CITY OF BOULDER
PLANNING BOARD MEETING AGENDA
DATE: July 31, 2014
TIME: 6 p.m.
PLACE: Council Chambers, 1777 Broadway

---

1. **CALL TO ORDER**

2. **APPROVAL OF MINUTES**

3. **PUBLIC PARTICIPATION**

4. **DISCUSSION OF DISPOSITIONS, PLANNING BOARD CALL-UPS/CONTINUATIONS**

5. **PUBLIC HEARING ITEMS**
   - **A.** Compliance of Proposed Changes to the 9th and Canyon Urban Renewal Plan to the Boulder Comprehensive Plan
   - **B.** 2015-2020 Capital Improvement Program
   - **C.** Public hearing to consider a recommendation to City Council on an ordinance amending Title 9, "Land Use Code," B.R.C. 1981, to add a process for review of Concept Plans by City Council and to relax housing occupancy limitations for persons 62 years of age and older, implementing measures recommended as part of the city's Comprehensive Housing Strategy.

6. **MATTERS FROM THE PLANNING BOARD, PLANNING DIRECTOR, AND CITY ATTORNEY**
   - **A.** Envision East Arapahoe- Draft Vision Elements and Scenario Concepts

7. **DEBRIEF MEETING/CALENDAR CHECK**

8. **ADJOURNMENT**

For more information call (303) 441-1880. Board packets are available after 4 p.m. Friday prior to the meeting, online at www.bouldercolorado.gov, at the Boulder Public Main Library's Reference Desk, or at the Planning and Development Services Center, located at 1739 Broadway, third floor.

CITY OF BOULDER PLANNING BOARD
MEETING GUIDELINES

CALL TO ORDER
The Board must have a quorum (four members present) before the meeting can be called to order.

AGENDA
The Board may rearrange the order of the Agenda or delete items for good cause. The Board may not add items requiring public notice.

PUBLIC PARTICIPATION
The public is welcome to address the Board (3 minutes* maximum per speaker) during the Public Participation portion of the meeting regarding any item not scheduled for a public hearing. The only items scheduled for a public hearing are those listed under the category PUBLIC HEARING ITEMS on the Agenda. Any exhibits introduced into the record at this time must be provided in quantities of ten (10) to the Board Secretary for distribution to the Board and admission into the record.

DISCUSSION AND STUDY SESSION ITEMS
Discussion and study session items do not require motions of approval or recommendation.

PUBLIC HEARING ITEMS
A Public Hearing item requires a motion and a vote. The general format for hearing of an action item is as follows:

1. Presentations

a. Staff presentation (5 minutes maximum*)
b. Applicant presentation (15 minute maximum*). Any exhibits introduced into the record at this time must be provided in quantities of ten (10) to the Board Secretary for distribution to the Board and admission into the record.
c. Planning Board questioning of staff or applicant for information only.

2. Public Hearing

Each speaker will be allowed an oral presentation (3 minutes maximum*). All speakers wishing to pool their time must be present, and time allotted will be determined by the Chair. No pooled time presentation will be permitted to exceed ten minutes total.

- Time remaining is presented by a Green blinking light that means one minute remains, a Yellow light means 30 seconds remain, and a Red light and beep means time has expired.
- Speakers should introduce themselves, giving name and address. If officially representing a group, homeowners' association, etc., please state that for the record as well.
- Speakers are requested not to repeat items addressed by previous speakers other than to express points of agreement or disagreement. Refrain from reading long documents, and summarize comments wherever possible. Long documents may be submitted and will become a part of the official record.
- Speakers should address the Land Use Regulation criteria and, if possible, reference the rules that the Board uses to decide a case.
- Any exhibits introduced into the record at the hearing must be provided in quantities of ten (10) to the Secretary for distribution to the Board and admission into the record.
- Citizens can send a letter to the Planning staff at 1739 Broadway, Boulder, CO 80302, two weeks before the Planning Board meeting, to be included in the Board packet. Correspondence received after this time will be distributed at the Board meeting.

3. Board Action

d. Board motion. Motions may take any number of forms. With regard to a specific development proposal, the motion generally is to either approve the project (with or without conditions), to deny it, or to continue the matter to a date certain (generally in order to obtain additional information).
e. Board discussion. This is undertaken entirely by members of the Board. The applicant, members of the public or city staff participate only if called upon by the Chair.
f. Board action (the vote). An affirmative vote of at least four members of the Board is required to pass a motion approving any action. If the vote taken results in either a tie, a vote of three to two, or a vote of three to one in favor of approval, the applicant shall be automatically allowed a rehearing upon requesting the same in writing within seven days.

MATTERS FROM THE PLANNING BOARD, DIRECTOR, AND CITY ATTORNEY
Any Planning Board member, the Planning Director, or the City Attorney may introduce before the Board matters which are not included in the formal agenda.

ADJOURNMENT
The Board's goal is that regular meetings adjourn by 10:30 p.m. and that study sessions adjourn by 10:00 p.m. Agenda items will not be commenced after 10:00 p.m. except by majority vote of Board members present.

*The Chair may lengthen or shorten the time allotted as appropriate. If the allotted time is exceeded, the Chair may request that the speaker conclude his or her comments.

C I T Y O F B O U L D E R
PLANNING BOARD AGENDA ITEM

MEETING DATE: July 31, 2014

AGENDA TITLE:
Compliance of Proposed Changes to the 9th and Canyon Urban Renewal Plan to the Boulder Comprehensive Plan

REQUESTING DEPARTMENTS:
David Driskell, Executive Director, Community Planning and Sustainability
David Gehr, Assistant City Attorney
Molly Winter, Director, Downtown and University Hill Management Division and Parking Services
Sam Assefa, Senior Urban Designer, Community Planning and Sustainability
Liz Hanson, Economic Vitality Coordinator, Community Planning and Sustainability

OBJECTIVE:
Consider Adoption of Modifications to the 9th and Canyon Urban Renewal Plan.

EXECUTIVE SUMMARY

The purpose of this agenda item is to seek Planning Board's recommendation regarding compliance of the proposed modifications to the 9th and Canyon Urban Renewal Plan (URP) (**Attachment A**). The role of the Planning Board is very specific: determine that the proposed modifications comply with the Boulder Valley Comprehensive Plan. These modifications facilitate the implementation of the plan's civic use requirement through a proposal to develop a public/private partnership between the city and the St. Julien Hotel. The concept envisions a facility with both civic and hotel uses on the civic use pad adjacent to the St. Julien Hotel. The concept is recommended by staff, the Civic Use Task Force IV (CUTF IV) and St. Julien Hotel, and supported by City Council. The modifications to the plan are generic and are not specific to this proposal.

URP Modification

Two sections of the URP need to be modified in order to support the further exploration of this concept: Section III.B.1 regarding the amount of civic use required as part of the development and Section III.E.2 which would align the amount of floor area ratio (FAR) allowed with existing zoning standards in the downtown. (See **Attachment B.**)

The Boulder Urban Renewal Board (BURA) unanimously approved the modification to the plan at its July 21, 2014 meeting. BURA supported the concept of providing some flexibility in the URP while not tying the result to a specific plan. BURA modified the language proposed by staff with the following change to Section III.E.2: removal of the text "appropriately utilizes the land" to read "……will result in an FAR that does not exceed the amount permitted by the

underlying zoning." It was noted that the language did not provide enough detail to be helpful in implementing the objective of the modification to the plan. Staff supports this change to the language.

BACKGROUND

Concurrent Implementation Efforts

Simultaneously, the city is developing a Memorandum of Understanding between the city and the St. Julien which outlines the next steps in the development of the civic use concept prior to entering into a final management agreement.

The concept proposes a facility on the civic use pad built and owned by the St. Julien including 8,000 square feet of event space for shared hotel and "civic use" on the first floor, upper floors of hotel uses, and a multi-purpose roof deck. Incorporated in the vision is a potential pedestrian connection across Canyon Boulevard to a future cultural facility at the current main library location. (See **Attachment C**) The plans for the St. Julien civic use pad are coordinated with the Civic Area Plan.

The civic use pad is owned as a limited common element of the Hotel. The original agreement in the condominium declaration included a provision that if an acceptable civic use was not established on the property on or before Jan. 1, 2020, that the owner of the hotel would have the right to convert the civic use site from a limited common element to another unit or to reallocate the civic use site to another use on the site. In other words, the civic use pad can be put to other purposes under the terms of the condominium declaration after Jan. 1, 2020.

Urban Renewal Plan

The city of Boulder has undertaken only two urban renewal projects the redevelopment of Crossroads Mall in the early 1980's and the 9th and Canyon redevelopment. An Urban Renewal Plan adopted in 1988 for the 9th and Canyon site in downtown Boulder called for hotel and convention facilities, including retail, restaurants, entertainment, transportation facilities and underground parking. In 1995, City Council modified the plan to include design guidelines for the site, as well as requiring that a minimum of 20 percent of the gross floor area be committed to civic uses.

9th & Canyon Hotel and Parking Garage

The two property owners on the 9th and Canyon site – St. Julien Partners and the downtown parking district, Central Area General Improvement District (CAGID) - entered into a 9th and Canyon Condominium Association and built the project that exists today. The underground CAGID parking garage opened in November 2002 and the St. Julien Hotel opened in February 2003. Incorporated in the mixed use project is an 11,000 square foot pad east of the hotel constructed with a concrete structural deck capable of supporting a building ("the civic use pad").

The major requirements of the URP plan were addressed: the hotel is located on Walnut Street, open space was created on Canyon, a pedestrian walkway connects Pearl Street and the Civic Area, all the parking is underground and a pad east of the hotel was designated for a future civic use. Tax increment financing was used for the public parking.

Efforts to Put the Civic Use Pad to Productive Use

The civic use component of the project first came under consideration in 1998 when a citizen task force comprised of city board, downtown and community members was appointed to review submitted proposals and make a recommendation to City Council. The civic use criteria approved by the City Council in 1998, and currently applicable to the civic use pad, are:

- Financial ability to construct and/or operate and maintain a use over time.
- Acceptance as civic use defined by attraction/benefit to the cultural or scientific or educational or entertainment or artistic or humanistic or civic life of the community.
- Compatibility to the other urban renewal site uses, i.e. the hotel, the parking garage and open space.
- Enhancement to the vitality of the downtown by generating interest in coming downtown, diversifying the downtown experience for citizens, visitors and downtown users or complementing other downtown uses.

Subsequently, three different task forces have sought solutions and approaches to achieve a civic use on the site, but without success. These first three task forces considered a wide variety of ideas and formal proposals including location for the Depot, a children's museum and community dance facility, the Boulder History Museum, a 500 foot performance venue, a community dance facility with hotel meeting space, and the entry of a conference facility connected to buildings to the east.

In February 2000, Planning Board approved a Site Review Amendment to approve a building on the civic use pad to house the Collage Children's Museum and the Village Arts Coalition dance organization. Due to financial challenges, this approved civic use building was not constructed.

Civic Use Task Force IV – Recommendation

In 2009, City Manager Jane Brautigam appointed a 4th Civic Use Task Force (CUTF IV) with the charge to:

- Assess the challenges that have been identified through past efforts and make recommendations that would increase the likelihood of a successful endeavor;
- Review the civic use criteria to ensure they reflect the current city priorities and goals and needs of the community; and
- Assist in the development of a proposal solicitation strategy and process.

The members of the CUTF IV are:

- Boulder City Council Members Mary Young, George Karakehian and Lisa Morzel;
- Michael Smith, the Boulder Arts Commission;
- Susan Connelly, Boulder Convention and Visitors Bureau Advisory Board and former member of the Boulder Urban Renewal Authority and vice chair of the task force;
- Fern O'Brien, Downtown Boulder Business Improvement District;
- Matt McMullen, Downtown Management Commission and chair of the task force;
- Josie Heath representing non-profits;
- Wendy Reynolds representing the financial sector; and Cindy Carlisle representing the community sector.
- Bruce Porcelli, from the St. Julien, was invited to join the task force in May 2012.

- City Council members KC Becker and Suzanne Jones served on the task force.

The CUTF IV conducted a thorough and comprehensive investigation of the challenges, options and possibilities presented by the civic use requirement. Please see **Attachment C** for a summary of their efforts and accomplishments.

In the opinion of the Task Force and staff, after the exhaustive 15 year process of exploring civic use options, this collaborative partnership represents the most workable, exciting and viable path to achieving the requirement for civic use set out in the 9th and Canyon Urban Renewal Plan.

The CUTF IV and staff are formally exploring a collaborative partnership to understand its constraints, challenges, opportunities, benefits and issues of the concept. The areas for further analysis, study, potential change and negotiation include: existing legal agreements associated with the site including the Urban Renewal Plan and Condominium Association; planning and zoning regulations; building design and compatibility with the hotel and garage; financing; lease and user options to support civic use of the event space and multi-purpose roof deck for the community; and the negotiations with St. Julien to define the facility management and parameters of the public/private partnership. The final development and management agreement will be negotiated and purposed to City Council for their final approval

PROCESS

The process for modification of an urban renewal plan starts with an approval by BURA. After approval by BURA, there is a requirement that the plan modification be reviewed by the Planning Board to ensure that it is consistent with the Boulder Valley Comprehensive Plan. Once those two steps have been completed, the plan modification is presented to the City Council for final approval. As was done with the original plan approval in 1988 and its modification in 1995, the modifications will be approved by an ordinance of the Boulder City Council.

The Downtown Management Commission, representing CAGID, provides a recommendation to City Council representing the interests of CAGID, one of the property owners in the 9th and Canyon Condominium Association.

City Council will consider the ordinance with the Urban Renewal Plan modifications and the Memorandum of Understanding in September.

ANALYSIS

BURA Analysis

There are two types of plan modifications under the urban renewal statute: substantial modifications and modifications. The proposed changes fall into the modification category and can be approved as part of simple three step process outlined in the analysis section of this memo. The proposed modifications addressing the amount of civic use on the site and the project FAR are generic changes and are not specific to the current proposal.

Staff supports the amendment made by BURA at their meeting on July 21st. Removing the phrase “appropriately utilizes the land” from section III.E.2 does not change the intent of the section; it was a reference to an earlier sentence: “The City of Boulder Planning Department’s criteria for “significantly underutilized” land in downtown is a FAR below .49” All current

planning and zoning regulations regarding use would apply to this proposal so the term "appropriately utilizes the land" is not necessary.

The Colorado urban renewal law provides a process for changing urban renewal plans that do not constitute a substantial modification of the plan. See section 31-25-107, C.R.S. The process includes the following steps.

1. A change to a plan is initiated by the Urban Renewal Authority. The Urban Renewal Authority approves the plan, which leads to the next two steps in the process.

2. The statute requires the plan amendment be referred to the Planning Board. The Planning Board is required to review and make recommendation to the City Council as to whether the modifications conformance with the "general development plan" for development of the city as a whole. (Boulder's "general development plan" is considered the Boulder Valley Comprehensive Plan.)

3. The City Council will consider the modification to the Plan after a considering the recommendation of the Planning Board and the approval of BURA.

<u>Boulder Valley Comprehensive Plan Analysis</u>
CP&S staff reviewed the proposed URP changes, Section III.B.1 regarding the amount of civic use required as part of the development and Section III.E.2 which would align the amount of floor area ratio (FAR) allowed with existing zoning standards in the downtown for this site, within the context of compliance to the Boulder Valley Comprehensive Plan (BVCP). See **Attachment D**.

The first modification to the URP, Section III.B.1, adds the following language:

> "pursuant to a plan, agreement or other arrangement approved by the city, allows the flexibility to modify the 20% of the gross square footage of development (which translates to 37,000 square feet) for civic use."

As past experience has shown since the initial efforts began in 1998, it has been difficult to find the organizations or entities to construct and operate a stand-alone building. The new language allows BURA and the City Council more latitude to approve a project that meets the civic use guidelines, is feasible financially, and meets community needs and benefit.

The modification to Section III.E.2 (as modified by BURA) includes the addition of the following language,

> "that does not exceed the amount permitted by underlying zoning"

The existing language of the Urban Renewal Plan simply has a declaratory statement of the size of the project. This modification is a clarification that it is the intent of the URP that the site be developed in a manner that is consistent with the underlying zoning designation Downtown Five (DT-5).

The language aligns the floor area ration (FAR) with the existing DT-5 zoning district in the Land Use Code which is intended for "higher intensity uses" and an area where the city has anticipated the highest potential for redevelopment in the downtown area. Any development review application for the civic use pad will be required to meet the requirements of the underlying zoning: "land use and zoning regulations . . . are developed and amended to be consistent with the goals and policies of the Comprehensive Plan. BVCP, p. 7.

The proposed use of the site to create a facility with both civic and hotel uses on the civic use pad adjacent to the St. Julien Hotel is consistent with the "Regional Business" underlying BVCP land use designation in that the area is intended for "major" retail and offices "serving the entire Boulder Valley". The definition also indicates the city's expectation that such areas will continue to be redeveloped and a dominant focus for major business activities in the region.

Based on this analysis, staff finds that the proposed modifications to the URP are in compliance with the BVCP.

Overall Project Analysis

Please see **Attachment C** for a thorough analysis of the site's context within the Civic Area Plan (CAP), civic space utilization survey of community organizations, potential building mass feasibility study, preliminary planning and zoning issues and necessary legal agreements.

RECOMMENDATION

Staff recommends that the Planning Board adopt the following motion:

> The Planning Board finds that the modifications to the to the two sections of the 9th and Canyon Urban Renewal Plan – section III.B.1 and section III.E.2, including the amendment by the Boulder Urban Renewal Board, as a whole, conform to the general plan for the development of the municipality of the city which is the Boulder Valley Comprehensive Plan.

ATTACHMENTS

Attachment A: 9th and Canyon Urban Renewal Plan
Attachment B: Ordinance Modifying the 9th and Canyon Urban Renewal Plan
Attachment C: City Council Study Session Memorandum January 2014
Attachment D: CP&S Staff Analysis

Boulder Urban Renewal Plan

Ninth & Canyon

1995 Revised Plan

Adopted:

Boulder Urban Renewal Authority, April 6, 1995

Boulder Planning Board, May 11, 1995

Boulder City Council, July 11, 1995

Boulder Urban Renewal Authority

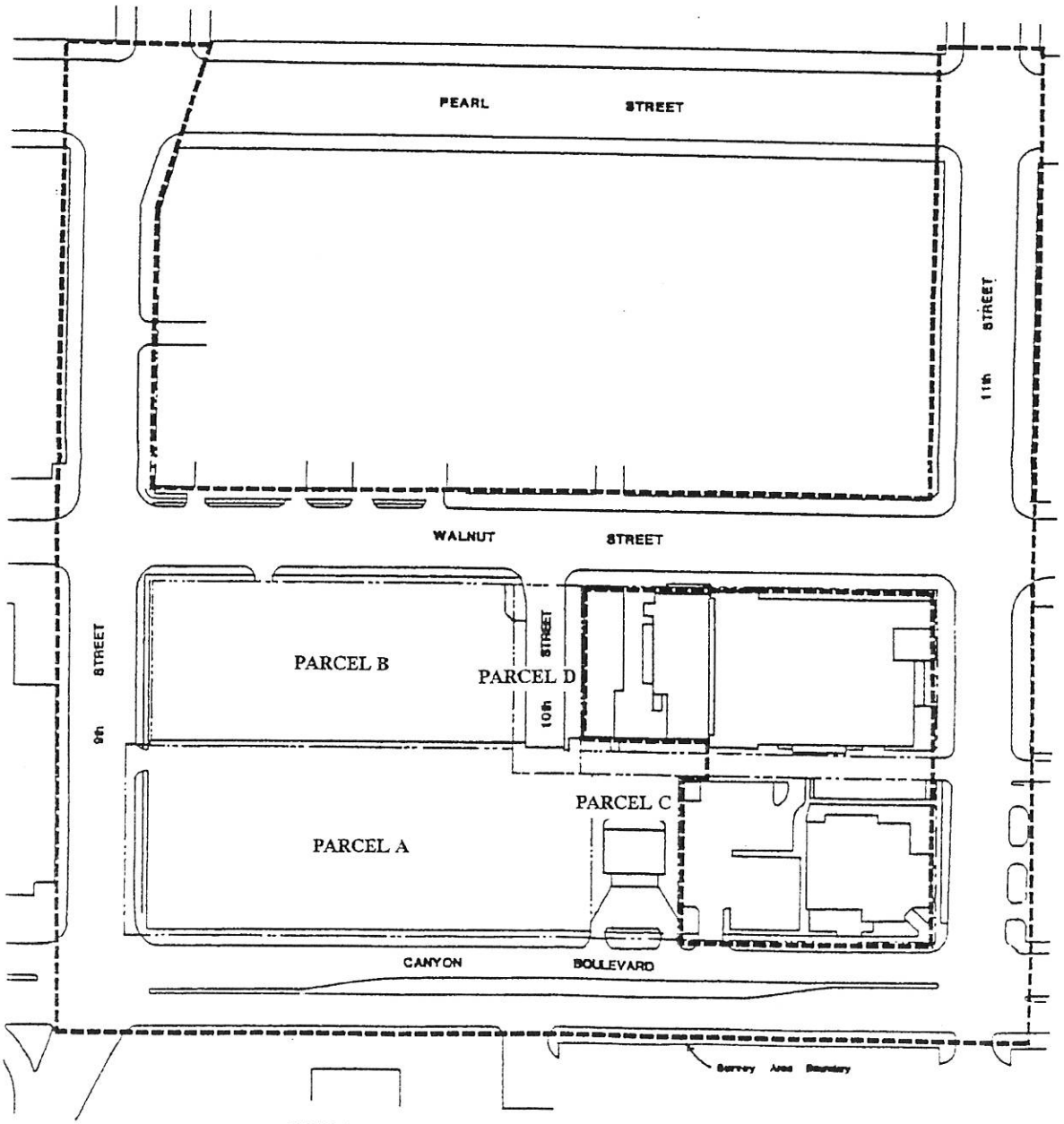
I. INTRODUCTION

A. PREFACE

This plan has been prepared by the Boulder Urban Renewal Authority pursuant to the provisions of the Urban Renewal Law of the State of Colorado, Part 1 of Article 25 of Title 31, C.R.S. The administration of this project and the enforcement of this plan, including the preparation and execution of any documents implementing it, shall be the responsibility of the Boulder Urban Renewal Authority.

B. PROJECT AREA BOUNDARIES

The boundaries of the project area are illustrated on the following map:



BURA
BOULDER URBAN RENEWAL AUTHORITY
SURVEY OF 9TH STREET AND CANYON BOULEVARD SITE

The project area boundaries are described as follows:

Beginning at a point that is the intersection of the southerly ROW line of Canyon Boulevard, and the westerly ROW line of 9th Street; then northwesterly along the westerly ROW line of 9th Street, to a point that is the intersection of the westerly ROW line of 9th Street , and the northerly ROW line of Pearl Street;

Then northeasterly along the northerly ROW line of Pearl Street, to a point that is the intersection of the northerly ROW line of Pearl Street, and the easterly ROW line of 9th Street;

Then southeasterly along the easterly ROW line of 9th Street, to a point that is the intersection of the easterly ROW line of 9th Street, and the northerly ROW line of Walnut Street;

Then northeasterly along the northerly ROW line of Walnut Street, to a point that is the intersection of the northerly ROW line of Walnut Street, and the westerly ROW line of 11th Street;

Then northwesterly along the westerly ROW line of 11th Street, to a point that is the intersection of the westerly ROW line of 11th Street, and the northerly ROW line of Pearl Street;

Then northeasterly along the northerly ROW line of Pearl Street, to a point that is the intersection of the northerly ROW line of Pearl Street, and the easterly ROW line of 11th Street;

Then southeasterly along the easterly ROW line of 11th Street, to a point that is the intersection of the easterly ROW line of 11th Street, and the southerly ROW line of Canyon Boulevard;

Then southwesterly along the southerly ROW line of Canyon Boulevard to the point of beginning.

Excepting the following:

All of Lots 1, 2, 3, 4, 5, 6, 9, 10, 11, and 12, Block 44, Boulder Plat (Original Town);

The easterly 25 feet of Lot A, Block 44, Boulder Plat (Original Town);

The easterly 10 feet of 10th Street, vacated by City Ordinance 3010;

All that portion of the improved alley that is located in Block 44, Boulder Plat (Original Town).

C. PROJECT PURPOSES

An Urban Renewal Plan for the Ninth and Canyon site in downtown Boulder has been developed to achieve the following purposes:

1. To implement the Boulder Valley Comprehensive Plan.

2. To eliminate existing conditions in the Urban Renewal Area that are detrimental to the project area, adjacent neighborhoods and facilities, and to the City as a whole.

3. To redevelop and rehabilitate the area in a manner which is compatible with and complementary to existing development and uses in the general area, and to provide an improvements framework which is based on community-wide goals and values.

4. Through redevelopment, contribute to a sustainable downtown Boulder community and economy.

5. To facilitate the redevelopment of the area by private enterprise by cooperating with other public bodies to provide needed infrastructure improvements.

6. To effectively utilize undeveloped and underdeveloped land.

II. URBAN RENEWAL ELIGIBILITY

A. GENERAL AREA DESCRIPTION

The project area is located on the western portion of the block bounded by 9th Street, Canyon Boulevard, Walnut Street and 11th Street. It is comprised of four parcels totaling 2.89 acres in area. Parcel A, owned as of April 1995 by St. Julien Partners located in Boulder, Colorado, is an unpaved, unimproved lot. Parcel B is a paved public parking lot owned by the Central Area General Improvement District (CAGID). Parcel C, also owned by St. Julien Partners, contains the only built improvement in the area, the old Chamber of Commerce building. Parcel D is comprised wholly of the 10th Street right-of-way.

B. SITE SURVEY CONDITIONS

The following conditions were documented on the site in 1988 and served as the basis for the initiation of the urban renewal planning process:

Environmental Conditions

- The majority of the site is in the 100 year floodplain.
- A portion (approx. 25%) of the site is in the 100 year "floodway".
- Canyon Boulevard is a high noise corridor (61 decibels).
- Site drainage is very poor on the unpaved portions (Parcel A).
- The majority of the site has a very high ground water table.

Site Utilization

- Most of the site is vacant except for parking uses - the overall Floor Area Ratio (F.A.R.) is approximately 0.03. (F.A.R. is the ratio of building size to site size). The City Planning Department's criteria for "significantly underutilized" land in the downtown is a F.A.R. below 0.49.
- Access to and circulation within the site is seriously deficient, particularly for emergency vehicles (mainly fire apparatus).

Traffic/Streets

- The 9th and Canyon intersection is mis-aligned. Southbound 9th Street traffic has difficulty finding the proper 9th Street lane to enter on the south side of Canyon Boulevard.
- Excessive speeds and heavy traffic volumes on 9th Street create pedestrian crossing problems, particularly at Walnut Street.
- The 9th and Canyon intersection had 15 accidents in 1987, tying for 22nd place of all intersections in the City.
- Paving on 10th Street (a public right of way) is seriously deteriorated with sidewalk on one side only.
- Deteriorated curb, gutter and sidewalks occur along Canyon Boulevard, 9th Street and Walnut Street.

Site Improvements

- On-site spot drainage and severe pothole and erosion problems occur on the unpaved portions (Parcel A and alleyways) of the area.
- Landscaping is seriously deficient throughout the area.
- Site lighting is deficient, particularly on Parcel A.
- On-site directional signage is inadequate.
- Driveway and access definition is inadequate.
- Site maintenance is seriously deficient. On-site debris is prevalent.
- Some on-site exterior structures (walls, fences, etc.) are deteriorated.
- Pedestrian and bicycle facilities are almost non-existent.

Utilities

- Water mains are old (25-30 years) and may not meet current standards, but do not present any capacity, pressure, or maintenance problems at this time.

Fire Protection/General Health and Safety

- Fire apparatus access to car fires is very difficult because of the condition of the unpaved parking surface and poor driveway definition.
- Public hydrants are inadequate in terms of number and location.
- It is difficult to access the rear of adjacent buildings.
- Overhead power lines create a hazard for firefighting personnel using highly mechanized equipment.
- Seventeen crimes, mostly automobile related, occurred in the study area between June 1986 to April 1988. This is a relatively high crime rate for a parking lot.

III. DEVELOPMENT PLAN

A. COMPREHENSIVE PLAN AND LOCAL STANDARDS

1. Land Use and Planning Criteria

Determination of land use and densities, major circulation routes, public facilities and planning criteria are based on the Boulder Valley Comprehensive Plan, City Land Use Regulation, Subdivision Ordinance, Building Code and this Urban Renewal Plan.

The Context Guidelines for Project Area Development (Section III, C) and the Project Area Development Guidelines (Section III, D) will be applied by the Authority when providing a recommendation to the Planning Board during the site review process, (B.R.C. 9-4-10). In addition, the Downtown Design Advisory Board (DDAB) or its successor, will review development proposals and will make recommendations to the Authority and Planning Board during the site review process. The guidelines set forth in Section III, C and Section III, D may be waived or modified by the Authority for a specific redevelopment project.

2. Planning Conformance

The Urban Renewal Plan is in conformance with the Boulder Valley Comprehensive Plan in respect to land use and densities, transportation and other public facilities, and meets the intent and goal of the Comprehensive Plan for development which could include opportunities for shopping, support services and public facilities, including parks and other civic uses. Specifically, the Comprehensive Plan's Community Design and Central Area policies state:

Community Design
"New residential, commercial and industrial development and redevelopment shall be encouraged to follow sound and innovative land use planning. The goals are to provide a livable built environment and, through the judicious use of landscaping, materials and human scale, to respect the character of the surrounding area." (p. 8).

Central Area Programs
"The City of Boulder, through the merging of public and private interests, shall seek to retain the Central Area of the Boulder Valley as the primary governmental, cultural, office, financial, entertainment, shopping, medical facility, and high density residential district of the Boulder Valley.

The Downtown shall retain its historic role as the governmental, entertainment, office, and financial center of the Boulder Valley. It shall continue to develop as a specialty retail center. This shall be accomplished by coordinating concerted and comprehensive public policies and investments with private redevelopment and rehabilitation efforts." (p. 139).

B. GENERAL DESCRIPTION OF THE DEVELOPMENT PLAN

The Development Plan will require the redevelopment of the project area to address the following:

1. Mixed and/or multi-use development that incorporates a combination of hotel and ancillary hotel services as primary uses. Civic uses (such as recreation center, museum, cultural center, City office space, and transit facilities as specified under Section III, E.2.d of this plan), will occupy a minimum of 20% of the gross floor area developed in the project area.

2. If a viable project is not in the process of approval or development prior to April 18, 1998, the City Council shall consider reopening this urban renewal plan to permit alternative land uses.

C. CONTEXT GUIDELINES

The Ninth and Canyon project area is located in the Walnut/Canyon corridor of downtown Boulder. Redevelopment efforts during the last twenty years have resulted in an area comprised of office buildings, restaurants, banks and surface parking lots. This corridor, which is located between the historic commercial area and the civic park, has limited retail uses, street life and pedestrian activity. The goal of an enhanced and vital downtown can be promoted with a mix of quality uses and developments that encourage pedestrian activities. These guidelines will set a standard for other redevelopment parcels along the Walnut/Canyon corridor.

The following guidelines establish the Authority's objectives for the redevelopment of the project area. Development proposals will be reviewed according to the guidelines. Such review will be a responsibility of DDAB or its successor, and as such made a part of the site review process identified in the City of Boulder Land Use Regulation. Design integrity will be project specific. Massing, location, character, materials, setbacks, height, circulation, open space and other elements must work in relation to each other and as parts of a whole.

Therefore, the specific definition and application of Section III C and D will vary according to project specific design considerations. The guidelines are not intended as a design checklist. They are intended to suggest the type and range of options requiring serious consideration.

1. Walnut/Canyon Corridor Redevelopment Guidelines

- Retail activity at the street level
- South facing urban open spaces and buildings
- Landscaping along Canyon Boulevard
- Pedestrian access corridors through redevelopment sites
- A gateway element at Ninth and Canyon
- Streetwalls and spaces framed by buildings on Walnut Street
- Open space, building openings, setbacks and orientation which frame the southerly views

2. General Development Guidelines

Regional Access Regional access to the project area is excellent because of its location along Canyon Boulevard. Uses and development which require this type of access should be considered for the project area, with heavy emphasis on transit and alternative modes.

Western Gateway to Downtown The project area is a unique gateway to downtown because of its location on the western edge of the city and within the viewshed of Canyon Boulevard and Boulder Creek. Uses and development can help to identify this gateway with special uses, development and design features. It can also provide an anchor in the western part of downtown and a link to adjacent residential neighborhoods, the civic center and the Boulder Creek corridor.

Downtown and Neighborhood Connections Ninth and Canyon is located close to the Downtown Mall, the Civic Park, the Library, the West Pearl shopping area, other major downtown destinations and residential neighborhoods. Connections to these facilities through the Ninth and Canyon project area are important to reinforce the overall unity of downtown and to promote a pedestrian environment in downtown. In addition, efforts should be made to avoid the negative impacts of vehicular traffic on the core area neighborhoods.

Quality Development The project area is located within the Walnut/Canyon corridor, an area comprised of large banks, mixed use buildings and large surface parking lots. Future downtown development within this corridor should improve the pedestrian and fulltime character of downtown, and encourage a more sustainable utilization of downtown properties. Corridor development should link the Civic Park and Walnut/Canyon corridor with the historic commercial area.

3. Area Development Guidelines

Pedestrian Access Provide and enhance pedestrian connections within downtown and adjacent neighborhoods at Ninth and Canyon. Provide pedestrian access corridors to and through the project area. Maximize use of the 10th street alley, sidewalks, and possible public improvements along Canyon, 9th and Walnut.

Intersections and Entrances Recognize the features and uses which provide a distinctive image at the Ninth and Canyon intersection. Develop compatible intersection features at 9th/Walnut and 10th/Walnut to relate development of the project area to the adjacent neighborhoods. Landscaping, public uses, and building features should reinforce the intersections.

Public Improvements Civic improvements should enhance the functions and image of the project area. These improvements should be considered for the 10th street alley and pedestrian connections across Canyon, 9th and Walnut and the Canyon, 9th, Walnut streetscapes.

Physical Development and Buildings Develop multiple use buildings to provide fulltime activity in the project area. Physical development should reinforce the attributes of the project area and downtown Boulder, incorporating traditional elements that are adaptable to a variety of uses. Provide streetwalls along Walnut Street to enclose and frame public spaces. Upper level stepbacks should be used to minimize street level shadows and pedestrian scale features along the sidewalk.

Open Space Develop usable open spaces. Provide community and neighborhood facilities for sitting, relaxing, community gatherings, and local activities.

D. SITE DEVELOPMENT GUIDELINES

The following guidelines establish the Authority's objectives for the redevelopment of the project area. The guidelines represent a range of development options and are not intended to be a design checklist. A specific project will not necessariiy be required to address or fulfill all of the guidelines.

1. Encourage the development of buildings that provide a mix of uses to provide full time activity within the project area.

   1.1 Encourage a mix of uses on the site with lodging units or civic uses on the upper levels.

   1.2 Respect and enhance the character of the street with small scale pedestrian oriented commercial activities along Walnut and 9th Street.

   1.3 Establish the Ninth and Canyon project area as a community focal place with uses, buildings and improvements that attract community activities and interaction.

   1.4 Encourage secondary special uses, such as educational, recreational, cultural and civic uses, which complement the primary uses of the project area.

   1.5 Develop a building complex to:
   - Reduce the apparent mass and bulk of the building
   - Express the varied uses of the site
   - Reflect the mixed use environment of downtown Boulder

   1.6 No individual project should become an enclave.

   1.7 Accentuate different portions of the buildings with various materials to reflect the different uses and functions of the buildings.

   1.8 Develop public outdoor spaces with uses and functions that will add interest and character to Ninth and Canyon and downtown Boulder.

2. Physical development should reinforce the unique attributes of the site and its relationship to downtown Boulder.

   2.1 Address the potential shade impact to Walnut with elements such as stepping back upper portions of taller buildings, streetscape design, street lighting, building illumination and ice deterrent.

   2.2 Encourage special features to convey a unique development character along Canyon Boulevard and Ninth Street.

   2.3 Provide building elements along Walnut to reinforce the historic commercial and pedestrian character of downtown.

   2.4 Physical development should enhance the downtown identity while creating an individual image at Ninth and Canyon.

2.5 Public interest should be provided by the use of pedestrian scale applications of first story details, facade details, and pedestrian scale features.

2.6 Any parking storage should be compatible with adjacent buildings.

2.7 Establish appropriate streetwalls and building setbacks along 9th Street, Walnut Street, and Canyon Boulevard (streetwalls are buildings which frame street spaces).

3. Establish a physical gateway to downtown Boulder at Ninth and Canyon by developing special features and uses which provides a distinctive image.

3.1 Building setbacks, design, massing, orientation and height should reinforce the significance of the Ninth and Canyon intersection.

3.2 Physical development should reinforce the significance of the Ninth and Canyon intersection.

3.3 The project should provide public art and landscaping at the Ninth and Canyon site to reinforce the Ninth and Canyon intersection. The intersection could be strengthened by establishing design elements common to both Boulder Creek and the project area, and by establishing view corridors from the project area to public art along Boulder Creek.

4. Provide and enhance pedestrian connections within downtown and adjacent neighborhoods at Ninth and Canyon.

4.1 A pedestrian link on the east side of the project area, along the 10th Street alignment should be provided through the site to connect south toward the library, and north toward Pearl Street. This and other pedestrian links should reinforce the downtown grid pattern and provide a more interesting and diverse pedestrian environment within the downtown.

4.2 Pedestrian facilities should link developed uses within the project area and should provide access to adjacent pedestrian destinations.

4.3 Landscaped sidewalks should be provided along Walnut, 9th, and Canyon to enhance the pedestrian environment leading to the project area and within downtown.

4.4 Provide for an on-site transit center/stop integrated with the sidewalk and buildings to facilitate transit access.

4.5 Enhance linkages to all transit facilities with information, education, directional signs and convenient and comfortable facilities.

5. Provide quality public space.

5.1 Public spaces should be large enough to accommodate scheduled and informal special events.

5.2 Design public spaces to incorporate drainage and floodhazard conditions associated with Boulder Creek.

5.3 Public spaces should be urban in character to complement the mixed use image of downtown.

5.4 Public spaces should be oriented south to the greatest extent possible to enhance solar access.

5.5 Public spaces should be oriented to the greatest extent possible to views of the Flatirons, Boulder Creek and the mountains to the west of Boulder.

5.6 Provide ample places to sit, relax, and eat meals.

6. Public improvements should enhance the function and image of the project area.

6.1 Develop special intersection improvements at Ninth and Canyon that may incorporate vertical gateway features, decorative street lights, landscaped medians, street accent paving, and corner landscape improvements.

6.2 The project should be designed to accommodate, and could participate in funding a possible future pedestrian/bicycle underpass (similar to the one at Broadway/College) across Canyon Boulevard at 10th Street to enhance access to the Civic Park.

6.3 The City could develop midblock pedestrian improvements at 10th/Walnut to link the project area to Pearl Street along the 10th Street corridor. This would be a portion of a larger pedestrian connector between the Civic Park and Pearl Street.

E. PUBLIC IMPROVEMENTS

Improvements will be made to provide the infrastructure necessary to carry out the objectives of the Plan. Such improvements include, but are not limited to:

1. Environmental

a) Floodplain Improvements - Any uses will meet the City's Floodplain Regulation (Chapter 9-9, B.R.C. 1981). No structures intended for human occupancy will be allowed in the high hazard zone or the conveyance zone. Uses in the floodplain will be fully protected from the 100 year flood.

b) Erosion and Storm Drainage - Erosion problems will be eliminated through development of the site. Storm drainage improvements will be made as necessary.

2. Land Utilization

The current floor area ratio (F.A.R.) for the project area is approximately 0.03. The City of Boulder Planning Department's criteria for "significantly underutilized" land in the downtown is an F.A.R. below 0.49. Implementation of this Plan will result in an F.A.R. of approximately 1.50.

3. Streets/Access/Circulation

a) Street improvements, to the extent required by the development plan, will be completed. A portion of 10th Street between Walnut and Canyon may be closed to vehicular traffic and resurfaced, to encourage and enhance safe pedestrian movement; and curbs, gutters and sidewalks will be replaced or repaired as needed. New traffic control and other intersection improvements will be made as needed.

b) Off-Street Parking - Parking located in an underground structure must provide for the replacement of the existing Central Area General Improvement District (CAGID) spaces, provide for the parking requirements of the proposed development and allow for additional parking to offset the increase in parking demand that development in the project area will generate in adjacent areas. The latter requirement will be explicitly defined in a CAGID/BURA cooperation agreement at the time the project area is redeveloped. This plan supersedes the provision of the RB-X zone district that permits non-residential development without parking facilities if located in a mandatory parking district.

c) Pedestrian and Bicycle Circulation - A system of pedestrian facilities that may include walks, a pedestrian mall, an atrium, pocket park and landscaped open spaces will be provided. Bike parking areas will be provided to encourage bike access.

d) Transportation Facilities - Significant facilities for alternative modes of transportation must be incorporated into the development plan with the objective of reducing the amount of parking that will be required in the project area. The goal shall be at least a 15% reduction in projected single occupant vehicle trips to and from the project area. If a hotel use is developed as identified in section III, B. 1 of this plan, shuttle service to Denver International Airport and possibly other locations will be required.

4. Site Improvements

a) Landscaping, Signage and Lighting - A landscaping plan will be developed and implemented to provide enhancement of the non-building portions of the project area.

b) Open Spaces - In addition to landscaped open spaces, other publicly accessible improvements such as a plaza, pedestrian mall, an atrium, and a pocket park may be provided. A

minimum of 50,000 square feet of open space and landscaped areas is planned. However, the specific requirements of this Plan for the provision of open space will be determined through the Site Review process.

c) Additional fire hydrants, stand pipes, etc. will be provided as needed to meet City Fire Code regulations.

F. LAND USE REGULATIONS AND BUILDING REQUIREMENTS

1. The land use, design and construction of development in the project area shall comply with the City of Boulder's RB-X Zoning, the Downtown Design Guidelines, and other applicable provisions of the Boulder Land Use Regulation (including site and use review as applicable). Under the provisions of this Plan, parcels A (unimproved lot), B (CAGID parking lot) and C (old Chamber of Commerce Building) will be required to be developed in a coordinated manner.

2. All development must conform with the provisions and purposes of this Plan, and with all applicable laws, ordinances and codes.

IV. IMPLEMENTATION PROGRAM

A. PROJECT ACTIVITIES

1. PROPERTY ACQUISITION

No land will be acquired by the Authority and therefore no provisions are provided in this plan for owner participation, property management, relocation, or property disposition.

2. DEMOLITION, CLEARANCE AND SITE PREPARATION

The Authority will require any developer to demolish structures and other improvements and to clear and prepare the site for redevelopment in accordance with this Urban Renewal Plan.

3. PUBLIC IMPROVEMENTS AND FACILITIES

The Authority may install and construct, or cooperate as appropriate with developers and other public or private agencies, in the installation and construction of such public improvements, public facilities and utilities as necessary to carry out this Plan.

Such improvements, facilities and utilities include, but are not limited to, streets, curbs and gutters, sidewalks, bike paths, street lights, traffic signals; sanitary and storm sewers; water, electrical, gas and telephone distribution systems; parks, plazas and landscaped areas; and public transit facilities.

4. REDEVELOPMENT

Purchasers or owners of property within the project area shall be obligated to develop the property in accordance with the provisions of this Plan and the design standards and criteria established by the Authority, to begin and complete the development of the property within a period of time which the Authority fixes as reasonable, and to comply with such other conditions as the Authority deems necessary to assure the achievement of the purposes of this plan.

B. PROJECT FINANCING

1. METHODS OF FINANCING

The Boulder Urban Renewal Authority is authorized to finance this project by any method authorized under the Colorado Urban Renewal Law, or any other applicable law, including appropriations from the City of Boulder, federal loans and grants, interest income, property or sales tax increments, or any other available source.

The Authority is authorized to issue bonds in an amount sufficient to finance all or part of the project. The Authority is authorized to borrow funds and create indebtedness in carrying out this plan. The principal and interest on such indebtedness would be paid from tax increments or any other funds available to the Authority.

The economic feasibility of any redevelopment proposal will be reviewed by the Authority at the time the project is submitted for development review. The specific extent and nature of Authority economic participation in the project will be assessed at that time.

2. TAX INCREMENT FINANCING

This project may be financed by the Boulder Urban Renewal Authority under the tax allocation financing provisions of the Urban Renewal Law of the State of Colorado. However, the use of tax increment financing will be dependent on securing a City of Boulder/BURA cooperation agreement. The general provisions of the financing method are set forth below. In compliance with the requirements of §31-25-107(9)(d), C.R.S. the Boulder Valley School District of the County of Boulder, Colorado, has been permitted to participate in an advisory capacity concerning the project financing included in this Plan. Under the financing method, property taxes as levied after the effective date of the approval of this Plan upon taxable property in the Urban Renewal Area each year, and all of the municipal sales taxes collected within such area, by or for the benefit of any public body, shall be divided for a period not to exceed 25 years after the effective date of adoption of this Plan as follows:

a) Base Amount

That portion of property taxes which are produced by the levy at the rate fixed each year by or for each such public body upon the valuation for assessment of taxable property in

the urban renewal area last certified prior to the effective date of approval of this Plan, and that portion of municipal sales taxes collected within the boundaries of the urban renewal area in the last 12 month period ending on the last day of the month prior to the effective date of approval of this Plan, shall be paid into the funds of each such public body as are all other taxes collected by or for said public body.

Unless and until the total valuation for assessment of the taxable property in the Urban Renewal Area exceeds the base valuation for assessment of the taxable property in the Urban Renewal Area, all of the taxes levied upon the taxable property in the Urban Renewal Area shall be paid into the funds of the respective public bodies. Unless and until the total municipal sales tax collections in the urban renewal area exceed the base year municipal sales tax collections in the urban renewal area, all such sales tax collections shall be paid into the funds of the City.

b) Increment Amount

That portion of said property taxes and/or all of said sales taxes in excess of the amounts specified in a) above shall be allocated to and, when collected, paid into a special fund of the Authority to pay the principal of, the interest on and any premiums due in connection with the bonds of, loans or advances to, or indebtedness incurred by, whether funded, refunded, assumed, or otherwise, the Authority for financing or refinancing, in whole or in part, for this Project. When the bonds, loans, advances, and indebtedness, if any, including interest thereon and any premiums due in connection therewith, have been paid, all taxes upon the taxable property and the total municipal sales tax collections in the Urban Renewal Area shall be paid into the funds of the respective public bodies.

The incremental portion of the taxes described herein shall be irrevocably pledged by the Authority for the payment of the principal of, the interest on, and any premiums due in connection with the bonds, loans, advances, and indebtedness incurred by the Authority to finance the Project, subject to the terms of any loan or bond trust indenture.

C. CHANGES IN THE APPROVED PLAN

This Plan may be modified pursuant to the provisions of the Colorado Urban Renewal Law governing such modifications, including §31-25-107, C.R.S.

D. MINOR VARIATIONS

Where a literal enforcement of the provisions contained in this Plan would constitute an unreasonable limitation beyond the intent and purpose of these provisions, the Authority may in specific cases allow minor variations from these provisions.

9c95pl.fin

ORDINANCE NO. 5714

AN ORDINANCE MODIFYING THE URBAN RENEWAL PLAN FOR THE NINTH STREET AND CANYON BOULEVARD PROJECT AREA; AND SETTING FORTH DETAILS IN RELATION THERETO.

WHEREAS, the city council has adopted the "Boulder Urban Renewal Plan, Ninth and Canyon" (hereinafter called the "Plan") effective October 5, 1988; and

WHEREAS, the city council has determined that certain modifications to the land use, design, building requirements, and procedures are appropriate to update the Plan based upon current city policies; and

WHEREAS, the Plan modifications have been approved by the Board of Commissioners of the Boulder Urban Renewal Authority; and

WHEREAS, the city council has held a public hearing on the proposed Plan modifications providing a full opportunity for all residents and taxpayers of the city and other interested persons to be heard;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BOULDER, COLORADO:

Section 1. The revised Plan, attached hereto as Exhibit A and incorporated herein by reference, for the project area, having been duly reviewed and considered, is hereby approved.

Section 2. It is hereby found and determined that Ordinance No. 5133 is amended by the substitution of the attached Exhibit A hereto as the Boulder Urban Renewal Plan for the Ninth Street and Canyon Boulevard project area.

Section 3. This ordinance shall not take effect unless and until the City of Boulder Planning Board reviews the proposed modifications and determines that such modifications conform with the Boulder Valley Comprehensive Plan, as amended.

Section 4. This ordinance is necessary to protect the public health, safety, and welfare of the residents of the city, and covers matters of local concern.

Section 5. The council deems it appropriate that this ordinance be published by title only and orders that copies of this ordinance be made available in the office of the city clerk for public inspection and acquisition.

INTRODUCED, READ ON FIRST READING, AND ORDERED PUBLISHED BY TITLE ONLY this 18th day of April, 1995.

Mayor

Attest:

Director of Finance and Record
Ex-Officio City Clerk

READ ON SECOND READING, AMENDED, AND ORDERED PUBLISHED BY TITLE ONLY this 13th day of June, 1995.

Mayor

Attest:

Director of Finance and Record
Ex-Officio City Clerk

READ ON THIRD READING, PASSED, ADOPTED, AND ORDERED PUBLISHED BY TITLE ONLY this 11th day of July, 1995.

Mayor

Attest:

Director of Finance and Record
Ex-Officio City Clerk

BU GE o-5714.YGE

ORDINANCE NO. ____

AN ORDINANCE MODIFYING THE URBAN RENEWAL PLAN FOR THE NINTH STREET AND CANYON BOULEVARD PROJECT AREA; AND SETTING FORTH DETAILS IN RELATION THERETO.

WHEREAS, THE CITY COUNCIL OF THE CITY OF BOULDER, COLORADO FINDS AND RECITES:

A. The city council has adopted the "Boulder Urban Renewal Plan, Ninth and Canyon" (hereinafter called the "Plan") effective October 5, 1988 pursuant to Ordinance No 5133 and modified the Urban Renewal Plan in 1995 pursuant to Ordinance No. 5714.

B. The 1995 Urban Renewal Plan amended the 1988 Urban Renewal Plan by replacing it.

C. The city council has determined that certain modifications to the land use, design, building requirements, and procedures are appropriate to update the Plan based upon current city purposes and desires.

D. The Plan modifications have been approved by the Board of Commissioners of the Boulder Urban Renewal Authority.

E. Planning Board reviewed the proposed modifications and determined that such modifications conform with the Boulder Valley Comprehensive Plan, as amended.

F. The city council has held a public hearing for the proposed plan modifications, providing a full opportunity for all residents and taxpayers of the city and other interested persons to be heard.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BOULDER, COLORADO:

Section 1. The revised plan, with the changes shown in Section 2 below for the project area, having been duly reviewed and considered is hereby approved.

Section 2. The following provisions of the Urban Renewal Plan, adopted as an exhibit in Ordinance No. 5717 are amended to read:

III. DEVELOPMENT PLAN

B. GENERAL DESCRIPTION OF THE DEVELOPMENT PLAN

The Development Plan will require the redevelopment of the project area to address the following:

1. Mixed and/or multi-use development that incorporates a combination of hotel and ancillary hotel services as primary uses. Civic uses (such as recreation center, museum, cultural center, City office space, and transit facilities as specified under Section III, E.2.d of this plan), will occupy ~~a~~

~~minimum of~~ up to 20% of the gross floor area developed in the project area pursuant to a plan , agreement, or other arrangement approved by the city.

2. If a viable project is not in the process of approval or development prior to April 18, 1998, the City Council shall consider reopening this urban renewal plan to permit alternative land uses.

. . .

E. PUBLIC IMPROVEMENTS

. . .

2. Land Utilization

The current floor area ratio (FAR) for the project area is approximately 0.03. The City of Boulder Planning Department's criteria for "significantly underutilized" land in the downtown is an FAR below 0.49. Implementation of this Plan will result in an FAR ~~of approximately 1.50~~ that does not exceed the amount permitted by the underlying zoning.

Section 3. City Council has considered the proposed modifications set forth in this ordinance, and finds and determines that such modifications do not constitute modifications that will substantially change the urban renewal plan in land area, land use, design, building requirements, timing or procedure, as previously approved. The city council finds that the changes proposed in this plan are not substantial modifications to the Urban Renewal Plan pursuant to the provisions of section 31-25-107, C.R.S. Accordingly, such modifications to the Plan may be approved and incorporated into the Plan by adoption of this ordinance.

Section 4. This ordinance is necessary to protect the public health, safety, and welfare of the residents of the city, and covers matters of local concern. For the purposes of complying with the requirements of the modification standards of the Colorado Urban Renewal Law, the ordinance shall also be considered as a resolution of the Boulder City Council.

Section 5. The City Council deems it appropriate that this ordinance be published by title only and orders that copies of this ordinance be made available in the office of the city clerk for public inspection and acquisition.

INTRODUCED, READ ON FIRST READING, AND ORDERED PUBLISHED BY TITLE ONLY this ___day of _____, 2014.

_____
Mayor

Attest:

_____
City Clerk

READ ON SECOND READING, PASSED, ADOPTED, AND ORDERED PUBLISHED BY TITLE ONLY this ___day of _____, 2014.

_____
Mayor

Attest:

_____
City Clerk

Memorandum

STUDY SESSION MEETING DATE: January 28, 2014

To: Members of City Council

From: Jane S. Brautigam, City Manager
Paul J. Fetherston, Deputy City Manager
David Driskell, Executive Director, Community Planning and Sustainability
Molly Winter, Director, Downtown and University Hill Management Division and Parking Services
David Gehr, Deputy City Attorney
Sam Assefa, Senior Urban Designer, Community Planning and Sustainability
Elaine McLaughlin, Senior Planner, Community Planning and Sustainability

RE: Civic Use Task Force IV Recommendation regarding the St. Julien Civic Use Pad

Date: January 16, 2014

I. EXECUTIVE SUMMARY

The Civic Use Task Force IV (CUTF IV) recommends to City Council a new vision for civic use at the pad adjacent to the St. Julien Hotel. Over the last 15 years multiple task forces have explored a myriad of different ideas and concepts; however, a viable plan with sustainable financing and management structure has been elusive. After extensive exploration, discussion and consideration, the CUTF IV envisions a facility developed as a public private partnership with the St. Julien Hotel within the context of the Civic Area Plan. St. Julien Partners supports the recommendation and, as a major partner in the project, will work towards an implementation framework. Staff also supports the Task Force's recommendation.

The concept proposes a facility on the pad including 8,000 square feet of event space for shared hotel and "civic use" on the first floor, upper floors of hotel uses, and a multi-purpose roof deck. Incorporated in the vision is a potential pedestrian connection across Canyon Boulevard to a future cultural facility at the current Library location. (See

ATTACHMENT A.) In the opinion of the Task Force, after the exhaustive 15 year process, this collaborative partnership represents the most workable, exciting and viable path to achieving the requirement for civic use set out in the 9th and Canyon Urban Renewal Plan (see ATTACHMENT B) before it expires in 2020 when the site reverts to its owner, St. Julien Partners.

The CUTF IV recommends formal exploration of the collaborative partnership to understand its constraints, challenges, opportunities, benefits and issues. The areas for further analysis, study, potential change and negotiation include: existing legal agreements associated with the site including the Urban Renewal Plan and Condominium Association; planning and zoning regulations; building design and compatibility with the hotel and garage; financing; lease and user options to support civic use of the event space and multi purpose roof deck for the community; and the negotiations with St. Julien to define the facility management and parameters of the public/private partnership. Staff proposes a phased incremental work program with regular check-ins with the CUTF IV and City Council.

II. QUESTIONS FOR CITY COUNCIL

Does City Council support further exploration of this new vision for a civic use including a public/private partnership with the St. Julien Partners and coordination with the Civic Area Plan?

Does City Council support further analysis regarding planning and zoning, design and management strategies and financial options to ensure a civic benefit?

Does City Council support revisions to the 9th and Canyon Urban Renewal Plan and other legal documents in order to attain the CUTF IV's vision of civic use?

III. BACKGROUND

An urban renewal plan adopted in 1988 for the 9th and Canyon site in downtown Boulder called for hotel and convention facilities, including retail, restaurants, entertainment, transportation facilities and underground parking. In 1995, City Council modified the plan to include design guidelines for the site, as well as requiring that a minimum of 20 percent of the gross floor area be committed to civic uses. As stipulated in the 9th and Canyon Condominium Declaration, the Condominium Association comprised of the property owners (the hotel owner, St. Julien Partners, and the Central Area General Improvement District - CAGID) has the right to lease the civic use pad at the southeast corner of the site in accordance with the civic use lease up until January 1, 2020. After such time, the civic use restriction will end and St. Julien Partners may develop the site as they see fit within existing zoning regulations. The civic use lease must be approved by owner of the hotel unit (St. Julien Partners) and CAGID.

The underground CAGID parking garage opened in November 2002 and the St. Julien Hotel opened in February 2003. Incorporated in the mixed use project is an 11,000 square foot pad east of the hotel constructed with a concrete structural deck capable of supporting a building ("the civic use pad").

The civic use component of the project first came under consideration in 1998 when a citizen task force comprised of city board, downtown and community members was appointed to review submitted proposals and make a recommendation to City Council. The civic use criteria approved by the City Council in 1998, and currently applicable to the civic use pad, are:

- Financial ability to construct and/or operate and maintain a use over time.
- Acceptance as civic use defined by attraction/benefit to the cultural or scientific or educational or entertainment or artistic or humanistic or civic life of the community.
- Compatibility to the other urban renewal site uses, i.e. the hotel, the parking garage and open space.
- Enhancement to the vitality of the downtown by generating interest in coming downtown, diversifying the downtown experience for citizens, visitors and downtown users or complementing other downtown uses.

Subsequently, three different task forces have sought solutions and approaches to achieve a civic use on the site, but without success. These first three task forces considered a wide variety of ideas and formal proposals including location for the Depot, a children's museum and community dance facility, the Boulder History Museum, a 500 foot performance venue, a community dance facility with hotel meeting space, and the entry of a conference facility connected to buildings to the east. (See ATTACHMENT C.) In 2009, City Manager Jane Brautigam appointed a 4th Civic Use Task Force with the charge to:

1. Assess the challenges that have been identified through past efforts and make recommendations that would increase the likelihood of a successful endeavor;
2. Review the civic use criteria to ensure they reflect the current city priorities and goals and needs of the community; and
3. Assist in the development of a proposal solicitation strategy and process.

The members of the CUTF IV are: Boulder City Council Members Mary Young, George Karakehian and Lisa Morzel; Michael Smith, the Boulder Arts Commission; Susan Connelly, Boulder Convention and Visitors Bureau Advisory Board and the Boulder Urban Renewal Authority and vice chair of the task force; Fern O'Brien, Downtown Boulder Business Improvement District; Matt McMullen, Downtown Management Commission and chair of the task force; Josie Heath representing non-profits; Wendy Reynolds representing the financial sector; and Cindy Carlisle representing the community sector. Bruce Porcelli from the St. Julien was invited to join the task force in May 2012. City Council members KC Becker and Suzanne Jones served on the task force.

The CUTF IV conducted a thorough and comprehensive investigation of the challenges, options and possibilities presented by the civic use requirement. The following is a summary of their efforts and accomplishments.

- Analyzed the opportunities and constraints of the site and its legal agreements which govern the outcome. These include the 1988 Urban Renewal Plan (ATTACHMENT B) (amended in 1995) and documents associated with the Condominium Association.
- Developed vision and performance criteria to evaluate reasonable and feasible opportunities for civic use based on the current realities.

- Communicated with dozens of Boulder-based organizations and thought leaders in the community about the opportunities for the civic use pad; conducted focus groups with non-profit organizations serving the Boulder Area; and discussed opportunities with UCAR, NCAR, the Climate Center, the Fort Collins Museum, CU Museum of Natural History and the Exploratorium.
- Created a video promoting the site.
- Determined that a 500 seat music/performance theatre is not a realistic fit for this site.
- Commissioned a property valuation of the pad and associated constructed site improvements.
- Explored the possibility of a mixed use, "layer cake" approach with both civic and commercial uses: hotel functions, meeting space and an art house cinema.
- Commissioned a market and financial feasibility analysis of the "layer cake" mixed use approach.
- Enhanced the relationship with St. Julien Partners; Bruce Porcelli joined the task force in 2012.
- Issued a Request for Information (RFI) to developers seeking the expertise and perspective of the local private development community to identify obstacles to financing and development of the site, and identifying incentives desirable for a successful project. No responses to the RFI were received.

Based on the accumulation of feedback, analysis and discussion, the CUTF IV concluded the following:

- A single user concept is unrealistic given the size, character and financial resources of Boulder.
- Based on the feedback from the community, the required building space - 20% of the existing building equates to 37,000 square feet - is too much for any one user to afford, the Task Force recommends the Urban Renewal Plan be modified to meet the realities and needs of the current proposal.
- A redefinition of "civic use" as a specific building or portion of a building to "civic benefit" within the context of a public private partnership. As noted above, the expectation of a stand-along facility is not realistic for civic and non-profit entities within our community. However, there is a periodic need for many organizations for sharing a venue; hence the concept of civic benefit rather than a single use.
- Coordination with the Civic Area Planning effort provides a design synergy within the broader context of the area and opportunity for a viable and dynamic use for the site.
- A public private partnership with the St. Julien will be necessary to achieve a successful result and achieve the civic use concept prior to the expiration date.

After the Task Force's comprehensive review of the options and thorough outreach to the community, a key breakthrough came with the realization that partnering with the St. Julien Partners offered the most viable, realistic and sustainable approach to achieving the goal of a civic benefit on the pad within the shrinking window of opportunity. Having Bruce Porcelli join the Task Force created the opportunity to jointly develop a mutual vision with shared benefits.

IV. ANALYSIS

The New Vision of the Civic Use Pad

The Civic Area Plan (CAP) generated a new and broader context for envisioning the civic use pad, and shifted the thinking of the Task Force. The proximity of the pad to CAP area expands the possibilities for uses on the pad by creating connections with other sites such as re-envisioned Library Building as a performance center and the Municipal Building as a cultural facility. The triangular relationship of the three locations indicates how the potential facilities could support each other and create the density to become the foundation for a cultural district. The civic use is no longer a stand-alone opportunity to achieve city goals but part of a broader, move comprehensive plan. (See ATTACHMENT D.)

The proposed concept connects the pad facility with the hotel opening up the opportunity for additional hotel rooms. The first floor is proposed as an event/multi-use space of approximately 8,000 square feet divisible into smaller spaces and meeting rooms to maximize flexibility of use managed by the hotel for both hotel and civic users. The southern facade would take advantage of the views of the park and the mountains and be a wall of glass. A proposal to maximize the first level for event use creates a mezzanine level storage space below, within the first level of the parking garage. A roof deck could be a signature feature of the facility accommodating a variety of uses and public access with scenic views of the Flatirons. (See ATTACHMENT A.)

The new vision promotes multiple benefits. The community access and use of the first floor event space and roof deck embodies the civic benefit. The ability for local non-profits and civic groups to host their events in a large enough venue in Boulder would be a source of community pride, as well as a financial benefit to Boulder. Adding additional hotel rooms contributes to the enhanced economic vitality of the city and downtown. The potential for a pedestrian bridge across Canyon Boulevard connecting the civic use to a re-imagined library facility enhances the connection with the Civic Area and addresses the barrier of the boulevard. The pedestrian bridge has the potential to become an iconic feature of Boulder and a gateway into the city from the west.

Preliminary Analysis

To understand the feasibility of the new vision, staff undertook several preliminary steps: an event space utilization survey of local organizations (ATTACHMENT E); a design feasibility study the site (ATTACHMENT A); preliminary issue identification by staff of zoning and planning issues of the feasibility; and identification of the legal documents associated with the site which will need modification in order to achieve the vision (ATTACHMENT F).

Community Survey

With the assistance of the Boulder Convention and Visitors Bureau, staff developed a survey for community organizations to understand the local demand for a facility located at the civic use pad. The Community Foundation provided the contacts. The survey included a layout of the proposed event space with a variety of room arrangements and

potential types of uses. 40 non-profit and community organizations responded. The feedback indicated an active interest in using the facility; however clarity about rental costs, as well as the operational management structure, would be needed prior to any definitive feedback. Additional market demand information including price sensitivity will be part of the next steps. Pricing of the rental rates in order to open up access to the space is a key component to determining the level of civic benefit and worthiness of this endeavor.

Building Mass Feasibility Study

The St Julien Partners and the city, through CAGID, jointly commissioned a conceptual feasibility study of a building based on the new vision conducted by 42/20 the original project architects. The effort focused on how the proposed uses could fit on the site and how the facility could connect to the adjacent buildings – the CAGID garage and St. Julien hotel. It is very important to note that the study is **not** intended to convey any building design intent, but merely a massing exercise. The task force feels strongly that the building's design should be very special, expressing the Boulder ethos and values. As indicated in ATTACHMENT A the building program can be accommodated on the site, however, as is normal at this stage of consideration, the study did raise a number of issues and questions.

Preliminary Planning and Zoning Issues

While the preliminary plans are provided to convey massing and building relationship and not necessarily architectural style or finish materials, the plans will require some refinements and also a Site Review Amendment process to meet the land use code. For example, when the Site Review for the overall St. Julien Hotel and Civic Use Pad site was approved, it was based on a maximum 1.5 FAR allowed through the 9th and Canyon Urban Renewal Plan that had been adopted for the area. That maximum FAR essentially limited the size of the civic pad building to approximately 38,000 square feet. Therefore, to add the additional floor area shown in the preliminary plans, up to a 1.7 FAR, both a Site Review Amendment as well as an amendment to the Urban Renewal Plan would be required. The current proposal would be allowed under current zoning regulations.

The plans also illustrate a roof top deck with a retractable awning which would likely require a structural system for the awning that would exceed the 55-foot height limit and not fall under a definition of appurtenances. Therefore, some refinements to the building height will be required to ensure that the roof deck, the covering for the roof deck and the elevator access to the deck don't exceed 55 feet. The civic pad building height would be measured separately from the St. Julien provided the building and the connection to the St. Julien hotel are built as separate buildings under the provisions of the building code.

Legal Agreements

The 9th and Canyon Urban Renewal Plan, created in 1988 and revised in 1995, governs many aspects of the site and shaped its physical development and uses. The plan itself contains requirements created 19 years ago that will need to be modified in order to allow for the current CUTF IV vision for the pad, i.e. the specific civic space requirement. In addition, because of the development requirements (i.e. building the hotel on the CAGID

property), the Renewal Plan created the need for special legal documents addressing the land ownerships - Condominium Declaration - which also will need to be modified to allow for the vision. It is outlined in ATTACHMENT F.

Public/Private Partnership
St. Julien Partners supports the CUTF IV recommendation and, as a major partner in the project, will work towards an implementation framework. The partnership is envisioned to address project financing, define the civic benefit and mechanisms to ensure implementation, facility management and relationship with the city among other things. As a first step, staff recommends entering into a Memorandum of Understanding (MOU) between the city and St. Julien that will identify the parameters of the partnership, essential needs and roles of each entity, and a path to partnership.

V. FEEDBACK

The Downtown Management Commission (DMC) (as the advisory board for CAGID) reviewed the new vision and recommendations at their January 6th meeting. DMC supports the proposal as a win/win for both the city, the downtown, St Julien Partners and CAGID. The timing is an important consideration as the city will not receive any civic benefits if a mutual agreement is not reached by January 2020. The DMC supports the coordination of the civic use pad with the Civic Area Plan; and believes the St Julien is a qualified operator and will be a worthy partner.

VI. NEXT STEPS

Should City Council support the recommendation of the CUTF IV, staff would proceed with additional work in a phased approach. The first phase work would be an analysis of legal and planning and zoning issue;, exploration of financing options to create the civic benefit and the framework of a public private partnership with St. Julien. The Phase I work items would include:

- Detailed analysis to determine the methods, process and schedule to amend and or change existing applicable legal documents (see ATTACHMENT E);
- Additional study and analysis of the planning and zoning issues associated with the feasibility study;
- Limited feasibility study regarding the connectivity of the concept proposal with the adjoining buildings – the hotel and garage.
- Development of a Memorandum of Understanding (MOU) between the city of Boulder, St. Julien Partners and CAGID to outline the framework and parameters of the public/private partnership and facility management;
- Exploration and identification of financing options for the civic use;
- Continued coordination with the CAP process.

Based on the result of Phase I work, staff would present recommendations to the CUTF IV and then to City Council for review prior to further pursing the details and expending funds for Phase II work: market demand studies for the civic use space, the next stage of building design, analysis of financing options and negotiations with St. Julien.

ATTACHMENTS

Attachment A: Civic Pad Feasibility Study
Attachment B: 9th and Canyon Urban Renewal Plan
Attachment C: Past Development Proposals and Ideas
Attachment D: Illustration of Civic Area Plan
Attachment E: Survey and Summary
Attachment F: Chart Outlining Modifications to Legal Documents

Boulder Civic Area

Civic Pad Feasibility Study

Boulder, Colorado
40° 0', 105°16'

25 November 2013

4240

Table of Contents

01 Program

02 Opportunities and Constraints

03 Plans

04 Sections

05 Massing

06 Optional Bridge Connection

01 Program

Preliminary Program and Area Calculations

Civic Pad

Room/Space	Net Area (nsf)	Gross Area (gsf)	Notes
LEVEL 1			
1.10 Open Event Space	8,400		Room A combined with pre-function
Conference Room - A	6,700	6,700	
Conference Room - B	3,350		Quantity (2)
Conference Room - C	2,250		
Conference Room - D	1,100		
1.20 Pre-function		3,250	includes coat room
1.30 Restrooms		1,060	
1.40 Warming Kitchen		1,740	includes service elevator passageway
1.50 Vertical Circulation		680	
1.60 BOH/ Service Corrirdor		1,230	includes fan room exhaust wells
Total Level 1		**14,660**	
LEVEL 2			
2.10 St. Julien Hotel - Expansion		12,190	Exterior terraces not included
2.20 Circulation		900	Guest corridor 6' wide
2.30 Vertical Circulation		680	
2.40 BOH/ Service		740	
Total Level 2		**14,510**	
LEVEL 3			
3.10 St. Julien Hotel - Expansion		12,190	Exterior terraces not included
3.20 Circulation		900	Guest corridor 6' wide
3.30 Vertical Circulation		680	
3.40 BOH/ Service		740	
Total Level 3		**14,510**	
LEVEL 4			
4.10 St. Julien Hotel - Expansion		12,190	Exterior terraces not included
4.20 Circulation		900	Guest corridor 6' wide
4.30 Vertical Circulation		680	
4.40 BOH/ Service		740	
Total Level 4		**14,510**	
LEVEL 5 - CIVIC EVENT SPACE			
5.10 Roof top Terrace	7,250		Open, flexible outdoor event spa
5.20 Mechanical/Electrical Rooms		2,800	
5.30 Elevator Foyer/Vestibule		450	
5.40 Vertical Circulation		680	
Total Level 5		**3,930**	
MEZZANINE LEVEL (Above Parking Level 1)			
0.10 Storage		2,800	Event space storage - chairs, tab
5.40 Vertical Circulation		480	Service elevator access
Total Level 5		**3,280**	
TOTAL BUILDING AREA		**65,400**	

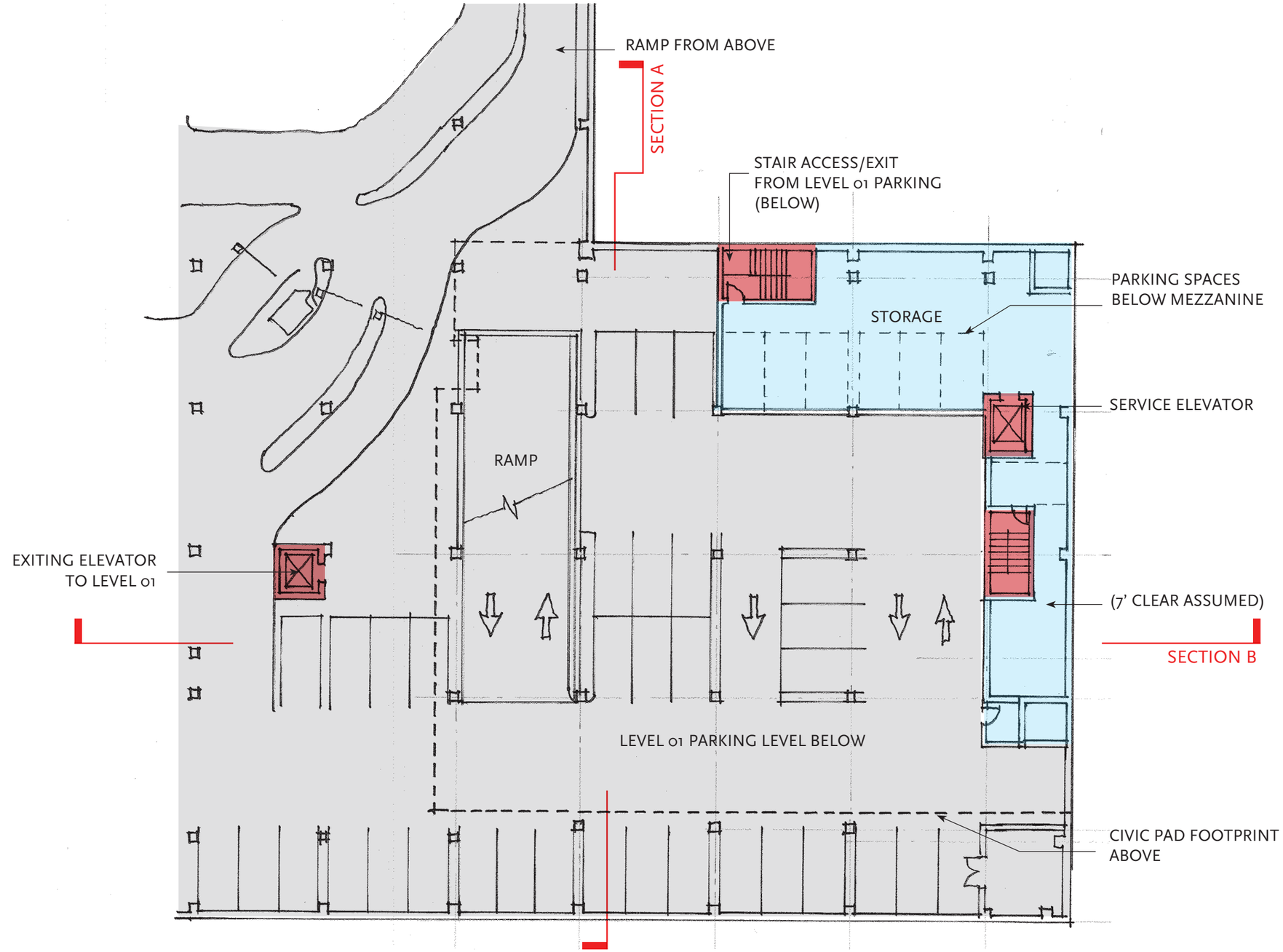
Opportunities:

i. Connection to West End Civic Plan
ii. Connection to Walnut St and Mall via Alley
iii. Connection to Civic Area (via Canyon Blvd crossing – street level or bridge)
iv. Connection to 9th and Walnut Parking Garage and potential mezzanine storage space
v. Large ground level multi-function public space with natural light
vi. Roof top activity terrace
vii. Facility sharing with St Julien Hotel
vii. Living Building Challenge Designation

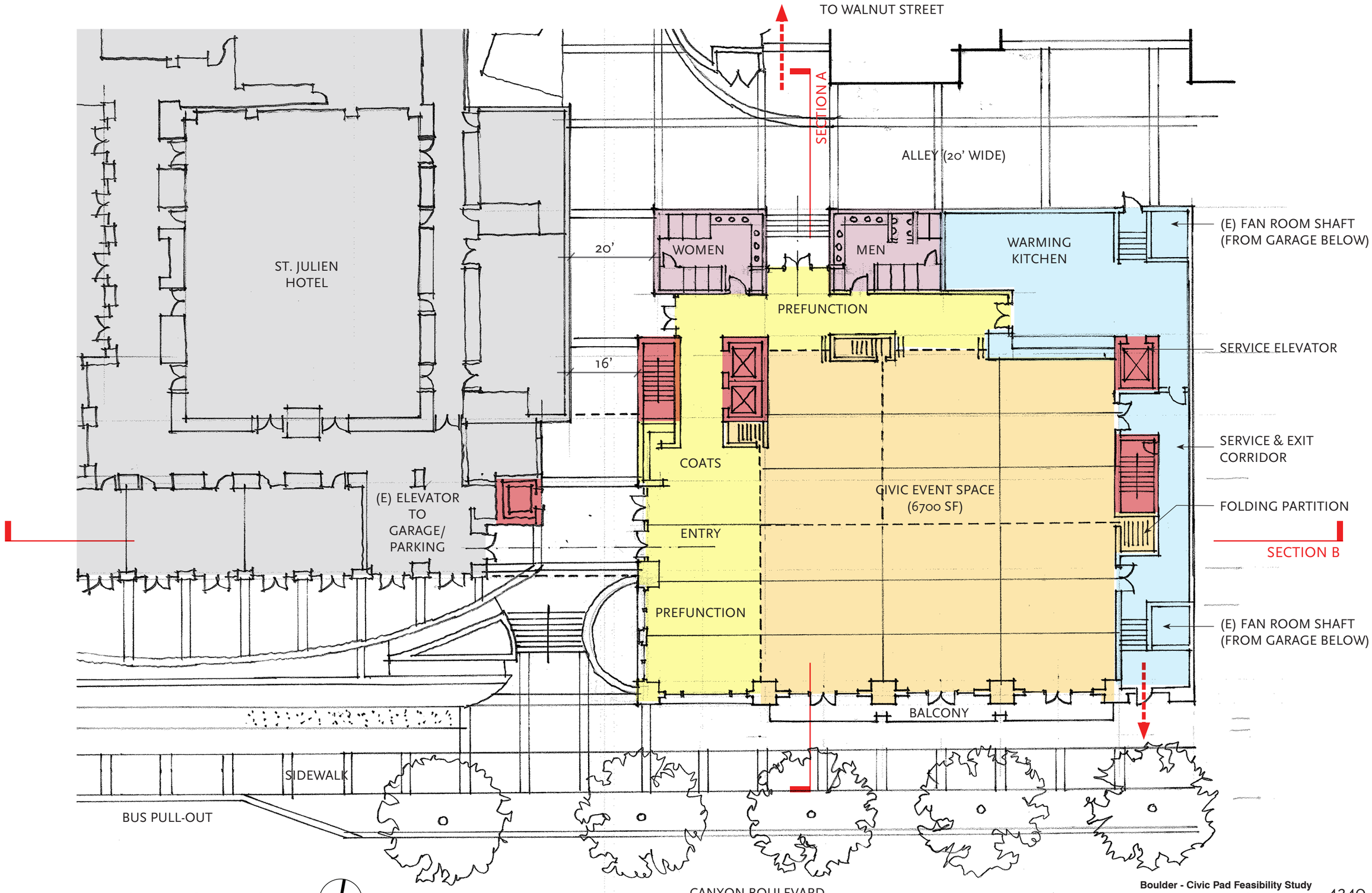
Possible Constraints:

i. Building height limit of 55' and roof top use
ii. Flood Conveyance zone
iii. Bridging Canyon Blvd – State Highway (14' min clearance?)

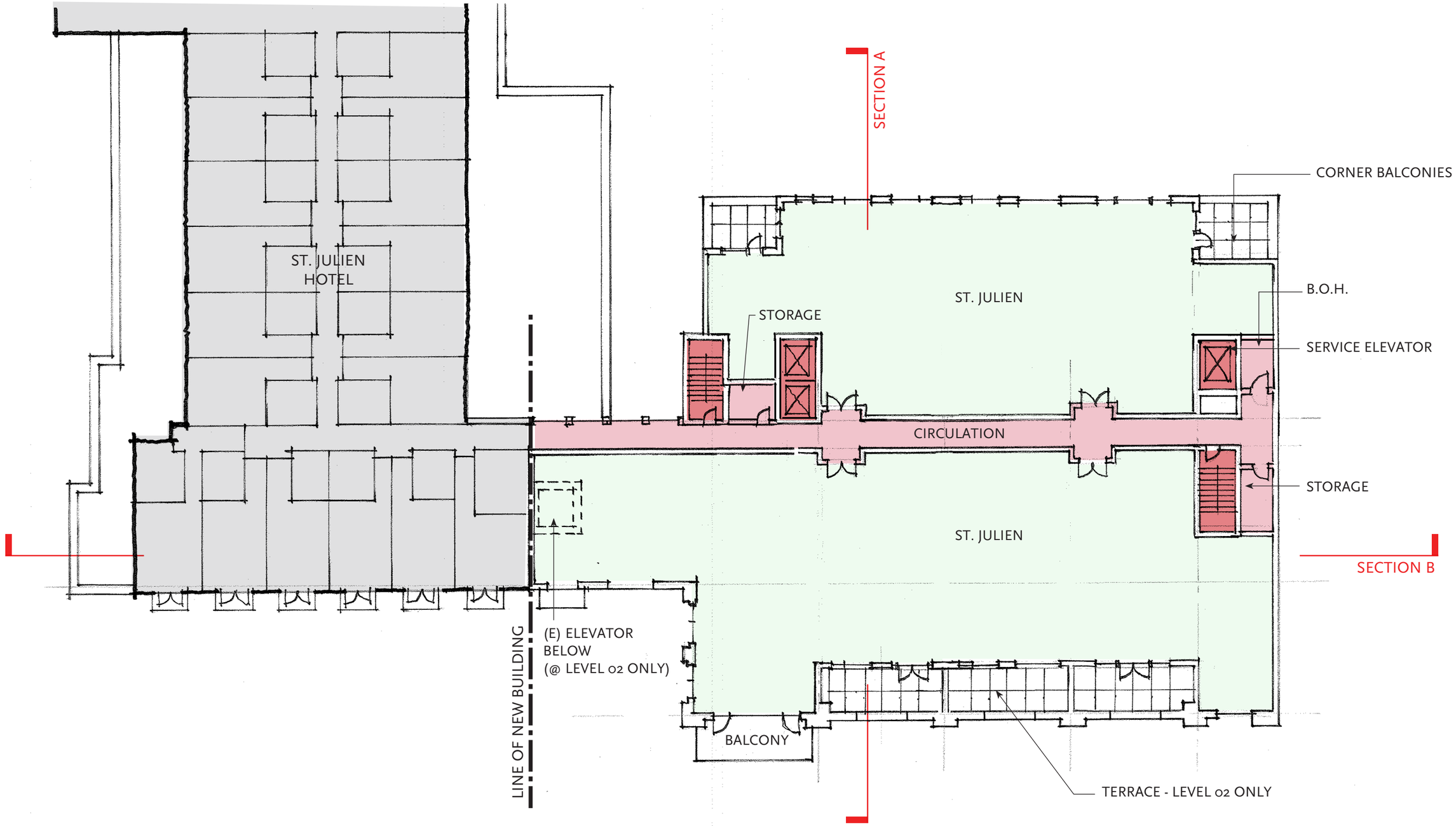
02 Opportunities and Constraints



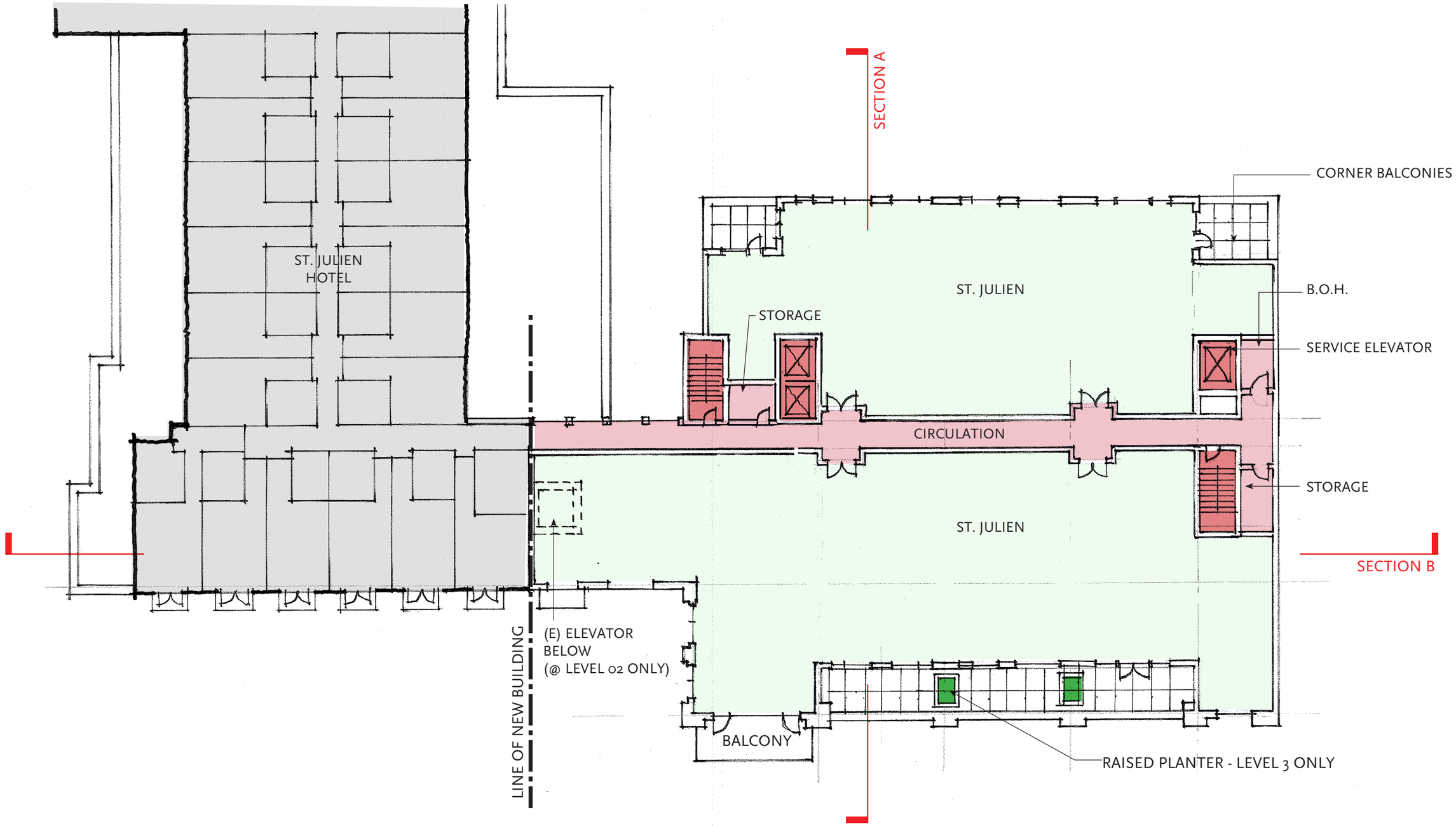
Mezzanine Level -Floor Plan



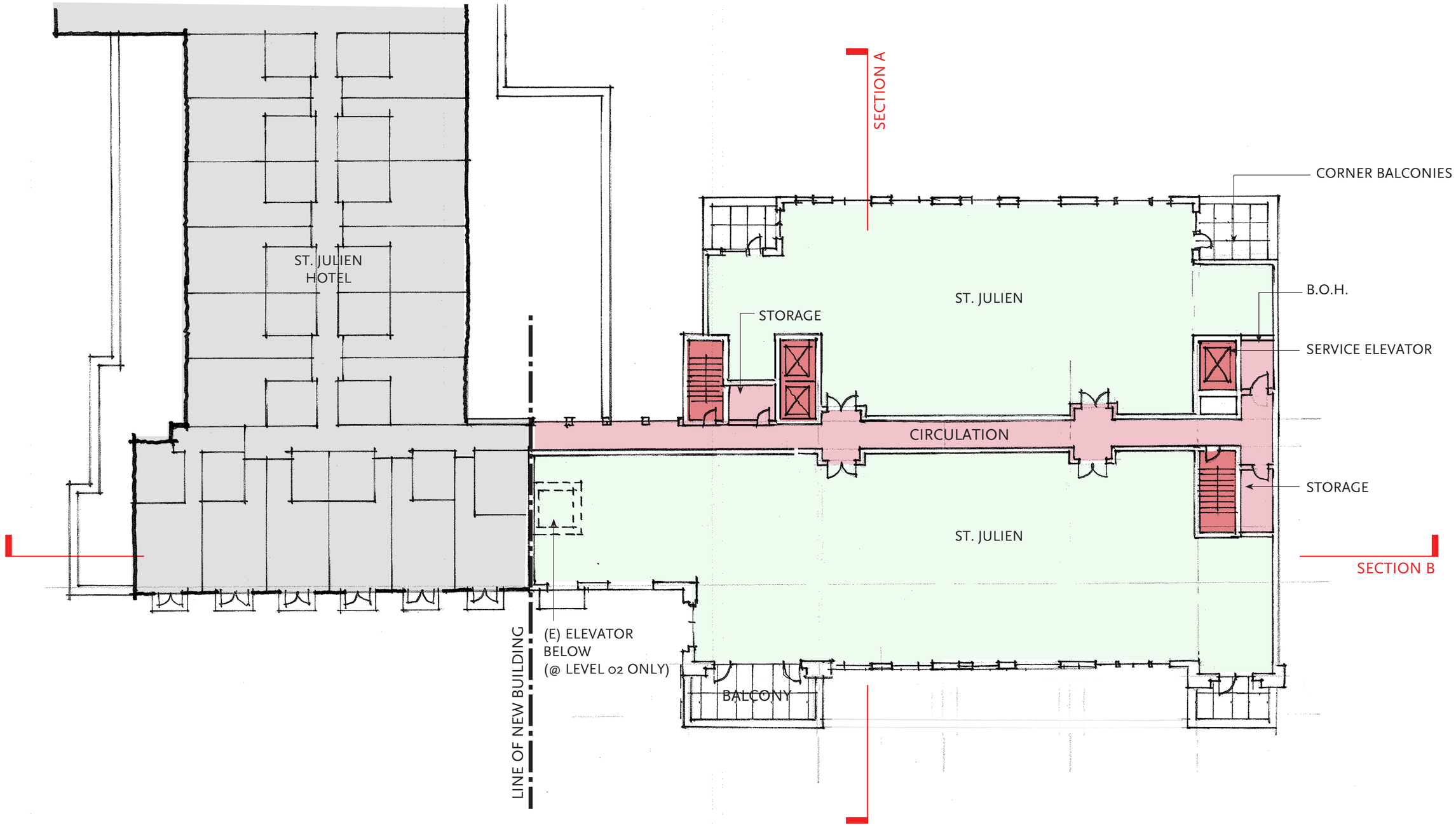
Level 01- Floor Plan



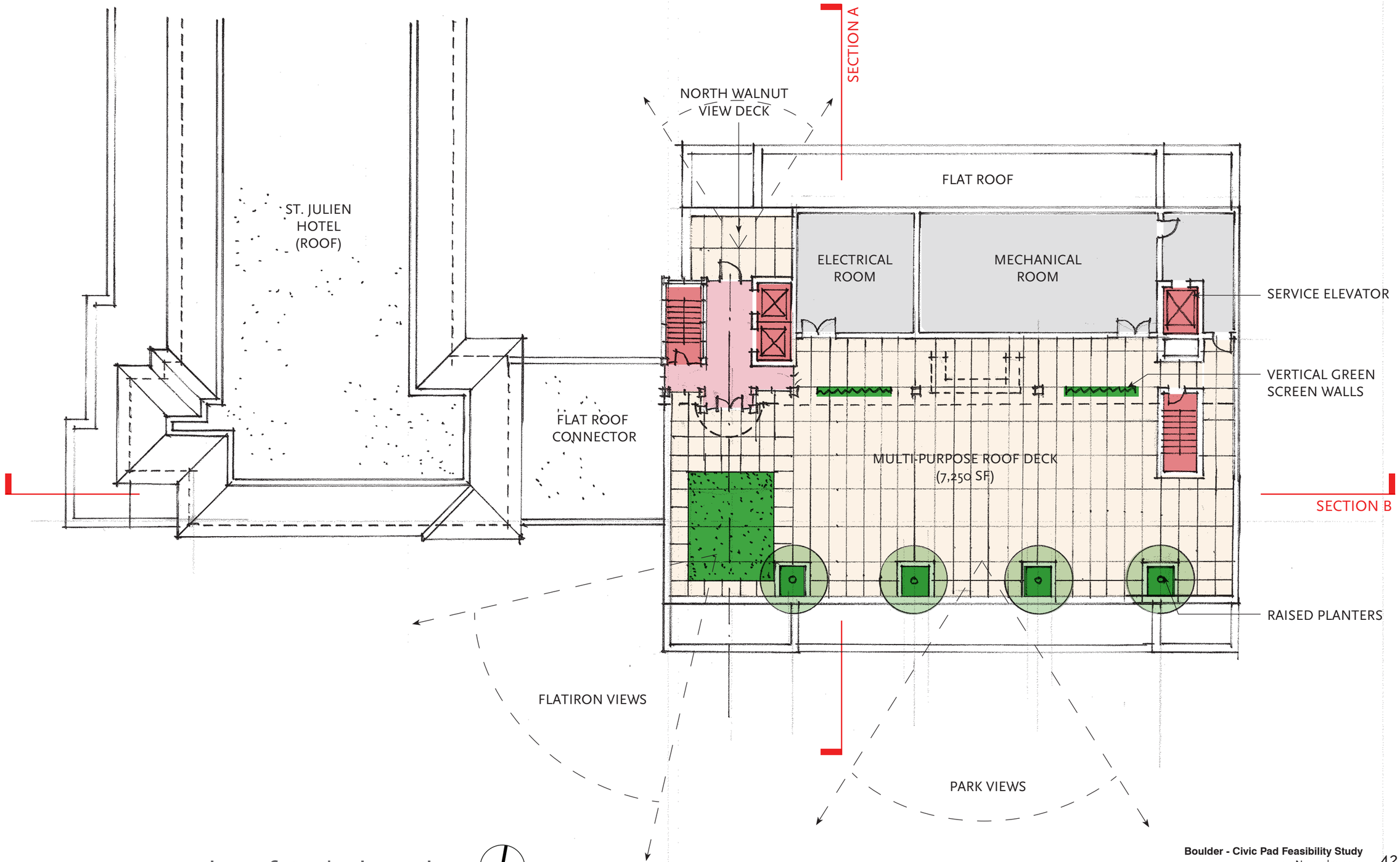
Level 02- Floor Plan



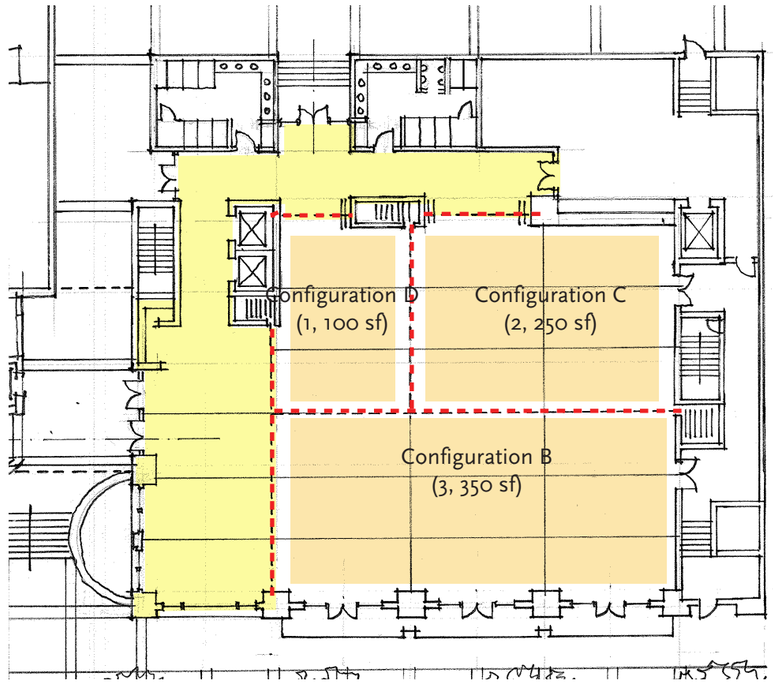
Level 03- Floor Plan



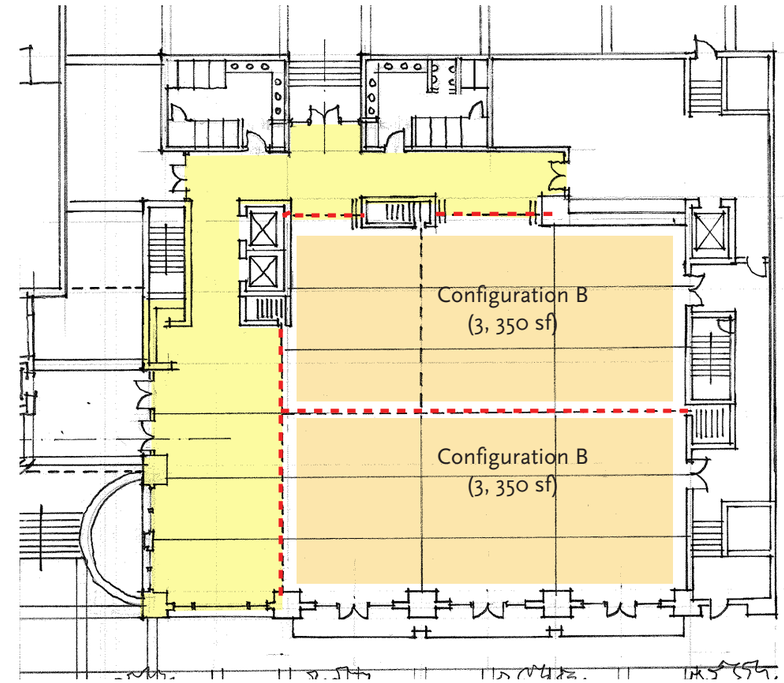
Level 04- Floor Plan



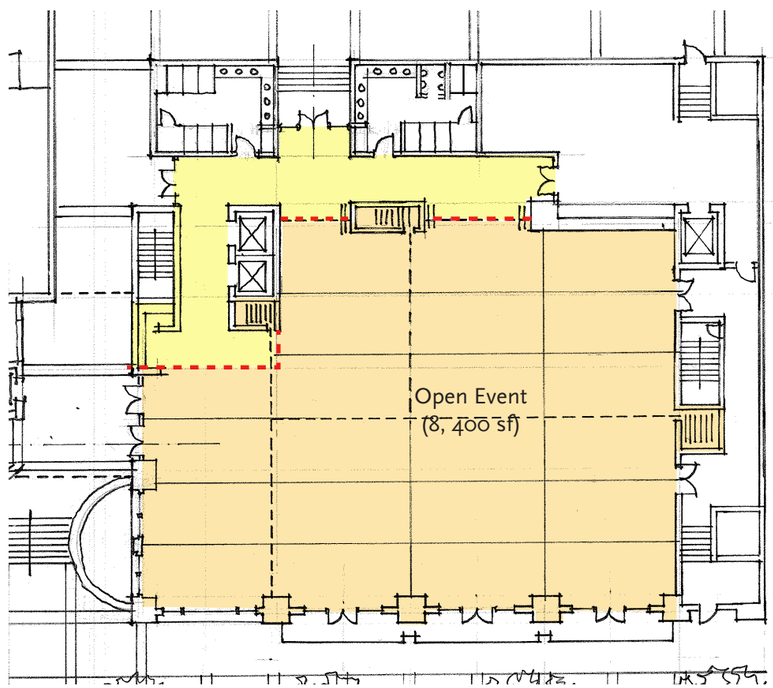
Upper Level Roof Deck Floor Plan



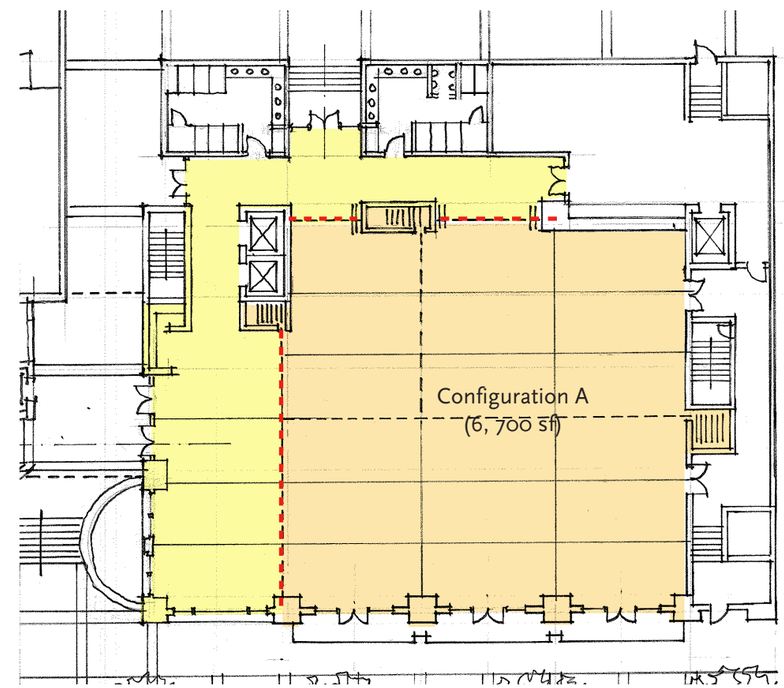
Partitioned Event - with prefunction



Partitioned Event - with prefunction

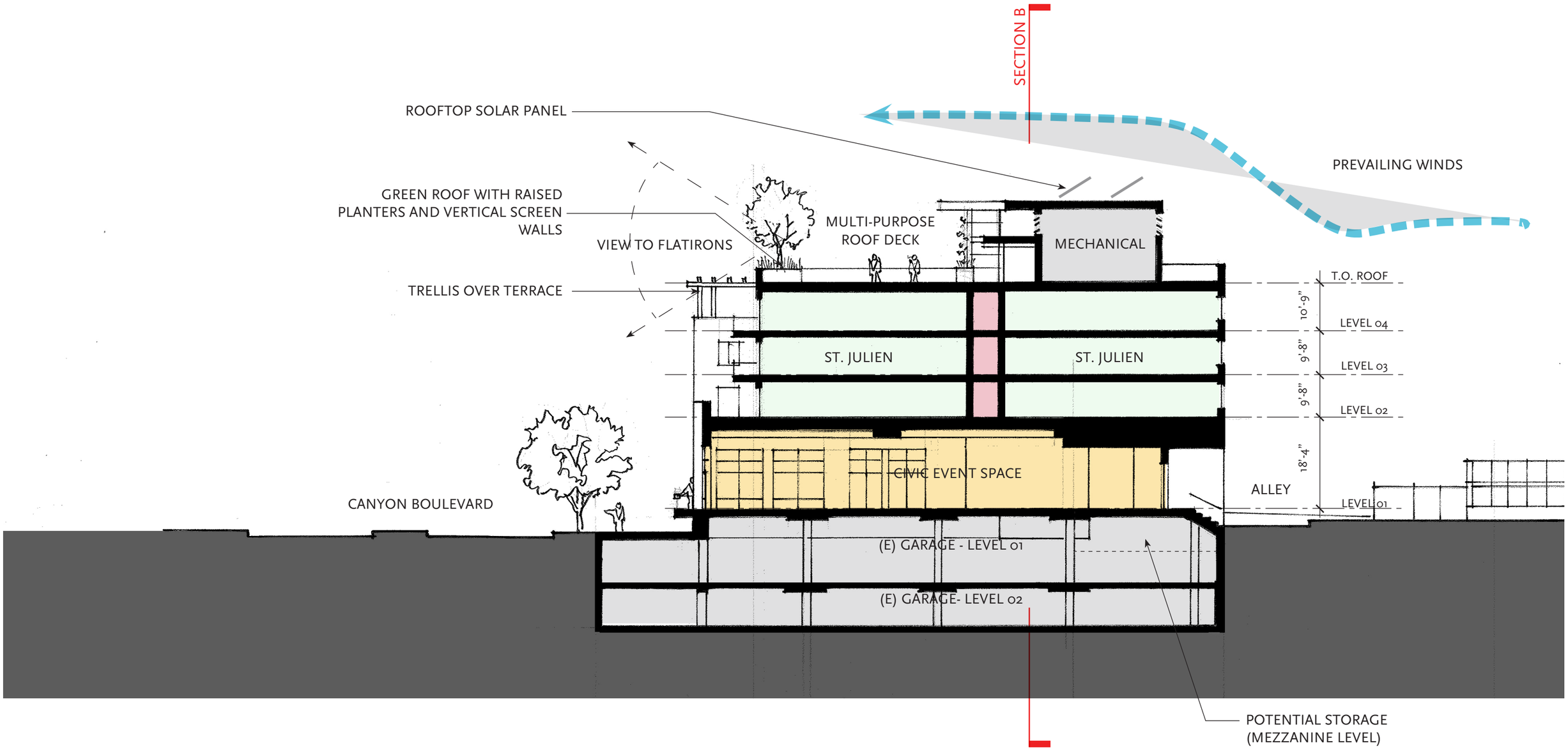


Open Event

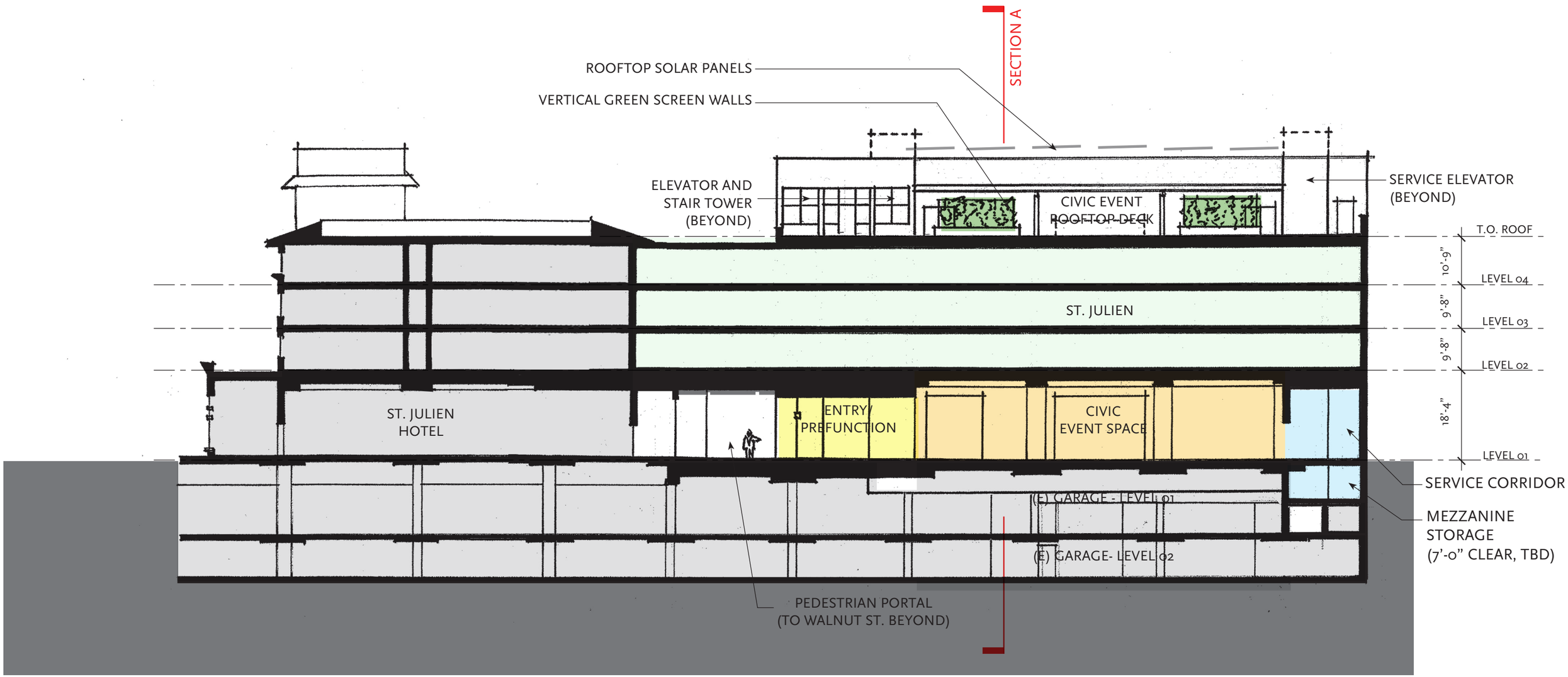


Open Event - with prefunction

Civic Event Space Configurations


SECTION B
ROOFTOP SOLAR PANEL
PREVAILING WINDS
GREEN ROOF WITH RAISED PLANTERS AND VERTICAL SCREEN WALLS
VIEW TO FLATIRONS
MULTI-PURPOSE ROOF DECK
MECHANICAL
TRELLIS OVER TERRACE
T.O. ROOF
10'-9"
LEVEL 04
ST. JULIEN
ST. JULIEN
9'-8"
LEVEL 03
9'-8"
LEVEL 02
18'-4"
CIVIC EVENT SPACE
ALLEY
LEVEL 01
CANYON BOULEVARD
(E) GARAGE - LEVEL 01
(E) GARAGE- LEVEL 02
POTENTIAL STORAGE (MEZZANINE LEVEL)

Section A

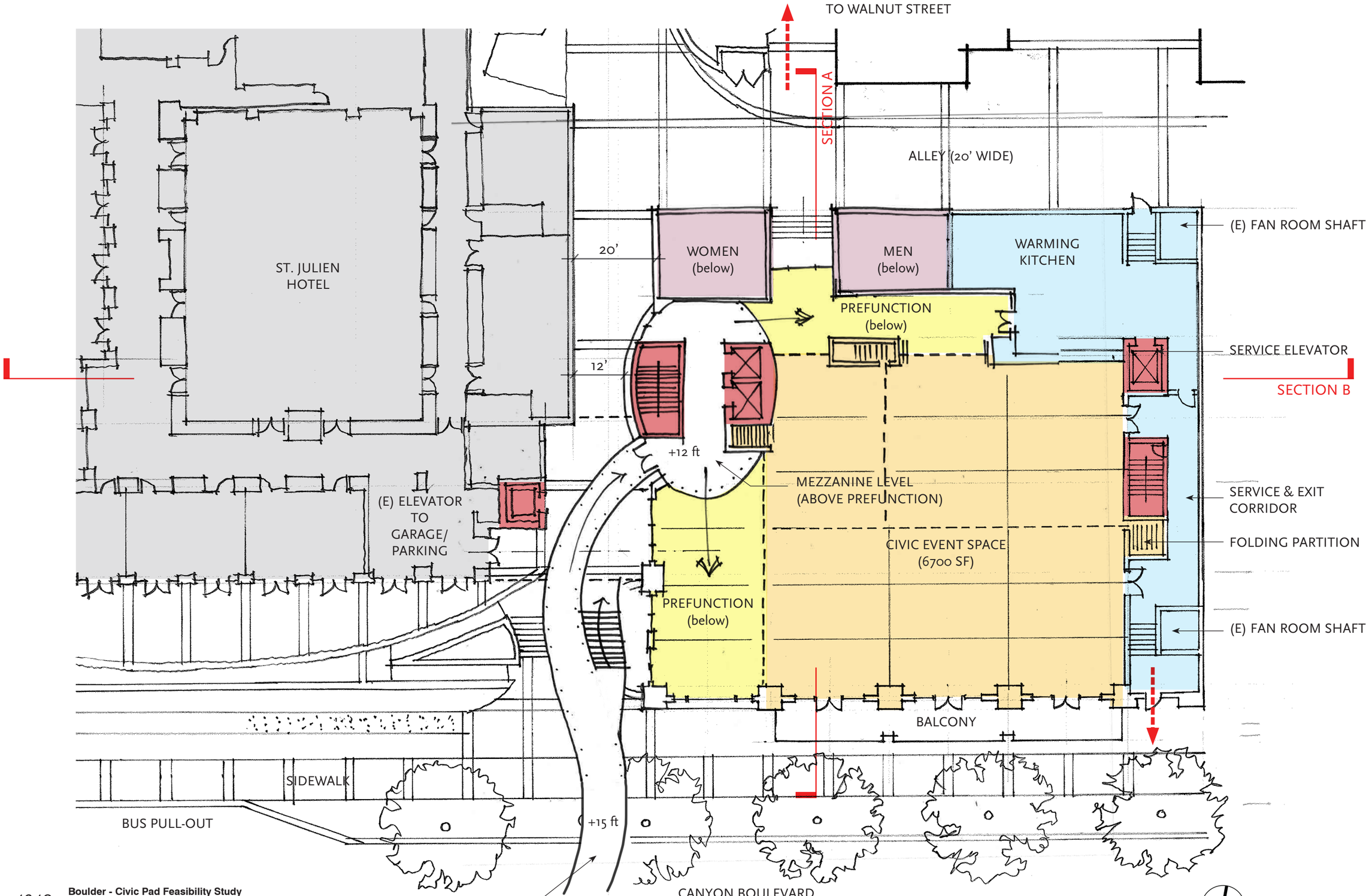

SECTION A
ROOFTOP SOLAR PANELS
VERTICAL GREEN SCREEN WALLS
ELEVATOR AND
STAIR TOWER
(BEYOND)
CIVIC EVENT
ROOFTOP DECK
SERVICE ELEVATOR
(BEYOND)
T.O. ROOF
10'-9"
LEVEL 04
9'-8"
LEVEL 03
9'-8"
LEVEL 02
18'-4"
LEVEL 01
ST. JULIEN
ST. JULIEN
HOTEL
ENTRY/
PREFUNCTION
CIVIC
EVENT SPACE
SERVICE CORRIDOR
(E) GARAGE - LEVEL 01
MEZZANINE
STORAGE
(7'-0" CLEAR, TBD)
(E) GARAGE- LEVEL 02
PEDESTRIAN PORTAL
(TO WALNUT ST. BEYOND)

Section B

Massing Model - view from southeast

Massing Model - view from southwest

06 Optional Bridge Connection

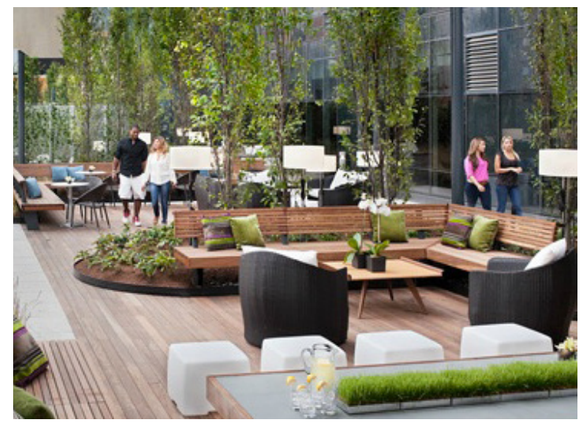


Optional Bridge Connection Mezzanine Level - Floor Plan

Optional Bridge Connection - Across Canyon Blvd.

Optional Bridge Connection - Across Canyon Blvd.

Optional Bridge Connection - Across Canyon Blvd.



Conference/Civic Event Space

Rooftop Deck- Civic Event Space

Precedent

Boulder Urban Renewal Plan

Ninth & Canyon

1995 Revised Plan

Adopted:

Boulder Urban Renewal Authority, April 6, 1995

Boulder Planning Board, May 11, 1995

Boulder City Council, July 11, 1995

Boulder Urban Renewal Authority

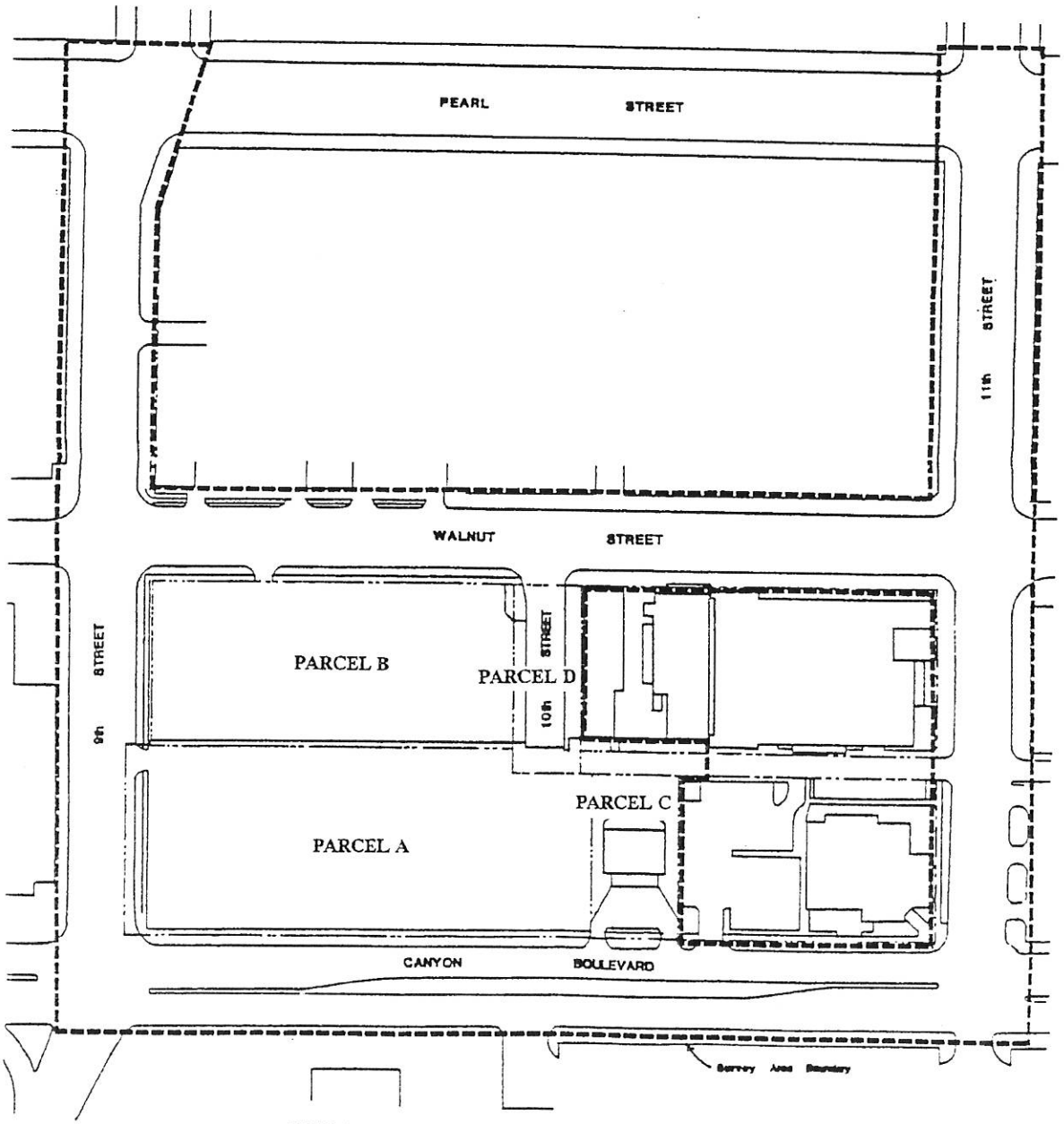
I. INTRODUCTION

A. PREFACE

This plan has been prepared by the Boulder Urban Renewal Authority pursuant to the provisions of the Urban Renewal Law of the State of Colorado, Part 1 of Article 25 of Title 31, C.R.S. The administration of this project and the enforcement of this plan, including the preparation and execution of any documents implementing it, shall be the responsibility of the Boulder Urban Renewal Authority.

B. PROJECT AREA BOUNDARIES

The boundaries of the project area are illustrated on the following map:



BURA
BOULDER URBAN RENEWAL AUTHORITY
SURVEY OF 9TH STREET AND CANYON BOULEVARD SITE

The project area boundaries are described as follows:

Beginning at a point that is the intersection of the southerly ROW line of Canyon Boulevard, and the westerly ROW line of 9th Street; then northwesterly along the westerly ROW line of 9th Street, to a point that is the intersection of the westerly ROW line of 9th Street , and the northerly ROW line of Pearl Street;

Then northeasterly along the northerly ROW line of Pearl Street, to a point that is the intersection of the northerly ROW line of Pearl Street, and the easterly ROW line of 9th Street;

Then southeasterly along the easterly ROW line of 9th Street, to a point that is the intersection of the easterly ROW line of 9th Street, and the northerly ROW line of Walnut Street;

Then northeasterly along the northerly ROW line of Walnut Street, to a point that is the intersection of the northerly ROW line of Walnut Street, and the westerly ROW line of 11th Street;

Then northwesterly along the westerly ROW line of 11th Street, to a point that is the intersection of the westerly ROW line of 11th Street, and the northerly ROW line of Pearl Street;

Then northeasterly along the northerly ROW line of Pearl Street, to a point that is the intersection of the northerly ROW line of Pearl Street, and the easterly ROW line of 11th Street;

Then southeasterly along the easterly ROW line of 11th Street, to a point that is the intersection of the easterly ROW line of 11th Street, and the southerly ROW line of Canyon Boulevard;

Then southwesterly along the southerly ROW line of Canyon Boulevard to the point of beginning.

Excepting the following:

All of Lots 1, 2, 3, 4, 5, 6, 9, 10, 11, and 12, Block 44, Boulder Plat (Original Town);

The easterly 25 feet of Lot A, Block 44, Boulder Plat (Original Town);

The easterly 10 feet of 10th Street, vacated by City Ordinance 3010;

All that portion of the improved alley that is located in Block 44, Boulder Plat (Original Town).

C. PROJECT PURPOSES

An Urban Renewal Plan for the Ninth and Canyon site in downtown Boulder has been developed to achieve the following purposes:

1. To implement the Boulder Valley Comprehensive Plan.

2. To eliminate existing conditions in the Urban Renewal Area that are detrimental to the project area, adjacent neighborhoods and facilities, and to the City as a whole.

3. To redevelop and rehabilitate the area in a manner which is compatible with and complementary to existing development and uses in the general area, and to provide an improvements framework which is based on community-wide goals and values.

4. Through redevelopment, contribute to a sustainable downtown Boulder community and economy.

5. To facilitate the redevelopment of the area by private enterprise by cooperating with other public bodies to provide needed infrastructure improvements.

6. To effectively utilize undeveloped and underdeveloped land.

II. URBAN RENEWAL ELIGIBILITY

A. GENERAL AREA DESCRIPTION

The project area is located on the western portion of the block bounded by 9th Street, Canyon Boulevard, Walnut Street and 11th Street. It is comprised of four parcels totaling 2.89 acres in area. Parcel A, owned as of April 1995 by St. Julien Partners located in Boulder, Colorado, is an unpaved, unimproved lot. Parcel B is a paved public parking lot owned by the Central Area General Improvement District (CAGID). Parcel C, also owned by St. Julien Partners, contains the only built improvement in the area, the old Chamber of Commerce building. Parcel D is comprised wholly of the 10th Street right-of-way.

B. SITE SURVEY CONDITIONS

The following conditions were documented on the site in 1988 and served as the basis for the initiation of the urban renewal planning process:

Environmental Conditions

- The majority of the site is in the 100 year floodplain.
- A portion (approx. 25%) of the site is in the 100 year "floodway".
- Canyon Boulevard is a high noise corridor (61 decibels).
- Site drainage is very poor on the unpaved portions (Parcel A).
- The majority of the site has a very high ground water table.

Site Utilization

- Most of the site is vacant except for parking uses - the overall Floor Area Ratio (F.A.R.) is approximately 0.03. (F.A.R. is the ratio of building size to site size). The City Planning Department's criteria for "significantly underutilized" land in the downtown is a F.A.R. below 0.49.
- Access to and circulation within the site is seriously deficient, particularly for emergency vehicles (mainly fire apparatus).

Traffic/Streets

- The 9th and Canyon intersection is mis-aligned. Southbound 9th Street traffic has difficulty finding the proper 9th Street lane to enter on the south side of Canyon Boulevard.
- Excessive speeds and heavy traffic volumes on 9th Street create pedestrian crossing problems, particularly at Walnut Street.
- The 9th and Canyon intersection had 15 accidents in 1987, tying for 22nd place of all intersections in the City.
- Paving on 10th Street (a public right of way) is seriously deteriorated with sidewalk on one side only.
- Deteriorated curb, gutter and sidewalks occur along Canyon Boulevard, 9th Street and Walnut Street.

Site Improvements

- On-site spot drainage and severe pothole and erosion problems occur on the unpaved portions (Parcel A and alleyways) of the area.
- Landscaping is seriously deficient throughout the area.
- Site lighting is deficient, particularly on Parcel A.
- On-site directional signage is inadequate.
- Driveway and access definition is inadequate.
- Site maintenance is seriously deficient. On-site debris is prevalent.
- Some on-site exterior structures (walls, fences, etc.) are deteriorated.
- Pedestrian and bicycle facilities are almost non-existent.

Utilities

- Water mains are old (25-30 years) and may not meet current standards, but do not present any capacity, pressure, or maintenance problems at this time.

Fire Protection/General Health and Safety

- Fire apparatus access to car fires is very difficult because of the condition of the unpaved parking surface and poor driveway definition.
- Public hydrants are inadequate in terms of number and location.
- It is difficult to access the rear of adjacent buildings.
- Overhead power lines create a hazard for firefighting personnel using highly mechanized equipment.
- Seventeen crimes, mostly automobile related, occurred in the study area between June 1986 to April 1988. This is a relatively high crime rate for a parking lot.

III. DEVELOPMENT PLAN

A. COMPREHENSIVE PLAN AND LOCAL STANDARDS

1. Land Use and Planning Criteria

Determination of land use and densities, major circulation routes, public facilities and planning criteria are based on the Boulder Valley Comprehensive Plan, City Land Use Regulation, Subdivision Ordinance, Building Code and this Urban Renewal Plan.

The Context Guidelines for Project Area Development (Section III, C) and the Project Area Development Guidelines (Section III, D) will be applied by the Authority when providing a recommendation to the Planning Board during the site review process, (B.R.C. 9-4-10). In addition, the Downtown Design Advisory Board (DDAB) or its successor, will review development proposals and will make recommendations to the Authority and Planning Board during the site review process. The guidelines set forth in Section III, C and Section III, D may be waived or modified by the Authority for a specific redevelopment project.

2. Planning Conformance

The Urban Renewal Plan is in conformance with the Boulder Valley Comprehensive Plan in respect to land use and densities, transportation and other public facilities, and meets the intent and goal of the Comprehensive Plan for development which could include opportunities for shopping, support services and public facilities, including parks and other civic uses. Specifically, the Comprehensive Plan's Community Design and Central Area policies state:

Community Design
"New residential, commercial and industrial development and redevelopment shall be encouraged to follow sound and innovative land use planning. The goals are to provide a livable built environment and, through the judicious use of landscaping, materials and human scale, to respect the character of the surrounding area." (p. 8).

Central Area Programs
"The City of Boulder, through the merging of public and private interests, shall seek to retain the Central Area of the Boulder Valley as the primary governmental, cultural, office, financial, entertainment, shopping, medical facility, and high density residential district of the Boulder Valley.

The Downtown shall retain its historic role as the governmental, entertainment, office, and financial center of the Boulder Valley. It shall continue to develop as a specialty retail center. This shall be accomplished by coordinating concerted and comprehensive public policies and investments with private redevelopment and rehabilitation efforts." (p. 139).

B. GENERAL DESCRIPTION OF THE DEVELOPMENT PLAN

The Development Plan will require the redevelopment of the project area to address the following:

1. Mixed and/or multi-use development that incorporates a combination of hotel and ancillary hotel services as primary uses. Civic uses (such as recreation center, museum, cultural center, City office space, and transit facilities as specified under Section III, E.2.d of this plan), will occupy a minimum of 20% of the gross floor area developed in the project area.

2. If a viable project is not in the process of approval or development prior to April 18, 1998, the City Council shall consider reopening this urban renewal plan to permit alternative land uses.

C. CONTEXT GUIDELINES

The Ninth and Canyon project area is located in the Walnut/Canyon corridor of downtown Boulder. Redevelopment efforts during the last twenty years have resulted in an area comprised of office buildings, restaurants, banks and surface parking lots. This corridor, which is located between the historic commercial area and the civic park, has limited retail uses, street life and pedestrian activity. The goal of an enhanced and vital downtown can be promoted with a mix of quality uses and developments that encourage pedestrian activities. These guidelines will set a standard for other redevelopment parcels along the Walnut/Canyon corridor.

The following guidelines establish the Authority's objectives for the redevelopment of the project area. Development proposals will be reviewed according to the guidelines. Such review will be a responsibility of DDAB or its successor, and as such made a part of the site review process identified in the City of Boulder Land Use Regulation. Design integrity will be project specific. Massing, location, character, materials, setbacks, height, circulation, open space and other elements must work in relation to each other and as parts of a whole.

Therefore, the specific definition and application of Section III C and D will vary according to project specific design considerations. The guidelines are not intended as a design checklist. They are intended to suggest the type and range of options requiring serious consideration.

1. Walnut/Canyon Corridor Redevelopment Guidelines

- Retail activity at the street level
- South facing urban open spaces and buildings
- Landscaping along Canyon Boulevard
- Pedestrian access corridors through redevelopment sites
- A gateway element at Ninth and Canyon
- Streetwalls and spaces framed by buildings on Walnut Street
- Open space, building openings, setbacks and orientation which frame the southerly views

2. General Development Guidelines

Regional Access Regional access to the project area is excellent because of its location along Canyon Boulevard. Uses and development which require this type of access should be considered for the project area, with heavy emphasis on transit and alternative modes.

Western Gateway to Downtown The project area is a unique gateway to downtown because of its location on the western edge of the city and within the viewshed of Canyon Boulevard and Boulder Creek. Uses and development can help to identify this gateway with special uses, development and design features. It can also provide an anchor in the western part of downtown and a link to adjacent residential neighborhoods, the civic center and the Boulder Creek corridor.

Downtown and Neighborhood Connections Ninth and Canyon is located close to the Downtown Mall, the Civic Park, the Library, the West Pearl shopping area, other major downtown destinations and residential neighborhoods. Connections to these facilities through the Ninth and Canyon project area are important to reinforce the overall unity of downtown and to promote a pedestrian environment in downtown. In addition, efforts should be made to avoid the negative impacts of vehicular traffic on the core area neighborhoods.

Quality Development The project area is located within the Walnut/Canyon corridor, an area comprised of large banks, mixed use buildings and large surface parking lots. Future downtown development within this corridor should improve the pedestrian and fulltime character of downtown, and encourage a more sustainable utilization of downtown properties. Corridor development should link the Civic Park and Walnut/Canyon corridor with the historic commercial area.

3. Area Development Guidelines

Pedestrian Access Provide and enhance pedestrian connections within downtown and adjacent neighborhoods at Ninth and Canyon. Provide pedestrian access corridors to and through the project area. Maximize use of the 10th street alley, sidewalks, and possible public improvements along Canyon, 9th and Walnut.

Intersections and Entrances Recognize the features and uses which provide a distinctive image at the Ninth and Canyon intersection. Develop compatible intersection features at 9th/Walnut and 10th/Walnut to relate development of the project area to the adjacent neighborhoods. Landscaping, public uses, and building features should reinforce the intersections.

Public Improvements Civic improvements should enhance the functions and image of the project area. These improvements should be considered for the 10th street alley and pedestrian connections across Canyon, 9th and Walnut and the Canyon, 9th, Walnut streetscapes.

Physical Development and Buildings Develop multiple use buildings to provide fulltime activity in the project area. Physical development should reinforce the attributes of the project area and downtown Boulder, incorporating traditional elements that are adaptable to a variety of uses. Provide streetwalls along Walnut Street to enclose and frame public spaces. Upper level stepbacks should be used to minimize street level shadows and pedestrian scale features along the sidewalk.

Open Space Develop usable open spaces. Provide community and neighborhood facilities for sitting, relaxing, community gatherings, and local activities.

D. SITE DEVELOPMENT GUIDELINES

The following guidelines establish the Authority's objectives for the redevelopment of the project area. The guidelines represent a range of development options and are not intended to be a design checklist. A specific project will not necessariiy be required to address or fulfill all of the guidelines.

1. Encourage the development of buildings that provide a mix of uses to provide full time activity within the project area.

   1.1 Encourage a mix of uses on the site with lodging units or civic uses on the upper levels.

   1.2 Respect and enhance the character of the street with small scale pedestrian oriented commercial activities along Walnut and 9th Street.

   1.3 Establish the Ninth and Canyon project area as a community focal place with uses, buildings and improvements that attract community activities and interaction.

   1.4 Encourage secondary special uses, such as educational, recreational, cultural and civic uses, which complement the primary uses of the project area.

   1.5 Develop a building complex to:
   - Reduce the apparent mass and bulk of the building
   - Express the varied uses of the site
   - Reflect the mixed use environment of downtown Boulder

   1.6 No individual project should become an enclave.

   1.7 Accentuate different portions of the buildings with various materials to reflect the different uses and functions of the buildings.

   1.8 Develop public outdoor spaces with uses and functions that will add interest and character to Ninth and Canyon and downtown Boulder.

2. Physical development should reinforce the unique attributes of the site and its relationship to downtown Boulder.

   2.1 Address the potential shade impact to Walnut with elements such as stepping back upper portions of taller buildings, streetscape design, street lighting, building illumination and ice deterrent.

   2.2 Encourage special features to convey a unique development character along Canyon Boulevard and Ninth Street.

   2.3 Provide building elements along Walnut to reinforce the historic commercial and pedestrian character of downtown.

   2.4 Physical development should enhance the downtown identity while creating an individual image at Ninth and Canyon.

2.5 Public interest should be provided by the use of pedestrian scale applications of first story details, facade details, and pedestrian scale features.

2.6 Any parking storage should be compatible with adjacent buildings.

2.7 Establish appropriate streetwalls and building setbacks along 9th Street, Walnut Street, and Canyon Boulevard (streetwalls are buildings which frame street spaces).

3. Establish a physical gateway to downtown Boulder at Ninth and Canyon by developing special features and uses which provides a distinctive image.

3.1 Building setbacks, design, massing, orientation and height should reinforce the significance of the Ninth and Canyon intersection.

3.2 Physical development should reinforce the significance of the Ninth and Canyon intersection.

3.3 The project should provide public art and landscaping at the Ninth and Canyon site to reinforce the Ninth and Canyon intersection. The intersection could be strengthened by establishing design elements common to both Boulder Creek and the project area, and by establishing view corridors from the project area to public art along Boulder Creek.

4. Provide and enhance pedestrian connections within downtown and adjacent neighborhoods at Ninth and Canyon.

4.1 A pedestrian link on the east side of the project area, along the 10th Street alignment should be provided through the site to connect south toward the library, and north toward Pearl Street. This and other pedestrian links should reinforce the downtown grid pattern and provide a more interesting and diverse pedestrian environment within the downtown.

4.2 Pedestrian facilities should link developed uses within the project area and should provide access to adjacent pedestrian destinations.

4.3 Landscaped sidewalks should be provided along Walnut, 9th, and Canyon to enhance the pedestrian environment leading to the project area and within downtown.

4.4 Provide for an on-site transit center/stop integrated with the sidewalk and buildings to facilitate transit access.

4.5 Enhance linkages to all transit facilities with information, education, directional signs and convenient and comfortable facilities.

5. Provide quality public space.

5.1 Public spaces should be large enough to accommodate scheduled and informal special events.

5.2 Design public spaces to incorporate drainage and floodhazard conditions associated with Boulder Creek.

5.3 Public spaces should be urban in character to complement the mixed use image of downtown.

5.4 Public spaces should be oriented south to the greatest extent possible to enhance solar access.

5.5 Public spaces should be oriented to the greatest extent possible to views of the Flatirons, Boulder Creek and the mountains to the west of Boulder.

5.6 Provide ample places to sit, relax, and eat meals.

6. Public improvements should enhance the function and image of the project area.

6.1 Develop special intersection improvements at Ninth and Canyon that may incorporate vertical gateway features, decorative street lights, landscaped medians, street accent paving, and corner landscape improvements.

6.2 The project should be designed to accommodate, and could participate in funding a possible future pedestrian/bicycle underpass (similar to the one at Broadway/College) across Canyon Boulevard at 10th Street to enhance access to the Civic Park.

6.3 The City could develop midblock pedestrian improvements at 10th/Walnut to link the project area to Pearl Street along the 10th Street corridor. This would be a portion of a larger pedestrian connector between the Civic Park and Pearl Street.

E. PUBLIC IMPROVEMENTS

Improvements will be made to provide the infrastructure necessary to carry out the objectives of the Plan. Such improvements include, but are not limited to:

1. Environmental

a) Floodplain Improvements - Any uses will meet the City's Floodplain Regulation (Chapter 9-9, B.R.C. 1981). No structures intended for human occupancy will be allowed in the high hazard zone or the conveyance zone. Uses in the floodplain will be fully protected from the 100 year flood.

b) Erosion and Storm Drainage - Erosion problems will be eliminated through development of the site. Storm drainage improvements will be made as necessary.

2. Land Utilization

The current floor area ratio (F.A.R.) for the project area is approximately 0.03. The City of Boulder Planning Department's criteria for "significantly underutilized" land in the downtown is an F.A.R. below 0.49. Implementation of this Plan will result in an F.A.R. of approximately 1.50.

3. Streets/Access/Circulation

a) Street improvements, to the extent required by the development plan, will be completed. A portion of 10th Street between Walnut and Canyon may be closed to vehicular traffic and resurfaced, to encourage and enhance safe pedestrian movement; and curbs, gutters and sidewalks will be replaced or repaired as needed. New traffic control and other intersection improvements will be made as needed.

b) Off-Street Parking - Parking located in an underground structure must provide for the replacement of the existing Central Area General Improvement District (CAGID) spaces, provide for the parking requirements of the proposed development and allow for additional parking to offset the increase in parking demand that development in the project area will generate in adjacent areas. The latter requirement will be explicitly defined in a CAGID/BURA cooperation agreement at the time the project area is redeveloped. This plan supersedes the provision of the RB-X zone district that permits non-residential development without parking facilities if located in a mandatory parking district.

c) Pedestrian and Bicycle Circulation - A system of pedestrian facilities that may include walks, a pedestrian mall, an atrium, pocket park and landscaped open spaces will be provided. Bike parking areas will be provided to encourage bike access.

d) Transportation Facilities - Significant facilities for alternative modes of transportation must be incorporated into the development plan with the objective of reducing the amount of parking that will be required in the project area. The goal shall be at least a 15% reduction in projected single occupant vehicle trips to and from the project area. If a hotel use is developed as identified in section III, B. 1 of this plan, shuttle service to Denver International Airport and possibly other locations will be required.

4. Site Improvements

a) Landscaping, Signage and Lighting - A landscaping plan will be developed and implemented to provide enhancement of the non-building portions of the project area.

b) Open Spaces - In addition to landscaped open spaces, other publicly accessible improvements such as a plaza, pedestrian mall, an atrium, and a pocket park may be provided. A

minimum of 50,000 square feet of open space and landscaped areas is planned. However, the specific requirements of this Plan for the provision of open space will be determined through the Site Review process.

c) Additional fire hydrants, stand pipes, etc. will be provided as needed to meet City Fire Code regulations.

F. LAND USE REGULATIONS AND BUILDING REQUIREMENTS

1. The land use, design and construction of development in the project area shall comply with the City of Boulder's RB-X Zoning, the Downtown Design Guidelines, and other applicable provisions of the Boulder Land Use Regulation (including site and use review as applicable). Under the provisions of this Plan, parcels A (unimproved lot), B (CAGID parking lot) and C (old Chamber of Commerce Building) will be required to be developed in a coordinated manner.

2. All development must conform with the provisions and purposes of this Plan, and with all applicable laws, ordinances and codes.

IV. IMPLEMENTATION PROGRAM

A. PROJECT ACTIVITIES

1. PROPERTY ACQUISITION

No land will be acquired by the Authority and therefore no provisions are provided in this plan for owner participation, property management, relocation, or property disposition.

2. DEMOLITION, CLEARANCE AND SITE PREPARATION

The Authority will require any developer to demolish structures and other improvements and to clear and prepare the site for redevelopment in accordance with this Urban Renewal Plan.

3. PUBLIC IMPROVEMENTS AND FACILITIES

The Authority may install and construct, or cooperate as appropriate with developers and other public or private agencies, in the installation and construction of such public improvements, public facilities and utilities as necessary to carry out this Plan.

Such improvements, facilities and utilities include, but are not limited to, streets, curbs and gutters, sidewalks, bike paths, street lights, traffic signals; sanitary and storm sewers; water, electrical, gas and telephone distribution systems; parks, plazas and landscaped areas; and public transit facilities.

4. REDEVELOPMENT

Purchasers or owners of property within the project area shall be obligated to develop the property in accordance with the provisions of this Plan and the design standards and criteria established by the Authority, to begin and complete the development of the property within a period of time which the Authority fixes as reasonable, and to comply with such other conditions as the Authority deems necessary to assure the achievement of the purposes of this plan.

B. PROJECT FINANCING

1. METHODS OF FINANCING

The Boulder Urban Renewal Authority is authorized to finance this project by any method authorized under the Colorado Urban Renewal Law, or any other applicable law, including appropriations from the City of Boulder, federal loans and grants, interest income, property or sales tax increments, or any other available source.

The Authority is authorized to issue bonds in an amount sufficient to finance all or part of the project. The Authority is authorized to borrow funds and create indebtedness in carrying out this plan. The principal and interest on such indebtedness would be paid from tax increments or any other funds available to the Authority.

The economic feasibility of any redevelopment proposal will be reviewed by the Authority at the time the project is submitted for development review. The specific extent and nature of Authority economic participation in the project will be assessed at that time.

2. TAX INCREMENT FINANCING

This project may be financed by the Boulder Urban Renewal Authority under the tax allocation financing provisions of the Urban Renewal Law of the State of Colorado. However, the use of tax increment financing will be dependent on securing a City of Boulder/BURA cooperation agreement. The general provisions of the financing method are set forth below. In compliance with the requirements of §31-25-107(9)(d), C.R.S. the Boulder Valley School District of the County of Boulder, Colorado, has been permitted to participate in an advisory capacity concerning the project financing included in this Plan. Under the financing method, property taxes as levied after the effective date of the approval of this Plan upon taxable property in the Urban Renewal Area each year, and all of the municipal sales taxes collected within such area, by or for the benefit of any public body, shall be divided for a period not to exceed 25 years after the effective date of adoption of this Plan as follows:

a) Base Amount

That portion of property taxes which are produced by the levy at the rate fixed each year by or for each such public body upon the valuation for assessment of taxable property in

the urban renewal area last certified prior to the effective date of approval of this Plan, and that portion of municipal sales taxes collected within the boundaries of the urban renewal area in the last 12 month period ending on the last day of the month prior to the effective date of approval of this Plan, shall be paid into the funds of each such public body as are all other taxes collected by or for said public body.

Unless and until the total valuation for assessment of the taxable property in the Urban Renewal Area exceeds the base valuation for assessment of the taxable property in the Urban Renewal Area, all of the taxes levied upon the taxable property in the Urban Renewal Area shall be paid into the funds of the respective public bodies. Unless and until the total municipal sales tax collections in the urban renewal area exceed the base year municipal sales tax collections in the urban renewal area, all such sales tax collections shall be paid into the funds of the City.

b) Increment Amount

That portion of said property taxes and/or all of said sales taxes in excess of the amounts specified in a) above shall be allocated to and, when collected, paid into a special fund of the Authority to pay the principal of, the interest on and any premiums due in connection with the bonds of, loans or advances to, or indebtedness incurred by, whether funded, refunded, assumed, or otherwise, the Authority for financing or refinancing, in whole or in part, for this Project. When the bonds, loans, advances, and indebtedness, if any, including interest thereon and any premiums due in connection therewith, have been paid, all taxes upon the taxable property and the total municipal sales tax collections in the Urban Renewal Area shall be paid into the funds of the respective public bodies.

The incremental portion of the taxes described herein shall be irrevocably pledged by the Authority for the payment of the principal of, the interest on, and any premiums due in connection with the bonds, loans, advances, and indebtedness incurred by the Authority to finance the Project, subject to the terms of any loan or bond trust indenture.

C. CHANGES IN THE APPROVED PLAN

This Plan may be modified pursuant to the provisions of the Colorado Urban Renewal Law governing such modifications, including §31-25-107, C.R.S.

D. MINOR VARIATIONS

Where a literal enforcement of the provisions contained in this Plan would constitute an unreasonable limitation beyond the intent and purpose of these provisions, the Authority may in specific cases allow minor variations from these provisions.

9c95pl.fin

ORDINANCE NO. 5714

AN ORDINANCE MODIFYING THE URBAN RENEWAL PLAN FOR THE NINTH STREET AND CANYON BOULEVARD PROJECT AREA; AND SETTING FORTH DETAILS IN RELATION THERETO.

WHEREAS, the city council has adopted the "Boulder Urban Renewal Plan, Ninth and Canyon" (hereinafter called the "Plan") effective October 5, 1988; and

WHEREAS, the city council has determined that certain modifications to the land use, design, building requirements, and procedures are appropriate to update the Plan based upon current city policies; and

WHEREAS, the Plan modifications have been approved by the Board of Commissioners of the Boulder Urban Renewal Authority; and

WHEREAS, the city council has held a public hearing on the proposed Plan modifications providing a full opportunity for all residents and taxpayers of the city and other interested persons to be heard;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BOULDER, COLORADO:

Section 1. The revised Plan, attached hereto as Exhibit A and incorporated herein by reference, for the project area, having been duly reviewed and considered, is hereby approved.

Section 2. It is hereby found and determined that Ordinance No. 5133 is amended by the substitution of the attached Exhibit A hereto as the Boulder Urban Renewal Plan for the Ninth Street and Canyon Boulevard project area.

Section 3. This ordinance shall not take effect unless and until the City of Boulder Planning Board reviews the proposed modifications and determines that such modifications conform with the Boulder Valley Comprehensive Plan, as amended.

Section 4. This ordinance is necessary to protect the public health, safety, and welfare of the residents of the city, and covers matters of local concern.

Section 5. The council deems it appropriate that this ordinance be published by title only and orders that copies of this ordinance be made available in the office of the city clerk for public inspection and acquisition.

INTRODUCED, READ ON FIRST READING, AND ORDERED PUBLISHED BY TITLE ONLY this 18th day of April, 1995.

Mayor

Attest:

Director of Finance and Record
Ex-Officio City Clerk

READ ON SECOND READING, AMENDED, AND ORDERED PUBLISHED BY TITLE ONLY this 13th day of June, 1995.

Mayor

Attest:

Director of Finance and Record
Ex-Officio City Clerk

READ ON THIRD READING, PASSED, ADOPTED, AND ORDERED PUBLISHED BY TITLE ONLY this 11th day of July, 1995.

Mayor

Attest:

Director of Finance and Record
Ex-Officio City Clerk

BU GE o-5714.YGE

Attachment E: Past development Proposals and Ideas for the Civic Use Pad

1999:
Collage Children's Museum and Village Arts Coalition (VAC) proposal was endorsed by City Council.

2002:
The Collage Children's Museum withdrew from the civic use building project for financial reasons.

The Boulder History Museum (BHM) considered stepping into Collage's place as a joint partner with VAC and BHM was endorsed by Council as a civic user. However, BHM withdrew from consideration that same year.

2003/2004:
The City received the Boulder Odeum proposal to build and operate 20,000 square feet or two floors of meeting space in cooperation with the St. Julien Hotel and to complement the Village Arts Coalition. The Village Arts Coalition also came forward with an expanded proposal for the entire building. The City promoted a design process to investigate the possibility of both organizations sharing a 37,000 square foot facility. That effort did not produce a collaborative result because neither party decided to move forward due to incompatibility of uses.

In April 2004, a second 9th and Canyon Civic Use Task Force convened to review new proposals from Village Arts Coalition and the Boulder Odeum. The Task Force did not recommend either proposal because they did not meet the criteria for financial and management capability to construct, operate and maintain a facility of its size, nor did they meet the civic use criteria.

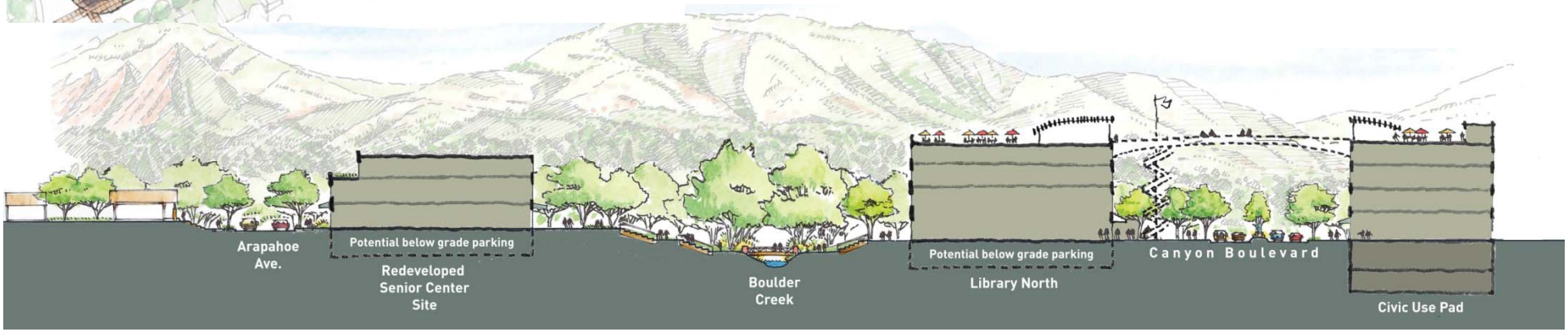
2005:
A third Civic Use Task Force met to provide input on the "hybrid" scenario combining the civic use pad with a conference center on the second floor of privately-owned adjacent properties. However, discussions ended when the adjacent private property owners withdrew their property from consideration as a conference center in November 2005.

2008:
The Boulder History Museum (BHM) expressed renewed interest in the civic use site for a new museum; however, they have located a site along Broadway.

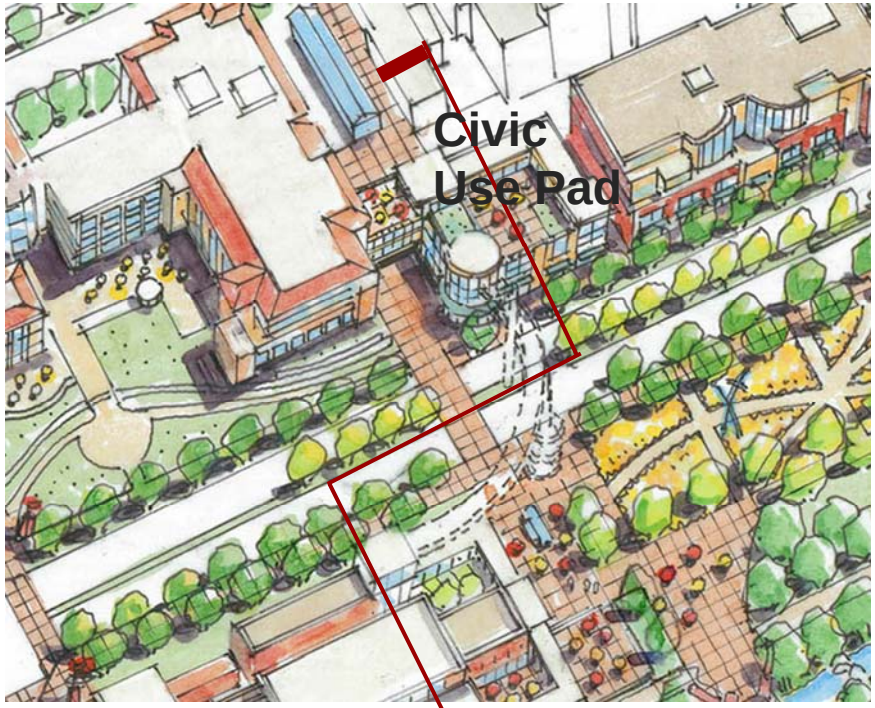
2011:
Representatives from a group proposing a performing arts center in Boulder addressed the CUTFIV about using the civic use pad.

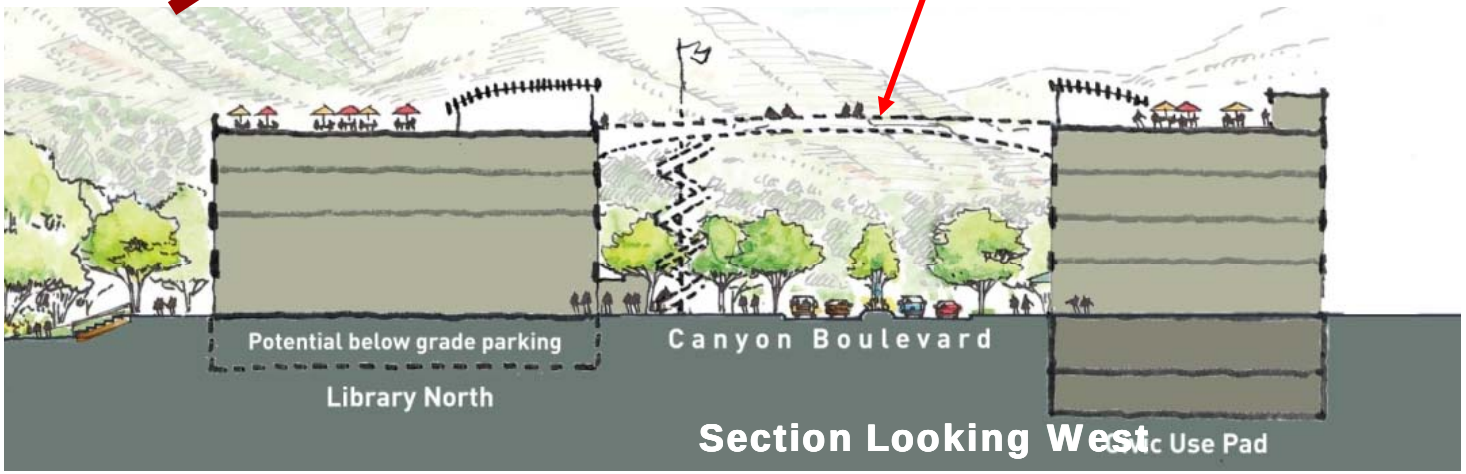
West End Possible Programs

- Muni. Building
- Library Café
- Civic Use Pad
- Arts/Performance Space
- Structured Parking

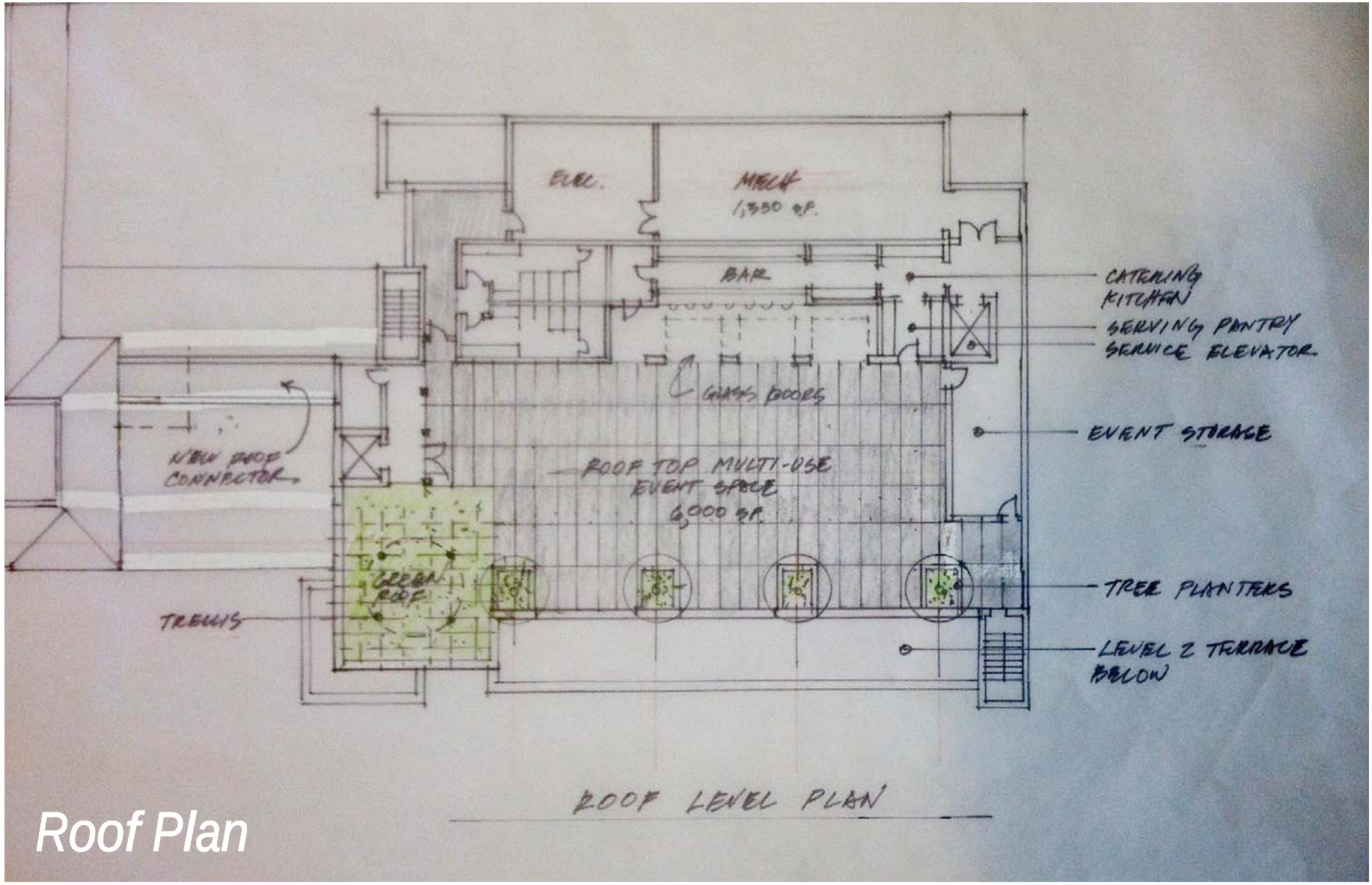


Civic Use Pad



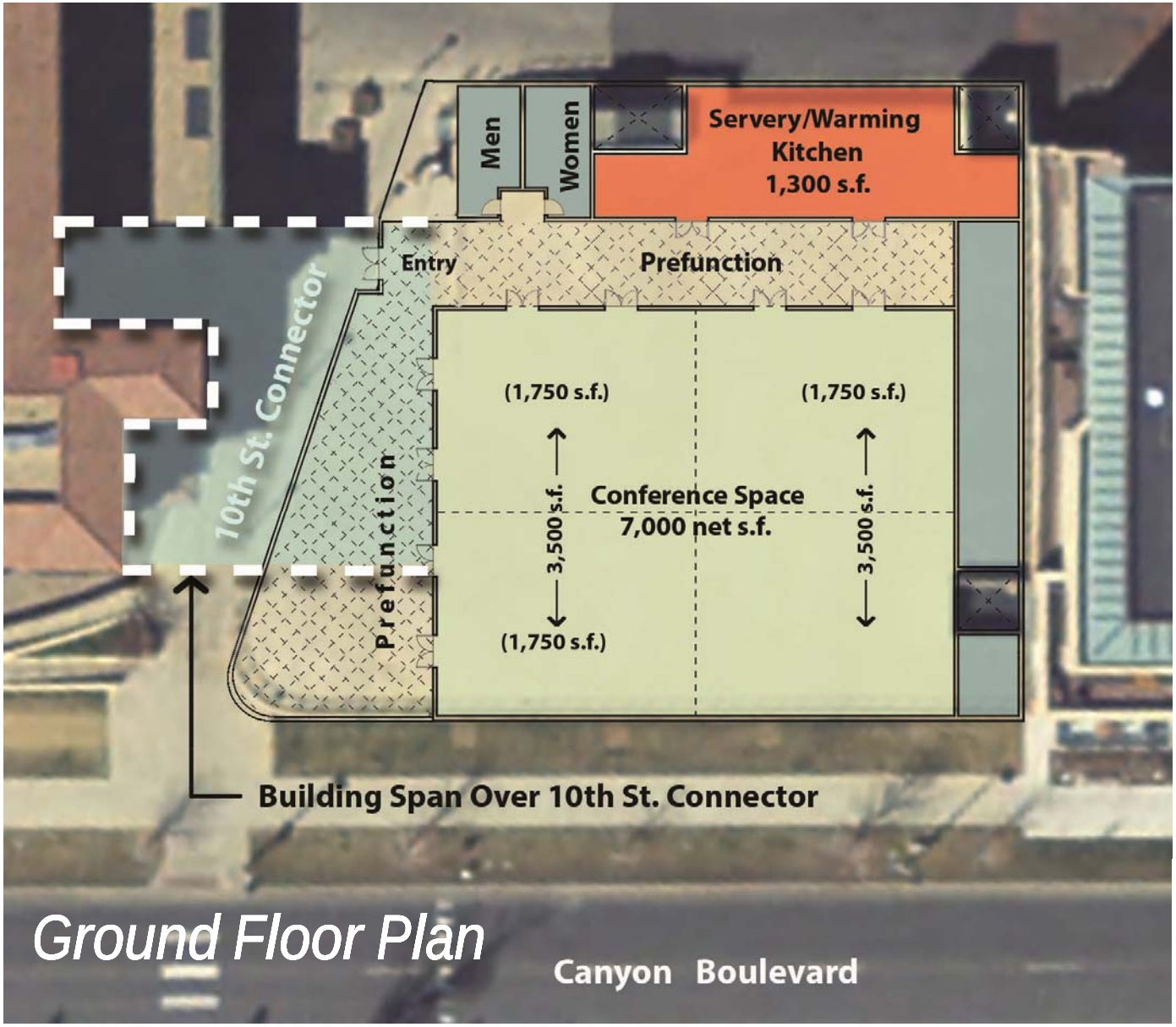


Civic Use Pad



Roof Plan

Civic Use Pad



Civic Use Pad

4-levels, with potential connection to St Julien above

Civic Use Pad

4-levels, with potential roof-top access

Civic Use Pad

Example of roof-top access

Dear Community Organization,

On behalf of the Civic Use Task Force, I would like to get your feedback about a potential new meeting/event space as part of the Civic Use Pad adjacent to the St. Julien Hotel and are asking you fill out the attached survey form and return to Ruth Weiss at weissr@bouldercolorado.gov by August 9th.

The Civic Use Task Force is a group of citizens, representatives from city boards and organizations and city staff investigating feasible options for creating civic uses on the Civic Use Pad in partnership with the St. Julien Hotel. A current proposal creates up to 7,000 square feet of event/meeting/conference space on the first floor of a building that also includes additional hotel rooms above. Details of the proposal are included in the attached survey. The proposal for larger event space which can also be divided into smaller options is in response from the community to have more options within Boulder for local events of all kinds.

The options for the Civic Use Pad are being considered within the context of the Civic Area Plan, please see attached image. The north wing of the library has a potential to redevelop as a small to mid-sized performing arts facility. Its proximity to St Julien Hotel, the potential multi-use event space on the first floor of the Civic Use Pad, and a potential arts/museum facility at a repurposed Municipal Building, would create a unique and vibrant mix of synergetic uses at the West End of the Civic Area.

We would appreciate your feedback and comments on this potential new opportunity for more civic space. If you have any questions please send them to me via email, winterm@bouldercolorado.gov.

Sincerely,

Molly Winter
Director
Downtown and University Hill Management Division/Parking Services
City of Boulder

Preliminary concept for a Multi-Use Event Space at the Civic Pad at the St. Julien Hotel
July 11, 2013

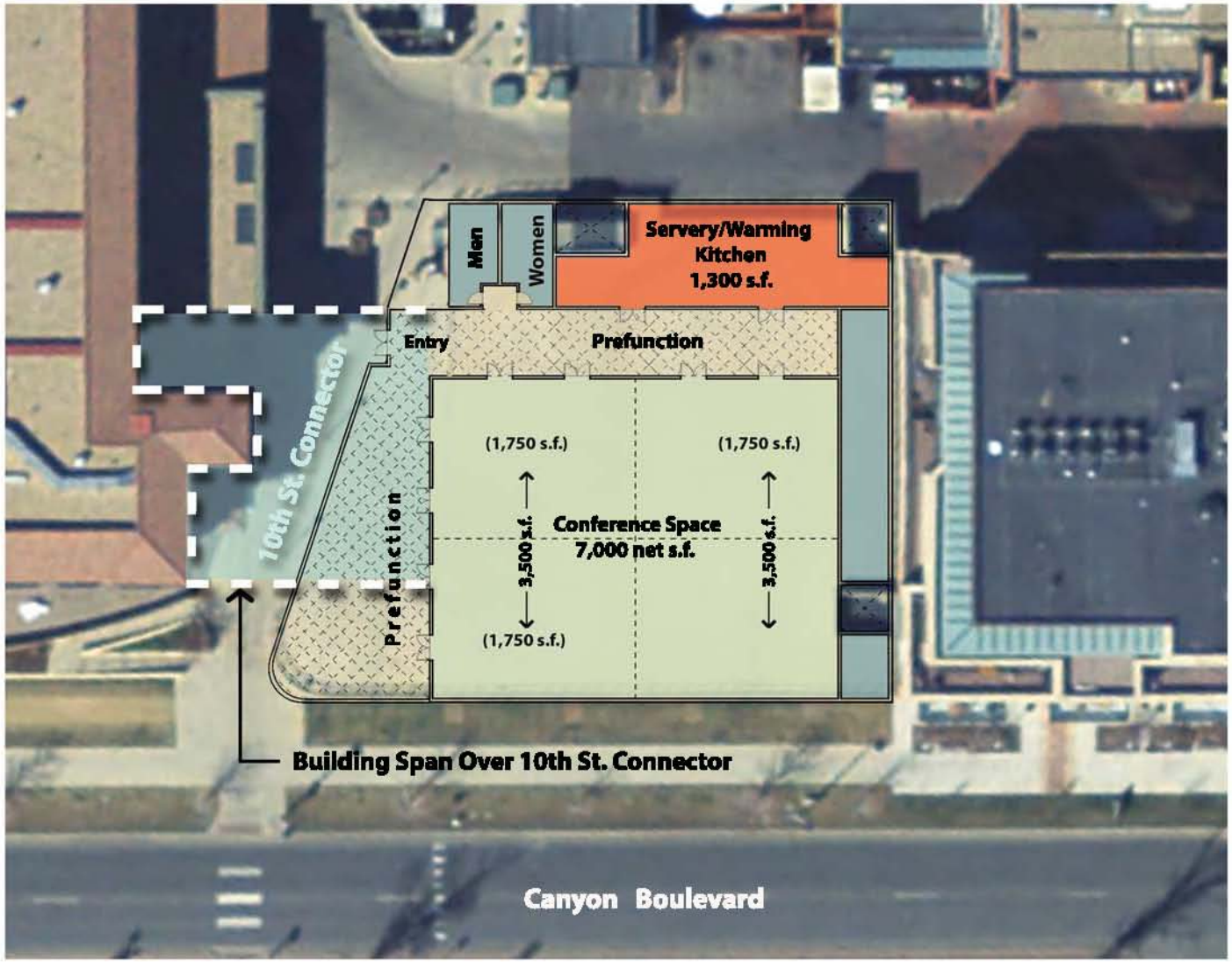
A citizen task force has been working with the St. Julien Hotel to develop ideas to incorporate an appropriate civic use into a potential building on the pad adjacent to the hotel along Canyon.

A concept under consideration by the task force and the St. Julien is a building with a first floor multi-use event space with views towards Canyon Boulevard and the Flatirons. We are seeking input from local non-profit and community organizations to ascertain their potential interest in and parameters for using such a multi-use facility in downtown Boulder. We would appreciate your participation in a short survey so that we can evaluate the demand for such a space and understand its financial feasibility.

A diagram of the space is presented below. The space is envisioned with the following attributes:

- 7,000 square feet contiguous event space also divisible into a variety of smaller configurations of two spaces of 3,500, or three spaces of 1,750 square feet; the attached chart indicates the potential estimated occupancies based on different types of events;
- Exterior pre-function space;
- The space will have a fee that is yet to be determined;
- A catering kitchen with the option of using an approved list of caterers in addition to the food services of the St. Julien;
- Potential access to roof top open-air facilities;
- Access to public parking available in the underground garage;
- Alcohol service available by the St. Julien; donated alcohol allowed provided in compliance with state and local liquor licensing laws concerning donated alcohol to non-profit and charitable organizations.

Room	Sq Ft	dimensions	Theatre 10/sqft	Classroom 20/sqft	Banquet 16/sqft	Reception 12/sqft
#1	7,000	94'x75'	700	350	437	580
#2	3,500	47'x75'	350	175	218	290
#3	1,750	47' x 37.5'	175	88	109	145



Preliminary Concept for Multi-Use Space at Civic Use Pad

July 5, 2013

SURVEY INFORMATION REQUESTED:

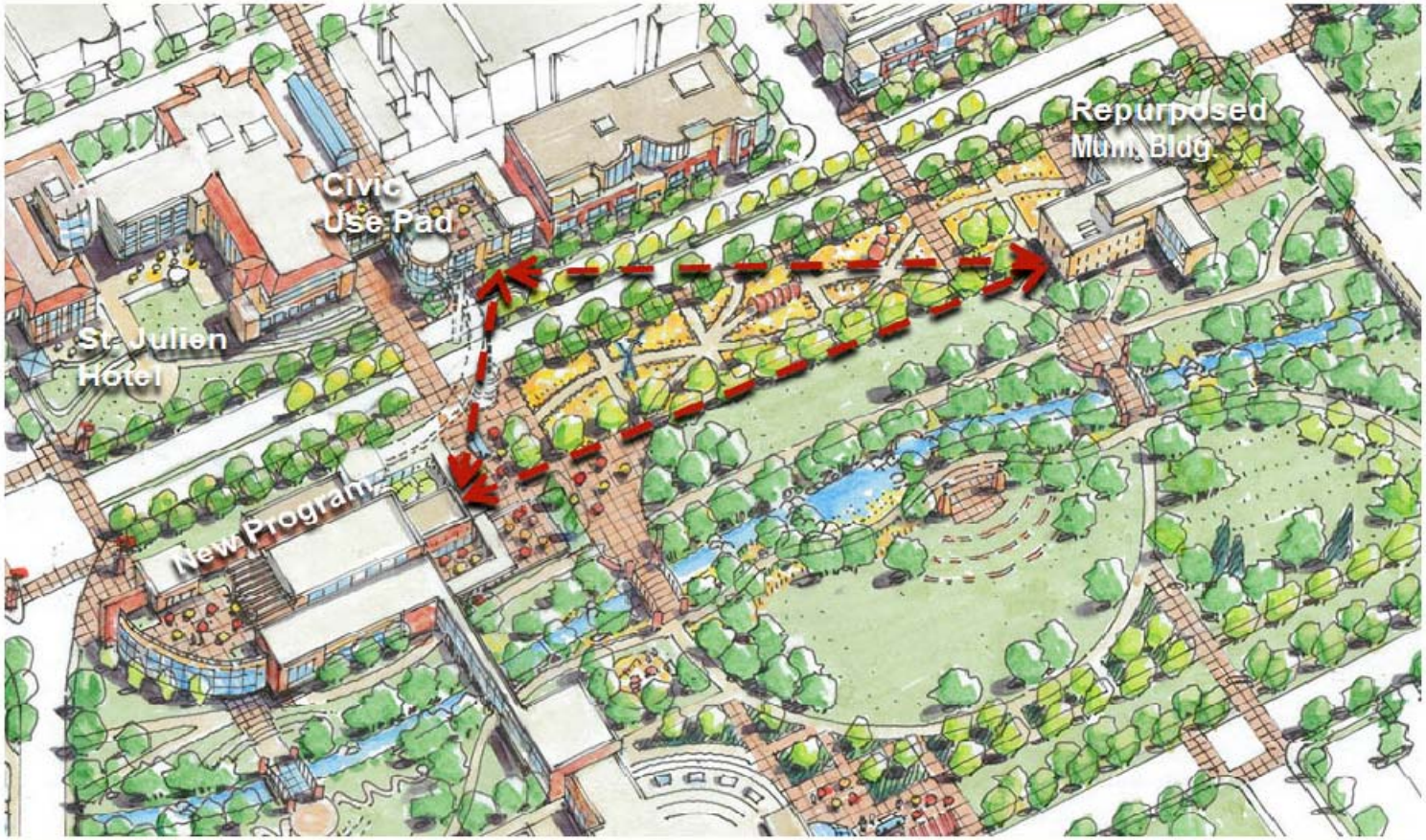
Name of Organization:

Space Demand:

Please see survey information requested below about your organization's space demand based on the proposed plan.

7,000 sq ft Event Type:	# of Events	Frequency:					# of Participants
		Annual	Semi Annual	Quarterly	Monthly	Weekly	
Banquet/ Fundraising							
Reception							
Performance							
Meeting							
Other							
3,500 sq ft Event Type:	# of Events	Frequency:					# of Participants
		Annual	Semi Annual	Quarterly	Monthly	Weekly	
Banquet/ Fundraising							
Reception							
Performance							
Meeting							
Other							
1,750 sq ft Event Type:	# of Events	Frequency:					# of Participants
		Annual	Semi Annual	Quarterly	Monthly	Weekly	
Banquet/ Fundraising							
Reception							
Performance							
Meeting							
Other							

Comments:



DRAFT Boulder Civic Area Plan - West End

SURVEY INFORMATION TALLY
40 RESPONDENTS

7,000 sq ft Event Type:	# of Events	Frequency:					# of Participants
		Annual	Semi Annual	Quarterly	Monthly	Weekly	
Banquet/ Fundraising	8	X					2775 (250-450)
Reception	2	X					150/600
Performance	5	x	x	x			1800 (200-700)
Meeting	1 4	X X (4 days in Dec)					150 500-700 ea
Other							
3,500 sq ft Event Type:	# of Events	Frequency:					# of Participants
		Annual	Semi Annual	Quarterly	Monthly	Weekly	
Banquet/ Fundraising	2	x					350 (150/200)
Reception	2	x					200
Performance	4 – 6	x					350
Meeting	1	1					75
Other							
1,750 sq ft Event Type:	# of Events	Frequency:					# of Participants
		Annual	Semi Annual	Quarterly	Monthly	Weekly	
Banquet/ Fundraising	4	x					290 (30/60/100)
Reception	3	x					180 (30/50/100)
Performance	2	x					100
Meeting	43		x	x	x		425 (varies)
Other	8				x		50

Comments:

* Rehearsal Space: 20 -22' ceilings – classroom/rehearsal – 6 days/week for 49 weeks, 6 – 8 hours a day.

* Acoustically excellent mid-size concert space for 300'ish – 2 to 3 concerts/yr of 2 – 3 performances

* Cost will be a large determinant for ECCBC

* Via Mobility Services – cost would be a huge factor

* Imagine Foundation currently use the Plaza Conference Center in Longmont since Boulder lacks large enough space with convenient parking. Would love to return to Boulder.

* Greenwood Wildlife Rehabilitation Center – "very few options in Boulder for the type and size of fundraiser we have. We would welcome having this new venue."

*"Boulder needs a venue that can host 450+ for a dinner and have additional space for entertainment. We (There With Care) will need to move our events out of Boulder. In addition, it is important for non-profit organizations to bring in donations from outside vendors i.e. food, alcohol."

* Boulder Shelter – more need for meeting space than event space.

* Attention Homes –recommend there be a commercial kitchen limited to heating/holding/mini prep only. I would not build a cooking kitchen. Cost is prohibitive and its use by many would be problematical. Also, 1750 configurations should be able to morph into smaller event rooms as well by half and half again. Small meeting areas in town are at a premium.

* "I would also like low-cost lodging upstairs for visiting VIP's. – EcoCycle

* "I also wonder if there could ba any potential to use the new site for a community emergency? I.e. an event such as the Four Mile Fire…."

* I would like to request that Liquor Service have more than two options (donated or St. Julien). If a nonprofit can receive a liquor license and purchase wholesale or in some other discounted way, that seems more than legitimate. I realize the concerns of the St. J, and its desires to make revenue off the facility; however, as an example at Thorne's events, we purchase liquor at cost from both Vodka 14 and Organic Vintners' and they provide staff to serve. In this instance, we would have to forgo these meaningful contributions, that are well within the intent of what I imagine the City and St. J are trying to negotiate The difference between this and paying the St. J would be in the thousands of dollars for our event. Also, I REALLY would like to see a final event space rental rate. The St. J is benefiting tremendously by the opportunity to build additional hotel rooms. I realize they have a little upper hand since the City and its nonprofit partners have not found a erasable and fundable use for the pad in the time allotted per the original agreements, however, this is a real boon for the St. J owners, and as such the space created should remain VERY affordable into the future and not be subject to the typical refits and staffing expenses of the St J in determining costs for nonrpfits to use. The rates should be decided upon based on average best practices in other civic use spaces in other cities that are comparable and not managed by a for profit like the St. J. The annual losses on managing the space shodul be commensurate to the aded value the St. J is receiving. All this said, I

am highly in favor of this arrangement with the St. J. I was against developing a civic use space not in partnership with the St. J, as I felt it would be better managed and of better value to the comity if it were done in partnership, now I just hope the partnership is one that actually allows organizations like mine to use the space.

Respondents:

- Rocky Mountain Revels
- The Early Childhood Council of Boulder County
- Boulder Valley Women's Health Center
- Tesseract Productions
- Via Mobility Services
- Imagine! Foundation
- Catalyst High School
- KGNU Community Radio
- Greenwood Wildlife Rehabilitation Center
- Independent Boulder Fund Raiser
- There With Care
- Boulder Shelter
- Attention Homes
- Knick O'Time Horse Rescue and Rehabilitation
- Boulder Concert Band
- Frequent Flyers Productions Inc.
- BoldeReach
- Eco-Cycle
- Boulder B-cycle
- Boulder History Museum
- Wow! Children's Museum
- Partners Mentoring Youth Boulder County
- Boulder County Public Health
- "I Have a Dream" Foundation of Boulder County
- The Community Foundation Serving Boulder County
- BMoCA
- Sound Circle and Resonance Women's Chorus
- Thorne Nature Experience
- Partners Mentoring Youth
- Kutandara Center
- 3rd Law Dance/Theater
- Growe Foundation
- Greater Boulder Youth Orchestras

Respondents – Will not use.

- Boulder Philharmonic Orchestra
- Flatirons Community Church, Lafayette
- Unreasonable Institute
- Boulder Ensemble Theatre Company
- Colorado Chautauqua Association
- Nederland Area Seniors
- Longmont Senior Services

815 emails sent, 40 replies, .049% response.

Civic Use Pad Constraints and Methods to Modify
Prepared by Deputy City Attorney David Gehr and Molly Winter

ISSUES	GOVERNING DOCUMENT	METHOD TO MODIFY	COMMENTS
1. Civic use required	Boulder Urban Renewal Plan – Ninth & Canyon revised plan adopted 1995. Section III B. 1	Modifications drafted and adopted by the Urban Renewal Authority, reviewed for comp plan compliance by Planning Board and adopted by City Council.	Broaden definition of Civic use.
	Condominium Declaration for Ninth and Canyon Hotel and Parking Condominium Article 6	Governed by the Condominium Declaration. Amendments to the map are covered by §3.2. Amendments to the Declaration are required by Article 20. It requires written approval of owners holding 75% of the votes of the association and 75% of the first mortgagees.	However, Article 6 permits the owner to reallocate the Civic use pad to the Hotel unit or the hotel garage unit without consent of the other party. § 18.1 supports the notion that the St. Julien Partners may convert the Civic use pad to a unit at the times specified in the declaration.
2. 20% Square footage requirement for civic use = 37,000 square feet	Boulder Urban Renewal Plan – Ninth & Canyon revised plan adopted 1995. Section III B. 1	Modifications drafted and adopted by the Urban Renewal Authority, reviewed for comp plan compliance by Planning Board and adopted by City Council.	37,000 s.f. may be too large and will be dependent upon the building program. Height limit and building setbacks (affecting floor plate size) may come into play in final design.
3. Civic Use Lease Terms			
a. Types and amounts of auxiliary commercial uses	Civic Use Operation Agreement, Exhibit A, Civic Use Form, 5/7/03: Section 4.2	Changes to the Civic Use Lease need approval from CAGID, St. Julien,	And the city?
	Civic Use Operation Agreement, Exhibit A, dated 5/7/03; 4.2section	Changes to the civic use lease need approval from Units G (CAGID) and H (St. Julien)	Section 1 of the operation agreement states that any material provisions of the civic use lease cannot be modified by the landlord without the prior consent of the city attorney. Also, § 16.12 of the lease provides in part that "any modifications or amendments . . . shall be binding only if evidenced in a writing signed by . . . the city , CAGID and each of the parties hereto."
c. Lease extension beyond 35 years	Civic Use Lease Form, Section 2.4.c states 35 years		There are not any lease term extension provisions in the Civic Use Lease Form.
d. Change in civic use from museum and music and dance performing arts facility	Civic Use Lease Form, Section 4.1	Change in civic use needs written approval of the City of Boulder, St. Julien and CAGID	The use needs to comply with the use restrictions that are described in Section 4.1

PROPOSAL AND SITE SUMMARY:

Proposal: Modifications to the 9th and Canyon Urban Renewal Plan regarding the Civic Use Requirement to facilitate the plan's civic use requirement through a vision to develop a public private partnership between the city and St Julien Hotel. The vision creates a facility with both civic and hotel uses on the civic use pad adjacent to the St Julien Hotel. The concept proposes a facility on the civic use pad including 8,000 square feet of event space for shared hotel and "civic use" on the first floor, hotel uses on the upper 3 floors, and a multi-purpose roof deck. Incorporated in the vision is a potential pedestrian connection across Canyon Boulevard to a future cultural facility at the current main library location.

Project Name: 9th and Canyon: Civic Use Pad
Location: Northeast corner of 9th Street and Canyon Boulevard
Zoning: Downtown – 5 (DT-5)
Comprehensive Plan: Regional Business

Key Issues:

1) Is proposed modifications to the 9th and Canyon Urban Renewal Plan (URP) in compliance with the Boulder Valley Comprehensive Plan, including consistency with the DT-5 zoning and the Regional Business land use designation of the BVCP along with policies of the BVCP?

Background

An urban renewal plan adopted in 1988 for the 9th and Canyon site in downtown Boulder called for hotel and convention facilities, including retail, restaurants, entertainment, transportation facilities and underground parking. In 1995, City Council modified the plan to include design guidelines for the site, as well as requiring that a minimum of 20 percent of the gross floor area be committed to civic uses. As stipulated in the 9th and Canyon Condominium Declaration, the Condominium Association comprised of the property owners (the hotel owner, St Julien Partners, and the Central Area General Improvement District – CAGID – the downtown parking district and a separate taxing entity) has the right to lease the civic use pad at the southeast corner of the site in accordance with the civic use lease up until January 1, 2020. After such time, the civic use restriction will end and St. Julien Partners may develop the site as they see fit within existing zoning regulations. The civic use lease must be approved by the owner of the hotel unit (St. Julien Partners) and CAGID.

In February 2000, Planning Board approved a Site Review Amendment to approve a building on the civic use pad to house the Collage Children's Museum and the Village Arts Coalition dance organization. Due to financial challenges, this approved civic use building was not constructed.

The civic use component of the project first came under consideration in 1998 when a citizen task force comprised of city board, downtown and community members was appointed to review submitted proposals and make a recommendation to City Council. The civic use criteria approved by the City Council in 1998, and currently applicable to the civic use pad, are:

- Financial ability to construct and/or operate and maintain a use over time.
- Acceptance as civic use defined by attraction/benefit to the cultural or scientific or educational or entertainment or artistic or humanistic or civic life of the community.

- Compatibility to the other urban renewal site uses, i.e. the hotel, the parking garage and open space.
- Enhancement to the vitality of the downtown by generating interest in coming downtown, diversifying the downtown experience for citizens, visitors and downtown users or complementing other downtown uses.

1) Community policy considerations including likely conformity of the proposed modifications with the Boulder Valley Comprehensive Plan and relevant policies;

BVCP Land Use Designation: As shown in Figure 1, the land use map below, the site for the Civic Use Pad is located within the Regional Business land use designation. The intent of the Regional Business designation as described in the BVCP is as follows:

> *"Within these areas are located the major shopping facilities, offices, financial institutions, and government and cultural facilities serving the entire Boulder Valley and abutting communities. These areas will continue to be refurbished and upgraded and will remain the dominant focus for major business activities in the region."*

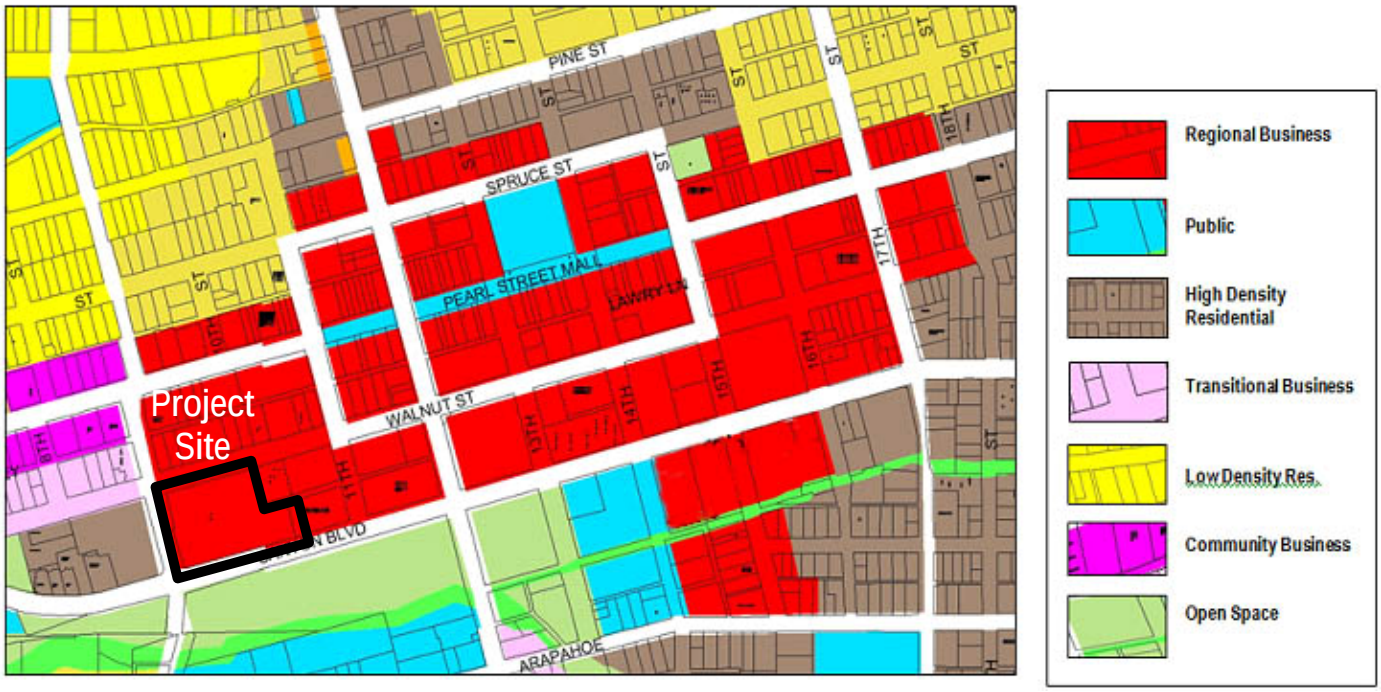


Figure 1: Boulder Valley Comprehensive Plan Land Use of Subject Site and Surroundings

The proposed use of the site to create a facility with both civic and hotel uses on the civic use pad adjacent to the St Julien Hotel is consistent with the "Regional Business" definition of the BVCP, in that the area is intended for "major" retail and offices "serving the entire Boulder Valley. The definition also indicates the city's expectation that such areas will continue to be redeveloped and a dominant focus for major business activities in the region.

Relevant BVCP Policies: The proposed project is consistent with the following BVCP policies:

1.04 Principles of Social Sustainability
1.03 Principles of Economic Sustainability
2.03 Compact Land Use Pattern
2.18 Role of the Central Area
5.09 Role of Arts and Cultural Programs
5.13 Responsive to Changes in the Marketplace
8.05 Diversity

2.30 Sensitive Infill and Redevelopment
5.02 Regional Job Center
5.05 Support for Local Business
8.17 Performing and Visual Arts
8.18 The Arts
8.20 Canyon Boulevard Cultural Corridor

Zoning: As shown in Figure 2, the zoning map below, the property is located within the Downtown – 5 (DT-5) zoning district, surrounded by DT-5 to the north and east, and DT-2 to the south. Further to the south is RH-2 zoning and further west is public zoning.

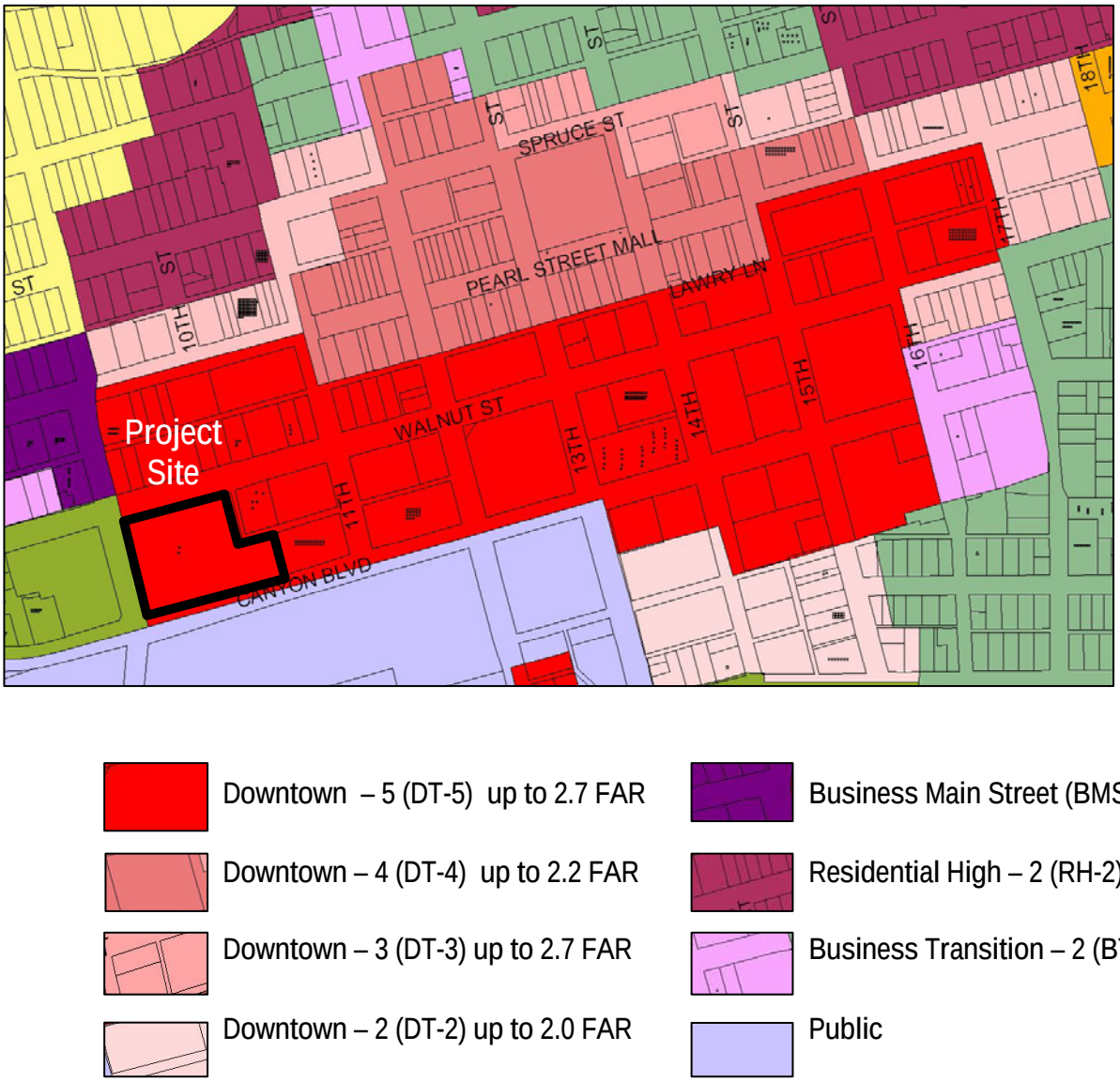


Figure 2: Zoning on the Subject Site and Surroundings

The DT-5 zoning district is defined in the Land Use Code, section 9-5-2, B.R.C. 1981 as follows:

> *"The business area within the downtown core that is in the process of changing to a higher intensity use where a wide range of office, retail, residential and public uses are permitted. This area has the greatest potential for new development and redevelopment within the downtown core."*

From the intent statement for the DT-5 zoning district in the Land Use Code, it is evident that the area within downtown where the project site is located is intended for “higher intensity uses” and an area where the city has anticipated the highest potential for “redevelopment.”

Central Area General Improvement District. The site is located within CAGID and as such there is no parking requirement for non-residential uses.

C I T Y O F B O U L D E R
PLANNING BOARD AGENDA ITEM

MEETING DATE: July 25, 2013

AGENDA TITLE:
Public hearing and consideration of a recommendation to City Council on the proposed 2015-2020 Capital Improvement Program (CIP).

REQUESTING DEPARTMENTS:
David Driskell, Executive Director of Community Planning & Sustainability (CP&S)
Susan Richstone, Deputy Director of CP&S
Peggy Bunzli, Budget Officer, Finance
Chris Meschuk, Flood Recovery Coordinator – Community Services
Lesli Ellis, Comprehensive Planning Manager, CP&S
Jean Gatza, Sustainability Planner, CP&S
Milford John-Williams, Budget Analyst, Finance
Joe Castro, Facilities and Asset Management
Jeff Haley, Parks & Recreation
Bob Harberg, Public Works / Utilities
Douglass Sullivan, Public Works / Utilities
Tim Head, Public Works / Airport
Don Ingle, Information Technology
Annie Noble, Public Works / Utilities & Greenways
Kurt Bauer, Public Works / Utilities & Greenways
Mike Orosel, Open Space and Mountain Parks
Stephany Westhusin, Public Works / Transportation
Molly Winter, DUHMD

INTRODUCTION:
The purpose of this item is for the Planning Board to hold a public hearing and consider a recommendation on the draft 2015-2020 Capital Improvement Program (CIP).

The City of Boulder's Capital Improvements Program (CIP) is a comprehensive, 6-year plan for maintaining and enhancing public infrastructure by correcting current facility deficiencies and constructing new service-delivery infrastructure. (see Attachment A for the proposed 2015-2020 CIP.) The CIP provides a forecast of funds available for capital projects and identifies all planned capital improvement projects and their estimated costs over the 6-year period. A community's CIP is a framework to guide achieving the current and future goals related to the physical assets of the community.

The 2015 Capital Improvement Program includes proposed funding of $68.7 million for 103 projects. The entire six-year CIP includes proposed funding of $352.7 million for 156 projects. The amount of money per department varies year to year depending on the type and cost of projects recommended for

funding in that year and the amount of external funding received. The recommended 2015 allocations of $68.7 million are $26.3 million greater than approved 2014 allocations ($42.4 million). The primary reasons for the one year increase in 2015 is mainly due to the addition of projects in response to the 2013 flood, including large utility projects, additional funding in Transportation, and the installation of the parking garage access equipment in DUHMD. For additional information, see the introduction section of the draft CIP.

A total of 65 percent ($231 million) of the 6-year CIP is allocated to the repair, rehabilitation, or enhancements to existing facilities. 23 percent of the 6-year CIP is allocated to new construction ($80.8 million) such as Boulder Junction improvements or the Carter Lake Pipeline. 11 percent of the 6-year CIP is allocated to Land Acquisition ($39.5 million). The remaining $1.2 million (less than 1 percent) is for study and analysis projects. A total of $1.7 million is allocated through the transfer of money from one fund to another or to a program, such as the funding for the Greenways program.

Project Type	6-year Amount	Percentage
Existing Facilities (Enhancements & Maintenance)	$231,180,215	65%
New Capital	$80,826,828	23%
Land & Asset Acquisition	$39,517,000	11%
Capital Planning Studies	1,170,000	<1%
Transfer	$1,671,600	1%

Planning Board's role:

1) Evaluate CIP projects in the context of the long-term, "big picture" policies of the Boulder Valley Comprehensive Plan (BVCP) and other city plans;
2) Make recommendations on the scope, priorities, and scheduling of CIP projects;
3) Make recommendations on resolving policy issues raised by the proposed location and design of CIP projects;
4) Make a determination of which CIP projects will be required to undergo a Community and Environmental Assessment Process (CEAP) review and list of projects for design review.

The first year's program in the CIP is adopted by the City Council as the Capital Budget, as a counterpart to the annual Operating Budget. Even though fiscal resources are appropriated only in the first year of the CIP, the succeeding five years of the CIP are important in providing a longer-term plan for setting spending priorities, scheduling projects in a logical sequence, and coordinating and targeting capital improvement projects for all city departments.

BACKGROUND ON THE CAPITAL IMPROVEMENT PROGRAM:

As stipulated in Section 78 of the City Charter, the city Planning Department is responsible for submitting to the City Manager the annual CIP. The annual CIP is coordinated by the Department of Community Planning & Sustainability and the Finance Department, in partnership with other city departments. The Planning Board evaluates and makes recommendations to the City Manager and City Council on the proposed CIP as part of the annual budget process, as described in the Boulder Revised Code.

The Planning Board's review of the CIP includes the policies of the BVCP, but also looks to subcommunity plans, area plans and departmental master plans. As defined in the BVCP, subcommunity plans and area plans provide more detailed planning for land use, urban design, neighborhood revitalization, and public facility needs. Most departments now have functional master

plans for the provision of services and facilities. Master plans are developed to be consistent with the policies and the growth projections in the BVCP. They typically include level of service standards needed to meet BVCP goals and policies, more specific policies, and system-wide priorities for scheduling and targeting capital improvements. The master plan is then used by each department in its decision making and prioritization as part of the annual budgeting process, using the priority based budgeting framework.

ANALYSIS:

1. **Changes to the 2015-2020 CIP due to the September 2013 Flood.**

While full recovery from the September 2013 flood is likely to take years, affected critical services have been restored. The information learned from the flood has lead to reprioritization of CIP projects. As a direct result of the flood, some previously planned projects have either been deferred or are no longer relevant. In some cases, funding previously identified for regular CIP projects has been used to cover the cost of flood repair and recovery and new or different funding sources will need to be identified to complete high priority projects, within the needed timeframe. This is reflected in new projects, changes in timing of projects, and changes in scope of projects. The flood has also created an opportunity to think strategically about the future specifically focusing on broad objectives that guide near-term recovery and long-term resilience.

2. **Consistency of the 2015-2020 CIP with the long-term, "big picture" policies of the Boulder Valley Comprehensive Plan (BVCP).**

The BVCP is the overarching policy to guide development and preservation in the Boulder Valley, including the city's capital improvements. The CIP is one of the key implementation tools to ensure the city's capital investments implement the city's long term planning goals, and is aligned with the vision set forth in the plan. Staff considers the 2015-2020 CIP to be consistent with the general policies of the BVCP and contributes to maintaining the urban service standards and criteria set forth in the plan. Projects located within subcommunity and area plans are directly implementing the specific vision for that area. Significant projects are proposed in Boulder Junction and within the Transit Village Area Plan boundary, including construction of Junction Place, the Boulder Junction pocket park, traffic signals and intersections, and numerous multi-use connections.

3. **Scope, priorities, and scheduling of proposed CIP projects and unfunded projects.**

Continued for this year's CIP was the use of city-wide CIP Guiding Principles (included in the introduction of the proposed CIP). While they are not intended to be a checklist for compliance, they are being used to help the city have a common method of prioritization across the organization. In addition, each department prioritizes their CIP based on industry practices and the needs identified in their master plan. Departments schedule projects based on estimated cost, projected revenue, urgency of the project, and maintenance schedules. Staff considers that the scope, priorities, and scheduling of the 2015-2020 CIP are consistent with accepted master plans, and subcommunity and area plans. As noted above this year's CIP reflects changes based on current understanding of impacts from the 2013 flood. The CIP will continue to evolve to reflect those needs and long-term objectives.

In 2011 the city engaged in a capital investment strategy resulting in the voter approved capital bond (see Special Highlight: Capital Improvement Bond section of this document), which has provided over $50 million dollars for capital investment in the city.

Following passage of the capital bond, the city commenced the Comprehensive Financial Strategy

(CFS) project that building on the capital investment strategy to assess capital needs across the city. The CFS project is providing an assessment of capital needs and includes recommendations to council for short-term capital project funding. Additionally the CFS is looking at larger infrastructure investment needs, long-term capital deficiencies, place-making capital investment and long-term operating needs. The CFS brings together the overall long-term financial strategic planning of the city, recognizing the interconnectedness of capital investment and operating planning to provide the most efficient and effective public service, meeting community needs now and in the future. Potential next phases for new capital funding include a potential Pay As You Go ballot issue, longer-term capital bonds and creation of an ongoing capital fund to address capital needs. More specific information on capital planning and unfunded needs is included in Appendix B of the draft CIP.

4. **Policy issues regarding the location or design of proposed CIP projects.**

A key component of the implementation of the BVCP, subcommunity plans, and area plans is the CIP. Included in the introduction is information on the investments proposed within these areas. Staff has not identified any significant policy issues related to the design, location or timing of any CIP projects recommended in the draft CIP. Several projects proposed for funding in 2018 or 2019 such as the NCWCD Carter Lake Pipeline will have some threshold decision making points prior to consideration of funding approval.

Planning studies are an important component to initiate the capital implementation of master plans. With the recent adoption of the Parks and Recreation Master Plan and near completion of the Transportation Master Plan, significant funding is proposed in 2015 to plan for future capital needs. Transportation corridor scoping studies are proposed for funding in 2015 that will guide capital planning in the Civic Area, East Arapahoe and 30th & Colorado. Newly proposed planning projects for Parks and Recreation include: an Urban Forest Strategic Management Plan, response planning for the emerald ash borer threat, a Recreation Facility Strategic Plan and new Planning, Design and Construction Standards for urban parks and facilities.

Ongoing efforts for design excellence in capital projects include working to ensure that the design, timing and location of public capital projects should be evaluated based on their ability to advance most, if not all, of the principles articulated both in the BVCP Sustainable Urban Form components, and the city's Sustainability Framework.

5. **CIP projects that will be required to undergo a Community and Environmental Assessment Process (CEAP) review.**

The projects that are proposed to be evaluated under Community and Environmental Assessment Process (CEAP) review are listed in Appendix C of the proposed CIP, and the individual project sheets identify if a CEAP is required. The purpose of a CEAP is defined to "assess potential impacts of conceptual project alternatives in order to inform the selection and refinement of a preferred alternative."

The CEAP process is referenced in the Council Procedure, the Appendix to Title 2 of the Boulder Revised Code. Section IX. Procedure in Handling Major Capital Improvement Projects, states that projects should be handled in accordance with the City Plans and Projects Handbook, dated November 2007.

The Handbook states the following guidelines for selecting projects that should be evaluated through a CEAP. As a note, the projects that require Concept and Site Plan Review do not go through the CEAP

and are not reviewed by the CEAP Review Group.

- A project or a potential alternative could have a significant impact on an environmental, social, or cultural resource and the project would benefit from a CEAP.
- The project is anticipated to generate enough neighborhood or community input to require a public hearing or board review.
- There is more than one possible conceptual alternative that will require staff or community input in the selection.
- The project requires alternatives analysis as part of internal or external permitting and review processes at the local, county (1041), state, or federal level (NEPA). (An internal city CEAP should be performed prior to submitting for a local permit or to the external agency.)

CEAP reviews are prepared when projects are in the site location and facility design phase. The primary purpose of the CEAP is to encourage the consideration of potential social and environmental impacts in planning and decision making and, ultimately, to arrive at actions that achieve the objectives of the project with the fewest impacts. The intent of the CEAP is to make project planning more efficient in considering issues in advance of implementation.

All CEAPs include an analysis of the project and alternatives, including how the project will further implement the BVCP, master plan goals, or subcommunity or area plans. The alternatives are then analyzed through a checklist of impacts to Natural Areas or Features, Riparian Areas/Floodplains, Wetlands, Geology & Soils, Water Quality, Air Quality, Resource Conservation, Cultural/Historic Resources, Visual Quality, Safety, Physiological Well-being, Urban Services, Special Populations, and the Economy.

CEAP findings are submitted by departments to their respective advisory board for review as part of CIP project approval. Council has the opportunity to call up projects for their review and approval. (For those departments that do not have an advisory board, Planning Board is responsible for reviewing CEAP findings as part of project approval.)

The list of projects identified for a CEAP can be found in Appendix C of the proposed CIP.

PUBLIC COMMENT AND PROCESS:

Public comment has been sought through the individual department budget and planning processes. No public comment has been received to date regarding the full proposed 2015-2020 CIP. Any comment received prior to the Planning Board hearing will be provided to the board. As part of the relationship of the CIP to the BVCP, the draft document has been routed to Boulder County Land Use for comment, and staff will provide any feedback at the Planning Board meeting.

The CIP and additional background on the program can be found on the city website at www.bouldercolorado.gov/CIP. Projects funded through the 2011 Capital Improvement Bond can be found at www.bouldercolorado.gov/bondprojects.

Departmental advisory boards have reviewed draft CIP projects related to their respective departments. The recommendations of the boards are below:

Greenways Advisory Committee
The Greenways Advisory Committee met on May 22, 2014 and unanimously (5-0) recommended approval of the 2015-2020 Greenways Program CIP to Planning Board and City Council.

Open Space Board of Trustees
At its June 11, 2014 meeting, The Open Space Board of Trustees unanimously (5-0) passed a motion approving the 2015 OSMP proposed CIP and recommending approval of the same by the Planning Board and City Council.

Parks and Recreation Advisory Board
On April 28, 2014, the Parks & Recreation Advisory Board voted unanimously (6-0) to approve the recommended 2015-2020 Capital Improvement Program.

Transportation Advisory Board
On June 9, 2014, the Transportation Advisory Board voted unanimously (5-0) to recommend approval of the proposed 2015-2020 Transportation Fund, Transportation Development Fund and Boulder Junction Improvement Capital Improvement Programs.

Water Resources Advisory Board
The preliminary 2015 Utilities budget and 2015-2020 CIP was first presented to the WRAB on April 21, 2014 as a discussion item. WRAB hosted a public hearing and continued their discussion of the preliminary 2015 Utilities budget and 2015-2020 CIP on May 19, 2014. Seven members of the public addressed the WRAB during the public hearing and generally advocated for a more aggressive capital improvement program focusing on the rehabilitation of the sanitary sewer system and additional flood mitigation.

At the June 16, 2014 meeting WRAB hosted a public hearing during which seven members of the public spoke advocating a more aggressive capital improvement program focusing on the rehabilitation of the sanitary sewer system and additional flood mitigation.
After discussion, WRAB passed the following motion by a 4-0 vote:

> The Water Resources Advisory Board recommends approval of the 2015-2020 CIP for the Water, Wastewater, and Stormwater/Flood Management Utilities proposed in Attachment A including proposed rate adjustments to support 2015 revenue increases of 5% in the water utility, 25% in the wastewater utility, and 71% in the stormwater and flood control utility.

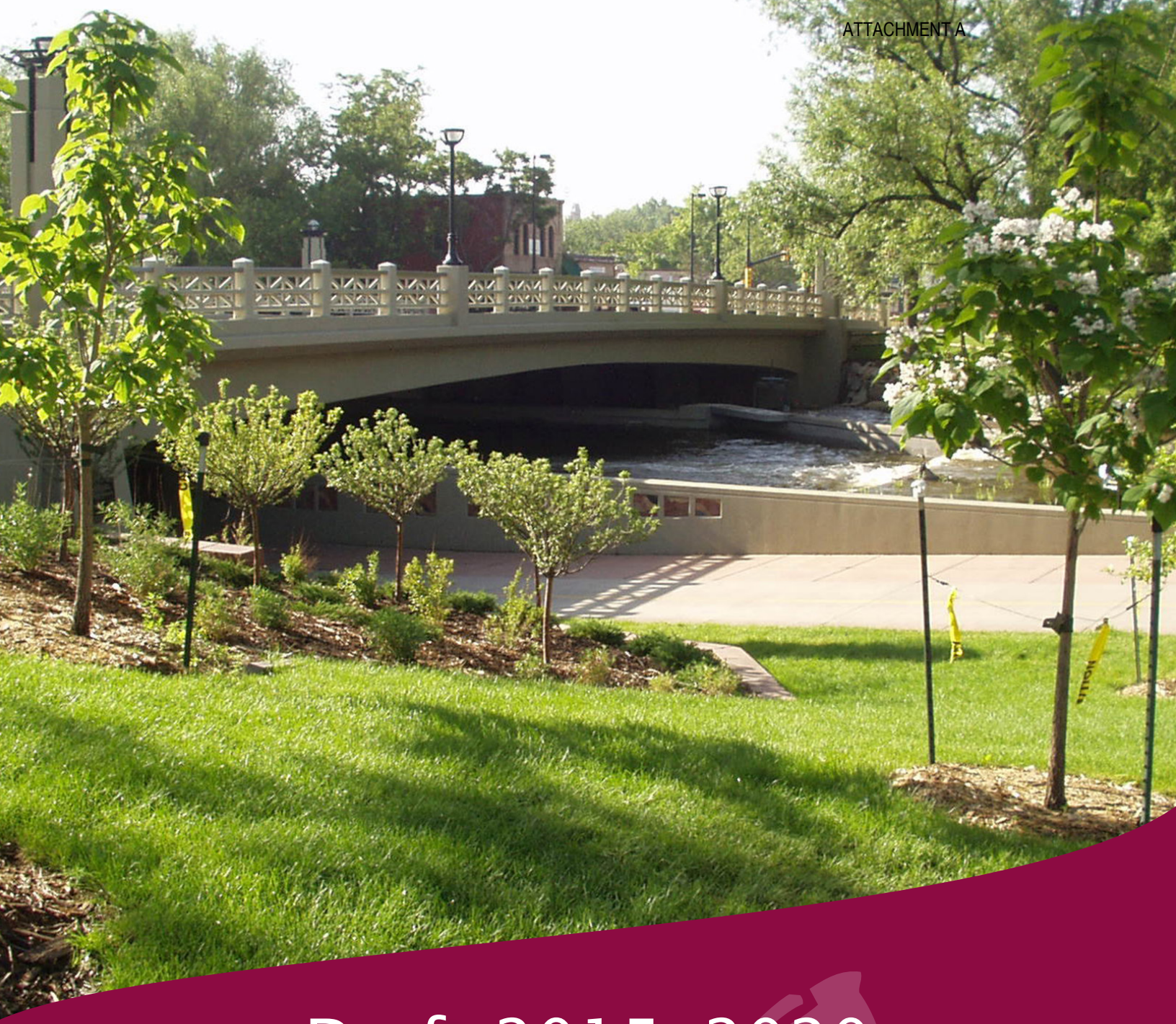
STAFF RECOMMENDATION:

Staff recommends the Planning Board adopt the following Motion:

The Planning Board recommends to City Council the 2015-2020 proposed Capital Improvement Program, including the list of CIP projects to undergo a Community and Environmental Assessment Process, as outlined in the staff memorandum dated July 25, 2014.

ATTACHMENTS:

Attachment A: Draft 2015-2020 Capital Improvement Program (CIP).



Draft 2015-2020 Capital Improvement Program

City of Boulder, Colorado

2015—2020 Draft Capital Improvement Program

[This page is intentionally blank.]

City of Boulder
2015 –2020 Capital Improvement Program

Mayor .....Matthew Appelbaum
Mayor Pro Tem..... George Karakehian
Council Members ..... Macon Cowles
Suzanne Jones
Lisa Morzel
Tim Plass
Andrew Shoemaker
Sam Weaver
Mary Young

City Manager..... Jane S. Brautigam

City of Boulder Staff

City Manager ..... Jane S. Brautigam

City Attorney ..... Tom Carr

Municipal Judge ..... Linda P. Cooke

Chief Financial Officer ..... Bob Eichem

Director of Finance ..... Cheryl Pattelli

Director of Public Works for Utilities ..... Jeffrey M. Arthur

Interim Director of Parks and Recreation ..... Jeff Dillon

Executive Director of Energy Strategy and Electric Utility Development ..... Heather Bailey

Fire Chief ..... Larry Donner

Executive Director of Community Planning and Sustainability ..... David Driskell

Director of Library and Arts ..... David Farnan

Director of Labor Relations ..... Eileen Gomez

Director of Information Technology ..... Don Ingle

Director of Support Services/City Clerk ..... Alisa D. Lewis

Director of Human Resources ..... Joyce Lira

Director of Open Space and Mountain Parks ..... Michael Patton

Director of Human Services ..... Karen Rahn

Executive Director of Public Works ..... Maureen F. Rait

Municipal Court Administrator ..... Lynne Reynolds

Police Chief ..... Greg Testa

Director of Communications ..... Patrick Von Keyserling

Director of Public Works for Transportation ..... Tracy Winfree*

Director of Downtown University Hill Mgmt Division/Parking Services ..... Molly Winter

* Member of the CIP Peer Review Team

City of Boulder CIP Staff Team

Budget Officer (CIP Coordinator) ..... Peggy Bunzli*

Community Sustainability Coordinator (CIP Coordinator) ..... Jean Gatza*

Planner II (CIP Coordinator) ..... Chris Meschuk*

Community Planning & Sustainability ..... Susan Richstone

Downtown & University Hill Mgmt Division/Parking Services ..... Donna Jobert*

Finance ..... Milford John-Williams*

Fire ..... Frank Young

Information Technology ..... Beth Lemur

Open Space & Mountain Parks ..... Mike Orosel

Parks & Recreation ..... Douglas Godfrey*

Parks & Recreation ..... Jeff Haley

Police ..... Bridget Pankow

Public Works ..... Joanna Crean

Public Works/Airport ..... Tim Head

Public Works/Facilities & Asset Management ..... Joe Castro

Public Works/Facilities & Asset Management ..... Mitch Meier*

Public Works/Greenways ..... Annie Noble

Public Works/ Greenways ..... Kurt Bauer

Public Works/Transportation ..... Stephany Westhusin*

Public Works/Utilities ..... Ken Baird

Public Works/Utilities ..... Bob Harberg

Public Works/Utilities ..... Douglas Sullivan*

* Member of the CIP Peer Review Team

2015 – 2020 CAPITAL IMPROVEMENT PROGRAM
TABLE OF CONTENTS

City Council iii
City of Boulder Staff iv
Table of Contents vi
List of Figures and Tables ix
How to Use This Document xi

INTRODUCTION
Capital Improvement Program Introduction 1

FUNDING SUMMARIES
Overview 15
Funding by Department 17
Funding by Project Type 33
Funding by Fund 45

SEPTEMBER 2013 FLOOD
Overview 63
Flood Costs by Department 64
Sources of Funding 65

CAPITAL IMPROVEMENT BOND
Overview 67
2011-2015 Spend Plan 73

DOWNTOWN UNIVERSITY HILL MANAGEMENT DIVISION / PARKING SERVICES
Overview 75
2015-2020 Funding Summary by Department 80
Projects Map 81
Project Sheets 82

FACILITIES AND ASSET MANAGEMENT
Overview 87
2015-2020 Funding Summary by Department 94
Projects Map 95
Project Sheets 96

FIRE AND RESCUE
Overview 115

2015 – 2020 CAPITAL IMPROVEMENT PROGRAM
TABLE OF CONTENTS

GREENWAYS
- Overview 119
- 2015-2020 Funding Summary by Department 124
- Projects Map 125
- Project Sheets 126

INFORMATION TECHNOLOGY
- Overview 131
- 2015-2020 Funding Summary by Department 136
- Project Sheets 138

OPEN SPACE AND MOUNTAIN PARKS
- Overview 145
- 2015-2020 Funding Summary by Department 150
- Projects Map 151
- Project Sheets 152

PARKS AND RECREATION
- Overview 175
- 2015-2020 Funding Summary by Department 184
- Projects Map 185
- Project Sheets 186

POLICE
- Overview 207
- 2015-2020 Funding Summary by Department 210
- Project Sheets 212

TRANSPORTATION
- Overview 213
- 2015-2020 Funding Summary by Department 222
- Projects Map 224
- Project Sheets 226

UTILITIES
- Overview 245
- 2015-2020 Funding Summary by Department 262
- Projects Map 266

Project Sheets 268

APPENDIX A: MAPS OF PROJECTS BY AREA 331
APPENDIX B: UNFUNDED PROJECTS 337
APPENDIX C: PROJECT RECOMMENDATIONS FOR CEAP..... 355

2015 – 2020 CAPITAL IMPROVEMENT PROGRAM
LIST OF FIGURES AND TABLES

HOW TO USE THIS DOCUMENT

Figure 0-1: Sample Capital Funding Plan Table xiii

INTRODUCTION

Figure 1-1: CIP Guiding Principles 2
Figure 1-2: 2015 Projects by Category 3
Figure 1-3: Sustainability Framework 11
Figure 1-4: CIP Definition and Criteria 14

FUNDING SUMMARIES

Figure 2-1: Total Projected CIP Funding by Year 15
Figure 2-2: 2015-2020 Funding by Department 18
Table 2-1: 2015-2020 Funding Summary by Department 19
Figure 2-3: 2015-2020 Funding by Project Type 34
Figure 2-4: 2015-2020 Funding By Project Type Excluding Utilities 35
Table 2-2: 2015-2020 Funding Summary by Project Type 36
Figure 2-5: 2015-2020 Funding by Fund 46
Table 2-3: 2015-2020 Funding Summary by Fund 47

SEPTEMBER 2013 FLOOD

Figure 3-1: Flood Costs by Department 64
Figure 3-2: Sources of Funding 65

CAPITAL IMPROVEMENT BOND

Table 4-1: 2011-2015 Spend Plan 73

DOWNTOWN COMMERCIAL DISTRICT

Table 5-1: 2015-2020 Funding Summary by Department 80

FACILITIES AND ASSET MANAGEMENT

Table 6-1: Capital Development Fund Balance – 2013 Year-End 87
Table 6-2: FAM Priority Codes 91
Table 6-3: 2015-2020 Funding Summary by Department 80

FIRE

Table 7-1: Unfunded Projects 118

LIST OF FIGURES AND TABLES

GREENWAYS

Table 8-1: 2015-2020 Funding Summary by Department 124

INFORMATION TECHNOLOGY

Figure 9-1: IT Strategic Plan Projects 134

Table 9-1: 2015-2020 Funding Summary by Department 136

OPEN SPACE AND MOUNTAIN PARKS

Table 10-1: 2015-2020 Funding Summary by Department 150

PARKS AND RECREATION

Table 11-1: 2015-2020 Funding Summary by Department 184

POLICE

Table 12-1: 2015-2020 Funding Summary by Department 210

TRANSPORTATION

Table 13-1: 2015-2020 Funding Summary by Department 222

UTILITIES

Table 14-1: Existing and Planned Utility Infrastructure Financed by Debt 247

Table 14-2: Utility Rate Increases 258

Table 14-3: Changes to ENR Index and CDOT Index 259

Table 14-4: 2015-2020 Funding Summary by Department 262

APPENDIX B: UNFUNDED LIST

Table 16-1: Unfunded Projects—Emergency Preparedness 340

Table 16-2: Unfunded Projects— Infrastructure Deficiencies 343

Table 16-3: Unfunded Projects—Placemaking 348

2015 – 2020 CAPITAL IMPROVEMENT PROGRAM
HOW TO USE THIS DOCUMENT

The City of Boulder's 2015-2020 Capital Improvement Program (CIP) contains information on how the city plans to invest available resources into key infrastructure and facilities between 2015 and 2020. This document contains: planned project funding summaries organized by department, project type, and fund; detail sheets for every project and program included in the plan; maps illustrating the location of projects throughout the city; and narratives describing the rationale behind project prioritization.

Document Organization

The 2015-2020 CIP has five main parts:

- Introduction
- Funding Summaries
- Special Highlights
- Department Projects
- Appendices

Introduction

The Introduction section provides an overview of the 2015-2020 CIP, describes the CIP development process, gives highlights of the CIP, and summarizes factors that influenced the projects included in the plan.

Funding Summaries

The Funding Summaries section contains analysis of how the 2015-2020 CIP allocates dollars among city departments, project types, and funds. Full financial detail can be found in the tables of this section.

Special Highlights

The Special Highlights sections include information on the effects of the September 2013 Flood on the CIP and highlight a major area of concerted effort related to capital investment: implementation of Capital Improvement Bond projects. The capital bond section contains a narrative describing associated projects and other highlights.

Department Projects

The department sections each contain highlights of the department's capital projects and factors that influenced project selection. Following the narrative, the department sections contain department funding summaries, maps that identify the locations of department projects, and project sheets for each of the department's CIP projects.

Appendices

The 2015-2020 CIP contains three appendices. The first appendix contains maps of CIP projects by area of the city. The second appendix contains information on unfunded capital projects and

the third contains a list of CEAP projects.

Data Limitations

The 2015-2020 CIP provides the funding plan (amount needed by year) for each CIP project. That is, the amounts analyzed in the document's summary sections and in each project sheet refer to planned budget allocations (sources) and not expenditures (uses).

Future versions of this CIP will migrate expenditure information into all sections of the document as it becomes available in the city's financial systems.

How to Read Project Financial Data

The Capital Funding Plan section of the project sheets consists of three tables:

- Estimated Total Cost
- Capital Funding Plan
- Unfunded Amount

Figure 0-01 shows an example of the new tables. The *Estimated Total Cost* table shows the total estimated cost of completing the project. If a project sheet does not have a total cost, then the sheet is for an ongoing program, and the total cost field has been left blank.

For most projects in the CIP, the *Capital Funding Plan* table shows total allocated dollars to the project prior to 2015 and for each year between 2015 through 2020. However, on-going programs, because they have typically received funding for many years before 2015, do not have information about allocated funding prior to 2015. Ongoing programs generally allocate a set amount of funding per year on a continuing basis. Therefore, programs also do not have total cost information. Both blank fields focus the CIP on the coming six years of planned improvements for each on-going program, and by doing so, the CIP does not expect the on-going program to account for prior improvements or future improvements well beyond the CIP's planning horizon that ends in 2015.

The *Unfunded Amount* shows the total project cost from the *Estimated Total Cost* table less the Total Funding Plan from the *Capital Funding Plan* table. The unfunded amount for projects typically represents amounts that will be funded in years beyond the current planning horizon of the CIP.

Figure 0-1: Sample Capital Funding Plan Table

Estimated Total Cost		Unfunded Amount	
Project Cost		**Unfunded Amount**	
Planning		Project Cost Total	$950,000
Acquisition	$950,000	Funding Total	($950,000)
Construction			
Total Project Cost	**$950,000**	**Total Unfunded**	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Asset Forfeiture Fund	$0	$850,000	$100,000	$0	$0	$0	$0
Total Funding Plan	**$950,000**						

[This page is intentionally blank.]

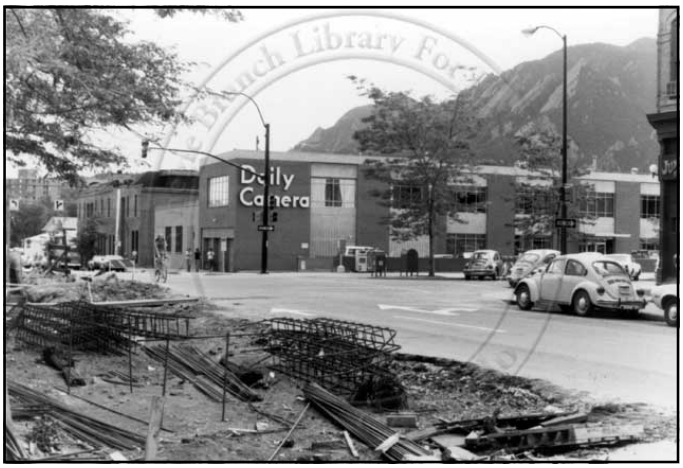
City of Boulder

INTRODUCTION

2015-2020 Capital Improvement Program

The City of Boulder's Capital Improvements Program (CIP) is a comprehensive, 6-year plan for maintaining and enhancing public infrastructure by correcting current facility deficiencies and constructing new service-delivery infrastructure. The CIP provides a forecast of funds available for capital projects and identifies all planned capital improvement projects and their estimated costs over the 6-year period. A community's CIP is a guide that lays out the framework for achieving the current and future goals related to the physical assets of the community.

Boulder has made significant investments to provide its current level of municipal services. The city owns and maintains 330 facilities, 1,800 acres of parkland, 45,384 acres of Open Space and Mountain Parks (OSMP), 305 centerline miles of streets, 159 centerline miles of bike facilities, 78 underpasses, three water treatment facilities, and over 800 miles of water and wastewater piping. The city funds the construction and maintenance of these assets using a wide range of sources, including tax revenues, bond proceeds, and fees. The city continues to look for ways to leverage its funding, through federal, state, and local grants and reimbursements, to maximize funding for CIP projects.



Pearl Street Mall Construction, 1976. Photo courtesy the Carnegie Branch Library for Local History, Boulder Historical Society Collection.

The CIP development process prioritizes the city's numerous needs spread across its 17 different departments, bearing in mind the limits of each funding source, progress on ongoing CIP projects, and funding commitments made by prior CIPs. To create a citywide understanding of which projects are chosen for inclusion in the CIP, the city developed nine CIP Guiding Principles to shape capital planning decisions made throughout the CIP process. The CIP Guiding Principles also ensure individual department priorities for CIP funding are aligned with city goals. Figure 1-1 lists the CIP Guiding Principles.

Figure 1-1: CIP Guiding Principles

The City of Boulder develops a Capital Improvement Program (CIP) that addresses the ongoing major business needs and maintenance and repair of city assets as well as enhancements and expansion called for in the Boulder Valley Comprehensive Plan. The CIP is a strategic document that assures that the municipal organization maintains a strong bond rating, implements community values, and has fiscal integrity. The city prioritizes its investments both across and within funds based on the following guiding principles:

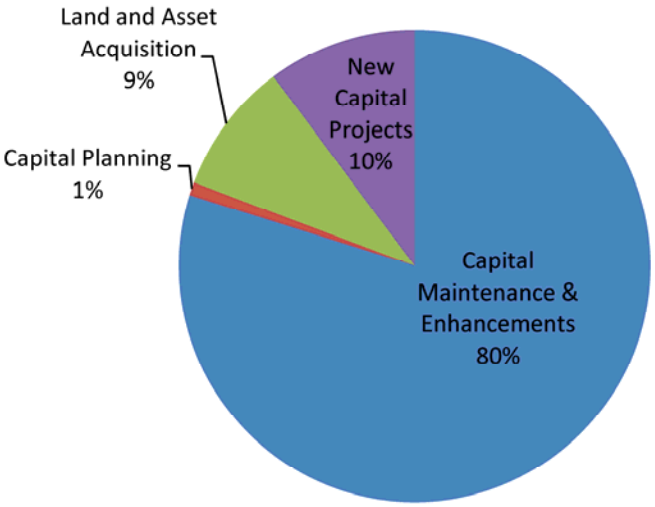
1. **Capital Improvement Programs should be consistent with and implement Council-accepted master plans and strategic plans.**
2. **Capital Improvements should achieve Community Sustainability Goals:**
    - Environmental – sustainable materials, construction practices, renewable resources, etc.
    - Social – enhancements that improve accessibility to city services and resources provided to the community
    - Economic – effective and efficient use of public funds across the community.
3. **As potential capital investments are identified, the city must demonstrate in the CIP process that there are sufficient funds to operate and maintain the project or program.**
4. **Capital Improvement Programs should provide enough capacity and flexibility in our long-term planning to be able to respond to emerging, unanticipated needs.**
5. **Capital Improvement Programs should maintain and enhance the supporting city-wide "business systems", such as information and finance systems, for the city over the long term.**
6. **Capital Improvement Programs should sustain or improve maintenance of existing assets before investing in new assets.**
7. **Capital improvements should:**
    - Meet legal mandates from federal, state, or city levels
    - Maintain or improve public safety and security
    - Leverage external investments
    - Promote community partnerships
    - Reduce operating costs and improve efficiency.
8. **Capital programming should maximize efficiency of investments demonstrated by measurable cost/benefit analyses and coordination of projects across departments within and across funds.**
9. **The Capital Improvement Program should provide sufficient reserves to allow for a sound fiscal foundation with benefits that include:**
    - A strong bond rating
    - The ability to address emergencies and natural disasters.

The 2015-2020 CIP includes funding for $352.7 million for 156 projects. 103 projects are recommended for funding in 2015, totaling $68.7 million. Proposed 2015-2020 allocations are $114 million greater than 2014-2019 allocations ($238.7) presented in the 2014-2019 CIP. The recommended 2015 allocations are $26.3 million greater than approved 2014 allocations ($42.4 million). The 2011 Capital Improvement Bond proceeds are not included in these totals because allocations for the bond occurred in 2012. The primary reasons for the increase in 2015-2020 are flood related projects, large utility projects, additional Transportation funding from the new .15 cent sales tax, and the response to the Emerald Ash Borer threat. The one year increase in 2015 is mainly due to the addition of projects in response to the 2013 flood, including large Utility projects, additional funding in Transportation, and the installation of parking garage access equipment in DUHMD. The city regularly sets aside money in its CIP to save for future projects. This important budget practice leads to better planning by allowing the city to pay for higher dollar projects over time rather than requiring the city to find funding in a single budget year.

The city is spending the majority, almost 80 percent, of its 2015 capital funds on capital maintenance and enhancement of its existing assets (See Figure 1-2). Capital enhancements involve upgrades to existing facilities, such as replacement of irrigation systems with updated technologies, materials and equipment that can be more efficient, effective and less costly to operate over time.

The CIP focuses on taking care of what the city already owns with an emphasis on making improvements to its core service areas.

Figure 1-2: 2015 Projects by Category



CIP Highlights

The city anticipates completing a significant number of Capital Projects in 2014 and 2015. These projects benefit the City of Boulder, its residents and visitors by maintaining key infrastructure and functionality, maintaining and improving the transportation network, providing greater safety, maintaining and improving recreational facilities and natural lands, and maximizing the use of technology for greater efficiency and better service delivery. A few examples of these are listed below. Additional details on 2014 accomplishments and highlights of the 2015-2020 CIP are noted in the department overviews.

[Please note that Capital Improvement Bond projects are included in this list.]

Variable messaging sign located downtown.

2014 Accomplishments (see Department Overviews for additional details and highlights)

- Flood recovery (see Special Flood Highlight section)
- Completed variable messaging signage in downtown parking garages
- Implemented replacement of integrated Finance, Payroll and HR system
- Voluntary cleanup program of 13th Street Plaza
- Completed major drainageways plan for South Boulder Creek flood mitigation
- Completed upgrades and repairs to electrical, HVAC and roof of Weiser House, included on the National Register of Historic Places
- Completed Boulder Reservoir infrastructure improvements and site management plan
- Completed Arapahoe reconstruction from Folsom to 15th Street
- Built bridge over Goose Creek at Boulder Junction
- Assessed condition of wastewater collection system and removed debris
- Replaced approximately 20,000 feet of water main

Arapahoe Avenue under reconstruction in front of Boulder High School.

Goose Creek at Boulder Junction. A bridge is being built to connect Junction Place to 33rd Street.

2015 and Beyond Planning and Construction (see Department Overviews for additional details and highlights)

- Complete Main Library renovation

- Implement replacement of Police Records Management System
- Complete construction of new wildland fire station
- Wonderland Creek and Fourmile Canyon Creek flood mitigation improvements
- Coot lake restoration
- Responsive measures to mitigate the Emerald Ash Borer threat
- Begin implementation of Civic Area Plan
- Construct Baseline underpass, east of Broadway
- Complete West TSA implementation, complete North and East TSA plans, and begin North TSA implementation
- Barker Dam: safety related corrections to Dam and Reservoir; outlet rehabilitation; hydroelectric facility construction
- Construction of Carter Lake Pipeline

Challenges

Each year, as the CIP is being updated, City Council, advisory boards, and staff consider technical, environmental, and financial challenges that could potentially limit the ability of the city to fund its priority projects. Challenges being identified in the 2015-2020 CIP include, flood impact and recovery costs, response to the Emerald Ash Borer threat, funding constraints, construction cost inflation, operational funding, unfunded projects.

Flood Impact

The September 2013 flood had a threefold impact on the City of Boulder's CIP. As a direct result of the flood, some previously planned projects have either been deferred or are no longer relevant (for example work on a single element of a park that now needs more extensive repair and restoration, as a result of the flood). In some cases, funding previously identified for regular CIP projects has been used to cover the cost of flood repair and recovery, and new or different funding sources will need to be identified to complete high priority projects, within the needed timeframe. Finally, the information learned from the flood has led to reprioritization of CIP projects. In the CIP, this is reflected in new projects, changes in timing of projects, and changes in scope of projects.

The 2015 – 2020 CIP includes a special flood highlight section, which provides additional information related to the impact of the flood on the CIP. Affected departments have also included details specific to their departments in the Department Overview sections of the CIP.

Emerald Ash Borer Threat

In September, 2013, City of Boulder Parks and Recreation Forestry staff discovered an Emerald Ash Borer (EAB) infestation within the city. This is the first known occurrence of EAB in Colorado and is the western-most occurrence of this invasive pest in North America. Eradication and containment efforts across the country have been unsuccessful, resulting in the loss of over 50 million ash trees.

EAB management, including tree removal, tree replacement, wood disposal and pesticide treatments will have direct impacts to the City of Boulder and private residents over the next 15 years. Staff estimates the number of public, private and naturalized ash within the city is 98,000 trees. The loss of this tree canopy will have significant economic, social, and environmental impacts for decades.

Staff is gathering information and working interdepartmentally with Parks & Recreation, Integrated Pest Management team, Open Space and Mountain Parks, Development Review, and other interested divisions, departments and boards to develop an EAB work plan for 2014 and ultimately an EAB Management Plan to manage the infestation within the city and potentially slow the spread to nearby communities.

Funding Constraints

Revenue has recovered over the past few years and voter renewal of several expiring taxes has helped to stabilize the long-term outlook, however, a structural gap between needs and resources still remains. The city will continue to prioritize its needs based on its available resources using the CIP Guiding Principles.

Construction Cost Inflation

The *Engineering News Record* Construction Cost Index for Denver and the Colorado Department of Transportation (CDOT) Colorado Construction Cost Index indicate that construction costs are escalating at a rate of 3.63 percent, based on a 5-year rolling average. The 2013 change was lower than the 5-year rolling average with the ENR index increasing 0.5 percent and the CDOT index **decreasing** 12 percent, over 2012. The increases from 2011 to 2012 were significantly higher at 8 and 17 percent respectively for the ENR and CDOT indices. The 2013 change is reflected over an anomalously high inflation year, making the differential information potentially deceptive. As variations are not uncommon, a five-year rolling average is more indicative of the

inflationary trend. Staff closely monitors inflation indices and uses this information to determine expected capital cost escalation over the 6-year CIP. A higher cost escalator will reduce the amount of work that can be done with planned revenues, in particular, over the planning horizon of the CIP.

Operational Funding

The organization continues to face the challenge of increased operating and maintenance (O&M) costs associated with new and existing capital improvements. The current CIP strives to identify O&M cost increases associated with projects and to identify funding for this. It also identifies O&M savings produced by capital enhancements.

Unfunded Projects

As the city embarked upon the capital phase of the Comprehensive Financial Strategy (CFS), staff continued to identify a large number of unfunded capital needs across the city. The 2015-2020 CIP includes information on citywide unfunded capital needs, both in department overview sections and in Appendix B to this document. While strategies to address all these needs are being developed, staff and council have recognized the need to be more intentional in calling out specific public safety (or emergency preparedness) unfunded capital needs. The 2015-2020 CIP, therefore, includes a department overview section for both Police and Fire, calling out long-term capital needs in these two departments and laying the groundwork for understanding, prioritizing, planning and, ultimately, including funding for crucial emergency preparedness capital projects in the city's CIP.

Opportunities

Similarly, there are issues that positively impact the city's capital investment performance. Opportunities identified in the 2015-2020 CIP include the Capital Investment Strategy, additional funding availability, and the city's Comprehensive Financial Strategy.

Capital Investment Strategy

A Capital Bond initiative was passed by the City of Boulder voters in November of 2011. As a result of this, the city was able to leverage existing revenues to bond up to $49 million to fund capital projects. Additional information on the bond fund and projects is included in a separate section of this document.

CAPITAL Improvement BOND

The 2011 Capital Bond is approximately half way through the implementation phase.

Funding

In November 2013, voters approved a temporary sales and use tax for Transportation, and renewed expiring taxes for the purposes of funding open space, transportation and general city needs. This additional and renewed funding provides continued opportunity for capital investment in the city. The 2015-2020 CIP includes Transportation and Open Space capital investment related to these funding sources. Other proposed capital investment will be brought forward in the next year(s), in line with recommendations from both the capital and operating phases of the Comprehensive Financial Strategy.

City's Comprehensive Financial Strategy

A cross-departmental team is undertaking the update of the city's Comprehensive Financial Strategy. The purpose of the project is to review and update the revenue and expenditure components of the city's Comprehensive Financial Strategy to reflect current and projected economic and budgetary conditions, challenges, and issues to meet the strategic needs of the municipal corporation over the next five years. The project involves the examination of the Blue Ribbon Commission (BRC) I and BRC II implementation efforts to date. The project also includes the evaluation of many different areas affecting the city's Comprehensive Financial Strategy including the current capital needs assessments and the feasibility of a ballot initiative for the second phase of capital bonding.

Work associated with this project commenced in the late fall of 2013 and preliminary findings from the capital phase analysis have been presented to the City Council. Council is currently considering a Pay As You Go ballot initiative, which would use new, temporary sales and use taxes to fund specific capital needs such as catalytic projects in the Civic Area, improved safety and improvements along the Boulder Creek Path, lighting and other improvements in the University Hill Area, the arts, and capital contribution to other cultural projects in the City of Boulder.

Implementation of Subcommunity & Area Plans

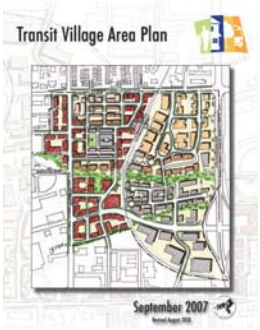
North Boulder Subcommunity Plan

The North Boulder Subcommunity Plan (NoBo Plan) was adopted by the city in 1995. The city is currently evaluating the plan and developing a new generation of action items that further advances the original plan's vision. Much of the planning area has now been developed or is approved for development, and a significant number of Capital Improvements have been made in the area. Proposed Capital Improvements in the next six years include Wonderland Creek and

Fourmile Canyon Creek Flood and Greenways Improvements, and Violet Park development in coordination with Greenways. Additional capital projects will likely emerge out of the 2014 Action Plan for future prioritization against local and citywide projects.

Boulder Junction

The Boulder Junction area includes the Transit Village Area Plan (TVAP), adopted by the city in 2008, which covers 160 acres. Implementation of the plan is underway, with the first two private development projects approved by the city and capital projects are currently under construction, including the Pearl Parkway Multiway Boulevard, construction of a bridge over Goose Creek, utility infrastructure installation, and a multi-use path along Pearl Parkway. Proposed capital investments in the next six years include construction of Junction Place north Pearl Parkway, a new pocket park at Junction Place and Goose Creek, and traffic signal installations.



The Transit Village Area Plan was adopted in 2007.

Gunbarrel Community Center Area Plan

The Gunbarrel Community Center Plan was adopted in 2004. The Gunbarrel Town Center redevelopment has been approved, which is a key implementation project for the plan. Several public infrastructure improvements will be constructed by the developer in conjunction with this project. Projects include: a pedestrian crossing at Spine Road and Chaparral Court, a multi-use path from Spine Road to the Greens Industrial Park Open Space, sidewalks along Lookout Road and Gunpark Drive, and sidewalks along Nautilus Court.

Downtown Boulder

The future vision for downtown Boulder was developed through the Downtown Alliance, and its final report in 1997. While significant private and public investment has occurred since that time, continual investments in the downtown are needed to continue to ensure downtown remains a primary community gathering place, business and commercial center, and tourism attraction. In the next six years, projects in downtown include ongoing parking garage maintenance, garage access equipment improvements, repair and replacement of CAGID parking lots, and improvements and amenities replacement on the mall.

Civic Area Plan

Work on the civic area is under way, focusing on site activation, site transformation and major

capital project planning. CIP funds proposed for 2015 are related to technical, feasibility and programming studies which will provide due diligence and planning necessary to advance the major capital projects. These studies include planning and programming for a year-round Farmer's Market, facilities for innovation and city services, possible performing arts venues, parking, governance models, efficient utility planning, and other supporting, technical work.

Projects Recommended for CEAP

The projects that are proposed to be evaluated under Community and Environmental Assessment Process (CEAP) review are listed in Appendix B, and the individual project sheets identify if a CEAP is required. The purpose of a CEAP is defined to "assess potential impacts of conceptual project alternatives in order to inform the selection and refinement of a preferred alternative."
CEAP findings are submitted by departments to their respective advisory board for review as part of CIP project approval. Council has the opportunity to call up projects for their review and approval. (For those departments that do not have an advisory board, Planning Board is responsible for reviewing CEAP findings as part of project approval.)

CIP Process

The annual CIP process can be divided into three parts: Planning, Project Review, and Board Review/City Council Adoption. The responsibility for coordinating the process citywide is shared by the Department of Community Planning & Sustainability and the Finance Department.

Planning

The first phase of the process identifies and prioritizes the needs of the community. This is done by applying Boulder's Sustainability Framework to ensure that the CIP aligns with and advances the wide range of goals and priorities of the City Council and community. The seven categories of the Sustainability Framework build upon the Boulder Valley Comprehensive Plan and the city's Priority Based Budgeting (PBB) approach: two key initiatives that define long-term community goals and priorities. Both the BVCP and PBB were developed from extensive community input processes and are used to guide long-term decision making as well as the city's annual budget process.

The Sustainability Framework ensures that subcommunity and area plans and departmental master plans are aligned with the CIP. Subcommunity and area plans provide more detailed

planning for land use, urban design, neighborhood revitalization, and public facility needs for a specific area of the city. Departmental master plans include details about and funding plans for future needs related to services and facilities.. The master plans are used by each department during their decision making and prioritization as part of the annual budgeting and CIP processes. Figure 1-3 illustrates the relationship between the Sustainability Framework, BVCP, PBB, bcommunity and Area Plans, Master Plans, and the CIP.

Figure 1-3: Sustainability Framework

Project Review

The second phase engages each department proposing projects for the CIP in a citywide review process. Proposed projects are reviewed by the CIP Peer Review Team (PRT). After the PRT's review of projects, the city's Executive Budget Team also reviews the project information and provides feedback to departments before departments propose projects for inclusion in the draft CIP.

Board Review and City Council Adoption

The final phase involves review by department advisory boards, the Planning Board, and City Council. Department advisory boards review their department's proposed CIP projects and make recommendations to the Planning Board and City Council.

Section 78 of the City Charter calls for the city Planning Department to prepare the annual CIP with other city departments for submittal to the City Manager. The Planning Board evaluates and makes recommendations to the City Manager and City Council on the draft CIP. The Planning Board's review of the CIP includes the relationship of projects to the policies of the BVCP, subcommunity plans, area plans and departmental master plans.

City Council reviews the draft CIP in August, and provides feedback to the City Manager prior to final budget development. City Council appropriates funds for the first year of the CIP through the budget ordinances. While Colorado state law limits appropriations to the first year of the CIP, the succeeding five years of the annual CIP are important in providing a longer term plan for setting funding priorities, scheduling projects in a logical sequence, and coordinating and targeting capital improvements for all city departments.

CIP Process Changes

The CIP document and process have undergone significant changes over the past four years to improve the selection of projects and communication of information on selected projects. The CIP Guiding Principles have been the foundation for all project selection and CIP process improvements.

Many of the changes made to the CIP have focused on improving the financial information included in the CIP document, through a partnership with the Finance Department and Department of Community Planning & Sustainability.

Introduction

Due to the impact of the September 2013 flood and the implementation of a new financial and human resources Enterprise Resource Planning software on staff time and work load, this year's CIP process and document have been unchanged from last year.

The city will continue to make improvements to the CIP in future years. Changes planned for the future include updates to the CIP section of the City Plans and Project Handbook, adding project expenditure and schedule information to the document, incorporating graphical enhancements to improve the on-line view of the information and document, and incorporating performance measures into the plan.

Figure 1-4: CIP Definition and Criteria

Capital Improvement Program Projects

"CIP projects are any major projects requiring the expenditure of public funds (over and above operation expenditures) for the purchase, construction, or replacement of the physical assets of the community. This broad definition includes those projects that are bondable, technology infrastructure, new or expanded physical facilities as well as the land necessary for the project."

Criteria for New Capital Project:

- Projects resulting in the construction or acquisition of a new asset.
- Construction resulting in additional square footage of an existing asset.
- Projects have a discrete start and end date.
- Projects are location specific.
- Projects are typically over $50,000 in total project cost, but do not have to be.
- Projects result in a durable, long lasting asset, with a useful life of at least 15 years.

Criteria for Capital Enhancement:

- Construction resulting in the expansion or significant improvement of an existing facility or asset.
- Projects have a discrete start and end date.
- Projects are location specific.
- Projects are typically over $50,000 in total project cost, but do not have to be. Information Technology projects are typically over $25,000 in total project cost.
- Projects result in a durable, long lasting asset, with a useful life of at least 15 years. Information Technology projects may be as short as 5 years.

Criteria for Capital Maintenance:

- Projects result in the repair, replacement, or renovation of an existing asset.
- Projects may or may not have a discrete start and end date.
- Projects are location specific or programs that cover a geographic area.
- Projects are typically over $50,000 in total project cost. Information Technology projects are typically over $25,000 in total project cost.
- Projects result in a durable, lasting physical asset, with a useful life of at least 5 years. Information Technology projects may be as short as 3 years.

Criteria for Land & Asset Acquisition:

- Project or program results in the acquisition of real property, such as land, mineral or water rights, or permanent easements.
- Projects may have discrete start and end dates, or may be programmatic.
- Projects or programs may be location specific or city-wide.
- Projects or programs typically include acquisitions totaling over $50,000.

Criteria for Capital Planning Studies:

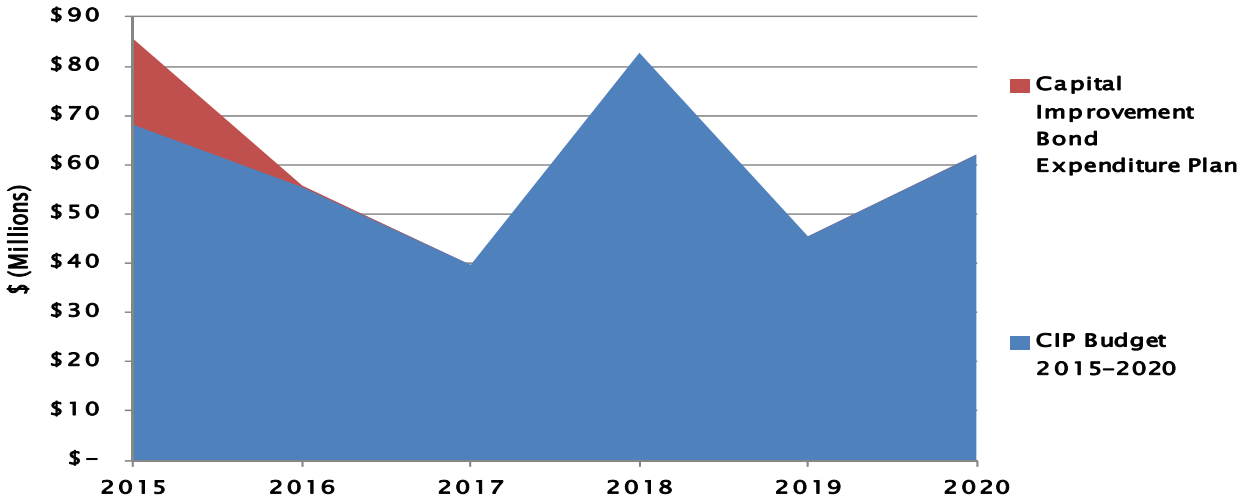
- Project results in the development of a study or plan which is intended to identify, plan, or prepare for the construction or acquisition of capital assets or capital program.
- Projects have discrete start and end date.
- Projects are typically for studies that are over $50,000 in total cost.

The Funding Summaries section provides full detail of the city's CIP budget needs from 2015 through 2020 by department, project type, and fund. For each of the three funding views, the following information is shown:

- Total project cost
- Planned funding allocation in each year 2015-2020 and the six-year total
- Prior funded amount
- Unfunded amount

The Funding Summaries focus on estimated budget needs (sources) for all projects. The CIP this year shows limited instances of planned or actual expenditures at a project, department, or fund level. In practice, as projects are planned, designed, and constructed, during any given year, appropriated project sources almost always differ from project expenditures. In some circumstances, such as a large project that requires many years of accumulated funds before design or construction can commence, expenditures may significantly lag appropriations. Figure 2-1 shows total CIP funding for 2015-2020. Funding varies year over year depending on specific project plans. For example, 2018 includes the Carter Lake Pipeline project which carries a significant cost.

Figure 2-1: Total Projected CIP Funding by Year[1]



Notes:
1 The Red area is the 2014-2015 portion of the 2011 Capital Improvement Bond funds. These bonds were sold and funding appropriated in 2012. The blue area is planned allocations of 2015-2020 funding for all other projects.

All tables and graphs in this section include transfers between departments. These transfers are included in the departments because they will appear in the individual department sections of the overall city budget. The summary information included in the introduction removes transfers to avoid double counting and to correctly express the total project funding of the CIP.

FUNDING BY DEPARTMENT

The following city departments are participating in the 2015-2020 CIP:

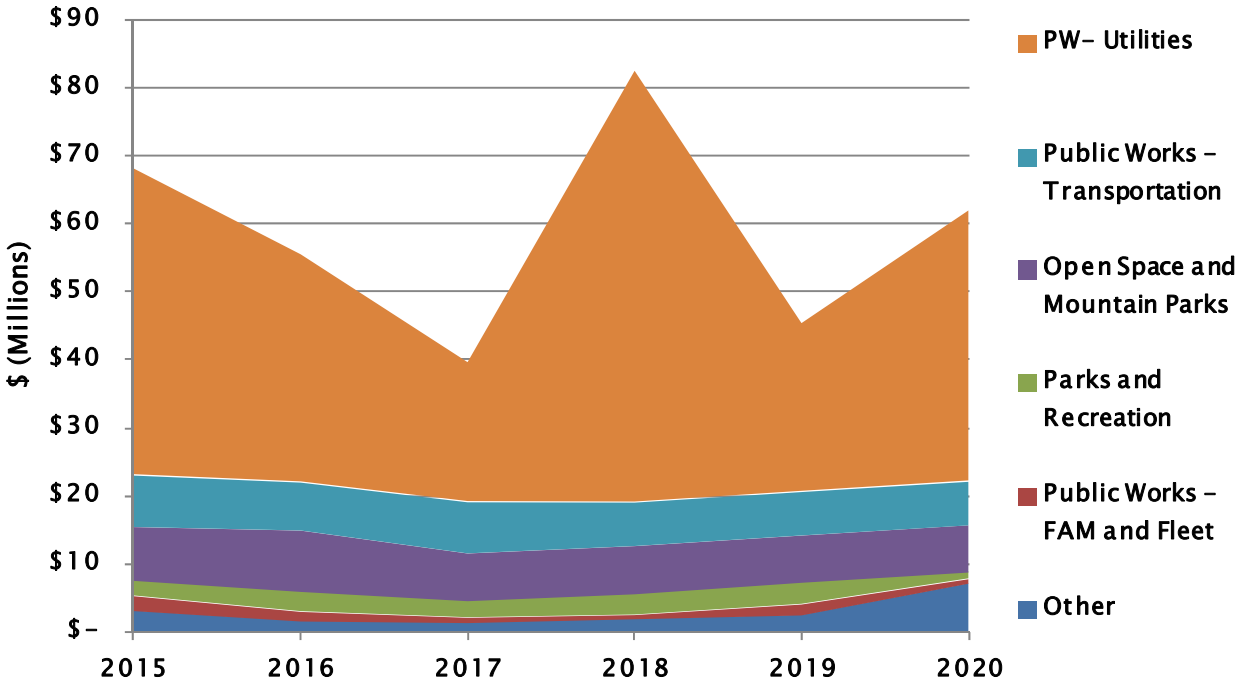
- Downtown / University Hill Management Division and Parking Services (DUHMD/PS
- Fire and Rescue
- Information Technology (IT)
- Open Space and Mountain Parks (OSMP)
- Parks and Recreation
- Police
- Public Works (PW) - Facilities Asset Management (FAM)
- PW-Greenways
- PW-Municipal Airport
- PW—Stormwater and Flood Management Utility
- PW-Transportation
- PW-Wastewater Utility
- PW-Water Utility

The Public Works divisions of Utilities and Transportation have the greatest allocations of resources in the 2015-2020 CIP. Major renovations to stormwater, water and wastewater facilities are primarily responsible for the large spikes in allocations during 2015, 2018, and 2020.

Many departments have dedicated revenue sources that keep their CIP funding relatively constant. For example, both Open Space & Mountain Parks and Parks & Recreation have dedicated revenue sources, and their CIP funding remains relatively constant throughout 2015-2019.

Figure 2-2 displays the share of total 2015-2020 CIP spending on each department.

Figure 2-2: 2015-2020 Funding by Department



Other includes DUHMD/PS, Information Technology, Police, Public Works - Municipal Airport, and Public Works - Greenways

Table 2-1: 2015-2020 Funding Summary By Department

SUMMARY OF ALL DEPARTMENTS

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
DUHMD / Parking Services	$ 1,075,000	$ 1,475,000	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ 3,475,000	$ -	$ -
Information Technology	2,907,781	1,245,171	803,541	571,893	699,503	1,696,923	1,852,700	6,869,731	638,750	-
Open Space and Mountain Parks	2,264,000	7,964,000	9,065,300	7,065,300	7,125,300	6,975,300	6,985,300	45,180,500	8,205,486	(6,759,486.00)
Parks and Recreation	15,911,427	2,280,400	2,955,700	2,455,400	3,079,700	3,230,300	1,030,300	15,031,800	1,931,227	200,000
Police	950,000	850,000	100,000	-	-	-	-	950,000	-	-
Public Works - FAM and Fleet	8,031,000	2,195,000	1,417,000	769,000	600,000	1,600,000	650,000	7,231,000	-	800,000
Public Works - Greenways	27,332,670	320,441	320,441	320,441	320,441	320,441	320,441	1,922,646	736,716	-
Public Works - Municipal Airport	4,935,000	-	-	-	435,000	-	4,500,000	4,935,000	-	-
Public Works - Stormwater and Flood Management Utility	50,505,163	19,355,500	7,665,600	7,078,848	15,293,894	4,244,490	5,662,189	59,300,521	4,962,308	11,800,000
Public Works - Transportation	4,114,823	7,629,500	7,096,500	7,568,500	6,426,500	6,447,500	6,447,500	41,616,000	1,435,323	150,000
Public Works - Wastewater Utility	70,798,837	16,148,176	3,658,720	5,095,680	4,715,675	6,176,893	26,381,702	62,176,846	2,530,247	5,828,652
Public Works - Water Utility	117,344,936	9,580,007	22,169,251	8,303,508	43,518,109	14,310,998	7,794,726	105,676,599	6,888,695	8,426,304
Total	**$ 306,170,637**	**$ 69,043,195**	**$ 55,652,053**	**$ 39,628,570**	**$ 82,614,122**	**$ 45,402,845**	**$ 62,024,858**	**$ 354,365,643**	**$ 27,328,752**	**$ 20,445,470**

Table 2-1: 2015-2020 Funding Summary By Department (Cont.)

DOWNTOWN AND UNIVERSITY HILL MANAGEMENT DIVISION (DUHMD) / PARKING SERVICES

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Maintenance										
CAGID Parking Garage Access Equipment	$ 1,075,000	$ 1,075,000	$ -	$ -	$ -	$ -	$ -	$ 1,075,000	$ -	$ -
Downtown 14th Street Parking Lot Improvements	-	25,000	25,000	25,000	25,000	25,000	25,000	150,000	-	-
Downtown Parking Garage Major Maintenance	-	250,000	250,000	250,000	250,000	250,000	250,000	1,500,000	-	-
Downtown/Pearl St Mall Amenities Replacement	-	125,000	125,000	125,000	125,000	125,000	125,000	750,000	-	-
Subtotal	$ 1,075,000	$ 1,475,000	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ 3,475,000	$ -	$ -
Total	**$ 1,075,000**	**$ 1,475,000**	**$ 400,000**	**$ 400,000**	**$ 400,000**	**$ 400,000**	**$ 400,000**	**$ 3,475,000**	**$ -**	**$ -**

INFORMATION TECHNOLOGY

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Maintenance										
End User Device Replacement	$ -	$ 458,000	$ 458,000	$ 458,000	$ 458,000	$ 458,000	$ 458,000	$ 2,748,000	$ 458,000	$ -
Network Hardware Replacement	1,301,331	160,671	148,041	113,893	116,503	612,223	648,000	1,799,331	150,000	-
Security Administration	77,450	11,500	54,000	-	-	6,700	6,700	78,900	5,250	-
Server Admin Hardware Repalcement	767,000	615,000	10,500	-	81,000	35,000	740,000	1,481,500	25,500	-
VoIP Telephone System Replacement	633,000	-	133,000	-	-	500,000	-	633,000	-	
Data Backup and Disaster Recovery	129,000	-	-	-	44,000	85,000	-	129,000	-	-
Subtotal	$ 2,907,781	$ 1,245,171	$ 803,541	$ 571,893	$ 699,503	$ 1,696,923	$ 1,852,700	$ 6,869,731	$ 638,750	$ -
Total	**$ 2,907,781**	**$ 1,245,171**	**$ 803,541**	**$ 571,893**	**$ 699,503**	**$ 1,696,923**	**$ 1,852,700**	**$ 6,869,731**	**$ 638,750**	**$ -**

Table 2-1: 2015-2020 Funding Summary By Department (Cont.)

OPEN SPACE AND MOUNTAIN PARKS

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Enhancement										
Bear Canyon Road Flood Damage Repair and Mitigation	$ 150,000	$ 150,000	$ -	$ -	$ -	$ -	$ -	$ 150,000	$ -	$ -
Flagstaff Summit Improvements	250,000	250,000	-	-	-	-	-	250,000	-	-
OSMP North Trail Study Area (NTSA)	-	50,000	100,000	200,000	100,000	50,000	50,000	550,000	100,000	(650,000)
Restoration of Riparian and Wetland Habitat - Gregory Canyon Creek and Fancier Ponds Flood Repair	59,000	59,000	-	-	-	-	-	59,000	-	-
OSMP West Trail Study Area (WTSA)	-	-	550,000	450,000	600,000	50,000	50,000	1,700,000	1,119,486	(2,819,486)
Visitor Infrastructure - System Wide	-	-	250,000	200,000	200,000	500,000	500,000	1,650,000	350,000	-
OSMP East Trail Study Area (ETSA)	300,000	-	-	50,000	50,000	200,000	200,000	500,000	-	(200,000)
Subtotal	$ 759,000	$ 509,000	$ 900,000	$ 900,000	$ 950,000	$ 800,000	$ 800,000	$ 4,859,000	$ 1,569,486	$ (3,669,486)
Capital Maintenance										
Agriculture Facilities Projects	$ -	$ 100,000	$ 110,000	$ 110,000	$ 120,000	$ 120,000	$ 130,000	$ 690,000	$ -	$ (690,000)
Boulder Creek and South Boulder Creek Confidence Area Restoration Flood Repair	150,000	150,000	-	-	-	-	-	150,000	-	-
Cultural Resource/Facility Restoration	60,000	60,000	-	-	-	-	-	60,000	-	-
Hartnagle House Restoration	65,000	65,000	-	-	-	-	-	65,000	-	-
Lower Big Bluestem Trail Flood Repair	205,300	205,300	-	-	-	-	-	205,300	-	-
Royal Arch Trail Flood Repair	150,000	150,000	-	-	-	-	-	150,000	-	-
South Boulder Creek West Trail Flood Repair	100,000	100,000	-	-	-	-	-	100,000	-	-
South Mesa Road and Shanahan Ridge Trail	544,700	544,700	-	-	-	-	-	544,700	-	-
Viele House Foundation Repair	80,000	80,000	-	-	-	-	-	80,000	-	-
OSMP - Historical Structures & Trails - Stabilization and Restoration	-	-	355,300	355,300	355,300	355,300	355,300	1,776,500	686,000	-
Subtotal	$ 1,355,000	$ 1,455,000	$ 465,300	$ 465,300	$ 475,300	$ 475,300	$ 485,300	$ 3,821,500	$ 686,000	$ (690,000)
Land and Asset Acquisition										
Mineral Rights Acquisition	$ -	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 600,000	$ 100,000	$ -
OSMP Real Estate Acquisition Program	-	5,400,000	5,400,000	5,400,000	5,400,000	5,400,000	5,400,000	32,400,000	5,400,000	-
Water Rights Acquisition	-	200,000	200,000	200,000	200,000	200,000	200,000	1,200,000	200,000	-
Subtotal	$ -	$ 5,700,000	$ 5,700,000	$ 5,700,000	$ 5,700,000	$ 5,700,000	$ 5,700,000	$ 34,200,000	$ 5,700,000	$ -
New Capital Project										
South Boulder Creek at Greenbelt Meadows	$ 150,000	$ 150,000	$ -	$ -	$ -	$ -	$ -	$ 150,000	$ -	$ -
South Boulder Creek Instream Flow	-	150,000	2,000,000	-	-	-	-	2,150,000	250,000	(2,400,000)
Subtotal	$ 150,000	$ 300,000	$ 2,000,000	$ -	$ -	$ -	$ -	$ 2,300,000	$ 250,000	$ (2,400,000)
Total	**$ 2,264,000**	**$ 7,964,000**	**$ 9,065,300**	**$ 7,065,300**	**$ 7,125,300**	**$ 6,975,300**	**$ 6,985,300**	**$ 45,180,500**	**$ 8,205,486**	**$ (6,759,486)**

Table 2-1: 2015-2020 Funding Summary By Department (Cont.)

PARKS AND RECREATION

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Enhancement										
Rec Center Enhancements .25	$ 460,000	$ -	$ 180,000	$ 280,000	$ -	$ -	$ -	$ 460,000	$ -	$ -
ADA Compliance Improvements	800,000	100,000	100,000	200,000	200,000	-	-	600,000	200,000	-
Coot Lake Restoration	250,000	250,000	-	-	-	-	-	250,000	-	-
Emerald Ash Borer Response Measures	890,000	230,000	220,000	220,000	220,000	-	-	890,000	-	-
Recreation Center Enhancements	1,220,000	280,000	100,000	-	280,000	280,000	280,000	1,220,000		
Artificial Turf Field Installation	1,500,000	-	500,000	500,000	500,000	-	-	1,500,000	-	-
Lighting Ordinance Implementation	500,000	-	250,000	250,000	-	-	-	500,000	-	-
Playground and Park Irrigation System Renovation	1,500,000	-	300,000	300,000	300,000	300,000	300,000	1,500,000	-	-
Playground and Park Irrigation System Renovation - Lottery	1,151,200	-	230,300	230,000	230,300	230,300	230,300	1,151,200	-	-
Subtotal	$ 8,271,200	$ 860,000	$ 1,880,300	$ 1,980,000	$ 1,730,300	$ 810,300	$ 810,300	$ 8,071,200	$ 200,000	$ -
Capital Maintenance										
Historic Railroad Coach Restoration	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ 100,000	$ -	$ -
Pearl Street Mall Irrigation System Replacement	1,500,000	550,000	-	-	-	-	-	550,000	550,000	400,000
Pearl Street Mall Irrigation System Replacement - Lottery	-	200,000	-	-	-	-	-	200,000	400,000	-
Pool Replastering	230,000	75,000	-	-	-	-	-	75,000	155,000	-
Flatirons Golf Course Restroom and Path Repairs	-	-	200,000	-	-	-	-	200,000	-	(200,000)
Court Repairs and Renovation	280,000	-	-	-	280,000	-	-	280,000	-	-
Parking Lot Repair	860,000	-	-	-	220,000	420,000	220,000	860,000	-	-
Subtotal	$ 2,970,000	$ 925,000	$ 200,000	$ -	$ 500,000	$ 420,000	$ 220,000	$ 2,265,000	$ 1,105,000	$ 200,000
Capital Planning Studies										
Parks and Recreation Planning, Design, and Construction Standards	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ 100,000	$ -	$ -
Recreation Facility Strategic Plan	150,000	150,000	-	-	-	-	-	150,000	-	-
Urban Forest Management Plan	120,000	120,000	-	-	-	-	-	120,000	-	-
Subtotal	$ 370,000	$ 370,000	$ -	$ -	$ -	$ -	$ -	$ 370,000	$ -	$ -
Land and Asset Acquisition										
Boulder Junction Rail Plaza	$ 1,874,000	$ -	$ -	$ -	$ 374,000	$ 1,500,000	$ -	$ 1,874,000	$ -	$ -
Subtotal	$ 1,874,000	$ -	$ -	$ -	$ 374,000	$ 1,500,000	$ -	$ 1,874,000	$ -	$ -
New Capital Project										
Boulder Junction Pocket Park	$ 1,926,227	$ -	$ 750,000	$ 350,000	$ 350,000	$ -	$ -	$ 1,450,000	$ 476,227	$ -
Violet Park	500,000	-	-	-	-	500,000	-	500,000	-	-
Subtotal	$ 2,426,227	$ -	$ 750,000	$ 350,000	$ 350,000	$ 500,000	$ -	$ 1,950,000	$ 476,227	$ -
Transfer										
Tributary Greenways Program - Lottery	$ -	$ 125,400	$ 125,400	$ 125,400	$ 125,400	$ -	$ -	$ 501,600	$ 150,000	$ -
Subtotal	$ -	$ 125,400	$ 125,400	$ 125,400	$ 125,400	$ -	$ -	$ 501,600	$ 150,000	$ -
Total	**$ 15,911,427**	**$ 2,280,400**	**$ 2,955,700**	**$ 2,455,400**	**$ 3,079,700**	**$ 3,230,300**	**$ 1,030,300**	**$ 15,031,800**	**$ 1,931,227**	**$ 200,000**

Table 2-3: 2015-2020 Funding Summary by Fund (Cont.)

POLICE

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Maintenance										
Records Management System	$ 950,000	$ 850,000	$ 100,000	$ -	$ -	$ -	$ -	$ 950,000	$ -	$ -
Subtotal	$ 950,000	$ 850,000	$ 100,000	$ -	$ -	$ -	$ -	$ 950,000	$ -	$ -
Total	**$ 950,000**	**$ 850,000**	**$ 100,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 950,000**	**$ -**	**$ -**

Table 2-1: 2015-2020 Funding Summary By Department (Cont.)

PUBLIC WORKS - FACILITIES AND ASSET MANAGEMENT (FAM) / FLEET

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Enhancement										
North Boulder Recreation Center - Replace Solar Thermal System	$ 350,000	$ 350,000	$ -	$ -	$ -	$ -	$ -	$ 350,000	$ -	$ -
Outdoor Lighting Compliance Improvements	200,000	10,000	190,000	-	-	-	-	200,000	-	-
Stazio Refurbish Restrooms and Concessions	160,000	160,000	-	-	-	-	-	160,000	-	-
East Boulder Community Center Renovation	1,100,000	-	-	-	100,000	100,000	100,000	300,000	-	800,000
Tantra Shop Renovation	300,000	-	-	-	-	300,000	-	300,000	-	-
West Senior Center Major Maintenance & Rehab	700,000	-	-	-	-	700,000	-	700,000	-	-
Subtotal	$ 2,810,000	$ 520,000	$ 190,000	$ -	$ 100,000	$ 1,100,000	$ 100,000	$ 2,010,000	$ -	$ 800,000
Capital Maintenance										
Boulder Museum of Contemporary Arts - Floor Replacement	$ 90,000	$ 90,000	$ -	$ -	$ -	$ -	$ -	$ 90,000	$ -	$ -
Fire Station #1 - Repair Concrete Floor in Vehicle Bays and Exterior Ramps	150,000	150,000	-	-	-	-	-	150,000	-	-
Mapleton Ballfields, Renovate Concessions and Restrooms +	100,000	100,000	-	-	-	-	-	100,000	-	-
Miscellaneous Facility DET Projects	715,000	465,000	50,000	50,000	50,000	50,000	50,000	715,000	-	-
Miscellaneous Facility Maintenance Projects	2,415,000	370,000	415,000	380,000	400,000	400,000	450,000	2,415,000	-	-
North Boulder Recreation Center Roof Replacement	450,000	450,000	-	-	-	-	-	450,000	-	-
East Boulder Community Center - Replace Pool Air Handlers	500,000	-	500,000	-	-	-	-	500,000	-	-
Replaster Pools +	80,000	-	80,000	-	-	-	-	80,000	-	-
Stazio Tensile Canopy Covering Replacement	132,000	-	132,000	-	-	-	-	132,000	-	-
Martin Park Shelter Major Maintenance	169,000	-	-	169,000	-	-	-	169,000	-	-
North Boulder Park Shelter Repair	120,000	-	-	120,000	-	-	-	120,000	-	-
Subtotal	$ 4,921,000	$ 1,625,000	$ 1,177,000	$ 719,000	$ 450,000	$ 450,000	$ 500,000	$ 4,921,000	$ -	$ -
Capital Planning Studies										
Facility Assessments	$ 300,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 300,000	$ -	$ -
Subtotal	$ 300,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 300,000	$ -	$ -
Total	**$ 8,031,000**	**$ 2,195,000**	**$ 1,417,000**	**$ 769,000**	**$ 600,000**	**$ 1,600,000**	**$ 650,000**	**$ 7,231,000**	**$ -**	**$ 800,000**

Table 2-1: 2015-2020 Funding Summary By Department (Cont.)

PUBLIC WORKS - GREENWAYS

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Enhancement										
Wonderland Creek (28th) Kalmia to Winding Trail	$ 7,805,657	$ 270,441	$ -	$ -	$ -	$ -	$ -	$ 270,441	$ 295,000	$ -
Fourmile Canyon Creek Upland to Violet	6,102,205	-	270,441	270,441	270,441	270,441	270,441	1,352,205	-	-
Wonderland Creek Foothills to 30th	13,424,808	-	-	-	-	-	-	-	391,716	-
Subtotal	$ 27,332,670	$ 270,441	$ 270,441	$ 270,441	$ 270,441	$ 270,441	$ 270,441	$ 1,622,646	$ 686,716	$ -
Capital Maintenance										
Miscellaneous Water Quality, Restoration and Trail Improvements	$ -	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 300,000	$ 50,000	$ -
Subtotal	**$ -**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 300,000**	**$ 50,000**	**$ -**
Total	**$ 27,332,670**	**$ 320,441**	**$ 320,441**	**$ 320,441**	**$ 320,441**	**$ 320,441**	**$ 320,441**	**$ 1,922,646**	**$ 736,716**	**$ -**

PUBLIC WORKS - MUNICIPAL AIRPORT

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Maintenance										
Rehabilitate Runway and Eastern Taxiway	$ 4,935,000	$ -	$ -	$ -	$ 435,000	$ -	$ 4,500,000	$ 4,935,000	$ -	$ -
Subtotal	$ 4,935,000	$ -	$ -	$ -	$ 435,000	$ -	$ 4,500,000	4,935,000	$ -	$ -
								-		
Total	**$ 4,935,000**	**$ -**	**$ -**	**$ -**	**$ 435,000**	**$ -**	**$ 4,500,000**	4,935,000	**$ -**	**$ -**

Table 2-1: 2015-2020 Funding Summary By Department (Cont.)

PUBLIC WORKS - STORMWATER AND FLOOD MANAGEMENT UTILITY

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Enhancement										
Local Drainage Improvements	$ -	$ 780,000	$ 811,200	$ 843,648	$ 877,394	$ 912,490	$ 948,989	5,173,721	$ -	$ -
Bear Canyon Creek Flood Mitigation	600,000	100,000	500,000	-	-	-	-	600,000	-	-
Boulder Creek Flood Mitigation	5,600,000	500,000	2,500,000	2,500,000	-	-	-	5,500,000	100,000	-
Gregory Creek Flood Mitigation	600,000	100,000	500,000	-	-	-	-	600,000	-	-
South Boulder Creek Flood Mitigation Phase I	24,000,000	250,000	750,000	750,000	10,150,000	-	-	11,900,000	300,000	11,800,000
Stormwater Quality Improvements	-	156,000	162,000	169,000	175,500	182,500	190,000	1,035,000	104,000	-
Upper Goose Creek Drainage	17,905,163	175,000	750,000	750,000	750,000	1,000,000	-	3,425,000	-	-
Utility Billing Computer System Replacement	-	50,000	-	-	-	-	-	50,000	-	-
Wonderland Creek - Foothills to 30th Street	-	10,000,000	-	-	-	-	-	10,000,000	3,033,092	-
Wonderland Creek at 28th Street	-	6,075,000	-	-	-	-	-	6,075,000	1,165,216	-
Fourmile Canyon Creek - Upland to Violet	-	-	500,000	500,000	500,000	750,000	2,500,000	4,750,000	-	-
Bluebell and King's Gultch Flood Mitigation	600,000	-	-	100,000	500,000	-	-	600,000	-	-
Skunk Creek Flood Mitigation	600,000	-	-	100,000	500,000	-	-	600,000	-	-
Twomile Canyon Creek Flood Mitigation	600,000	-	-	100,000	500,000	-	-	600,000	-	-
Subtotal	$ 50,505,163	$ 18,186,000	$ 6,473,200	$ 5,812,648	$ 13,952,894	$ 2,844,990	$ 3,638,989	$ 50,908,721	$ 4,702,308	$ 11,800,000
Capital Maintenance										
Storm Sewer Rehabilitation	$ -	$ 260,000	$ 270,400	$ 281,200	$ 292,500	$ 304,000	$ 632,700	$ 2,040,800	$ -	$ -
Transportation Coordination	-	312,000	324,500	337,500	351,000	365,000	633,000	2,323,000	260,000	-
Subtotal	$ -	$ 572,000	$ 594,900	$ 618,700	$ 643,500	$ 669,000	$ 1,265,700	$ 4,363,800	$ 260,000	$ -
Land and Asset Acquisition										
Preflood Property Acquisition	$ -	$ 500,000	$ 500,000	$ 550,000	$ 600,000	$ 633,000	$ 660,000	$ 3,443,000	$ -	
Subtotal	$ -	$ 500,000	$ 500,000	$ 550,000	$ 600,000	$ 633,000	$ 660,000	$ 3,443,000	$ -	$ -
Transfer										
Tributary Greenways Program - Stormwater & Flood	$ -	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 585,000	$ -	$ -
Subtotal	$ -	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 585,000	$ -	$ -
Total	**$ 50,505,163**	**$ 19,355,500**	**$ 7,665,600**	**$ 7,078,848**	**$ 15,293,894**	**$ 4,244,490**	**$ 5,662,189**	**$ 59,300,521**	**$ 4,962,308**	**$ 11,800,000**

Table 2-1: 2015-2020 Funding Summary By Department (Cont.)

PUBLIC WORKS - TRANSPORTATION

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Enhancement										
28th St (Baseline to Iris)	$ -	$ 860,000	$ 860,000	$ -	$ -	$ -	$ -	$ 1,720,000	$ -	$ -
28th St (Baseline to Iris) II	-	470,000	470,000	-	-	-	-	940,000	-	-
Boulder Junction - Junction Pl Enhancements (Goose Creek to Bluff)	877,000	477,000	-	-	-	-	-	477,000	400,000	-
Miscellaneous Development Coordination	-	50,000	50,000	50,000	50,000	50,000	50,000	300,000	-	-
Signal Maintenance and Upgrade	-	-	-	-	200,000	-	-	200,000	200,000	-
Subtotal	**$ 877,000**	**$ 1,857,000**	**$ 1,380,000**	**$ 50,000**	**$ 250,000**	**$ 50,000**	**$ 50,000**	**$ 3,637,000**	**$ 600,000**	**$ -**
Capital Maintenance										
Deficient Street Light Pole Replacement	$ 1,280,823	$ 321,000	$ 265,000	$ 265,000	$ -	$ 121,000	$ 121,000	1,093,000	$ 187,823	$ -
Major Capital Reconstruction	-	800,000	800,000	800,000	800,000	800,000	800,000	4,800,000	-	-
Pedestrian Facilities - Repair, Replacement, ADA	-	629,000	629,000	629,000	629,000	629,000	629,000	3,774,000	-	-
Subtotal	$ 1,280,823	$ 1,750,000	$ 1,694,000	$ 1,694,000	$ 1,429,000	$ 1,550,000	$ 1,550,000	$ 9,667,000	$ 187,823	$ -
Capital Planning Studies										
Transportation Corridor Scoping and Prioritization - Canyon Blvd	$ 200,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	100,000	$ 100,000	$ -
Transportation Corridor Scoping and Prioritization - East Arapahoe	200,000	100,000	100,000	-	-	-	-	200,000	-	-
Transportation Corridor Scoping and Prioritization - 30th/Colorado	200,000	-	100,000	100,000	-	-	-	200,000	-	-
Subtotal	$ 600,000	$ 200,000	$ 200,000	$ 100,000	$ -	$ -	$ -	$ 500,000	$ 100,000	$ -
New Capital Project										
Bikeway Facilities - Enhancements	$ -	$ 225,000	$ 225,000	$ 225,000	$ 225,000	$ 225,000	$ 225,000	$ 1,350,000	$ -	$ -
Boulder Junction - Development Coordination	825,000	75,000	75,000	75,000	-	-	-	225,000	450,000	150,000
Pedestrian Facilities Enhancements-Missing Links, Crossing Treatments	-	125,000	125,000	125,000	125,000	125,000	125,000	750,000	-	-
TIP Local Match/TMP Implementation	-	3,300,000	3,300,000	4,200,000	4,000,000	4,000,000	4,000,000	22,800,000	-	-
Boulder Junction - Traffic Signal at Bluff Street and 30th Street	228,000	-	-	228,000	-	-	-	228,000	-	-
Boulder Junction - Traffic Signal at Junction Place and Valmont	304,000	-	-	304,000	-	-	-	304,000	-	-
TIP Local Match/TMP Implementation II	-	-	-	470,000	300,000	400,000	400,000	1,570,000	-	-
Subtotal	$ 1,357,000	$ 3,725,000	$ 3,725,000	$ 5,627,000	$ 4,650,000	$ 4,750,000	$ 4,750,000	$ 27,227,000	$ 450,000	$ 150,000

Table 2-1: 2015-2020 Funding Summary By Department (Cont.)

PUBLIC WORKS - TRANSPORTATION (Cont.)

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Transfer										
Tributary Greenways Program - Transportation - Transfer	$ -	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 585,000	$ 97,500	$ -
Subtotal	$ -	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 585,000	$ 97,500	$ -
Total	**$ 4,114,823**	**$ 7,629,500**	**$ 7,096,500**	**$ 7,568,500**	**$ 6,426,500**	**$ 6,447,500**	**$ 6,447,500**	**$ 41,616,000**	**$ 1,435,323**	**$ 150,000**

Table 2-1: 2015-2020 Funding Summary By Department (Cont.)

PUBLIC WORKS - WASTEWATER UTILITY

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Enhancement										
Utility Billing Computer System Replacement	$ 115,000	$ 50,000	$ -	$ -	$ -	$ -	$ 65,000	$ 115,000	$ -	$ -
Wastewater Treatment Activated Sludge	710,961	389,376	-	58,493	-	-	-	447,869	-	-
Wastewater Treatment Facility Instrumentation/Control	9,131,068	540,800	-	674,918	701,915	729,992	759,191	3,406,816	695,600	5,028,652
Wastewater Treatment Facility Permit Improvements - Funded	23,337,234	1,650,000	150,000	-	750,000	1,500,000	18,625,000	22,675,000	662,234	-
Marshall Landfill	100,000	-	100,000	-	-	-	-	100,000	-	-
Wastewater Treatment Facility Electrical	1,420,000	-	120,000	1,200,000	-	-	-	1,320,000	100,000	-
Wastewater Treatment Facility Laboratory	100,000	-	50,000	-	-	-	-	50,000	50,000	-
Wastewater Treatment Facility Pumps	448,413	-	150,000	-	-	-	-	150,000	298,413	-
Goose Creek Sanitary Sewer Interceptor Rehabilitation	2,019,578	-	-	-	25,000	647,590	1,346,988	2,019,578	-	-
Subtotal	$ 37,382,254	$ 2,630,176	$ 570,000	$ 1,933,411	$ 1,476,915	$ 2,877,582	$ 20,796,179	$ 30,284,263	$ 1,806,247	$ 5,028,652
Capital Maintenance										
Condition Assessment Program	$ 5,173,721	$ 780,000	$ 811,200	$ 843,648	$ 877,394	$ 912,490	$ 948,989	$ 5,173,721	$ -	$ -
IBM Lift Station Improvements	1,300,000	500,000	-	-	-	-	-	500,000	-	800,000
Sanitary Sewer Manhole Rehabilitation	1,264,660	208,000	216,320	224,973	233,972	24,331	253,064	1,160,660	104,000	-
Sanitary Sewer Rehabilitation	23,193,721	12,030,000	2,061,200	2,093,648	2,127,394	2,162,490	2,198,989	22,673,721	520,000	-
Collection System Monitoring	100,000	-	-	-	-	-	-	-	100,000	-
Wastewater Treatment Facility Digester Complex	2,200,000	-	-	-	-	200,000	2,000,000	2,200,000	-	-
Wastewater Treatment Facility Cogeneration	184,481	-	-	-	-	-	184,481	184,481	-	-
Subtotal	$ 33,416,583	$ 13,518,000	$ 3,088,720	$ 3,162,269	$ 3,238,760	$ 3,299,311	$ 5,585,523	$ 31,892,583	$ 724,000	$ 800,000
Total	**$ 70,798,837**	**$ 16,148,176**	**$ 3,658,720**	**$ 5,095,680**	**$ 4,715,675**	**$ 6,176,893**	**$ 26,381,702**	**$ 62,176,846**	**$ 2,530,247**	**$ 5,828,652**

Table 2-1: 2015-2020 Funding Summary By Department (Cont.)

PUBLIC WORKS - WATER UTILITY

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Enhancement										
Barker Dam and Reservoir	$ 498,560	$ 378,560	$ -	$ -	$ -	$ -	$ -	$ 378,560	$ 120,000	$ -
Betasso Water Treatment Facility	13,325,000	700,000	12,125,000	-	-	-	-	12,825,000	500,000	-
Devil's Thumb Security Fence	50,000	50,000	-	-	-	-	-	50,000	-	-
Sunshine Transmission Pipe	2,000,000	1,000,000	-	-	-	-	-	1,000,000	1,000,000	-
Water System Security Upgrades	840,000	150,000	150,000	150,000	150,000	150,000	90,000	840,000	-	-
Barker Dam Outlet	9,062,557	-	50,000	175,000	803,414	8,034,143	-	9,062,557	-	-
Boulder Reservoir Water Treatment Facility - Funded	164,000	-	164,000	-	-	-	-	164,000	-	-
Lakewood Hydroelectric / Pressure Reducing Facility	430,000	-	130,000	-	-	300,000	-	430,000	-	-
Utility Billing Computer System Replacement	529,104	-	-	500,000	-	-	-	500,000	29,104	-
Lakewood Dam	124,707	-	-	-	124,707	-	-	124,707	-	-
Pearl Street Hydroelectric / Pressure Reducing Facility	267,664	-	-	-	24,333	243,331	-	267,664	-	-
Green Lake 2 Dam	5,223,557	-	-	-	-	75,000	468,051	543,051	-	4,680,506
Wittemyer Ponds - Funded	5,519,533	-	-	-	-	100,000	473,735	573,735	-	4,945,798
Subtotal	$ 38,034,682	$ 2,278,560	$ 12,619,000	$ 825,000	$ 1,102,454	$ 8,902,474	$ 1,031,786	$ 26,759,274	$ 1,649,104	$ 9,626,304
Capital Maintenance										
Barker Gravity Pipeline Repair	$ -	$ 378,560	$ 667,416	$ 612,436	$ 636,933	$ 662,410	$ 688,907	$ 3,646,662	$ -	$ -
Goose Lake Dam	20,000	20,000	-	-	-	-	-	20,000	-	-
Kohler Storage Tank	903,362	103,487	799,875	-	-	-	-	903,362	-	-
Lakewood Pipeline	846,730	270,400	-	-	-	316,330	-	586,730	260,000	-
Silver Lake Dam	75,000	75,000	-	-	-	-	-	75,000	-	-
Silver Lake Hydroelectric / PRV	150,000	150,000	-	-	-	-	-	150,000	-	-
Waterline Replacement	24,329,088	3,224,000	3,352,960	3,487,078	3,626,562	3,771,624	3,224,033	20,686,257	3,642,831	-
Watershed Improvements	260,000	80,000	80,000	-	-	-	100,000	260,000	-	-
Water Transmission Facilities (Zone 3)	250,000	-	1,200,000	-	-	250,000	-	1,450,000	-	(1,200,000)
Barker-Kossler Penstock Repair	116,986	-	-	116,986	-	-	-	116,986	-	-
Betasso Storage Tank	292,465	-	-	292,465	-	-	-	292,465	-	-
Sunshine Hydroelectric / Pressure Reducing Station	271,875	-	-	271,875	-	-	-	271,875	-	-
Water Transmission Facilities (Zone 2)	500,000	-	-	250,000	-	-	250,000	500,000	-	-
Betasso Hydroelectric / Pressure Reducing Facility	250,000	-	-	-	250,000	-	-	250,000	-	-
Water Transmission Facilities (Zone 1)	250,000	-	-	-	250,000	-	-	250,000	-	-
Farmer's Ditch	108,160	-	-	-	-	108,160	-	108,160	-	-
Subtotal	$ 28,623,666	$ 4,301,447	$ 6,100,251	$ 5,030,840	$ 4,763,495	$ 5,108,524	$ 4,262,940	$ 29,567,497	$ 3,902,831	$ (1,200,000)

Table 2-1: 2015-2020 Funding Summary By Department (Cont.)

PUBLIC WORKS - WATER UTILITY (Cont.)

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
New Capital Project										
Annexation Related Water System Expansion	$ 5,000,000	$ 2,500,000	$ 2,500,000	$ -	$ -	$ -	$ -	$ 5,000,000	$ -	$ -
NCWCD Conveyance - Carter Lake Pipeline	38,568,583	500,000	850,000	2,036,322	33,938,701	-	-	37,325,023	1,243,560	-
Barker Dam Hydroelectric	4,024,805	-	50,000	361,346	3,613,459	-	-	4,024,805	-	-
Source Water Monitoring	293,200	-	50,000	50,000	50,000	50,000	-	200,000	93,200	-
Carter Lake Hydroelectric	2,800,000	-	-	-	50,000	250,000	2,500,000	2,800,000	-	-
Subtotal	$ 50,686,588	$ 3,000,000	$ 3,450,000	$ 2,447,668	$ 37,652,160	$ 300,000	$ 2,500,000	$ 49,349,828	$ 1,336,760	$ -
Total	**$ 117,344,936**	**$ 9,580,007**	**$ 22,169,251**	**$ 8,303,508**	**$ 43,518,109**	**$ 14,310,998**	**$ 7,794,726**	**$ 105,676,599**	**$ 6,888,695**	**$ 8,426,304**

[This page is intentionally blank.]

FUNDING BY PROJECT TYPE

Each CIP project has been classified as a city investment in one of five project types:

- Capital Enhancement
- Capital Maintenance
- Capital Planning Studies
- Land Acquisition
- New Capital Project

There is an additional project type of *Transfers* that is used to indicate cross departmental funding collaborations. While these transfers are included in departmental totals, they are not included when calculating the total of all planned project funding in the CIP. The five project types are defined by the following criteria:

Capital Enhancement:

- Construction resulting in the expansion or significant improvement of an existing facility or asset
- Projects have a discrete start and end date
- Projects are location specific
- Projects are typically over $50,000 in total project cost, but do not have to be. Information Technology projects are typically over $25,000 in total project cost
- Projects result in a durable, long lasting asset, with a useful life of at least 15 years. Information Technology projects may be as short as 5 years.

Capital Maintenance:

- Projects result in the repair, replacement, or renovation of an existing asset
- Projects may or may not have a discrete start and end date
- Projects are location specific or programs that cover a geographic area
- Projects are typically over $50,000 in total project cost. Information Technology projects are typically over $25,000 in total project cost.

Criteria for Capital Planning Studies:

- Project results in the development of a study or plan which is intended to identify, plan, or prepare for the construction or acquisition of capital assets or capital program
- Projects have discrete start and end date
- Projects are typically for studies that are over $50,000 in total cost.

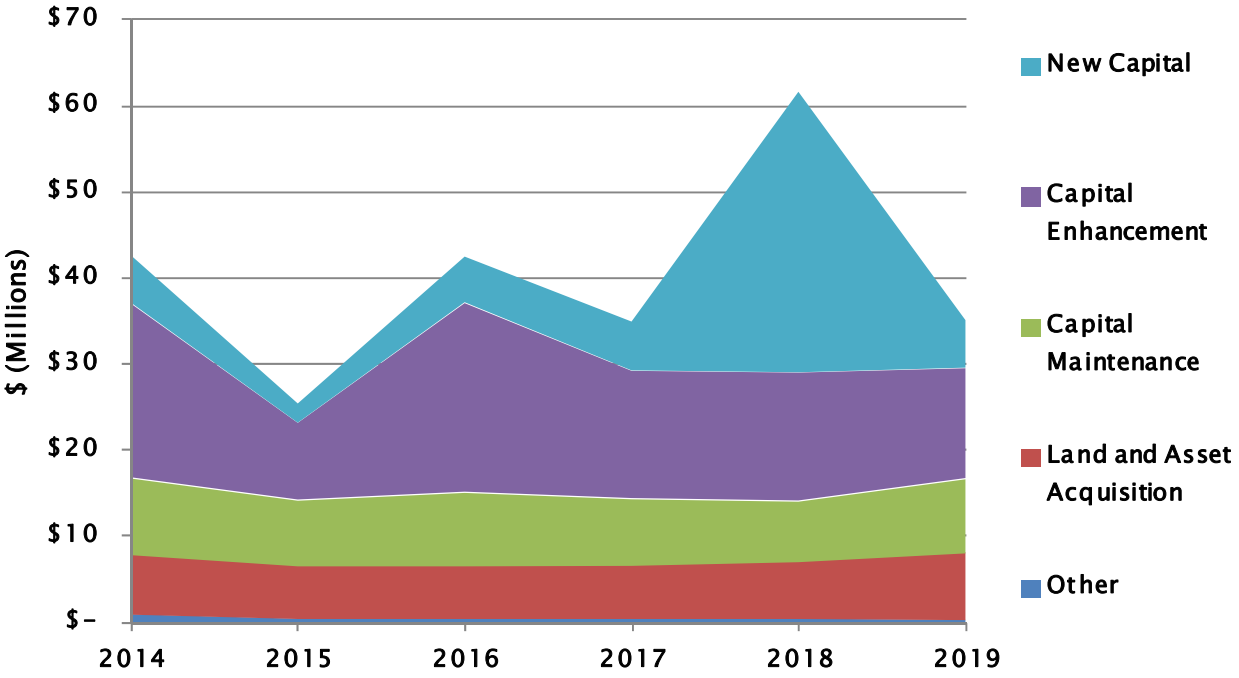
Land & Asset Acquisition:

- Project or program results in the acquisition of real property, such as land, mineral or water rights, or permanent easements
- Projects may have discrete start and end dates, or may be programmatic
- Projects or programs may be location specific or city-wide
- Projects or programs typically include acquisitions totaling over $50,000

Criteria for New Capital Project:

- Projects resulting in the construction or acquisition of a new asset
- Construction resulting in additional square footage of an existing asset
- Projects have a discrete start and end date
- Projects are location specific
- Projects are typically over $50,000 in total project cost, but do not have to be
- Projects result in a durable, long lasting asset, with a useful life of at least 15 years.

Figure 2-3: 2015-2020 Funding by Project Type



Other includes Capital Planning Studies and Transfers

Figure 2-4: 2015-2020 Funding by Project Type Excluding Utilities

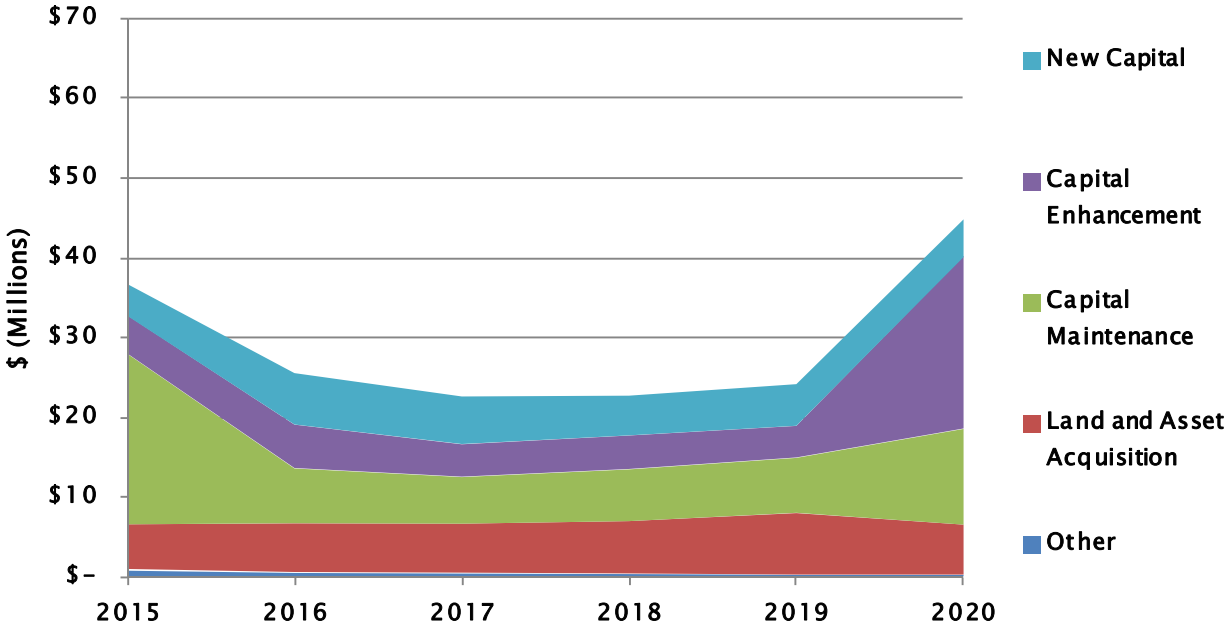


Table 2-2: 2015-2020 Funding Summary By Project Type

SUMMARY OF ALL TYPES

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Enhancement	$ 165,971,969	$ 27,111,177	$ 24,282,941	$ 11,771,500	$ 19,833,004	$ 17,655,787	$ 27,497,695	$ 128,152,104	$ 11,213,861	$ 23,585,470
Capital Maintenance	82,434,853	27,766,618	14,673,712	12,712,002	13,084,558	14,119,058	20,672,163	103,028,111	7,554,404	(890,000)
Capital Planning Studies	1,270,000	620,000	250,000	150,000	50,000	50,000	50,000	1,170,000	100,000	-
Land and Asset Acquisition	1,874,000	6,200,000	6,200,000	6,250,000	6,674,000	7,833,000	6,360,000	39,517,000	5,700,000	-
New Capital	54,619,815	7,025,000	9,925,000	8,424,668	42,652,160	5,550,000	7,250,000	80,826,828	2,512,987	(2,250,000)
Transfer	-	320,400	320,400	320,400	320,400	195,000	195,000	1,671,600	247,500	-
Total	**$ 306,170,637**	**$ 69,043,195**	**$ 55,652,053**	**$ 39,628,570**	**$ 82,614,122**	**$ 45,402,845**	**$ 62,024,858**	**$ 354,365,643**	**$ 27,328,752**	**$ 20,445,470**

[This page is intentionally blank.]

Table 2-2: 2015-2020 Funding Summary By Project Type (Cont.)

CAPITAL ENHANCEMENT

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
28th St (Baseline to Iris)	$ -	$ 1,330,000	$ 1,330,000	$ -	$ -	$ -	$ -	$ 2,660,000	$ -	$ -
ADA Compliance Improvements	800,000	100,000	100,000	200,000	200,000	-	-	600,000	200,000	-
Artificial Turf Field Installation	1,500,000	-	500,000	500,000	500,000	-	-	1,500,000	-	-
Barker Dam and Reservoir	498,560	378,560	-	-	-	-	-	378,560	120,000	-
Barker Dam Outlet	9,062,557	-	50,000	175,000	803,414	8,034,143	-	9,062,557	-	-
Bear Canyon Creek Flood Mitigation	600,000	100,000	500,000	-	-	-	-	600,000	-	-
Bear Canyon Road Flood Damage Repair and Mitigation	150,000	150,000	-	-	-	-	-	150,000	-	-
Betasso Water Treatment Facility	13,325,000	700,000	12,125,000	-	-	-	-	12,825,000	500,000	-
Bluebell and King's Gultch Flood Mitigation	600,000	-	-	100,000	500,000	-	-	600,000	-	-
Boulder Creek Flood Mitigation	5,600,000	500,000	2,500,000	2,500,000	-	-	-	5,500,000	100,000	-
Boulder Junction - Junction Pl Enhancements (Goose Creek to Bluff)	877,000	477,000	-	-	-	-	-	477,000	400,000	-
Boulder Reservoir Water Treatment Facility - Funded	164,000	-	164,000	-	-	-	-	164,000	-	-
Coot Lake Restoration	250,000	250,000	-	-	-	-	-	250,000	-	-
Devil's Thumb Security Fence	50,000	50,000	-	-	-	-	-	50,000	-	-
East Boulder Community Center Renovation	1,100,000	-	-	-	100,000	100,000	100,000	300,000	-	800,000
Emerald Ash Borer Response Measures	890,000	230,000	220,000	220,000	220,000	-	-	890,000	-	-
Flagstaff Summit Improvements	250,000	250,000	-	-	-	-	-	250,000	-	-
Fourmile Canyon Creek Upland to Violet	6,102,205	-	770,441	770,441	770,441	1,020,441	2,770,441	6,102,205	-	-
Goose Creek Sanitary Sewer Interceptor Rehabilitation	2,019,578	-	-	-	25,000	647,590	1,346,988	2,019,578	-	-
Green Lake 2 Dam	5,223,557	-	-	-	-	75,000	468,051	543,051	-	4,680,506
Gregory Creek Flood Mitigation	600,000	100,000	500,000	-	-	-	-	600,000	-	-
Lakewood Dam	124,707	-	-	-	124,707	-	-	124,707	-	-
Lakewood Hydroelectric / Pressure Reducing Facility	430,000	-	130,000	-	-	300,000	-	430,000	-	-
Lighting Ordinance Implementation	500,000	-	250,000	250,000	-	-	-	500,000	-	-
Local Drainage Improvements	-	780,000	811,200	843,648	877,394	912,490	948,989	5,173,721	-	-
Marshall Landfill	100,000	-	100,000	-	-	-	-	100,000	-	-
Miscellaneous Development Coordination	-	50,000	50,000	50,000	50,000	50,000	50,000	300,000	-	-
North Boulder Recreation Center - Replace Solar Thermal System	350,000	350,000	-	-	-	-	-	350,000	-	-
OSMP East Trail Study Area (ETSA)	300,000	-	-	50,000	50,000	200,000	200,000	500,000	-	(200,000)
OSMP North Trail Study Area (NTSA)	-	50,000	100,000	200,000	100,000	50,000	50,000	550,000	100,000	(650,000)
OSMP West Trail Study Area (WTSA)	-	-	550,000	450,000	600,000	50,000	50,000	1,700,000	1,119,486	(2,819,486)
Outdoor Lighting Compliance Improvements	200,000	10,000	190,000	-	-	-	-	200,000	-	-

Table 2-2: 2015-2020 Funding Summary By Project Type (Cont.)

CAPITAL ENHANCEMENT (Cont.)

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Pearl Street Hydroelectric / Pressure Reducing Facility	267,664	-	-	-	24,333	243,331	-	267,664	-	-
Playground and Park Irrigation System Renovation	2,651,200	-	530,300	530,000	530,300	530,300	530,300	2,651,200	-	-
Recreation Center Enhancements	1,680,000	280,000	280,000	280,000	280,000	280,000	280,000	1,680,000		
Restoration of Riparian and Wetland Habitat - Gregory Canyon Creek and Fancier Ponds Flood Repair	59,000	59,000	-	-	-	-	-	59,000	-	-
Signal Maintenance and Upgrade	-	-	-	-	200,000	-	-	200,000	200,000	-
Skunk Creek Flood Mitigation	600,000	-	-	100,000	500,000	-	-	600,000	-	-
South Boulder Creek Flood Mitigation Phase I	24,000,000	250,000	750,000	750,000	10,150,000	-	-	11,900,000	300,000	11,800,000
Stazio Refurbish Restrooms and Concessions	160,000	160,000	-	-	-	-	-	160,000	-	-
Stormwater Quality Improvements	-	156,000	162,000	169,000	175,500	182,500	190,000	1,035,000	104,000	-
Sunshine Transmission Pipe	2,000,000	1,000,000	-	-	-	-	-	1,000,000	1,000,000	-
Tantra Shop Renovation	300,000	-	-	-	-	300,000	-	300,000	-	-
Twomile Canyon Creek Flood Mitigation	600,000	-	-	100,000	500,000	-	-	600,000	-	-
Upper Goose Creek Drainage	17,905,163	175,000	750,000	750,000	750,000	1,000,000	-	3,425,000	-	-
Utility Billing Computer System Replacement	644,104	100,000	-	500,000	-	-	65,000	665,000	29,104	-
Visitor Infrastructure - System Wide	-	-	250,000	200,000	200,000	500,000	500,000	1,650,000	350,000	-
Wastewater Treatment Activated Sludge	710,961	389,376	-	58,493	-	-	-	447,869	-	-
Wastewater Treatment Facility Electrical	1,420,000	-	120,000	1,200,000	-	-	-	1,320,000	100,000	-
Wastewater Treatment Facility Instrumentation/Control	9,131,068	540,800	-	674,918	701,915	729,992	759,191	3,406,816	695,600	5,028,652
Wastewater Treatment Facility Laboratory	100,000	-	50,000	-	-	-	-	50,000	50,000	-
Wastewater Treatment Facility Permit Improvements - Funded	23,337,234	1,650,000	150,000	-	750,000	1,500,000	18,625,000	22,675,000	662,234	-
Wastewater Treatment Facility Pumps	448,413	-	150,000	-	-	-	-	150,000	298,413	-
Water System Security Upgrades	840,000	150,000	150,000	150,000	150,000	150,000	90,000	840,000	-	-
West Senior Center Major Maintenance & Rehab	700,000	-	-	-	-	700,000	-	700,000	-	-
Wittemyer Ponds - Funded	5,519,533	-	-	-	-	100,000	473,735	573,735	-	4,945,798
Wonderland Creek (28th) Kalmia to Winding Trail	7,805,657	6,345,441	-	-	-	-	-	6,345,441	1,460,216	-
Wonderland Creek Foothills to 30th	13,424,808	10,000,000	-	-	-	-	-	10,000,000	3,424,808	-
Total	**$ 165,971,969**	**$ 27,111,177**	**$ 24,282,941**	**$ 11,771,500**	**$ 19,833,004**	**$ 17,655,787**	**$ 27,497,695**	**$ 128,152,104**	**$ 11,213,861**	**$ 23,585,470**

Table 2-2: 2015-2020 Funding Summary By Project Type (Cont.)

CAPITAL MAINTENANCE

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Agriculture Facilities Projects	$ -	$ 100,000	$ 110,000	$ 110,000	$ 120,000	$ 120,000	$ 130,000	$ 690,000	$ -	$ (690,000)
Barker Gravity Pipeline Repair	-	378,560	667,416	612,436	636,933	662,410	688,907	3,646,662	-	-
Barker-Kossler Penstock Repair	116,986	-	-	116,986	-	-	-	116,986	-	-
Betasso Hydroelectric / Pressure Reducing Facility	250,000	-	-	-	250,000	-	-	250,000	-	-
Betasso Storage Tank	292,465	-	-	292,465	-	-	-	292,465	-	-
Boulder Creek and South Boulder Creek Confidence Area Restoration Flood Repair	150,000	150,000	-	-	-	-	-	150,000	-	-
Boulder Museum of Contemporary Arts - Floor Replacement	90,000	90,000	-	-	-	-	-	90,000	-	-
CAGID Parking Garage Access Equipment	1,075,000	1,075,000	-	-	-	-	-	1,075,000	-	-
Collection System Monitoring	100,000	-	-	-	-	-	-	-	100,000	-
Condition Assessment Program	5,173,721	780,000	811,200	843,648	877,394	912,490	948,989	5,173,721	-	-
Court Repairs and Renovation	280,000	-	-	-	280,000	-	-	280,000	-	-
Cultural Resource/Facility Restoration	60,000	60,000	-	-	-	-	-	60,000	-	-
Data Backup and Disaster Recovery	129,000	-	-	-	44,000	85,000	-	129,000	-	-
Deficient Street Light Pole Replacement	1,280,823	321,000	265,000	265,000	-	121,000	121,000	1,093,000	187,823	-
Downtown 14th Street Parking Lot Improvements	-	25,000	25,000	25,000	25,000	25,000	25,000	150,000	-	-
Downtown Parking Garage Major Maintenance	-	250,000	250,000	250,000	250,000	250,000	250,000	1,500,000	-	-
Downtown/Pearl St Mall Amenities Replacement	-	125,000	125,000	125,000	125,000	125,000	125,000	750,000	-	-
East Boulder Community Center - Replace Pool Air Handlers	500,000	-	500,000	-	-	-	-	500,000	-	-
End User Device Replacement	-	458,000	458,000	458,000	458,000	458,000	458,000	2,748,000	458,000	-
Farmer's Ditch	108,160	-	-	-	-	108,160	-	108,160	-	-
Fire Station #1 - Repair Concrete Floor in Vehicle Bays and Exterior Ramps	150,000	150,000	-	-	-	-	-	150,000	-	-
Flatirons Golf Course Restroom and Path Repairs	-	-	200,000	-	-	-	-	200,000	-	(200,000)
Goose Lake Dam	20,000	20,000	-	-	-	-	-	20,000	-	-
Hartnagle House Restoration	65,000	65,000	-	-	-	-	-	65,000	-	-
Historic Railroad Coach Restoration	100,000	100,000	-	-	-	-	-	100,000	-	-
IBM Lift Station Improvements	1,300,000	500,000	-	-	-	-	-	500,000	-	800,000
Kohler Storage Tank	903,362	103,487	799,875	-	-	-	-	903,362	-	-
Lakewood Pipeline	846,730	270,400	-	-	-	316,330	-	586,730	260,000	-
Lower Big Bluestem Trail Flood Repair	205,300	205,300	-	-	-	-	-	205,300	-	-
Major Capital Reconstruction	-	800,000	800,000	800,000	800,000	800,000	800,000	4,800,000	-	-
Mapleton Ballfields, Renovate Concessions and Restrooms +	100,000	100,000	-	-	-	-	-	100,000	-	-

Table 2-2: 2015-2020 Funding Summary By Project Type (Cont.)

CAPITAL MAINTENANCE (Cont.)

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Martin Park Shelter Major Maintenance	169,000	-	-	169,000	-	-	-	169,000	-	-
Miscellaneous Facility DET Projects	715,000	465,000	50,000	50,000	50,000	50,000	50,000	715,000	-	-
Miscellaneous Facility Maintenance Projects	2,415,000	370,000	415,000	380,000	400,000	400,000	450,000	2,415,000	-	-
Miscellaneous Water Quality, Restoration and Trail Improvements	-	50,000	50,000	50,000	50,000	50,000	50,000	300,000	50,000	-
Network Hardware Replacement	1,301,331	160,671	148,041	113,893	116,503	612,223	648,000	1,799,331	150,000	-
North Boulder Park Shelter Repair	120,000	-	-	120,000	-	-	-	120,000	-	-
North Boulder Recreation Center Roof Replacement	450,000	450,000	-	-	-	-	-	450,000	-	-
OSMP - Historical Structures & Trails - Stabilization and Restoration	-	-	355,300	355,300	355,300	355,300	355,300	1,776,500	686,000	-
Parking Lot Repair	860,000	-	-	-	220,000	420,000	220,000	860,000	-	-
Pearl Street Mall Irrigation System Replacement	1,500,000	750,000	-	-	-	-	-	750,000	950,000	400,000
Pedestrian Facilities - Repair, Replacement, ADA	-	629,000	629,000	629,000	629,000	629,000	629,000	3,774,000	-	-
Pool Replastering	230,000	75,000	-	-	-	-	-	75,000	155,000	-
Records Management System	950,000	850,000	100,000	-	-	-	-	950,000	-	-
Rehabilitate Runway and Eastern Taxiway	4,935,000	-	-	-	435,000	-	4,500,000	4,935,000	-	-
Replaster Pools +	80,000	-	80,000	-	-	-	-	80,000	-	-
Royal Arch Trail Flood Repair	150,000	150,000	-	-	-	-	-	150,000	-	-
Sanitary Sewer Manhole Rehabilitation	1,264,660	208,000	216,320	224,973	233,972	24,331	253,064	1,160,660	104,000	-
Sanitary Sewer Rehabilitation	23,193,721	12,030,000	2,061,200	2,093,648	2,127,394	2,162,490	2,198,989	22,673,721	520,000	-
Security Administration	77,450	11,500	54,000	-	-	6,700	6,700	78,900	5,250	-
Server Admin Hardware Repalcement	767,000	615,000	10,500	-	81,000	35,000	740,000	1,481,500	25,500	-
Silver Lake Dam	75,000	75,000	-	-	-	-	-	75,000	-	-
Silver Lake Hydroelectric / PRV	150,000	150,000	-	-	-	-	-	150,000	-	-
South Boulder Creek West Trail Flood Repair	100,000	100,000	-	-	-	-	-	100,000	-	-
South Mesa Road and Shanahan Ridge Trail	544,700	544,700	-	-	-	-	-	544,700	-	-
Stazio Tensile Canopy Covering Replacement	132,000	-	132,000	-	-	-	-	132,000	-	-
Storm Sewer Rehabilitation	-	260,000	270,400	281,200	292,500	304,000	632,700	2,040,800	-	-
Sunshine Hydroelectric / Pressure Reducing Station	271,875	-	-	271,875	-	-	-	271,875	-	-
Transportation Coordination	-	312,000	324,500	337,500	351,000	365,000	633,000	2,323,000	260,000	-
Viele House Foundation Repair	80,000	80,000	-	-	-	-	-	80,000	-	-
VoIP Telephone System Replacement	633,000	-	133,000	-	-	500,000	-	633,000	-	
Water Transmission Facilities (Zone 1)	250,000	-	-	-	250,000	-	-	250,000	-	-
Water Transmission Facilities (Zone 2)	500,000	-	-	250,000	-	-	250,000	500,000	-	-
Water Transmission Facilities (Zone 3)	250,000	-	1,200,000	-	-	250,000	-	1,450,000	-	(1,200,000)
Waterline Replacement	24,329,088	3,224,000	3,352,960	3,487,078	3,626,562	3,771,624	3,224,033	20,686,257	3,642,831	-
Watershed Improvements	260,000	80,000	80,000	-	-	-	100,000	260,000	-	-
Wastewater Treatment Facility Cogeneration	184,481	-	-	-	-	-	184,481	184,481	-	-
Wastewater Treatment Facility Digester Complex	2,200,000	-	-	-	-	200,000	2,000,000	2,200,000	-	-
Total	**$ 82,434,853**	**$ 27,766,618**	**$ 14,673,712**	**$ 12,712,002**	**$ 13,084,558**	**$ 14,119,058**	**$ 20,672,163**	**$ 103,028,111**	**$ 7,554,404**	**$ (890,000)**

Table 2-2: 2015-2020 Funding Summary By Project Type (Cont.)

CAPITAL PLANNING STUDIES

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Facility Assessments	$ 300,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 300,000	$ -	$ -
Parks and Recreation Planning, Design, and Construction Standards	100,000	100,000	-	-	-	-	-	100,000	-	-
Recreation Facility Strategic Plan	150,000	150,000	-	-	-	-	-	150,000	-	-
Transportation Corridor Scoping and Prioritization - 30/Colorado	200,000	-	100,000	100,000	-	-	-	200,000	-	-
Transportation Corridor Scoping and Prioritization - Canyon Blvd	200,000	100,000	-	-	-	-	-	100,000	100,000	-
Transportation Corridor Scoping and Prioritization - East Arapahoe	200,000	100,000	100,000	-	-	-	-	200,000	-	-
Urban Forest Management Plan	120,000	120,000	-	-	-	-	-	120,000	-	-
Total	**$ 1,270,000**	**$ 620,000**	**$ 250,000**	**$ 150,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 1,170,000**	**$ 100,000**	**$ -**

LAND AND ASSET ACQUISITION

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Boulder Junction Rail Plaza	$ 1,874,000	$ -	$ -	$ -	$ 374,000	$ 1,500,000	$ -	$ 1,874,000	$ -	$ -
Mineral Rights Acquisition	-	100,000	100,000	100,000	100,000	100,000	100,000	600,000	100,000	-
OSMP Real Estate Acquisition Program	-	5,400,000	5,400,000	5,400,000	5,400,000	5,400,000	5,400,000	32,400,000	5,400,000	-
Preflood Property Acquisition	-	500,000	500,000	550,000	600,000	633,000	660,000	3,443,000	-	-
Water Rights Acquisition	-	200,000	200,000	200,000	200,000	200,000	200,000	1,200,000	200,000	-
Total	**$ 1,874,000**	**$ 6,200,000**	**$ 6,200,000**	**$ 6,250,000**	**$ 6,674,000**	**$ 7,833,000**	**$ 6,360,000**	**$ 39,517,000**	**$ 5,700,000**	**$ -**

Table 2-2: 2015-2020 Funding Summary By Project Type (Cont.)

NEW CAPITAL

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Annexation Related Water System Expansion	$ 5,000,000	$ 2,500,000	$ 2,500,000	$ -	$ -	$ -	$ -	$ 5,000,000	$ -	$ -
Barker Dam Hydroelectric	4,024,805	-	50,000	361,346	3,613,459	-	-	4,024,805	-	-
Bikeway Facilities - Enhancements	-	225,000	225,000	225,000	225,000	225,000	225,000	1,350,000	-	-
Boulder Junction - Development Coordination	825,000	75,000	75,000	75,000	-	-	-	225,000	450,000	150,000
Boulder Junction - Traffic Signal at Bluff Street and 30th Street	228,000	-	-	228,000	-	-	-	228,000	-	-
Boulder Junction - Traffic Signal at Junction Place and Valmont	304,000	-	-	304,000	-	-	-	304,000	-	-
Boulder Junction Pocket Park	1,926,227	-	750,000	350,000	350,000	-	-	1,450,000	476,227	-
Carter Lake Hydroelectric	2,800,000	-	-	-	50,000	250,000	2,500,000	2,800,000	-	-
NCWCD Conveyance - Carter Lake Pipeline	38,568,583	500,000	850,000	2,036,322	33,938,701	-	-	37,325,023	1,243,560	-
Pedestrian Facilities Enhancements-Missing Links, Crossing Treatments	-	125,000	125,000	125,000	125,000	125,000	125,000	750,000	-	-
Source Water Monitoring	293,200	-	50,000	50,000	50,000	50,000	-	200,000	93,200	-
South Boulder Creek at Greenbelt Meadows	150,000	150,000	-	-	-	-	-	150,000	-	-
South Boulder Creek Instream Flow	-	150,000	2,000,000	-	-	-	-	2,150,000	250,000	(2,400,000)
TIP Local Match/TMP Implementation	-	3,300,000	3,300,000	4,200,000	4,000,000	4,000,000	4,000,000	22,800,000	-	-
TIP Local Match/TMP Implementation II	-	-	-	470,000	300,000	400,000	400,000	1,570,000	-	-
Violet Park	500,000	-	-	-	-	500,000	-	500,000	-	-
Total	**$ 54,619,815**	**$ 7,025,000**	**$ 9,925,000**	**$ 8,424,668**	**$ 42,652,160**	**$ 5,550,000**	**$ 7,250,000**	**$ 80,826,828**	**$ 2,512,987**	**$ (2,250,000)**

TRANSFER

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Tributary Greenways Program - Lottery	$ -	$ 125,400	$ 125,400	$ 125,400	$ 125,400	$ -	$ -	$ 501,600	$ 150,000	$ -
Tributary Greenways Program - Stormwater & Flood	-	97,500	97,500	97,500	97,500	97,500	97,500	585,000	-	-
Tributary Greenways Program - Transportation - Transfer	-	97,500	97,500	97,500	97,500	97,500	97,500	585,000	97,500	-
Total	**$ -**	**$ 320,400**	**$ 320,400**	**$ 320,400**	**$ 320,400**	**$ 195,000**	**$ 195,000**	**$ 1,671,600**	**$ 247,500**	**$ -**

[This page is intentionally blank.]

FUNDING BY FUND

2015-2020 Capital Improvement Program

One or more of the following 17 funds and funding sources are proposed for the CIP projects:

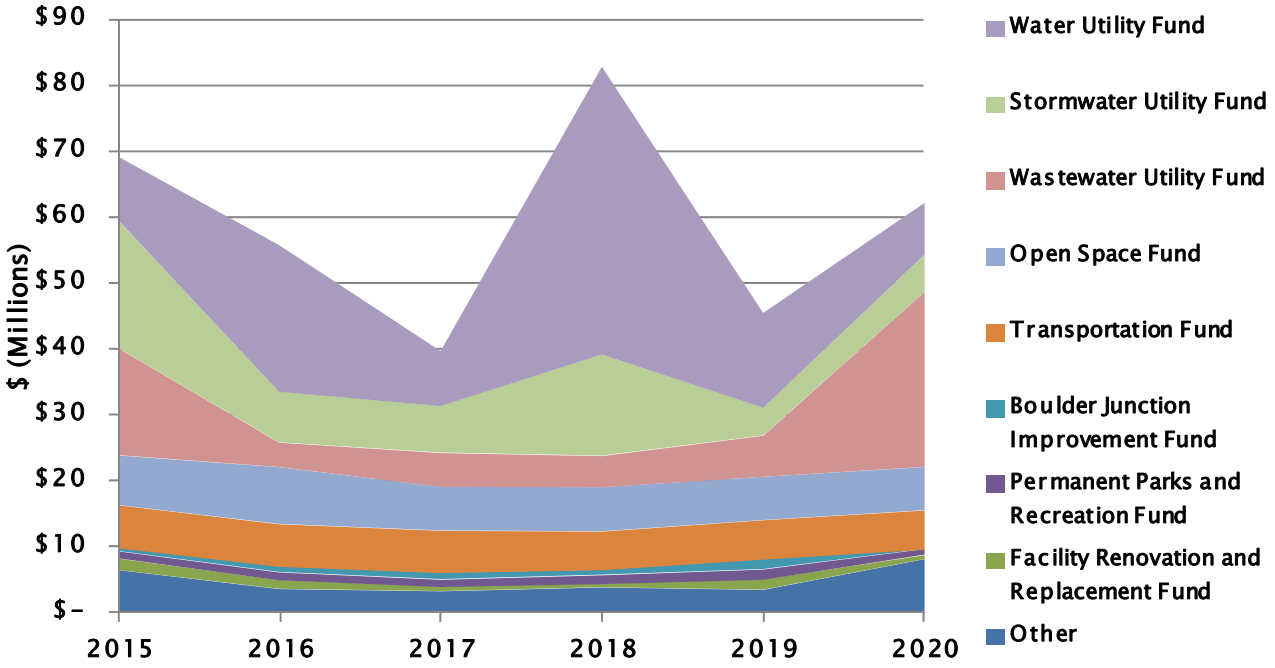
- .25 Cent Sales Tax Fund
- Airport Fund
- Boulder Junction Improvement Fund
- Capital Development Fund
- Computer Replacement Fund
- Downtown Commercial District Fund
- Facility Renovation and Replacement Fund
- General Fund
- Greenways Program
- Lottery Fund
- Open Space Fund
- Permanent Parks and Recreation Fund
- Stormwater Utility Fund
- Transportation Fund
- Transportation Development Fund
- Wastewater Utility Fund
- Water Utility Fund

Detailed descriptions of all of the city's funds are available in the introduction section of the Recommended 2014 Annual Budget - Volume 1. Many of the funds exist to handle dedicated revenues that can only be used for specific types of capital projects. These restrictions provide consistency in planning for project types, but also requires the city to allocate resources to a specific category of infrastructure and maintain existing priorities. The Greenways Program is not a fund as defined above, but is used within the CIP to illustrate the funding structure of the Public Works - Greenways workgroup. , and to call out the CIP projects associated with the work of Greenways

Similar to the department distributions described earlier in this section, the Transportation and Utility Funds are the largest contributors to the city's 2015-2020 CIP.

Figure 2-5 shows the distribution of six year funding by fund.

Figure 2-5: 2015-2020 Funding by Fund



Other includes the General Fund, .25 Cent Sales Tax Fund, Capital Development Fund, Airport Fund, Greenways Program, Downtown Commercial Fund, Transportation Development Fund, Lottery Fund, Computer Replacement Fund, and Telecommunications Fund.

Table 2-3: 2015-2020 Funding Summary by Fund

2015 - 2020 CAPITAL IMROVEMENTS PROGRAM - BY FUND

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
.25 Cent Sales Tax Fund	$ 3,050,000	$ 950,000	$ 700,000	$ 700,000	$ 700,000	$ -	$ -	$ 3,050,000	$ 200,000	$ (200,000)
Airport Fund	4,935,000	-	-	-	435,000	-	4,500,000	4,935,000	-	-
Boulder Junction Improvement Fund	6,034,227	552,000	825,000	957,000	724,000	1,500,000	-	4,558,000	1,326,227	150,000.00
Capital Development Fund	715,000	465,000	50,000	50,000	50,000	50,000	50,000	715,000	-	-
Computer Replacement Fund	2,274,781	1,245,171	670,541	571,893	699,503	1,196,923	1,852,700	6,236,731	638,750	-
Downtown Commercial District Fund	1,075,000	1,475,000	400,000	400,000	400,000	400,000	400,000	3,475,000	-	-
Facility Renovation and Replacement Fund	7,316,000	1,730,000	1,367,000	719,000	550,000	1,550,000	600,000	6,516,000	-	800,000
General Fund	950,000	850,000	100,000	-	-	-	-	950,000	-	-
Greenways	27,332,670	320,441	320,441	320,441	320,441	320,441	320,441	1,922,646	736,716	-
Lottery Fund	1,506,500	680,700	711,000	710,700	711,000	585,600	585,600	3,984,600	1,236,000	-
Open Space Fund	1,908,700	7,608,700	8,710,000	6,710,000	6,770,000	6,620,000	6,630,000	43,048,700	7,519,486	(6,759,486)
Permanent Parks and Recreation Fund	7,910,000	1,005,000	1,150,000	1,050,000	1,300,000	1,500,000	800,000	6,805,000	705,000	400,000
Stormwater Utility Fund	50,505,163	19,355,500	7,665,600	7,078,848	15,293,894	4,244,490	5,662,189	59,300,521	4,962,308	11,800,000
Telecommunications Fund	633,000	-	133,000	-	-	500,000	-	633,000	-	-
Transportation Fund	1,880,823	6,557,500	6,501,500	6,441,500	5,876,500	5,997,500	5,997,500	37,372,000	385,323	-
Transportation Development Fund	-	520,000	520,000	520,000	550,000	450,000	450,000	3,010,000	200,000	-
Wastewater Utility Fund	70,798,837	16,148,176	3,658,720	5,095,680	4,715,675	6,176,893	26,381,702	62,176,846	2,530,247	5,828,652
Water Utility Fund	117,344,936	9,580,007	22,169,251	8,303,508	43,518,109	14,310,998	7,794,726	105,676,599	6,888,695	8,426,304
Total	**$ 306,170,637**	**$ 69,043,195**	**$ 55,652,053**	**$ 39,628,570**	**$ 82,614,122**	**$ 45,402,845**	**$ 62,024,858**	**$ 354,365,643**	**$ 27,328,752**	**$ 20,445,470**

Table 2-3: 2015-2020 Funding Summary by Fund (Cont.)

.25 CENT SALES TAX FUND

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Enhancement										
Rec Center Enhancements .25	$ 460,000	$ -	$ 180,000	$ 280,000	$ -	$ -	$ -	$ 460,000	$ -	$ -
ADA Compliance Improvements	800,000	100,000	100,000	200,000	200,000	-	-	600,000	200,000	-
Coot Lake Restoration	250,000	250,000	-	-	-	-	-	250,000	-	-
Emeral Ash Borer Response Measures	890,000	230,000	220,000	220,000	220,000	-	-	890,000	-	-
Subtotal	$ 2,400,000	$ 580,000	$ 500,000	$ 700,000	$ 420,000	$ -	$ -	$ 2,200,000	$ 200,000	$ -
Capital Maintenance										
Historic Railroad Coach Restoration	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ 100,000	$ -	$ -
Flatirons Golf Course Restroom and Path Repairs	-	-	200,000	-	-	-	-	200,000	-	(200,000)
Court Repairs and Renovation	280,000	-	-	-	280,000	-	-	280,000	-	-
Subtotal	$ 380,000	$ 100,000	$ 200,000	$ -	$ 280,000	$ -	$ -	$ 580,000	$ -	$ (200,000)
Capital Planning Studies										
Recreation Facility Strategic Plan	150,000	150,000	-	-	-	-	-	150,000	-	-
Urban Forest Management Plan	120,000	120,000	-	-	-	-	-	120,000	-	-
Subtotal	$ 270,000	$ 270,000	$ -	$ -	$ -	$ -	$ -	$ 270,000	$ -	$ -
Total	**$ 3,050,000**	**$ 950,000**	**$ 700,000**	**$ 700,000**	**$ 700,000**	**$ -**	**$ -**	**$ 3,050,000**	**$ 200,000**	**$ (200,000)**

AIRPORT FUND

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Maintenance										
Rehabilitate Runway and Eastern Taxiway	$ 4,935,000	$ -	$ -	$ -	$ 435,000	$ -	$ 4,500,000	$ 4,935,000	$ -	$ -
Subtotal	$ 4,935,000	$ -	$ -	$ -	$ 435,000	$ -	$ 4,500,000	$ 4,935,000	$ -	$ -
Total	**$ 4,935,000**	**$ -**	**$ -**	**$ -**	**$ 435,000**	**$ -**	**$ 4,500,000**	**$ 4,935,000**	**$ -**	**$ -**

Table 2-3: 2015-2020 Funding Summary by Fund (Cont.)

BOULDER JUNCTION IMPROVEMENT FUND

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Enhancement										
Boulder Junction - Junction Pl Enhancements (Goose Creek to Bluff)	$ 877,000	$ 477,000	$ -	$ -	$ -	$ -	$ -	$ 477,000	$ 400,000	$ -
Subtotal	$ 877,000	$ 477,000	$ -	$ -	$ -	$ -	$ -	$ 477,000	$ 400,000	$ -
Land and Asset Acquisition										
Boulder Junction Rail Plaza	$ 1,874,000	$ -	$ -	$ -	$ 374,000	$ 1,500,000	$ -	$ 1,874,000	$ -	$ -
Subtotal	$ 1,874,000	$ -	$ -	$ -	$ 374,000	$ 1,500,000	$ -	$ 1,874,000	$ -	$ -
New Capital Project										
Boulder Junction - Development Coordination	$ 825,000	$ 75,000	$ 75,000	$ 75,000	$ -	$ -	$ -	$ 225,000	$ 450,000	$ 150,000
Boulder Junction Pocket Park	1,926,227	-	750,000	350,000	350,000	-	-	1,450,000	476,227	-
Boulder Junction - Traffic Signal at Bluff Street and 30th Street	228,000	-	-	228,000	-	-	-	228,000	-	-
Boulder Junction - Traffic Signal at Junction Place and Valmont	304,000	-	-	304,000	-	-	-	304,000	-	-
Subtotal	$ 3,283,227	$ 75,000	$ 825,000	$ 957,000	$ 350,000	$ -	$ -	$ 2,207,000	$ 926,227	$ 150,000
Total	**$ 6,034,227**	**$ 552,000**	**$ 825,000**	**$ 957,000**	**$ 724,000**	**$ 1,500,000**	**$ -**	**$ 4,558,000**	**$ 1,326,227**	**$ 150,000**

CAPITAL DEVELOPMENT FUND

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Maintenance										
Miscellaneous Facility DET Projects	$ 715,000	$ 465,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 715,000	$ -	$ -
Subtotal	$ 715,000	$ 465,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 715,000	$ -	$ -
Total	**$ 715,000**	**$ 465,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 715,000**	**$ -**	**$ -**

Table 2-3: 2015-2020 Funding Summary by Fund (Cont.)

COMPUTER REPLACEMENT FUND

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Maintenance										
End User Device Replacement	$ -	$ 458,000	$ 458,000	$ 458,000	$ 458,000	$ 458,000	$ 458,000	$ 2,748,000	$ 458,000	$ -
Network Hardware Replacement	1,301,331	160,671	148,041	113,893	116,503	612,223	648,000	1,799,331	150,000	-
Security Administration	77,450	11,500	54,000	-	-	6,700	6,700	78,900	5,250	-
Server Admin Hardware Repalcement	767,000	615,000	10,500	-	81,000	35,000	740,000	1,481,500	25,500	-
Data Backup and Disaster Recovery	129,000	-	-	-	44,000	85,000	-	129,000	-	-
Subtotal	$ 2,274,781	$ 1,245,171	$ 670,541	$ 571,893	$ 699,503	$ 1,196,923	$ 1,852,700	$ 6,236,731	$ 638,750	$ -
Total	**$ 2,274,781**	**$ 1,245,171**	**$ 670,541**	**$ 571,893**	**$ 699,503**	**$ 1,196,923**	**$ 1,852,700**	**$ 6,236,731**	**$ 638,750**	**$ -**

DOWNTOWN COMMERCIAL DISTRICT FUND

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Maintenance										
CAGID Parking Garage Access Equipment	$ 1,075,000	$ 1,075,000	$ -	$ -	$ -	$ -	$ -	$ 1,075,000	$ -	$ -
Downtown 14th Street Parking Lot Improvements	-	25,000	25,000	25,000	25,000	25,000	25,000	150,000	-	-
Downtown Parking Garage Major Maintenance	-	250,000	250,000	250,000	250,000	250,000	250,000	1,500,000	-	-
Downtown/Pearl St Mall Amenities Replacement	-	125,000	125,000	125,000	125,000	125,000	125,000	750,000	-	-
Subtotal	$ 1,075,000	$ 1,475,000	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ 3,475,000	$ -	$ -
Total	**$ 1,075,000**	**$ 1,475,000**	**$ 400,000**	**$ 400,000**	**$ 400,000**	**$ 400,000**	**$ 400,000**	**$ 3,475,000**	**$ -**	**$ -**

Table 2-3: 2015-2020 Funding Summary by Fund (Cont.)

FACILITY RENOVATION AND REPLACEMENT FUND

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Enhancement										
North Boulder Recreation Center - Replace Solar Thermal System	$ 350,000	$ 350,000	$ -	$ -	$ -	$ -	$ -	$ 350,000	$ -	$ -
Outdoor Lighting Compliance Improvements	200,000	10,000	190,000	-	-	-	-	200,000	-	-
Stazio Refurbish Restrooms and Concessions	160,000	160,000	-	-	-	-	-	160,000	-	-
East Boulder Community Center Renovation	1,100,000	-	-	-	100,000	100,000	100,000	300,000	-	800,000
Tantra Shop Renovation	300,000	-	-	-	-	300,000	-	300,000	-	-
West Senior Center Major Maintenance & Rehab	700,000	-	-	-	-	700,000	-	700,000	-	-
Subtotal	$ 2,810,000	$ 520,000	$ 190,000	$ -	$ 100,000	$ 1,100,000	$ 100,000	$ 2,010,000	$ -	$ 800,000
Capital Maintenance										
Boulder Museum of Contemporary Arts - Floor Replacement	$ 90,000	$ 90,000	$ -	$ -	$ -	$ -	$ -	$ 90,000	$ -	$ -
Fire Station #1 - Repair Concrete Floor in Vehicle Bays and Exterior Ramps	150,000	150,000	-	-	-	-	-	150,000	-	-
Mapleton Ballfields, Renovate Concessions and Restrooms +	100,000	100,000	-	-	-	-	-	100,000	-	-
Miscellaneous Facility Maintenance Projects	2,415,000	370,000	415,000	380,000	400,000	400,000	450,000	2,415,000	-	-
North Boulder Recreation Center Roof Replacement	450,000	450,000	-	-	-	-	-	450,000	-	-
East Boulder Community Center - Replace Pool Air Handlers	500,000	-	500,000	-	-	-	-	500,000	-	-
Replaster Pools +	80,000	-	80,000	-	-	-	-	80,000	-	-
Stazio Tensile Canopy Covering Replacement	132,000	-	132,000	-	-	-	-	132,000	-	-
Martin Park Shelter Major Maintenance	169,000	-	-	169,000	-	-	-	169,000	-	-
North Boulder Park Shelter Repair	120,000	-	-	120,000	-	-	-	120,000	-	-
Subtotal	$ 4,206,000	$ 1,160,000	$ 1,127,000	$ 669,000	$ 400,000	$ 400,000	$ 450,000	$ 4,206,000	$ -	$ -
Capital Planning Studies										
Facility Assessments	$ 300,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 300,000	$ -	$ -
Subtotal	$ 300,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 300,000	$ -	$ -
Total	**$ 7,316,000**	**$ 1,730,000**	**$ 1,367,000**	**$ 719,000**	**$ 550,000**	**$ 1,550,000**	**$ 600,000**	**$ 6,516,000**	**$ -**	**$ 800,000**

Table 2-3: 2015-2020 Funding Summary by Fund (Cont.)

GENERAL FUND

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Maintenance										
Records Management System	$ 950,000	$ 850,000	$ 100,000	$ -	$ -	$ -	$ -	$ 950,000	$ -	$ -
Subtotal	$ 950,000	$ 850,000	$ 100,000	$ -	$ -	$ -	$ -	$ 950,000	$ -	$ -
Total	**$ 950,000**	**$ 850,000**	**$ 100,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 950,000**	**$ -**	**$ -**

GREENWAYS PROGRAM

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Enhancement										
Wonderland Creek (28th) Kalmia to Winding Trail	$ 7,805,657	$ 270,441	$ -	$ -	$ -	$ -	$ -	$ 270,441	$ 295,000	$ -
Fourmile Canyon Creek Upland to Violet	6,102,205	-	270,441	270,441	270,441	270,441	270,441	1,352,205	-	-
Wonderland Creek Foothills to 30th	13,424,808	-	-	-	-	-	-	-	391,716	-
Subtotal	$ 27,332,670	$ 270,441	$ 270,441	$ 270,441	$ 270,441	$ 270,441	$ 270,441	$ 1,622,646	$ 686,716	$ -
Capital Maintenance										
Miscellaneous Water Quality, Restoration and Trail Improvements	$ -	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 300,000	$ 50,000	$ -
Subtotal	$ -	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 300,000	$ 50,000	$ -
Total	**$ 27,332,670**	**$ 320,441**	**$ 320,441**	**$ 320,441**	**$ 320,441**	**$ 320,441**	**$ 320,441**	**$ 1,922,646**	**$ 736,716**	**$ -**

Table 2-3: 2015-2020 Funding Summary by Fund (Cont.)

LOTTERY FUND

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Enhancement										
Bear Canyon Road Flood Damage Repair and Mitigation	$ 150,000	$ 150,000	$ -	$ -	$ -	$ -	$ -	$ 150,000	$ -	$ -
Playground and Park Irrigation System Renovation - Lottery	1,151,200	-	230,300	230,000	230,300	230,300	230,300	1,151,200	-	-
Subtotal	$ 1,301,200	$ 150,000	$ 230,300	$ 230,000	$ 230,300	$ 230,300	$ 230,300	$ 1,301,200	$ -	$ -
Capital Maintenance										
Lower Big Bluestem Trail Flood Repair	$ 205,300	$ 205,300	$ -	$ -	$ -	$ -	$ -	$ 205,300	$ -	$ -
Pearl Street Mall Irrigation System Replacement - Lottery	-	200,000	-	-	-	-	-	200,000	400,000	-
OSMP - Historical Structures & Trails - Stabilization and Restoration	-	-	355,300	355,300	355,300	355,300	355,300	1,776,500	686,000	-
Subtotal	$ 205,300	$ 405,300	$ 355,300	$ 355,300	$ 355,300	$ 355,300	$ 355,300	$ 2,181,800	$ 1,086,000	$ -
Transfer										
Tributary Greenways Program - Lottery	$ -	$ 125,400	$ 125,400	$ 125,400	$ 125,400	$ -	$ -	$ 501,600	$ 150,000	$ -
Subtotal	$ -	$ 125,400	$ 125,400	$ 125,400	$ 125,400	$ -	$ -	$ 501,600	$ 150,000	$ -
Total	**$ 1,506,500**	**$ 680,700**	**$ 711,000**	**$ 710,700**	**$ 711,000**	**$ 585,600**	**$ 585,600**	**$ 3,984,600**	**$ 1,236,000**	**$ -**

Table 2-3: 2015-2020 Funding Summary by Fund (Cont.)

OPEN SPACE FUND

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Enhancement										
Flagstaff Summit Improvements	$ 250,000	$ 250,000	$ -	$ -	$ -	$ -	$ -	$ 250,000	$ -	$ -
OSMP North Trail Study Area (NTSA)	-	50,000	100,000	200,000	100,000	50,000	50,000	550,000	100,000	(650,000)
Restoration of Riparian and Wetland Habitat - Gregory canyon Creek and Fancier Ponds Flood Repair	59,000	59,000	-	-	-	-	-	59,000	-	-
OSMP West Trail Study Area (WTSA)	-	-	550,000	450,000	600,000	50,000	50,000	1,700,000	1,119,486	(2,819,486)
Visitor Infrastructure - System Wide	-	-	250,000	200,000	200,000	500,000	500,000	1,650,000	350,000	-
OSMP East Trail Study Area (ETSA)	300,000	-	-	50,000	50,000	200,000	200,000	500,000	-	(200,000)
Subtotal	$ 609,000	$ 359,000	$ 900,000	$ 900,000	$ 950,000	$ 800,000	$ 800,000	$ 4,709,000	$ 1,569,486	$ (3,669,486)
Capital Maintenance										
Agriculture Facilities Projects	$ -	$ 100,000	$ 110,000	$ 110,000	$ 120,000	$ 120,000	$ 130,000	$ 690,000	$ -	$ (690,000)
Boulder Creek and South Boulder Creek Confidence Area Restoration Flood Repair	150,000	150,000	-	-	-	-	-	150,000	-	-
Cultural Resource/Facility Restoration	60,000	60,000	-	-	-	-	-	60,000	-	-
Hartnagle House Restoration	65,000	65,000	-	-	-	-	-	65,000	-	-
Royal Arch Trail Flood Repair	150,000	150,000	-	-	-	-	-	150,000	-	-
South Boulder Creek West Trail Flood Repair	100,000	100,000	-	-	-	-	-	100,000	-	-
South Mesa Road and Shanahan Ridge Trail	544,700	544,700	-	-	-	-	-	544,700	-	-
Viele House Foundation Repair	80,000	80,000	-	-	-	-	-	80,000	-	-
Subtotal	$ 1,149,700	$ 1,249,700	$ 110,000	$ 110,000	$ 120,000	$ 120,000	$ 130,000	$ 1,839,700	$ -	$ (690,000)
Land and Asset Acquisition										
Mineral Rights Acquisition	$ -	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 600,000	$ 100,000	$ -
OSMP Real Estate Acquisition Program	-	5,400,000	5,400,000	5,400,000	5,400,000	5,400,000	5,400,000	32,400,000	5,400,000	-
Water Rights Acquisition	-	200,000	200,000	200,000	200,000	200,000	200,000	1,200,000	200,000	-
Subtotal	$ -	$ 5,700,000	$ 5,700,000	$ 5,700,000	$ 5,700,000	$ 5,700,000	$ 5,700,000	$ 34,200,000	$ 5,700,000	$ -
New Capital Project										
South Boulder Creek at Greenbelt Meadows	$ 150,000	$ 150,000	$ -	$ -	$ -	$ -	$ -	$ 150,000	$ -	$ -
South Boulder Creek Instream Flow	-	150,000	2,000,000	-	-	-	-	2,150,000	250,000	(2,400,000)
Subtotal	$ 150,000	$ 300,000	$ 2,000,000	$ -	$ -	$ -	$ -	$ 2,300,000	$ 250,000	$ (2,400,000)
Total	**$ 1,908,700**	**$ 7,608,700**	**$ 8,710,000**	**$ 6,710,000**	**$ 6,770,000**	**$ 6,620,000**	**$ 6,630,000**	**$ 43,048,700**	**$ 7,519,486**	**$ (6,759,486)**

Table 2-3: 2015-2020 Funding Summary by Fund (Cont.)

PERMANENT PARKS AND RECREATION FUND

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Enhancement										
Recreation Center Enhancements	$ 1,220,000	$ 280,000	$ 100,000	$ -	$ 280,000	$ 280,000	$ 280,000	$ 1,220,000		
Artificial Turf Field Installation	1,500,000	-	500,000	500,000	500,000	-	-	1,500,000	-	-
Lighting Ordinance Implementation	500,000	-	250,000	250,000	-	-	-	500,000	-	-
Playground and Park Irrigation System Renovation	1,500,000	-	300,000	300,000	300,000	300,000	300,000	1,500,000	-	-
Subtotal	$ 4,720,000	$ 280,000	$ 1,150,000	$ 1,050,000	$ 1,080,000	$ 580,000	$ 580,000	$ 4,720,000	$ -	$ -
Capital Maintenance										
Pearl Street Mall Irrigation System Replacement	$ 1,500,000	$ 550,000	$ -	$ -	$ -	$ -	$ -	$ 550,000	$ 550,000	$ 400,000
Pool Replastering	230,000	75,000	-	-	-	-	-	75,000	155,000	-
Parking Lot Repair	860,000	-	-	-	220,000	420,000	220,000	860,000	-	-
Subtotal	$ 2,590,000	$ 625,000	$ -	$ -	$ 220,000	$ 420,000	$ 220,000	$ 1,485,000	$ 705,000	$ 400,000
Capital Planning Studies										
Parks and Recreation Planning, Design, and Construction Standards	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ 100,000	$ -	$ -
Subtotal	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ 100,000	$ -	$ -
New Capital Project										
Violet Park	$ 500,000	$ -	$ -	$ -	$ -	$ 500,000	$ -	$ 500,000	$ -	$ -
Subtotal	$ 500,000	$ -	$ -	$ -	$ -	$ 500,000	$ -	$ 500,000	$ -	$ -
Total	**$ 7,910,000**	**$ 1,005,000**	**$ 1,150,000**	**$ 1,050,000**	**$ 1,300,000**	**$ 1,500,000**	**$ 800,000**	**$ 6,805,000**	**$ 705,000**	**$ 400,000**

Table 2-3: 2015-2020 Funding Summary by Fund (Cont.)

STORMWATER AND FLOOD MANAGEMENT UTILITY FUND

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Enhancement										
Local Drainage Improvements	$ -	$ 780,000	$ 811,200	$ 843,648	$ 877,394	$ 912,490	$ 948,989	5,173,721	$ -	$ -
Bear Canyon Creek Flood Mitigation	600,000	100,000	500,000	-	-	-	-	600,000	-	-
Boulder Creek Flood mitigation	5,600,000	500,000	2,500,000	2,500,000	-	-	-	5,500,000	100,000	-
Gregory Creek Flood Mitigation	600,000	100,000	500,000	-	-	-	-	600,000	-	-
South Boulder Creek Flood Mitigation Phase I	24,000,000	250,000	750,000	750,000	10,150,000	-	-	11,900,000	300,000	11,800,000
Stormwater Quality Improvements	-	156,000	162,000	169,000	175,500	182,500	190,000	1,035,000	104,000	-
Upper Goose Creek Drainage	17,905,163	175,000	750,000	750,000	750,000	1,000,000	-	3,425,000	-	-
Utility Billing Computer System Replacement	-	50,000	-	-	-	-	-	50,000	-	-
Wonderland Creek - Foothills to 30th Street	-	10,000,000	-	-	-	-	-	10,000,000	3,033,092	-
Wonderland Creek at 28th Street	-	6,075,000	-	-	-	-	-	6,075,000	1,165,216	-
Fourmile Canyon Creek - Upland to Violet	-	-	500,000	500,000	500,000	750,000	2,500,000	4,750,000	-	-
Bluebell and King's Gultch Flood Mitigation	600,000	-	-	100,000	500,000	-	-	600,000	-	-
Skunk Creek Flood Mitigation	600,000	-	-	100,000	500,000	-	-	600,000	-	-
Twomile Canyon Creek Flood Mitigation	600,000	-	-	100,000	500,000	-	-	600,000	-	-
Subtotal	$ 50,505,163	$ 18,186,000	$ 6,473,200	$ 5,812,648	$ 13,952,894	$ 2,844,990	$ 3,638,989	$ 50,908,721	$ 4,702,308	$ 11,800,000
Capital Maintenance										
Storm Sewer Rehabilitation	$ -	$ 260,000	$ 270,400	$ 281,200	$ 292,500	$ 304,000	$ 632,700	$ 2,040,800	$ -	$ -
Transportation Coordination	-	312,000	324,500	337,500	351,000	365,000	633,000	2,323,000	260,000	-
Subtotal	$ -	$ 572,000	$ 594,900	$ 618,700	$ 643,500	$ 669,000	$ 1,265,700	$ 4,363,800	$ 260,000	$ -
Land and Asset Acquisition										
Preflood Property Acquisition	$ -	$ 500,000	$ 500,000	$ 550,000	$ 600,000	$ 633,000	$ 660,000	$ 3,443,000	$ -	
Subtotal	$ -	$ 500,000	$ 500,000	$ 550,000	$ 600,000	$ 633,000	$ 660,000	$ 3,443,000	$ -	$ -
Transfer										
Tributary Greenways Program - Stormwater & Flood	$ -	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 585,000	$ -	$ -
Subtotal	$ -	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 585,000	$ -	$ -
Total	**$ 50,505,163**	**$ 19,355,500**	**$ 7,665,600**	**$ 7,078,848**	**$ 15,293,894**	**$ 4,244,490**	**$ 5,662,189**	**$ 59,300,521**	**$ 4,962,308**	**$ 11,800,000**

Table 2-3: 2015-2020 Funding Summary by Fund (Cont.)

TELECOMMUNICATIONS FUND

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Maintenance										
VoIP Telephone System Replacement	$ 633,000	$ -	$ 133,000	$ -	$ -	$ 500,000	$ -	$ 633,000	$ -	
Subtotal	$ 633,000	$ -	$ 133,000	$ -	$ -	$ 500,000	$ -	$ 633,000	$ -	$ -
Total	**$ 633,000**	**$ -**	**$ 133,000**	**$ -**	**$ -**	**$ 500,000**	**$ -**	**$ 633,000**	**$ -**	**$ -**

TRANSPORTATION DEVELOPMENT FUND

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Enhancement										
28th St (Baseline to Iris) II	$ -	$ 470,000	$ 470,000	$ -	$ -	$ -	$ -	$ 940,000	$ -	$ -
Miscellaneous Development Coordination	-	50,000	50,000	50,000	50,000	50,000	50,000	300,000	-	-
Signal Maintenance and Upgrade	-	-	-	-	200,000	-	-	200,000	200,000	-
Subtotal	$ -	$ 520,000	$ 520,000	$ 50,000	$ 250,000	$ 50,000	$ 50,000	$ 1,440,000	$ 200,000	$ -
New Capital Project										
TIP Local Match/TMP Implementation II	$ -	$ -	$ -	$ 470,000	$ 300,000	$ 400,000	$ 400,000	$ 1,570,000	$ -	$ -
Subtotal	$ -	$ -	$ -	$ 470,000	$ 300,000	$ 400,000	$ 400,000	$ 1,570,000	$ -	$ -
Total	**$ -**	**$ 520,000**	**$ 520,000**	**$ 520,000**	**$ 550,000**	**$ 450,000**	**$ 450,000**	**$ 3,010,000**	**$ 200,000**	**$ -**

Table 2-3: 2015-2020 Funding Summary by Fund (Cont.)

TRANSPORTATION FUND

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Enhancement										
28th St (Baseline to Iris)	$ -	$ 860,000	$ 860,000	$ -	$ -	$ -	$ -	$ 1,720,000	$ -	$ -
Subtotal	$ -	$ 860,000	$ 860,000	$ -	$ -	$ -	$ -	$ 1,720,000	$ -	$ -
Capital Maintenance										
Deficient Street Light Pole Replacement	$ 1,280,823	$ 321,000	$ 265,000	$ 265,000	$ -	$ 121,000	$ 121,000	1,093,000	$ 187,823	$ -
Major Capital Reconstruction	-	800,000	800,000	800,000	800,000	800,000	800,000	4,800,000	-	-
Pedestrian Facilities - Repair, Replacement, ADA	-	629,000	629,000	629,000	629,000	629,000	629,000	3,774,000	-	-
Subtotal	$ 1,280,823	$ 1,750,000	$ 1,694,000	$ 1,694,000	$ 1,429,000	$ 1,550,000	$ 1,550,000	$ 9,667,000	$ 187,823	$ -
Capital Planning Studies										
Transportation Corridor Scoping and Prioritization - Canyon Blvd	$ 200,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	100,000	$ 100,000	$ -
Transportation Corridor Scoping and Prioritization - East Arapahoe	$ 200,000	100,000	100,000	-	-	-	-	200,000	-	-
Transportation Corridor Scoping and Prioritization - Lottery	$ 200,000	-	100,000	100,000	-	-	-	200,000	-	-
Subtotal	$ 600,000	$ 200,000	$ 200,000	$ 100,000	$ -	$ -	$ -	$ 500,000	$ 100,000	$ -
New Capital Project										
Bikeway Facilities - Enhancements	$ -	$ 225,000	$ 225,000	$ 225,000	$ 225,000	$ 225,000	$ 225,000	$ 1,350,000	$ -	$ -
Pedestrian Facilities Enhancements-Missing Links, Crossing Treatments	-	125,000	125,000	125,000	125,000	125,000	125,000	750,000	-	-
TIP Local Match/TMP Implementation	-	3,300,000	3,300,000	4,200,000	4,000,000	4,000,000	4,000,000	22,800,000	-	-
Subtotal	$ -	$ 3,650,000	$ 3,650,000	$ 4,550,000	$ 4,350,000	$ 4,350,000	$ 4,350,000	$ 24,900,000	$ -	$ -
Transfer										
Tributary Greenways Program - Transportation - Transfer	$ -	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 585,000	$ 97,500	$ -
Subtotal	$ -	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 585,000	$ 97,500	$ -
Total	**$ 1,880,823**	**$ 6,557,500**	**$ 6,501,500**	**$ 6,441,500**	**$ 5,876,500**	**$ 5,997,500**	**$ 5,997,500**	**$ 37,372,000**	**$ 385,323**	**$ -**

Table 2-3: 2015-2020 Funding Summary by Fund (Cont.)

WASTEWATER UTILITY FUND

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Enhancement										
Utility Billing Computer System Replacement	$ 115,000	$ 50,000	$ -	$ -	$ -	$ -	$ 65,000	$ 115,000	$ -	$ -
Wastewater Treatment Activated Sludge	710,961	389,376	-	58,493	-	-	-	447,869	-	-
Wastewater Treatment Facility Instrumentation/Control	9,131,068	540,800	-	674,918	701,915	729,992	759,191	3,406,816	695,600	5,028,652
Wastewater Treatment Facility Permit Improvements - Funded	23,337,234	1,650,000	150,000	-	750,000	1,500,000	18,625,000	22,675,000	662,234	-
Marshall Landfill	100,000	-	100,000	-	-	-	-	100,000	-	-
Wastewater Treatment Facility Electrical	1,420,000	-	120,000	1,200,000	-	-	-	1,320,000	100,000	-
Wastewater Treatment Facility Laboratory	100,000	-	50,000	-	-	-	-	50,000	50,000	-
Wastewater Treatment Facility Pumps	448,413	-	150,000	-	-	-	-	150,000	298,413	-
Goose Creek Sanitary Sewer Interceptor Rehabilitation	2,019,578	-	-	-	25,000	647,590	1,346,988	2,019,578	-	-
Subtotal	$ 37,382,254	$ 2,630,176	$ 570,000	$ 1,933,411	$ 1,476,915	$ 2,877,582	$ 20,796,179	$ 30,284,263	$ 1,806,247	$ 5,028,652
Capital Maintenance										
Condition Assessment Program	$ 5,173,721	$ 780,000	$ 811,200	$ 843,648	$ 877,394	$ 912,490	$ 948,989	$ 5,173,721	$ -	$ -
IBM Lift Station Improvements	1,300,000	500,000	-	-	-	-	-	500,000	-	800,000
Sanitary Sewer Manhole Rehabilitation	1,264,660	208,000	216,320	224,973	233,972	24,331	253,064	1,160,660	104,000	-
Sanitary Sewer Rehabilitation	23,193,721	12,030,000	2,061,200	2,093,648	2,127,394	2,162,490	2,198,989	22,673,721	520,000	-
Collection System Monitoring	100,000	-	-	-	-	-	-	-	100,000	-
Wastewater Treatment Facility Digester Complex	2,200,000	-	-	-	-	200,000	2,000,000	2,200,000	-	-
Wastewater Treatment Facility Cogeneration	184,481	-	-	-	-	-	184,481	184,481	-	-
Subtotal	$ 33,416,583	$ 13,518,000	$ 3,088,720	$ 3,162,269	$ 3,238,760	$ 3,299,311	$ 5,585,523	$ 31,892,583	$ 724,000	$ 800,000

Table 2-3: 2015-2020 Funding Summary by Fund (Cont.)

WATER UTILITY FUND

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Enhancement										
Barker Dam and Reservoir	$ 498,560	$ 378,560	$ -	$ -	$ -	$ -	$ -	$ 378,560	$ 120,000	$ -
Betasso Water Treatment Facility	13,325,000	700,000	12,125,000	-	-	-	-	12,825,000	500,000	-
Devil's Thumb Security Fence	50,000	50,000	-	-	-	-	-	50,000	-	-
Sunshine Transmission Pipe	2,000,000	1,000,000	-	-	-	-	-	1,000,000	1,000,000	-
Water System Security Upgrades	840,000	150,000	150,000	150,000	150,000	150,000	90,000	840,000	-	-
Barker Dam Outlet	9,062,557	-	50,000	175,000	803,414	8,034,143	-	9,062,557	-	-
Boulder Reservoir Water Treatment Facility - Funded	164,000	-	164,000	-	-	-	-	164,000	-	-
Lakewood Hydroelectric / Pressure Reducing Facility	430,000	-	130,000	-	-	300,000	-	430,000	-	-
Utility Billing Computer System Replacement	529,104	-	-	500,000	-	-	-	500,000	29,104	-
Lakewood Dam	124,707	-	-	-	124,707	-	-	124,707	-	-
Pearl Street Hydroelectric / Pressure Reducing Facility	267,664	-	-	-	24,333	243,331	-	267,664	-	-
Green Lake 2 Dam	5,223,557	-	-	-	-	75,000	468,051	543,051	-	4,680,506
Wittemyer Ponds - Funded	5,519,533	-	-	-	-	100,000	473,735	573,735	-	4,945,798
Subtotal	$ 38,034,682	$ 2,278,560	$ 12,619,000	$ 825,000	$ 1,102,454	$ 8,902,474	$ 1,031,786	$ 26,759,274	$ 1,649,104	$ 9,626,304
Capital Maintenance										
Barker Gravity Pipeline Repair	$ -	$ 378,560	$ 667,416	$ 612,436	$ 636,933	$ 662,410	$ 688,907	$ 3,646,662	$ -	$ -
Goose Lake Dam	20,000	20,000	-	-	-	-	-	20,000	-	-
Kohler Storage Tank	903,362	103,487	799,875	-	-	-	-	903,362	-	-
Lakewood Pipeline	846,730	270,400	-	-	-	316,330	-	586,730	260,000	-
Silver Lake Dam	75,000	75,000	-	-	-	-	-	75,000	-	-
Silver Lake Hydroelectric / PRV	150,000	150,000	-	-	-	-	-	150,000	-	-
Waterline Replacement	24,329,088	3,224,000	3,352,960	3,487,078	3,626,562	3,771,624	3,224,033	20,686,257	3,642,831	-
Watershed Improvements	260,000	80,000	80,000	-	-	-	100,000	260,000	-	-
Water Transmission Facilities (Zone 3)	250,000	-	1,200,000	-	-	250,000	-	1,450,000	-	(1,200,000)
Barker-Kossler Penstock Repair	116,986	-	-	116,986	-	-	-	116,986	-	-
Betasso Storage Tank	292,465	-	-	292,465	-	-	-	292,465	-	-
Sunshine Hydroelectric / Pressure Reducing Station	271,875	-	-	271,875	-	-	-	271,875	-	-
Water Transmission Facilities (Zone 2)	500,000	-	-	250,000	-	-	250,000	500,000	-	-
Betasso Hydroelectric / Pressure Reducing Facility	250,000	-	-	-	250,000	-	-	250,000	-	-
Water Transmission Facilities (Zone 1)	250,000	-	-	-	250,000	-	-	250,000	-	-
Farmer's Ditch	108,160	-	-	-	-	108,160	-	108,160	-	-
Subtotal	$ 28,623,666	$ 4,301,447	$ 6,100,251	$ 5,030,840	$ 4,763,495	$ 5,108,524	$ 4,262,940	$ 29,567,497	$ 3,902,831	$ (1,200,000)

Table 2-3: 2015-2020 Funding Summary by Fund (Cont.)

WATER UTILITY FUND (Cont.)											
New Capital Project											
Annexation Related Water System Expansion	$ 5,000,000	$ 2,500,000	$ 2,500,000	$ -	$ -	$ -	$ -	$ 5,000,000	$ -	$ -
NCWCD Conveyance - Carter Lake Pipeline	38,568,583	500,000	850,000	2,036,322	33,938,701	-	-	37,325,023	1,243,560	-
Barker Dam Hydroelectric	4,024,805	-	50,000	361,346	3,613,459	-	-	4,024,805	-	-
Source Water Monitoring	293,200	-	50,000	50,000	50,000	50,000	-	200,000	93,200	-
Carter Lake Hydroelectric	2,800,000	-	-	-	50,000	250,000	2,500,000	2,800,000	-	-
Subtotal	$ 50,686,588	$ 3,000,000	$ 3,450,000	$ 2,447,668	$ 37,652,160	$ 300,000	$ 2,500,000	$ 49,349,828	$ 1,336,760	$ -
Total	**$ 117,344,936**	**$ 9,580,007**	**$ 22,169,251**	**$ 8,303,508**	**$ 43,518,109**	**$ 14,310,998**	**$ 7,794,726**	**$ 105,676,599**	**$ 6,888,695**	**$ 8,426,304**

[This page is intentionally blank.]

City of Boulder

SPECIAL HIGHLIGHT ON SEPTEMBER 2013 FLOOD

2015-2020 Capital Improvement Program

Flood Impact to CIP - Overview

September 2013 brought unprecedented rainfall to the region, causing significant flooding and extensive damage to both private property and city infrastructure. While full recovery is likely to take years, affected critical services have been restored. The flood has also created an opportunity to think strategically about the future. In response on Oct. 15, 2013, City Council approved key objectives to guide near-term flood recovery and the long-term resiliency of the Boulder community.

Key Objectives for Near-Term Flood Recovery and Long-Term Resilience

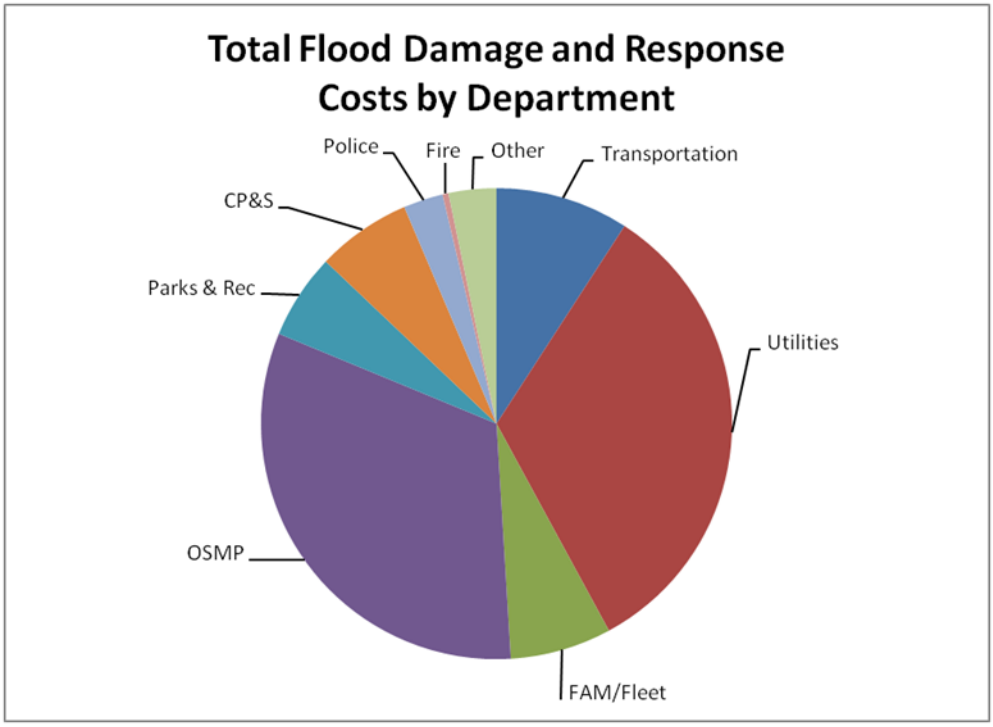
1. Help People Get Assistance
2. Restore and Enhance Our Infrastructure
3. Assist Business Recovery
4. Pursue and Focus Resources to Support Recovery Efforts
5. Learn Together and Plan for the Future

Damages to city infrastructure are currently estimated at approximately $27 million dollars, although that number may change as assessments and refinements occur. This includes damage to more than:

- 50 city buildings/facilities; water, sewer, and stormwater infrastructure;
- 3 treatment facilities;
- 47 parks and 7 recreation facilities;
- Sediment and debris in all 15 drainages;
- 30 streets and sidewalks;
- 25 areas with damage to the multi-use path system; and
- Hundreds of Open Space and Mountain Parks (OSMP) trails, trailheads, irrigation facilities, fences, and natural ecological resources.

The city has identified approximately 330 flood related capital projects. As of July 1, 2014, the city is 64 percent complete with flood recovery projects.

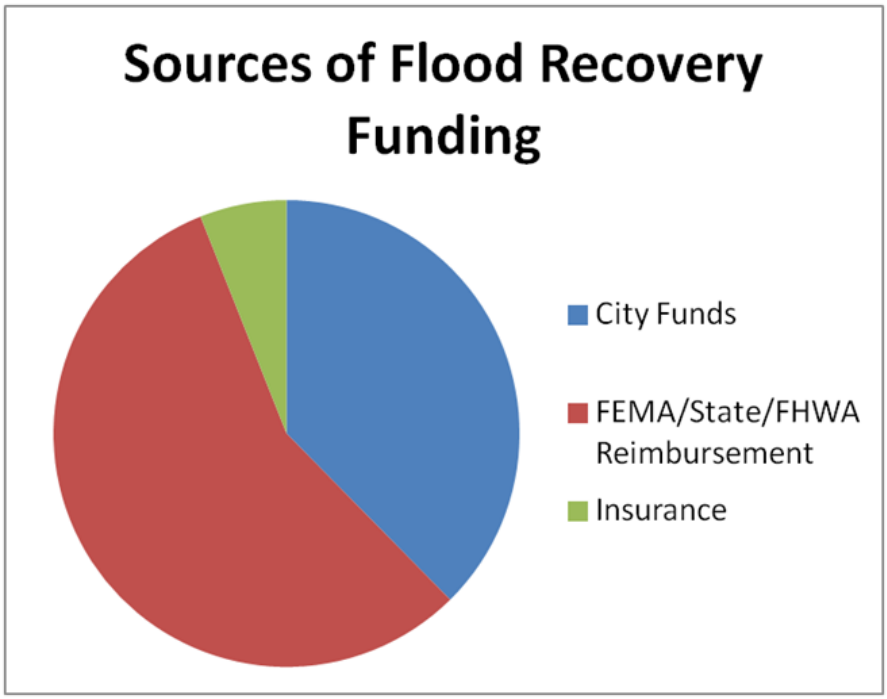
Figure 3-1: Flood Costs by Department



The city is utilizing all available resources in the recovery and reimbursement process including city insurance policies, FEMA assistance, and other federal agencies (e.g.: Federal Highway Administration, Urban Drainage & Flood Control District, Colorado Water Conservation Board, etc).

It is anticipated that 75% of eligible costs will eventually be reimbursed by FEMA, and an additional 12.5% by the State of Colorado. To be eligible for reimbursement, the work must meet certain criteria established by FEMA and be completed within 18 months of the disaster declaration. Eligible costs are uncertain and are currently estimated to be 80-90 percent of actual costs. The timing of the reimbursement is unknown and may occur over a period of 1-3 years.

Figure 3-2: Sources of Funding



Additional detail of the impacts of the flood is described in each department overview, including how the flood impacted or delayed various capital projects.

Additional information on flood impacts to people, private property and infrastructure citywide and the current status of recovery can be found at www.BoulderFloodInfo.net.

[This page is intentionally blank.]

City of Boulder

SPECIAL HIGHLIGHT ON CAPITAL IMPROVEMENT BOND

2015-2020 Capital Improvement Program

Introduction

The Special Highlight on the Capital Improvement Bond section details a significant, multi-department, capital improvement effort currently underway in the City of Boulder. Implementation of the bond is consistent with the City Council support, voter approval, stakeholder committee recommendation, and meets the legal requirements of the bond council.

A website has been created that allows the community to track the progress of implementation of the bond projects at www.bouldercolorado.gov/bondprojects. Background information on the Capital Improvement Bond, including bond issuance, is available in the 2014-2019 CIP document at: 2014-2019 CIP Special Highlight on Capital Bond.

Overview of Capital Investment Strategy and Capital Improvement Bond Implementation

In the November 2011 election, City of Boulder voters approved a measure, by a 3-to-1 margin, that would allow the city to leverage existing revenues to bond for up to $49 million to fund capital projects that address significant deficiencies and high priority infrastructure improvements throughout the community. Because the city was able to leverage existing revenues, the measure did not raise taxes. The $49 million of bonds have a 20-year payback and 85 percent of the total of the bonds is required to be spent by March 22, 2015.

Project Highlights and Status

There are nearly 100 individual projects that are being implemented with the bond funds throughout the community. The individual projects are grouped into 26 categories which are briefly described below along with the current status of the projects as of July 2014. Details related to each project can be found at www.bouldercolorado.gov/bondprojects.

1. Boulder Reservoir Infrastructure Improvements: Includes improving the entry gate, roadway, parking lot, utility infrastructure, and grounds and landscape. The new Gateway Enhancement project at the main Reservoir

Highlights at a Glance

- **26** categories containing a total of **nearly 100** individual projects:
  - **11%** in design & planning phase
  - **23%** under construction
  - **66%** completed
- **84%** of total funding has been spent or encumbered as of June 30, 2014.

entrance at 51st Street is complete and will provide improved traffic access, new entry buildings and an improved inspection station for Aquatic Nuisance Species (ANS). Utility upgrades are complete and provide improved water and sanitary sewer facilities at the reservoir.

2. Columbia Cemetery Upgrades and Enhancements: Includes constructing new fencing, repairing headstones and improving irrigation. A new fence has been installed along the west property boundary in keeping with the historic quality of the cemetery and headstones have been repaired. The next phase of construction will include installation of a new raw-water irrigation system to improve water conservation and efficiency.
3. Park Shelter Replacements and Improvements: Includes maintaining existing park shelters and providing critical shade amenities within multiple parks. Shade shelters construction at Valmont City Park, Foothills Dog Park, Eaton Park, Martin Park and Pleasant View Fields are complete. An additional shelter is planned at Harlow Platts Park later in 2014.
4. Existing Park and Recreation Facility Renovations: Includes addressing ongoing maintenance and accessibility while improving the overall safety and enjoyment of park facilities. Canyon Park, Columbine Park, Harlow Platts Park, Pineview Park, East Palo Park, and North Boulder Park are completed with improvements ranging from turf and irrigation renovations, playground replacement, accessibility compliance and replacement of park amenities. Pleasant View Sports facility, Mapleton Ballfields, and Stazio Ballfields all have completed parking lot and ADA compliance upgrades. Construction will begin this summer at Crestview Park, with completion later in 2014.

Sign highlighting a Capital Improvement Bond Program off of Gillaspie Drive.

5. South Boulder Recreation Center Floor Replacement: Includes replacing water-damaged wooden floor at the South Boulder Recreation Center (SBRC) gym and racquetball courts. During the design and investigative stages in January 2012, low levels of mercury and lead contamination were found in the underlying floor membrane in the gym, racquetball and Pilates rooms. Although posing no immediate risks to patrons and staff, it was decided to remove the old flooring system in all three rooms. The floor has been replaced along with installation of

necessary ADA compliance upgrades that provide full access to the new gym floor by all members of the community.

6. Downtown Commercial District Improvements: Includes public right-of-way enhancements to downtown commercial district and Pearl Street Mall. 15th Street between Arapahoe and Canyon to improve pedestrian accessibility as well as streetscape character is complete. Streetscape improvements on Pearl Street from 11th to 7th Streets are under construction, with an estimated completion date of fall 2014. An interdepartmental city team and Convention and Visitors Bureau staff jointly worked to place an interactive kiosk for public use on the Pearl Street Mall.
7. Main Library Renovation: Includes three critical renovations and improvements to the Main Library: (a) new children's library to be located in the area near and including the Boulder Creek Room; (b) new teen space; (c) improved access and browsing area for fiction, movies and music collections near the main entrance on Arapahoe Avenue; (d) a new cafe on the bridge; and (e) more meeting spaces. The library remains open during the renovation, and phases one and two of four will be complete by Aug. 1, 2014. The estimated completion of the project is fourth quarter 2014, with close-out costs occurring in first quarter 2015.
8. Replace Financial and Human Resources Software: In mid-2011, the city launched an effort to replace the outdated financial, human resources and payroll systems with an integrated, more modern and comprehensive software solution. The city selected Tyler Technologies as the software vendor, and is in the process of implementing the Munis software. The system go-live date is broken into several phases: Finance (Jan. 1, 2015), HR/Payroll (end of March 2015) and Performance Based Budgeting (later in 2015).
9. Major Business Software Replacement: Includes replacing and augmenting major business software, such as records management, website/eGov, and permit systems. An implementation plan for the records management software is complete and implementation is underway. The redesign of the city's website is complete, including a web-based Constituent Relationship Management (CRM) system. The city's permit system replacement project is underway with an estimated go-live date of fall 2016.
10. Facility Electrical, Plumbing, HVAC and Elevator Replacements: Includes infrastructure replacement for overdue replacement and repair projects such as at the Public Safety Building, Municipal Building, Main Library, Dairy Center, and Fleet Services. These projects have been completed, with the exception of the elevator repairs at the Public Safety Building. These repairs will be completed later in 2014.

11. Facility Parking Lot Repair: Includes repair and complete maintenance needs for some of the city's asphalt parking areas, including downtown facilities and fire stations. Most of the parking lot repairs are complete, with the exception of Spruce Pool and Park Central which will be complete in third quarter 2014.
12. Facility Outdoor Lighting: Includes solar canopy, car charging, and lighting projects, which would eliminate electrical conduit runs. Two of the solar canopies/car chargers are complete with one at East Boulder Recreation Center and one at the lot at Broadway and Spruce. New lights with solar powered fixtures will be installed in the public lot next to the Park Central building at the corner of Broadway and Arapahoe in coordination with the parking lot work, by October 2012.
13. Facility ADA Compliance: Includes prioritizing and adapting city facilities that do not meet the 2010 requirements of the Americans with Disabilities Act (ADA). Based on an assessment, ADA improvements have been made at the Main Library, South Boulder Recreation Center, and a new ramp will be installed at Park Central in coordination with the parking lot work. In addition, bond funds will be used to construct the new city-owned ADA restroom at Chautauqua Park (beginning fall/winter 2014) and install a new driveway at the Pottery Lab (winter 2014).
14. New Wildland Fire Station: Includes consolidating the operations of the Boulder Fire-Rescue Department's Wildland Fire personnel into one facility from the three facilities they currently use. Construction is underway, with anticipated completion by early 2015.
15. Replace Substandard Bridges, Structures, Signs and Systems: Includes the replacement of the 63rd Street Bridge, irrigation system replacement on the Foothills Parkway landscaping, replacement of substandard signs and the replacement of signal light bulbs with LED lights. The Foothills irrigation system replacement between Colorado and US 36 is being designed and construction will start later this year. The substandard sign installations have started and all of the traffic signal lighting (red, yellow and green) has been replaced with LED displays. The 63rd Street bridge project is under construction.
16. Arterial Road Reconstruction: Arapahoe is the arterial in highest need of reconstruction, and this project will allow the worst sections of Arapahoe to be reconstructed from Folsom to 15th Street. The project is under construction and anticipated to be complete by the fall of 2014.
17. Road Pavement Repair: Includes overlay and chip seal of various streets throughout the city. Approximately one-third of the funds will be spent each year to overlay approximately 50 blocks, or 5.5 miles, of roadway, in addition to the city's annual repair schedule.
18. Road Reconstruction: Includes reconstruction of streets that rate below 25, on the Overall Condition Index (OCI) that are mostly lower volume streets and cul-de-sacs. Approximately

one-third of the funds will be spent each year to reconstruct approximately 14 blocks, or approx 1.5 miles of roadway, in addition to the city's annual reconstruction schedule.

19. Transportation Boulder Junction Improvements: Includes the Junction Place Bridge at Goose Creek and the Pearl Parkway Multi-Way Boulevard from 30th to BNSF Railroad tracks on the south side of Pearl. The south side of Pearl Parkway is complete, and the Junction Place Bridge is under construction to be completed in winter 2014/2015.
20. Transportation Transit System Enhancements: Includes two projects, the largest of which is the 14th and Walnut Street Transit Center Improvements. The first phase, including 14th Street, is completed. The second phase for a secure bike storage facility is under construction. The second project provides additional money for transit stop improvements throughout the city, which is in the final design phase, soon to be completed.
21. Transportation New Multi-Use Path Connections: Includes constructing a multi-use path on 28th Street from Arapahoe to Goose Creek, which is in the construction phase. It also includes various multi-use path connections throughout the city. A connection on the south side of Baseline east and west of 30th Street and pedestrian crossing improvements at Baseline and Canyon Creek were completed in 2012.
22. Transportation Pedestrian Enhancements: Includes pedestrian crossing treatments, small and large missing sidewalk links and pedestrian improvements at Manhattan and S. Boulder Road. The enhancements to the pedestrian crossing at Canyon and 21st Street have been completed as well as the missing link on Gillaspie from Greenbriar to Julliard, Folsom south of Araphaoe on the east side, and on Pine Street and 27th Street.
23. Transportation Intersection Improvements: Includes improvements at the Foothills/Baseline intersection and the South Boulder Road/Manhattan Intersection. These projects are in the construction phase.
24. Transportation Bike System Enhancements: Includes additional bike system signage such as the designation of new on-street bike routes and installing way-finding and destination signs along existing greenways. Sign installation is on-going.
25. Police Equipment: Includes upgrading the records management system and adding more in-car video systems to the patrol fleet. The records system server upgrade is complete, and in-car and personal video systems are being installed in late 2014 or early 2015.
26. Police Equipment Upgrades and Replacement: Includes replacing the bomb squad robot, and purchasing equipment to operate a DNA Lab in Boulder in partnership with the Colorado Bureau of Investigation (CBI), and upgrading the emergency radio infrastructure. These projects are all complete.

Implementation

To ensure that the city meets the spending and timing requirements of the capital improvement bond, the city has collected spending plans for each project and closely monitors construction progress. Table 4-1 shows the annual expenditure plan for each project for 2011 through 2015.

Next Steps

Council will be updated on the capital improvement bond progress through semiannual updates as part of an Information Packet item.

In addition, public updates will be announced through press releases, social media and other commemorative events as some of the key projects break ground or are completed. Information on those projects that have traffic or multi-use path impacts will be provided to the public and media through weekly "Cone Zones" reports and other outreach materials. A map of the projects and status updates are available at www.bouldercolorado.gov/bondprojects.

Future CIP documents will continue to include a section on the capital bond projects until they are completed.

Table 4-1: 2011-2015 Spend Plan

CAPITAL IMPROVEMENT BOND

	Total Amount	2011 Actual	2012 Actual	2013 Actual	2014 Projected	2015 Projected
Arterial Road Reconstruction	$ 5,280,000	$ -	$ 292,179	$ 1,879,396	$ 3,083,186	$ 25,239
Boulder Reservoir Infrastructure Improvements	3,620,915	-	823,082	1,312,067	1,336,087	257,949
Columbia Cemetery Upgrades and Enhancements	750,000	-	87,280	237,741	309,191	122,787
Downtown Commercial District Improvements	2,720,000	-	79,089	979,599	1,659,427	-
Existing Park and Recreation Facility Renovations	3,700,000	-	1,605,009	874,086	829,384	261,521
Facility ADA Compliance	500,000	-	50,425	49,486	400,089	-
Facility Electrical, Plumbing, HVAC and Elevator Rep.	1,580,960	-	466,590	1,017,363	105,606	-
Facility Outdoor Lighting	56,807	-	8,611	48,196	3,216	-
Facility Parking Lot Repair	500,000	-	19,754	271,706	118,163	-
Main Library Renovations	2,900,000	-	12,481	289,353	2,258,887	337,381
Major Business Software Replacement	1,602,600	-	25,000	451,008	294,548	860,573
New Wildland Fire Station	3,077,718	-	20,327	182,000	2,188,192	685,954
Park Shelter Replacements and Improvements	1,000,000	-	355,535	239,885	312,937	141,643
Police Equipment	253,290	-	71,224	63,668	115,681	-
Police Equipment Upgrades and Replacement	820,050	-	369,938	556,473	-	-
Replace Financial and Human Resources Software	3,488,693	-	280,662	772,546	1,603,729	693,197
Replace Substandard Bridges, Structures, Signs & Sys.	4,150,000	-	475,563	1,130,808	2,356,766	22,978
Road Pavement Repair	5,000,000	-	1,568,616	1,947,932	1,483,452	-
Road Reconstruction	2,500,000	-	525,960	713,741	1,260,298	-
South Boulder Recreation Center Floor Replacement	281,748	-	205,237	76,511	-	-
Transportation Bike System Enhancements	300,000	11,511	135,105	91,580	61,804	-
Transportation Boulder Junction Improvements	5,810,000	-	855,192	2,083,198	2,671,660	200,000
Transportation Intersection Improvements	500,000	-	13,454	8,205	357,584	-
Transportation New Multi Use Path connections	2,000,000	5,229	354,468	235,076	1,532,870	90,000
Transportation Pedestrian Enhancements	850,000	5,658	285,531	200,199	254,584	-
Transportation Transit System Enhancements	600,000	-	127,671	232,653	240,903	-
Total	**$ 53,842,781**	**$ 22,397**	**$ 9,113,984**	**$ 15,944,475**	**$ 24,838,244**	**$ 3,699,222**

[This page is intentionally blank.]

City of Boulder

DOWNTOWN/UNIVERSITY HILL MANAGEMENT DIVISION & PARKING SERVICES

2015-2020 Capital Improvement Program

Funding Overview

Downtown and University Hill Management Division/Parking Services (DUHMD/PS) manages programs in five funds:

- Downtown Commercial District Fund – including restricted Central Area General Improvement District (CAGID) parking and tax revenues and on-street meter revenues
- University Hill Commercial District Fund – including restricted University Hill General Improvement District (UHGID) parking and tax revenues and on-street meter revenues
- Boulder Junction Access District (BJAD) Funds – Parking and Travel Demand Management (TDM) – including district tax revenues and eventually PILOT (payment in lieu of taxes) payments and parking revenues.
- General Fund – including on-street parking revenues, Neighborhood Parking Permit program revenues and parking enforcement revenues.

Additionally, funding from the Capital Improvement Bond (CIB) Fund supports a number of projects managed by DUHMD/PS. CIB funding is indicated by the following symbol:

Accomplishments and Highlights

Projects to be Completed in 2014:

- CAGID Garage Improvements: A new signage program will be completed in the five garages that includes variable messaging, new canopies and "lollipop" branding signage
- Downtown 14th Street Parking Lots: Patching and striping will be completed until enough funds for new paving accumulate
- CAGID Garage Major Maintenance: Planned projects include stair replacement at 1100 Walnut, elevator refurbishment at 1400 Walnut, interior painting at 1100 Spruce and 1500 Pearl.
- 15th St Streetscape Improvements: All work associated with the 15th St Streetscape project from Arapahoe to Canyon to improve pedestrian accessibility as well as streetscape character will be completed. Work included street trees, grates and guards, street furnishings and public art
- Interactive Kiosks-Pearl Street Mall: Pearl Street Mall interactive kiosk in conjunction with Parks and Recreation, Open Space, Library Arts and the Convention

15th Street after renovation.

and Visitors Bureau was installed for public use.

- West End Streetscape Improvements: All work associated with the West End Streetscape project on Pearl from 11th to 8th will be completed. This work will enhance the pedestrian crossing around 10th Street and the pedestrian corridor. In addition, work will include signage that will help draw people off the Pearl St Mall to the West End, new street trees and irrigation.

Projects Expected for Completion in 2015:

- BJAD-Parking: During 2015, with the completion of the Depot Square Project, BJAD-Parking will begin payments for 100 spaces within the Depot Square Garage.
- CAGID Garage Major Maintenance: Epoxy deck coating at 1100 Walnut, and drive lanes at 1000 Walnut garages. Additional interior painting at 1400 Walnut and 1100 Walnut.
- CAGID parking garage access equipment and supporting technology replacement (all 5 downtown garages).
- Downtown 14th Street Parking Lots: Repair and replacement of the three parking lots will begin as funds accumulate .
- Downtown/Pearl Street Mall Improvements and Amenities Replacement: Reserve funds will continue for the replacement of the pop jet fountain, begin mall bollard replacement, and refurbish the pedestrian scale lighting.

Projects Starting in 2015, but not Completed:

- Elevator Repair and refurbishment at 1100 Spruce.

Highlights of 2016 – 2020:

- CAGID Garage Major Maintenance: Projects to be covered include: major maintenance of the 1400 Walnut elevator; continued epoxy coatings; structural concrete repairs and interior painting at all garages.
- Downtown 14th Street Parking Lots: Continued repair and replacement of the lots as funds accumulate.
- Downtown/Pearl Street Mall Improvements and Amenities Replacement: Replace pop jet fountain, continue bollard replacement and replace shade structure awnings.

Relationship to Guiding Principles and Prioritization

CIP Guiding Principles:

All proposed projects in the 2015-2020 CIP are consistent with the applicable guiding principles. All projects have sufficient funds for ongoing maintenance and operations. All projects in the proposed CIP go towards maintaining and improving existing assets.

The Downtown/Pearl Street Mall Improvements/Replacements support the economic sustainability

of downtown Boulder by ensuring long term sustainability of our existing infrastructure and investing in the future economic and social vitality of our community center. The CAGID Garage Major Maintenance and Downtown 14th Street Parking Lot Replacement provide essential on-going major maintenance and reinvestment in the five parking facilities and three surface lots.

Prioritization:
The bond projects were all prioritized through the Capital Investment Stakeholder Committee as part of the city investment strategy. All of these projects improve and enhance the pedestrian experience in the downtown area.

DUHMD/PS has the responsibility to maintain all CAGID parking garage assets and the surface parking lots on 14th Street, in order to protect the investment and sustain functionality and safety.

The Downtown/Pearl Street Mall improvements are prioritized by necessary maintenance, replacement and repair of all amenities in the downtown area. Downtown Boulder is the center of the community and an important commercial center, economic generator and tourist attraction.

The Boulder Junction Access District parking garage was adopted through the TVAP plan in addressing the need for managed parking.

Projects Not in Master Plan:
DUHMD/Parking services does not have a master plan. Projects are included in the CIP based on stakeholder interest and necessary maintenance of capital assets.

New Projects

- CAGID parking garage access equipment and supporting technology replacement (all 5 downtown garages).

Operation and Maintenance Impacts

Garage and Lot maintenance and operations provide essential on-going major maintenance and reinvestment in the five parking facilities and three surface lots. Downtown and Pearl Street mall Improvements and Amenities replacement are intended to maintain all assets in current condition. With the maintenance and operation improvements programs in place, assets will avoid deferred maintenance. There are no additional O&M needs beyond what is included in these CIP programs.

Deferred Projects, Eliminated or Changed Projects

None.

Unfunded Projects and Emerging Needs

Greater University Hill Infrastructure Investments:

As part of the ongoing hill revitalization strategy, high priority infrastructure improvements are proposed that address demonstrated needs within the Hill Community. These include:

- Residential pedestrian scale corridor lighting – up to $5.7 million
- Gateway features between the residential and commercial areas – $500,000
- Pennsylvania Event Street Pilot – $700,000
- Commercial district street tree irrigation system – $520,000

[This page is intentionally blank.]

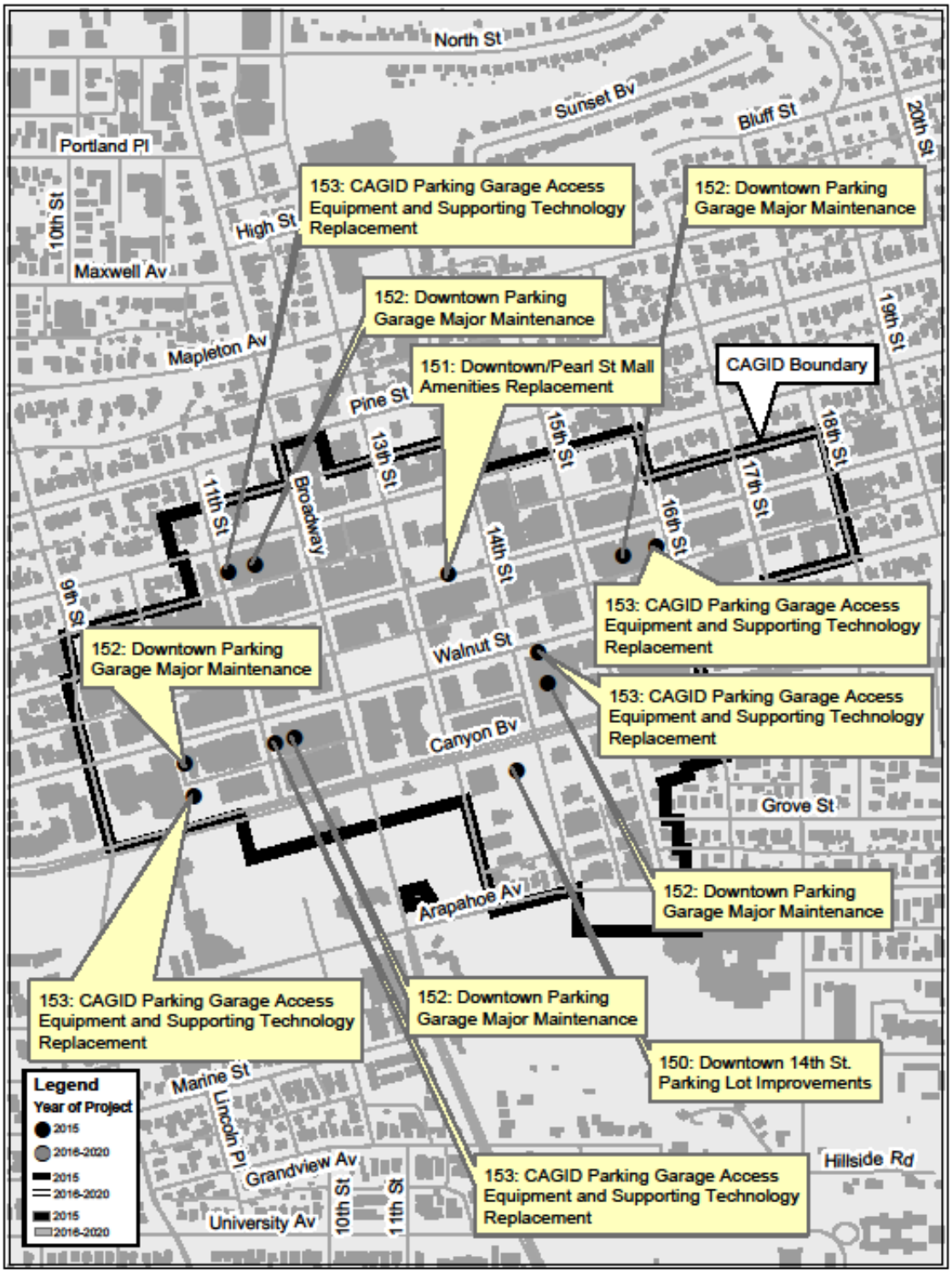
Table 5-1: 2015-2020 Funding Summary By Department

DOWNTOWN AND UNIVERSITY HILL MANAGEMENT DIVISION (DUHMD) / PARKING SERVICES

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Maintenance										
CAGID Parking Garage Access Equipment	$ 1,075,000	$ 1,075,000	$ -	$ -	$ -	$ -	$ -	$ 1,075,000	$ -	$ -
Dow ntow n 14th Street Parking Lot Improvements	-	25,000	25,000	25,000	25,000	25,000	25,000	150,000	-	-
Dow ntow n Parking Garage Major Maintenance	-	250,000	250,000	250,000	250,000	250,000	250,000	1,500,000	-	-
Dow ntow n/Pearl St Mall Amenities Replacement	-	125,000	125,000	125,000	125,000	125,000	125,000	750,000	-	-
Subtotal	$ 1,075,000	$ 1,475,000	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ 3,475,000	$ -	$ -
Total	**$ 1,075,000**	**$ 1,475,000**	**$ 400,000**	**$ 400,000**	**$ 400,000**	**$ 400,000**	**$ 400,000**	**$ 3,475,000**	**$ -**	**$ -**

City of Boulder Captial Improvement Projects, 2015 - 2020

Downtown and University Hill Management Division



Project Name: CAGID Parking Garage Access Equipment & Supporting Technology Replacement

Project at a Glance

Project Type:	Capital Maintenance		
Department:	DUHMD	**Subcommunity:**	Central Boulder
Project Number:		**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	153
		CEAP Status:	

Project Description

The current gate system, cash collection systems and supporting software is below industry standards and in need of replacement. The software is no longer supported and the hardware mechanical apparatus are aging and do not contain modern technology available in the parking industry today.
As a part of the AMPS project, a thorough analysis will be undertaken to assess all aspects of the parking access and control systems (PARCS) to include, gate equipment and supporting software. The intent in 2014 is to create an RFP for gate replacement and supporting technology to meet Boulder's future needs in the garages. The estimated total cost of $1,075,000 will be verified through the RFP process. Installation is estimated to begin in early 2015.

Relationship to Guiding Principles

- ☐ Consistent with Master Plans
- ☐ Achieves Community Sustainability goals
- ☑ Includes sufficient funding for operation and maintenance
- ☑ Maintains and enhances city's business systems
- ☑ Provides capacity and flexibility in long term planning
- ☑ Sustains or improves existing assets
- ☑ Maximizes efficiency and demonstrates positive cost/benefit
- ☐ Fund includes sufficient reserves
- ☐ Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Project is included in the AMPS assessment

Relationship with Other Departments

IT and Finance will collaborate on aspects of the garage gate and payment systems

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$75,000
Acquisition	
Construction	$1,000,000
Total Project Cost	**$1,075,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$1,075,000
Funding Total	($1,075,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Downtown Commercial District Fund	$0	$1,075,000	$0	$0	$0	$0	$0
Total Funding Plan	**$1,075,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:** Downtown Commercial Management Fund

Additional Annual O&M Description:

Replacement funds for the garage gate technology will be added in the 2016 operating budget for CAGID.

Project Name: Downtown 14th Street Parking Lot Improvements

Project at a Glance

Project Type:	Capital Maintenance		
Department:	DUHMD	**Subcommunity:**	Central Boulder
Project Number:		**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	150
		CEAP Status:	

Project Description

The 14th Street parking lot improvement project is an ongoing project to maintain the 3 surface parking lots on 14th Street between Canyon and Arapahoe. These lots are not owned by CAGID, they are city property, but located within the CAGID boundaries.
The 14th Street lots sufaces are near their useful life and need repair and replacement. DUHMD/PS does not have a master plan, but identified the lack of funding to maintain the lots in the 2012 budget cycle. Facilities and Asset Management performed an inspection in 2010 for the three lots. They found that 2 of the lots require replacement due to severity of asphalt fatigue, cracks, potholes and drainage issues in over 20% of the surface. The third lot requires patching and sealing to maintain in good operating condition. Once a lot is newly paved, it will have an estimated life span of 20 years.
The center lot was removed and replaced by FAM in 2014 as a part of a larger remediation project and rebuild of the civic plaza on 13th Street.
The CIP for this project is an annual and ongoing appropriation of $25,000 per year to establish repair and replacement savings. As the funds accumulate, the improvements to the lots will be completed on a rolling basis. Surface replacement of the lots with the highest severity of issues will be completed first.
A capital improvement amount of approximately $285,500 was estimated to complete all necessary asphalt surface repairs and replacement for the lots. 2015 represents the 4th year of appropriation toward the repair and improvement plan. As the middle lot was paved through the FAM remediation project, funds to upgrade the other two lots will be available sooner.
Staff will monitor the implementation of the Civic Area Plan to ensure coordination with any redevelopment projects and responsible expenditure of funds.

Relationship to Guiding Principles

- [ ] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [ ] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

no public process

Relationship with Other Departments

Parks and Recreation, FAM and DUHMD/PS have all participated in the care and maintenance of the 14th Street lots.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$0
Acquisition	$0
Construction	$0
Total Project Cost	

Unfunded Amount

Unfunded Amount

Project Cost Total	
Funding Total	
Total Unfunded	

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Downtown Commercial District Fund		$25,000	$25,000	$25,000	$25,000	$25,000	$25,000
Total Funding Plan							

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Downtown Commercial District Fund

Additional Annual O&M Description:

Operating costs are currently covered in the Downtown Commercial District fund.

Project Name: Downtown Parking Garage Major Maintenance

Project at a Glance

Project Type:	Capital Maintenance		
Department:	DUHMD	**Subcommunity:**	Central Boulder
Project Number:		**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	152
		CEAP Status:	

Project Description

Funding for the 4 year, 4.5 million dollar major capital renovation and repair project funding ended in 2011. Starting in 2012, $250,000 per year was allocated as ongoing repairs/renovations to maintain the garages in good standing.
Major maintenance projects include, but, are not limited to; epoxy coating of exposed garage decks (on a 6-8 year replacement schedule, one structure a year), painting (interior and exterior), major elevator repairs, and concrete deterioration . Many of these procedures require significant funding and are part of a rotating maintenance schedule. The intent is to maintain the garages in a manner to avoid or delay significant capital outlay brought on without timely maintenance.

Projects planned for 2014 include:
•CAGID Garage Improvements: A new signage program will be completed in the five garages that includes variable messaging.

•CAGID Garage Major Maintenance: Planned projects include stair replacement at 1100 Walnut, elevator refurbishment at 1400 Walnut, interior painting at 1100 Spruce and 1500 Pearl.

This project is for an ongoing funding program. All $250,00 will be spent on rotating projects at the 5 garages each year.

Relationship to Guiding Principles

- ☐ Consistent with Master Plans
- ☑ Achieves Community Sustainability goals
- ☑ Includes sufficient funding for operation and maintenance
- ☐ Maintains and enhances city's business systems
- ☑ Provides capacity and flexibility in long term planning
- ☑ Sustains or improves existing assets
- ☐ Maximizes efficiency and demonstrates positive cost/benefit
- ☐ Fund includes sufficient reserves
- ☐ Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

no public process

Relationship with Other Departments

There is no collaboration with other departments on the garage major maintenance.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning
Acquisition
Construction

Total Project Cost

Unfunded Amount

Unfunded Amount

Project Cost Total
Funding Total

Total Unfunded

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Downtown Commercial District Fund		$250,000	$250,000	$250,000	$250,000	$250,000	$250,000
Total Funding Plan							

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** *Downtown Commercial District Fund*

Additional Annual O&M Description:

Operating costs are covered in the Downtown Commercial District Fund

Project Name: Downtown/Pearl St Mall Amenities Replacement

Project at a Glance

Project Type:	Capital Maintenance		
Department:	DUHMD	**Subcommunity:**	Central Boulder
Project Number:		**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	151
		CEAP Status:	

Project Description

Until 2012, there was no capital replacement or future improvements plan or funding source identified for the Pearl Street Mall and downtown streetscape improvements. The Downtown/Pearl St Mall Amenities replacement plan consists of two components: 1) capital replacement budget for the existing amenities on the Pearl Street Mall (pop jet fountain, shade structure, kiosks, play areas, etc.) and existing streetscape elements within the downtown area (benches, trash receptacles, bike racks, etc.) and 2) replacement of future streetscape improvements in sub areas of the downtown.

This project is for an ongoing funding program. DUHMD/PS worked with the Parks Mall staff and FAM to develop a replacement schedule. The replacement funds are designated as amenities age and need replacement or repairs.

In 2015-2020, in addition to accumulating funds for amenities replacement, other projects will be identified as needed.

Relationship to Guiding Principles

- ☐ Consistent with Master Plans
- ☑ Achieves Community Sustainability goals
- ☑ Includes sufficient funding for operation and maintenance
- ☐ Maintains and enhances city's business systems
- ☐ Provides capacity and flexibility in long term planning
- ☑ Sustains or improves existing assets
- ☐ Maximizes efficiency and demonstrates positive cost/benefit
- ☑ Fund includes sufficient reserves
- ☐ Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

A Downtown Improvement Plan Task Force prioritized and identified improvements. Staff on the task force represent Parks and Recreation, Planning, Transportation, DUHMD/PS and Facilities Asset Management. Also included are representatives from the downtown boards and organizations: Downtown Management Division, Downtown Boulder Inc. and Downtown Boulder Business Improvement District. Additional stakeholders will be added as the project evolves. The primary foci of the task force has been twofold. First, working with Parks, GIS and FAM staff to create an inventory of existing amenity and streetscape improvements on the Pearl Street Mall and the downtown. This provides the detailed budget necessary to ensure that capital replacement funds are in place for these existing investments. The second component has been the recommendation for areas for future streetscape and infrastructure improvements.

FAM prepared a detailed replacement schedule spanning 10 years.

Relationship with Other Departments

DUHMD/PS staff is working with staff from FAM, Transportation, and Parks and Recreation to coordinate the downtown capital amenities replacement plan.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	**$0**

Unfunded Amount

Unfunded Amount

Project Cost Total	$0
Funding Total	
Total Unfunded	

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Downtown Commercial District Fund		$125,000	$125,000	$125,000	$125,000	$125,000	$125,000
Total Funding Plan							

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Downtown Commercial District Fund

Additional Annual O&M Description:

Operating costs are covered in the Downtown Commercial District Fund and the Parks and Recreation Fund.

[This page is intentionally blank.]

Funding Overview

The Facilities and Asset Management (FAM) CIP is supported by the following funds.

Capital Development Fund:

The Capital Development Fund accounts for development fees to be utilized for the construction of capital improvements related to new development and growth. Funding for the Capital Development Fund is provided through the development excise tax (DET) and impact fees.

In 1987, the DET was instituted to fund capital improvements related to growth and is paid by new commercial and residential development. Beginning in 2010, excise taxes previously collected for new construction for Fire, Housing and Human Services, Library, Police and Municipal Facilities ceased and were replaced with impact fees. In addition, Parks and Recreation was added to the list of departments collecting impact fees.

Table 6-1: Capital Development Fund Balance – 2013 Year-End

Account	DET Balance	Impact Fee Balance
Library	$2,018,685	$123,656
Municipal Facilities	$1,821,015	$89,941
HHS	$738,620	$46,898
Police Department	$776,122	$96,397
Fire Department	$21,226	$112,645
Parks and Recreation	N/A	$460,502
Total	**$5,376,668**	**$930,039**

Note:
The balances above will be revised due to the loan that was created at the end of 2013 from the Capital Development Fund to the FR&R fund for the 13th Street Clean Up project. The loan amount was $4,000,000 and will be paid back by the General Fund.

Facility Renovation & Replacement Fund:

The Facility Renovation & Replacement Fund (FR&R) accounts for major maintenance (projects >$3000), renovation and building system replacement projects for FAM maintained buildings, structures and property. The majority of FR&R funding is received as a transfer from the General Fund (GF). The FR&R fund also receives funding from restricted and enterprise funds for specific

departmental projects including remediation work. The FR&R fund is an internal service fund managed by FAM.

FR&R projects are identified by FAM throughout the year as facilities are serviced and inspected. Projects may also be identified in department master plans as these are approved by City Council. Project lists are then sent to departments for review and approval. For some departments like Parks & Recreation and Library and Arts, regularly scheduled meetings are held throughout the year to identify project needs or changes.

Due to the recent approval of several department master plans, specific area plans like the Civic Area Plan and Yards Master Plan update, and studies such as the Police Space Study and Fire Response mapping, FAM will coordinate various projects as part of the 2015 FAM Master Plan update.

Capital Improvement Bond Fund

Additionally, funding from the Capital Improvement Bond (CIB) Fund supports a number of projects managed by FAM. CIB funding is indicated by the following symbol:

2013 Flood Impact

The city's pre-flood mapping was instrumental in identifying facilities subject to flooding. Due to the quick response of city crews and facility tenants which alleviated further facility damages, insurance covered all facility-related damages. Insurance, however, did not cover facility mitigation and additional mitigation costs not covered by FEMA will be provided for in current year funding. The city is also seeking Hazard Mitigation Grant Project funding for generators at critical facilities which will also require a 20 percent match with current year funding. Flood projects already approved in 2013 and 2014 are being adjusted to address impacts from the September 2013 flood. No additional FAM CIP flood projects in 2015-2020 are planned.

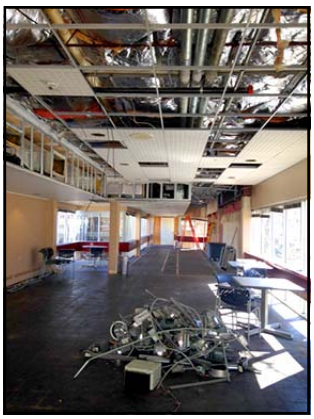
Accomplishments and Highlights

Projects to be Completed in 2014:

- Flood Restoration Projects: Completed repairs from the flood on 24 facilities, which included all three recreation centers, West Senior Center, 3 fire stations and Valmont Butte. Performed flood mitigation projects at eight facilities.
- Municipal Building: Rebuilt the flood gates and completed improvements to the Council Chambers including the audiovisual systems.
- Valmont Butte Voluntary Clean-Up Program (VCUP): Obtained environmental covenants on the remaining areas with mill tailings. Determined path ahead for land marking portions of the property.
- 13th Street Plaza: Partially completed the approved Voluntary Clean-Up Program and re-constructed a temporary plaza and negotiated with other responsible party for costs

and remaining clean-up.

- Renewable Electric Vehicle Charging Systems: Commissioned two electric vehicle solar charging trees, one at East Boulder Community Center and the other at the Spruce and Broadway parking lot.
- Completed Several Capital Improvement Bond (CIB) Projects: Completed asphalt parking lots repairs at seven facilities throughout city, freight elevator repairs at the Public Safety Building, and ADA compliance at multiple facilities to include constructing new accessible restrooms at the Chautauqua Auditorium.
- Renewable Energy Analyses: Performed assessments to evaluate renewable energy sources such as small scale wind, geothermal, biomass, hydro, and thermal storage systems on city properties.



Renovation of the bridge at the Library.

Projects Expected for Completion in 2015:

- New Wildland Fire Facility: A CIB bond project will provide for year-round wildland fire fighting capability.
- Main Library Renovation Project: Includes CIB bond funding for children and teen areas and infrastructure repairs for electrical, carpeting, HVAC upgrades and windows.

Projects Starting in 2015, but Not Completed:

- Downtown Campus Facilities: Access improvements to be coordinated with Civic Area Plan catalysts projects.

Highlights of 2016-2020 Projects:

- North Boulder Recreation Center: Replace solar thermal system that is beyond repair and replace leaking roof in coordination.
- East Boulder Community Center: Replace pool air handlers that are beyond their useful life.
- Outdoor Lighting Compliance Improvements: Replace outdoor fixtures with LED products to meet the city's outdoor lighting regulations.
- Fire Station #1: Repair cracked bay floors and exterior concrete ramp.
- Mapleton Ball Field: Renovate concessions and restrooms, upgrade electrical, lighting and HVAC systems, and renew protective coatings.
- Martin Park and North Boulder Park, Park Shelter Repairs: Upgrade electrical, plumbing and renew protective coatings.
- Stazio Ball Field, Renovate Restrooms and Concessions: Replace tensile canopy covering, upgrade electrical, plumbing, and HVAC, replace roof, renew protective coatings and provide for ADA compliance.
- Miscellaneous Facility Maintenance Projects: A collection of major maintenance projects

under $50,000 programmed annually, such as roof evaluations, pavement repairs, HVAC upgrades and exterior protective coatings. This totals $370,000 to $450,000 a year, with the current CIP period totaling $2,415,000.

Relationship to Guiding Principles and Prioritization

CIP Guiding Principles:

The proposed 2015 – 2020 CIP is consistent with the CIP Guiding Principles as follows:

- All projects (except those noted below) are consistent with council accepted master plans; FAM's Master Plan was last adopted in 2005 and is currently under review
- Capital improvements are designed to achieve community sustainability goals
- Funds to operate and maintain projects have been identified
- Adequate financial capacity and flexibility is available to respond to emerging, unanticipated needs
- Projects sustain or improve maintenance of existing assets before investing in new assets
- Projects have been identified to meet legal mandates, improve public safety and reduce annual operating costs and improve efficiency
- Projects have been coordinated with other departments
- Funds supporting FAM's CIP provides sufficient reserves to allow the ability to address emergencies and natural disaster. As projects are developed, improvements may also require building code updates, safety and security enhancements and added efficiencies to reduce energy consumption and operating costs.

As projects are developed, improvements may also require building code updates, safety and security enhancements and added efficiencies to reduce energy consumption and operating costs.

Prioritization:

In accordance to the FAM Master Plan and under current fiscally constrained funding, essential facilities are maintained to industry standards and remaining facilities at standards commensurate with available funding. Energy efficiency projects, such as the work accomplished through the Energy Performance Contracts, are funded, if budget neutral or if there is less than a three year simple payback.

In addition, FAM prioritizes its projects based on the type of facility and type of work as shown below. Should a higher priority project need arise during the current year and future years, projects may be prioritized, especially for an immediate health and safety need.

Table 6-2: FAM Priority Codes

Priority Code	Type of Facility	Type of Work
1	Essential[1]	Essential[2]
2	Non-Essential	Essential
3	Essential	Desirable
4	Non-Essential	Desirable[3]
5	Essential or Non-Essential	Discretionary[4]
6	Essential or Non-Essential	Deferred

[1]Essential Facility: A facility necessary to sustain the most basic core of city services such as public health and safety and/or compliance with federal or state laws particularly during an emergency event. 26 facilities are identified as "essential" in the City of Boulder such as the Municipal Building, Park Central, New Britain, Public Safety Building, Municipal Service Center, Fleet Services, Fire Stations, North Boulder Recreation Center and East Boulder Community Center.
[2]Essential Work: Work that is performed for life, health, and safety-related situations. Also includes work that is needed so that a city service can be provided.
[3]Desirable Work: Work that does not meet the essential or discretionary definition.
[4]Discretionary Work: Work that is not required but would be defined as "nice-to-have."

The following are examples of priority code projects:

- Priority 1: repair emergency generator at the Public Service Building
- Priority 2: repair emergency lighting at South Boulder Recreation Center
- Priority 3: replace lighting at Park Central
- Priority 4: replace lighting at Meadows Library
- Priority 5: paint walls at New Britain after 10 years
- Priority 6: replace carpet in staff spaces after 7 years

Projects Not in Master Plans:

- Fleet Services: The Fleet Strategic Plan is under development for 2015. This Plan will guide future plans for vehicle acquisition and maintenance for all city vehicles and off-road equipment.
- Parks and Recreation: The Tantra Shop Renovation will be prioritized with other projects based upon the Parks and Recreation Master Plan and associated area development plans.

New Projects

- North Boulder Recreation Center: Replace leaking roof in coordination with the solar thermal system replacement.
- Boulder Museum of Contemporary Art Floor Replacement: Replaces deteriorated and pitted first floor and stairway that are badly chipped and pitted, creating a tripping hazard.
- Fire Station #1: Repair cracked bay floors and exterior concrete ramp.

Operation and Maintenance Impacts

Since the proposed FAM 2015-2020 CIP enhances and maintains current facilities, the impacts to FAM's Operation and Maintenance (O&M) budget will be positive in the replacement of aging and inefficient infrastructure. However, despite additional ongoing operating dollars allocated to FAM in 2014 to help slow the rate of backlog increase, FAM's current O&M budget is not funded to action levels, which causes FAM's backlog to increase annually. Higher construction costs are also being seen and not adequately accounted for in O&M budgets. The FAM Master Plan update will also identify climate change impacts to building systems such as lower service lives of equipment and building systems, which will require more frequent replacements and possibly larger equipment.

Deferred Projects, Eliminated or Changed Projects

- FlatIrons Event Center Major Repairs: Eliminated $600,000 in 2019 repairs due to major flood damage in 2013 and proposed plan to demolish and construct a new facility.
- East Boulder Community Center Renovation: Added contributions for 2020 - $300,000 total.
- Outdoor Lighting Compliance: Move majority of funding ($190,000) to 2016 for execution with $10,000 in 2015 for project planning and design.

Unfunded Projects and Emerging Needs

- Parking Lot Repairs: Only partially funded with full replacement funding needed for the Municipal Service Center and Public Safety Building.
- Energy Efficiencies and Renewables: To achieve the city's new sustainability and greenhouse gas emission reduction goals, deeper energy efficiency projects and additional renewables may be required for city facilities and operations.
- Electric Vehicle Infrastructure: The wider use of electric vehicles in the city fleet, the Boulder community and in supporting a regional EV charging system will be needed to transition the transportation needs off fossil fuels.

[This page is intentionally blank.]

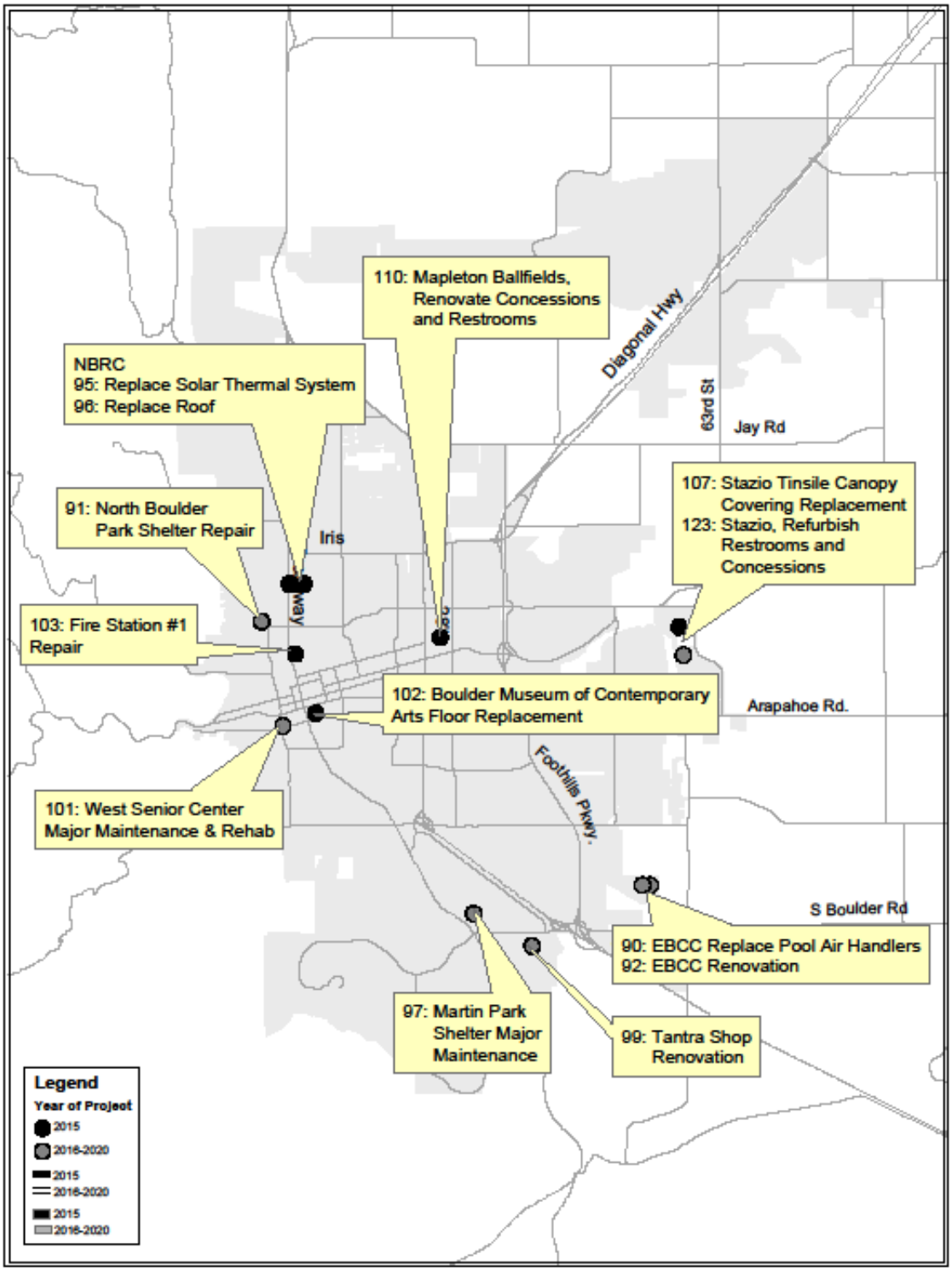
Table 6-3: 2015-2020 Funding Summary By Department

PUBLIC WORKS - FACILITIES AND ASSET MANAGEMENT (FAM) / FLEET

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Enhancement										
North Boulder Recreation Center - Replace Solar Thermal System	$ 350,000	$ 350,000	$ -	$ -	$ -	$ -	$ -	$ 350,000	$ -	$ -
Outdoor Lighting Compliance Improvements	200,000	10,000	190,000	-	-	-	-	200,000	-	-
Stazio Refurbish Restrooms and Concessions	160,000	160,000	-	-	-	-	-	160,000	-	-
East Boulder Community Center Renovation	1,100,000	-	-	-	100,000	100,000	100,000	300,000	-	800,000
Tantra Shop Renovation	300,000	-	-	-	-	300,000	-	300,000	-	-
West Senior Center Major Maintenance & Rehab	700,000	-	-	-	-	700,000	-	700,000	-	-
Subtotal	$ 2,810,000	$ 520,000	$ 190,000	$ -	$ 100,000	$ 1,100,000	$ 100,000	$ 2,010,000	$ -	$ 800,000
Capital Maintenance										
Boulder Museum of Contemporary Arts - Floor Replacement	$ 90,000	$ 90,000	$ -	$ -	$ -	$ -	$ -	$ 90,000	$ -	$ -
Fire Station #1 - Repair Concrete Floor in Vehicle Bays and Exterior Ramps	150,000	150,000	-	-	-	-	-	150,000	-	-
Mapleton Ballfields, Renovate Concessions and Restrooms +	100,000	100,000	-	-	-	-	-	100,000	-	-
Miscellaneous Facility DET Projects	715,000	465,000	50,000	50,000	50,000	50,000	50,000	715,000	-	-
Miscellaneous Facility Maintenance Projects	2,415,000	370,000	415,000	380,000	400,000	400,000	450,000	2,415,000	-	-
North Boulder Recreation Center Roof Replacement	450,000	450,000	-	-	-	-	-	450,000	-	-
East Boulder Community Center - Replace Pool Air Handlers	500,000	-	500,000	-	-	-	-	500,000	-	-
Replaster Pools +	80,000	-	80,000	-	-	-	-	80,000	-	-
Stazio Tensile Canopy Covering Replacement	132,000	-	132,000	-	-	-	-	132,000	-	-
Martin Park Shelter Major Maintenance	169,000	-	-	169,000	-	-	-	169,000	-	-
North Boulder Park Shelter Repair	120,000	-	-	120,000	-	-	-	120,000	-	-
Subtotal	$ 4,921,000	$ 1,625,000	$ 1,177,000	$ 719,000	$ 450,000	$ 450,000	$ 500,000	$ 4,921,000	$ -	$ -
Capital Planning Studies										
Facility Assessments	$ 300,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 300,000	$ -	$ -
Subtotal	$ 300,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 300,000	$ -	$ -
Total	**$ 8,031,000**	**$ 2,195,000**	**$ 1,417,000**	**$ 769,000**	**$ 600,000**	**$ 1,600,000**	**$ 650,000**	**$ 7,231,000**	**$ -**	**$ 800,000**

City of Boulder Captial Improvement Projects, 2015 - 2020

PW / Facilities and Asset Management



Project Name: Boulder Museum of Contemporary Arts - Floor Replacement

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Facilities & Asset Management	**Subcommunity:**	Central Boulder
Project Number:		**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	102
		CEAP Status:	

Project Description

Replace deteriorated, chipped and pitted first floor and stairway of the BMOCA building. Current floor is beyond repair and has large chips and divots which pose a tripping hazard. The current lease has the tenant, BMOCA, responsible for maintenance of the facility and the city responsible for repairs.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [ ] Achieves Community Sustainability goals
- [ ] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

None.

Relationship with Other Departments

Coordinate with tenant and Library and Arts Department on project timing to ensure minimize disruptions to events and showings.

Change from Past CIP

New addition to CIP.

Estimated Total Cost

Project Cost

Planning	$5,000
Acquisition	
Construction	$85,000
Total Project Cost	**$90,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$90,000
Funding Total	($90,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Facility Renovation & Replacement Fund	$0	$90,000	$0	$0	$0	$0	$0
Total Funding Plan	**$90,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:**

Additional Annual O&M Description:

Project Name: East Boulder Community Center - Replace Pool Air Handlers

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Facilities & Asset Management	**Subcommunity:**	East Boulder
Project Number:		**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	90
		CEAP Status:	

Project Description

Replace existing pool air handlers that were installed in 1990, are inefficient, and beyond their useful life.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

None - permits will be applied for.

Relationship with Other Departments

FAM will continue to coordinate with Parks and Recreation in the annual prioritization of HVAC replacement projects and scheduling of facility maintenance during annual shutdowns to minimize disruption to the customers.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$50,000
Acquisition	
Construction	$450,000
Total Project Cost	**$500,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$500,000
Funding Total	($500,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Facility Renovation & Replacement Fund	$0	$0	$500,000	$0	$0	$0	$0
Total Funding Plan	**$500,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $2,000 **Funding Source:** From FAM 118 O&M funding.

Additional Annual O&M Description:

For annual system maintenance

Project Name: East Boulder Community Center Renovation

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Facilities & Asset Management	**Subcommunity:**	East Boulder
Project Number:		**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	92
		CEAP Status:	

Project Description

Both the North Boulder Recreation Center and the South Boulder Recreation Center have had major renovations approximately every 20 years to accommodate new and changed programs and also ensure building code updates to the city's highest use facilities. This project will accomplish the same at East Boulder Community Center since it's construction in 1991.

Relationship to Guiding Principles

- ☑ Consistent with Master Plans
- ☑ Achieves Community Sustainability goals
- ☑ Includes sufficient funding for operation and maintenance
- ☐ Maintains and enhances city's business systems
- ☐ Provides capacity and flexibility in long term planning
- ☑ Sustains or improves existing assets
- ☑ Maximizes efficiency and demonstrates positive cost/benefit
- ☐ Fund includes sufficient reserves
- ☑ Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

This project will tie into the Parks and Recreation Master Plan Update.

Relationship with Other Departments

FAM will continue to coordinate with Parks and Recreation and Human Services in indentifying future renovation and replacement needs for the East Boulder Community Center along with working with Parks and Recreation on facility and program expansion needs that will be funded outside of FAM's FR&R account.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$110,000
Acquisition	
Construction	$990,000
Total Project Cost	**$1,100,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$1,100,000
Funding Total	($300,000)
Total Unfunded	**$800,000**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Facility Renovation & Replacement Fund	$0				$100,000	$100,000	$100,000
Total Funding Plan	**$300,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:**

Additional Annual O&M Description:

Project Name: Facility Assessments

Project at a Glance

Project Type:	Capital Planning Studies		
Department:	PW/ Facilities & Asset Management	**Subcommunity:**	System-wide
Project Number:		**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	94
		CEAP Status:	

Project Description

Funding is for study and analysis. Perform visual inspections and sampling of materials in city facilities to have an inventory of any asbestos, lead based paint, and other indoor air quality concerns. Identify code and safety deficiencies in existing facilities. The inventory will provide awareness for building occupants, maintenance staff, construction personnel, and emergency responders so as not to disturb the hazard. An inventory will also identify remediation projects, as needed. Expect a multi-year program to complete the 130-plus buildings managed by FAM and repeat the process.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

None.

Relationship with Other Departments

FAM will coordinate with other departments in performing the inventory of the facilities and any subsequent remediation requirements so disruption to occupants and customers is minimized.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	**$300,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$300,000
Funding Total	($300,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Facility Renovation & Replacement Fund	$0	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000
Total Funding Plan	**$300,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:**

Additional Annual O&M Description:

No additional O&M anticipated with this assessment.

Project Name: Fire Station #1 - Repair concrete floor in vehicle bays and exterior ramps

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Facilities & Asset Management	**Subcommunity:**	Central Boulder
Project Number:		**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	103
		CEAP Status:	

Project Description

Replace concrete floors in the fire station's vehicle bays and exterior concrete ramps due to cracks and subsiding. Newer, larger and heavier fire response vehicles are overloading the concrete floors.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [ ] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

None.

Relationship with Other Departments

Coordinate with Fire Department to phase work and ensure the station remains operable.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$15,000
Acquisition	
Construction	$135,000
Total Project Cost	**$150,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$150,000
Funding Total	($150,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Facility Renovation & Replacement Fund	$0	$150,000	$0	$0	$0	$0	$0
Total Funding Plan	**$150,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:**

Additional Annual O&M Description:

Project Name: Mapleton Ballfields, Renovate Concessions and Restrooms +

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Facilities & Asset Management	**Subcommunity:**	Crossroads
Project Number:	501XXX	**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	110
		CEAP Status:	

Project Description

This project upgrades electrical, lighting and HVAC systems to current building codes, upgrades plumbing system and fixtures for water conservation, and renews interior and exterior surface finishes.

+ Funding from other than General Fund FR&R:
Fund 118 - Parks & Rec Major Maintenance, managed by FAM

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [ ] Achieves Community Sustainability goals
- [ ] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

None. Project design will be reviewed during the normal permitting process.

Relationship with Other Departments

FAM will continue to coordinate with Parks and Recreation in indentifying future renovation and replacement needs for the Mapleton Ballfields along with working with Parks and Recreation on facility and program expansion needs that will be funded outside of FAM's FR&R account.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$10,000
Acquisition	
Construction	$90,000
Total Project Cost	**$100,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$100,000
Funding Total	($100,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Facility Renovation & Replacement Fund	$0	$100,000	$0	$0	$0	$0	$0
Total Funding Plan	**$100,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:**

Additional Annual O&M Description:

No additional operational costs will result from completing this project.

Project Name: Martin Park Shelter Major Maintenance

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Facilities & Asset Management	**Subcommunity:**	South Boulder
Project Number:	501XXX	**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	97
		CEAP Status:	

Project Description

This project upgrades the plumbing systems and fixtures and renews interior and exterior surface finishes of this facility constructed in 1962. Minor cosmetic work totaling $16,000 was last done in 2007. Code upgrades for the electrical systems will also be accomplished as required with any major renovation project.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [ ] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

None. Project design will be reviewed during the normal permitting process.

Relationship with Other Departments

This project will be coordinated with the Parks & Recreation Department. The P&R Round 1, Capital Investment Strategy project improves the shelter's exterior to include ADA access to the shelters, lighting upgrades, amenities (benches/tables), bear proof trash/recycling receptacles and concrete flatwork. FR&R funding not available currently to accomplish with 2013/2014 CIS project.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$16,000
Acquisition	
Construction	$153,000
Total Project Cost	**$169,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$169,000
Funding Total	($169,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Facility Renovation & Replacement Fund	$0	$0	$0	$169,000	$0	$0	$0
Total Funding Plan	**$169,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:**

Additional Annual O&M Description:

Project Name: Miscellaneous Facility DET Projects

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Facilities & Asset Management	**Subcommunity:**	System-wide
Project Number:	511702	**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	

Project Description

City's participation in accomplishing small projects and advance project planning, less than $50,000 each, that are done in conjunction with other new construction or expansion projects related to growth. Previous projects include: Valmont Butte engineering and environmental studies, Children, Youth and Family Services Addition, Outfitting the University Hill Police Annex, and Public Safety Building Space Analysis.

For 2015, $415,000 is for planning studies associated with the Civic Area Plan. Consultants will assist with space programming and concept development. Expert consultants will be engaged to assist with the Farmer's Market concept, Canyon Complete Streets options and the city's new service/innovation approaches, and arts venue, among others. In addition, technical reports are required to provide detailed work for: advance project feasibility and planning, scoping and budgeting; identifcation of potential issues and options related to adaptive building reuse e.g. Canyon Theater at North Library, and site redevelopment (13th Street). The type of reports include due diligence work related to geotechnical conditions, hazardous materials surveys, topographical surveys, parking, flood requirements, and other potential project feasibility issues and cost impacts.

Relationship to Guiding Principles

- ☑ Consistent with Master Plans
- ☑ Achieves Community Sustainability goals
- ☐ Includes sufficient funding for operation and maintenance
- ☑ Maintains and enhances city's business systems
- ☑ Provides capacity and flexibility in long term planning
- ☑ Sustains or improves existing assets
- ☐ Maximizes efficiency and demonstrates positive cost/benefit
- ☐ Fund includes sufficient reserves
- ☐ Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Any public process will be identified in conjunction with the overall project development. Project design will be reviewed by the Planning Department. Further design reviews will be conducted by the Landmarks Board, Design Advisory Board, and/or Planning Board as appropriate.

Relationship with Other Departments

This project will be coordinated with the affected departments, dependent on the project.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	**$715,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$715,000
Funding Total	($715,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Capital Development Fund	$0	$465,000	$50,000	$50,000	$50,000	$50,000	$50,000
Total Funding Plan	**$715,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:**

Additional Annual O&M Description:

No additional operational costs will result from completing these projects.

Project Name: Miscellaneous Facility Maintenance Projects

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Facilities & Asset Management	**Subcommunity:**	System-wide
Project Number:	501452	**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	

Project Description

This project addresses funding for on-going building replacement and miscellaneous projects costing less than $50,000 each. Facility replacement and projects costing $50,000 or more are individually listed in the CIP. Facility maintenance projects costing less than $50,000 will be managed by the Facilities & Fleet Manager. Typical projects over the past 2 years have included roof evaluations, backflow prevention, parking lot repairs, sidewalk repairs, stair repairs, structural inspections, HVAC upgrades, and exterior masonry repairs and protective coatings.

This project is for an ongoing funding program.

Relationship to Guiding Principles

- ☑ Consistent with Master Plans
- ☑ Achieves Community Sustainability goals
- ☑ Includes sufficient funding for operation and maintenance
- ☐ Maintains and enhances city's business systems
- ☑ Provides capacity and flexibility in long term planning
- ☑ Sustains or improves existing assets
- ☑ Maximizes efficiency and demonstrates positive cost/benefit
- ☐ Fund includes sufficient reserves
- ☑ Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Any project associated with these funds will be taken through the appropriate public process and CEAP review as part of the conceptual design if needed. Project design will be reviewed by the Planning Department. Further design reviews will be conducted by the Boards and Commissions as appropriate.

Relationship with Other Departments

This project will be coordinated with the affected departments to reduce occupant and customer impacts.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	**$2,415,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	*$2,415,000*
Funding Total	($2,415,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Facility Renovation & Replacement Fund	$0	$370,000	$415,000	$380,000	$400,000	$400,000	$450,000
Total Funding Plan	**$2,415,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:**

Additional Annual O&M Description:

No additional operational costs will result from completing these repair projects.

Project Name: North Boulder Park Shelter Repair

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Facilities & Asset Management	**Subcommunity:**	Central Boulder
Project Number:	501XXX	**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	91
		CEAP Status:	

Project Description

This project upgrades the plumbing systems and fixtures, and renews interior and exterior surface finishes of this facility built in 1969. Minor cosmetic work totaling $19,000 was last done in 2007. Electrical code upgrades will also be accomplished as required with major renovation projects.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [ ] Achieves Community Sustainability goals
- [ ] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

None. Project design will be reviewed during the normal permitting process.

Relationship with Other Departments

This project will be coordinated with the Parks & Recreation Department. The P&R Round 1, Capital Investment Strategy project improved the shelter's exterior to include ADA access to the shelters, lighting upgrades, amenities (benches/tables), bear proof trash/recycling receptacles and concrete flatwork. FR&R funding not available to time with CIS project.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$12,000
Acquisition	
Construction	$108,000
Total Project Cost	**$120,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$120,000
Funding Total	($120,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Facility Renovation & Replacement Fund	$0	$0	$0	$120,000	$0	$0	$0
Total Funding Plan	**$120,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:**

Additional Annual O&M Description:

No additional operating costs are anticipated.

Project Name: North Boulder Recreation Center - Replace Solar Thermal System

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Facilities & Asset Management	**Subcommunity:**	Central Boulder
Project Number:		**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	95
		CEAP Status:	

Project Description

In 2002, the North Boulder Recreation Center installed the largest solar thermal pool heating system in the nation, which helped it achieved its LEED Silver status. Overtime, the leading edge technology has had numerous leaks due to improperly designed fittings that can no longer be repaired without significant costs. The system is not currently operating. This project will replace the existing system with a more modern system that does not have the problems that the early systems have.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

None - permit will be submitted for approval.

Relationship with Other Departments

FAM will continue to coordinate with Parks and Recreation in coordinating the replacement of this system so as to minimize impacts to customers.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$30,000
Acquisition	
Construction	$320,000
Total Project Cost	**$350,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$350,000
Funding Total	($350,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Facility Renovation & Replacement Fund	$0	$350,000	$0	$0	$0	$0	$0
Total Funding Plan	**$350,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $5,000 **Funding Source:** FAM 118 O&M funding

Additional Annual O&M Description:

For glycol and occassional solar thermal tube replacements.

Project Name: North Boulder Recreation Center Roof Replacement

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Facilities & Asset Management	**Subcommunity:**	Central Boulder
Project Number:		**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	96
		CEAP Status:	

Project Description

Replace horizontal roof sections on North Boulder Recreation Center in coordination with the 2015 CIP solar thermal replacement project. Existing roof was inspected and shown to have deteriorated connections to the parapet walls, where leaks are occurring. Project will include moving the ballasted solar pV system and returning it to the same location. Opportunities for increasing the roof's insulation properties will be explored.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [ ] Achieves Community Sustainability goals
- [ ] Includes sufficient funding for operation and maintenance
- [x] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

None.

Relationship with Other Departments

Coordination with P&R department will be needed to minimize interruptions to NBRC users.

Change from Past CIP

New addition to CIP.

Estimated Total Cost

Project Cost

Planning	$10,000
Acquisition	
Construction	$440,000
Total Project Cost	**$450,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$450,000
Funding Total	($450,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Facility Renovation & Replacement Fund	$0	$450,000	$0	$0	$0	$0	$0
Total Funding Plan	**$450,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:**

Additional Annual O&M Description:

Project Name: Outdoor Lighting Compliance Improvements

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Facilities & Asset Management	**Subcommunity:**	System-wide
Project Number:	501XXX	**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	

Project Description

Replace outdoor lighting fixtures to comply with Boulder Revised Code 9-9-16, Outdoor Lighting ordinance. Lights must conform not later than 15 years after July 15, 2003. Projects will occur as lighting technologies, such as light emitting diodes, LEDs, become more advanced and less costly. This project is only for outdoor lighting under FAM's responsibility. Other departments, such as Parks and Recreation, are programming separate lighting projects.

In 2016, perform an inventory of lights that are not yet in compliance. In 2016, replace remaining non-compliant lights. This could impact all 130 facilities managed by FAM. No inventory of non-conforming lights has been completed yet.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [ ] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Any project associated with these funds will be taken through the appropriate public process and reviewed as part of the conceptual design, if needed.

Relationship with Other Departments

Work will be coordinated with affected departments in fixture selection and ensuring outdoor lighing compliance of selected fixtures.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$10,000
Acquisition	
Construction	$190,000
Total Project Cost	**$200,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$200,000
Funding Total	($200,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Facility Renovation & Replacement Fund	$0	$10,000	$190,000	$0	$0	$0	$0
Total Funding Plan	**$200,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: ($10,000) **Funding Source:** Various department energy funds.

Additional Annual O&M Description:

Estimated annual energy savings by replacing with more energy efficent lighting.

Project Name: Pool Replastering+

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Facilities & Asset Management	**Subcommunity:**	Multiple Subcommunities
Project Number:	501XXX	**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	
		CEAP Status:	

Project Description

Replaster one of the recreational pools which will be determined at a future date. This 2016 project follows Parks and Recreation replastering pool projects in 2013, 2014 and 2015.

+ Funding from other than General Fund FR&R:
Fund 118, Major Maintenance, P&R-managed by FAM

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [ ] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [ ] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

This project location will be dependent on decision yet to be made on the Aquatics Facility Study and the Parks and Recreation pool replaster projects.

Relationship with Other Departments

This project will be coordinated with Parks and Recreation following other re-plaster work they will be funding in 2014 and 2015.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$1,000
Acquisition	
Construction	$79,000
Total Project Cost	**$80,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$80,000
Funding Total	($80,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Facility Renovation & Replacement Fund	$0	$0	$80,000	$0	$0	$0	$0
Total Funding Plan	**$80,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:**

Additional Annual O&M Description:

No additional operational costs will result from completing this project.

Project Name: Stazio Refurbish Restrooms and Concessions

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Facilities & Asset Management	**Subcommunity:**	East Boulder
Project Number:	501XXX	**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	123
		CEAP Status:	

Project Description

This project upgrades electrical and HVAC systems to current building codes, upgrades plumbing systems and fixtures, and renews interior and exterior surface finishes.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [ ] Achieves Community Sustainability goals
- [ ] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [ ] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

None. Project design will be reviewed during the normal permitting process.

Relationship with Other Departments

This project has been moved to 2015 to be coordinated with the Parks & Recreation Department's 2015 ADA project.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$16,000
Acquisition	
Construction	$144,000
Total Project Cost	**$160,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$160,000
Funding Total	($160,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Facility Renovation & Replacement Fund	$0	$160,000	$0	$0	$0	$0	$0
Total Funding Plan	**$160,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:**

Additional Annual O&M Description:

Project Name: Stazio Tensile Canopy Covering Replacement

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Facilities & Asset Management	**Subcommunity:**	East Boulder
Project Number:	501XXX	**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	107
		CEAP Status:	

Project Description

The Stazio Tensile Canopy was inspected in 2003 by the contractor that originally installed the structure. All cables, structural components and coverings were inspected and found to be sound and fully functional. Preventive maintenance was performed on the structure. The contractor noted in their report that the covering is nearing the end of its service life and should be replaced in approximately five years (2008). The contractor prepared a cost estimate for replacement of the covering. This project was originally scheduled for 2009; the delay to 2016 is allowable by accomplishing minor repairs in 2010 versus complete replacement.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [ ] Achieves Community Sustainability goals
- [ ] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [ ] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

None. Project design will be reviewed during the normal permitting process.

Relationship with Other Departments

FAM will continue to coordinate with Parks and Recreation in assessing the tensile canopy annually to continue to lengthen its service life.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$6,000
Acquisition	
Construction	$126,000
Total Project Cost	**$132,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$132,000
Funding Total	($132,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Facility Renovation & Replacement Fund	$0	$0	$132,000	$0	$0	$0	$0
Total Funding Plan	**$132,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:**

Additional Annual O&M Description:

No additional operational costs are anticipated from completing this project.

Project Name: Tantra Shop Renovation

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Facilities & Asset Management	**Subcommunity:**	South Boulder
Project Number:		**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	99
		CEAP Status:	

Project Description

Renovate the Tantra Park Shop for continuing use for Park Operations maintenance staff. This 3,000 square foot facility, constructed in 1984, needs repairs and renovations to major building systems. At this time, no specific scope has been identified for this project planned in 2019.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [ ] Achieves Community Sustainability goals
- [ ] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Future of Tantra property will be part of Parks and Recreation Master Plan.

Relationship with Other Departments

FAM will continue to coordinate with Parks and Recreation in indentifying future renovation and replacement needs for the Tantra Park Shop.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$30,000
Acquisition	
Construction	$270,000
Total Project Cost	**$300,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$300,000
Funding Total	($300,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Facility Renovation & Replacement Fund	$0	$0	$0	$0	$0	$300,000	$0
Total Funding Plan	**$300,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:**

Additional Annual O&M Description:

Project Name: West Senior Center Major Maintenance & Rehab

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Facilities & Asset Management	**Subcommunity:**	Central Boulder
Project Number:	501XXX	**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	101
		CEAP Status:	

Project Description

This project provides refurbishment and replacement of the facilities including HVAC, electrical, and plumbing systems. It renews all surface finishes including carpet, paint, and ceilings. Provides improvements to restrooms and adds a fire sprinkler system, which is currently lacking, to the entire facility as required by B.R.C. 10-8, Fire Prevention Code. Provides for requirements under the new 2010 ADA standards. Replaces 1995 roof sections as required.

This project is scheduled for 2019, but may change depending on the outcomes of the Civic Area Plan and the Human Services Department master plan.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [ ] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Project design will be reviewed during the normal permitting process and the master plans portions affecting this project will be approved by City Council.

Relationship with Other Departments

This project will be coordinated with the Human Services Department and the Civic Area planning process. The kitchen was remodeled in 2006 by Meals on Wheels at a cost of approximately $400,000. This cost has been subtracted from the estimated refurbishment cost noted in the 2005 FAM Master Plan of $1,228,000, leaving an estimated cost of $828,000. Additional work was accomplished in the Energy Performance Contracts and a $140,000 refurbishment of the office areas was performed due to the Sept 2013 flood.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$70,000
Acquisition	
Construction	$630,000
Total Project Cost	**$700,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$700,000
Funding Total	($700,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Facility Renovation & Replacement Fund	$0	$0	$0	$0	$0	$700,000	$0
Total Funding Plan	**$700,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:**

Additional Annual O&M Description:

[This page is intentionally blank.]

City of Boulder

FIRE and RESCUE

2015-2020 Capital Improvement Program

Funding Overview

The Fire and Rescue Department is funded by the General Fund. Currently there is no specific capital funding source for General Fund departments and capital needs are addressed on a case by case basis, as funds are available. Strategies for addressing unfunded capital needs are being developed (see Appendix B) and will be presented to council in the coming months.

Potential sources of funding for the capital projects noted below include each of the following or any combination of :

- An increase in sales and use tax
- An increase in property tax mill levy
- Bond funding
- Use of existing operating funding to build a capital fund or pool of money available for capital projects.

Additionally, funding from the Capital Improvement Bond (CIB) Fund supports a number of projects citywide. CIB funding is indicated by the following symbol:

There are currently no specific Fire-Rescue projects proposed in the 2015-2020 CIP.

Accomplishments and Highlights

Projects to be Completed in 2014:

- None

Projects Expected for Completion in 2015:

- Wildland Fire Station: see FAM

Projects Starting in 2015, but not Completed:

- None

Highlights of 2015-2020 Projects:

- None

Relationship to Guiding Principles

CIP Guiding Principles:

The fire station projects are guided by strategies and initiatives in the 2012 Fire-Rescue Master Plan. All of the listed projects help the Fire and Rescue Department maintain and improve public safety. Proper fire station location improves accessibility to services provided to the community by the Fire and Rescue Department and ensures a timely response to emergencies occurring in the neighborhood. The construction or remodel of facilities will use Leadership in Energy and Environmental Design (LEED) targets to ensure energy efficiency. Each project listed identifies the estimated on-going funds needed to operate and maintain the project.

Prioritization:

Projects listed below in Unfunded Projects and Emerging Needs are in priority order based on the critical need, degree of deficiency in each project, and the degree to which the project advances efficiency or community livability goals. Station 3 relocation is listed first because of its susceptibility to flooding and impact to our emergency response system if it were out of service. The remaining facilities position on the list reflects the degree to which each station does not fulfill the department's needs for effective, efficient and safe fire station design.

Projects Not in Master Plans:

The following projects are not specified in the master plan and are added here because of their expense, over $50,000, and life cycle, at least 15 years.

- Fire Training Center (FTC) Phase 2: Driving area and storage building
- Fire Training Center (FTC) Phase 3: Additional Classroom, Office and Conference room space

New Projects

None

Operation and Maintenance Impacts

The primary category for the Fire and Rescue Department emerging needs are facilities. Three of the seven existing fire stations are over fifty years old and all are inadequately sized for today's needs and future capacity. A comprehensive community risk analysis is underway including response times from existing stations and emergency call demand loads. Preliminary findings demonstrate potential better locations for some stations and reaffirm others are correctly located. Further analysis is needed before final recommendations on station relocations are made.

Deferred, Eliminated, or Changed Projects

None

Unfunded Projects and Emerging Needs

- Relocate Fire Station 3 out of the 100-year floodplain, co-locate with Fire Administration Offices, and construct a separate storage facility for fire vehicles and equipment.
    - In 2011, 13 sites were identified as potential locations for Station 3. After analyzing multiple criteria, six sites remained. Since that time, three of those six could still be possible, each with their own acquisition issues. The top site is still the Mapleton ball fields. This station needs to be 17,000 square feet to house two fire engines and crews plus a battalion chief, the administration building needs to be 11,000 square feet and the storage building 10,000 square feet.
    - One-time Buildings $12,725,000, Land up to $8,600,000, On-going $459,000
- Replace Fire Station 4 at or near the current location of 4100 Darley Avenue.
    - Constructed in 1967 with 2,000 square feet this station is too small and needs to be 11,000 square feet to house one fire engine and crew.
    - One-time Building $4,125,000, Land up to $2,000,000, On-going $165,000
- Replace Fire Station 6 currently located at 5145 N 63rd Street
    - Constructed in 1979 with 3,435 square feet this station is too small and needs to be 11,000 square feet to house one fire engine and crew.
    - We are currently exploring the possibility of co-locating our fire engine and crew with Boulder Rural in their station located at 6230 Lookout Rd. The building and land at Station 6 could be sold.
    - If this is not possible a One-time $4,125,000, On-going $165,000
- Replace Fire Station 2 at or near the current location of 2225 Baseline Road.
    - Constructed in 1959 with 4,752 square feet this station is too small and needs to be 15,333 to house two fire engines and crews.
    - One-time Building $5,737,500, Land up to $3,500,000, On-going $229,500
- Replace Fire Station 5 at or near the current location of 4365 19th Street.
    - Constructed in 1992with 3,622 square feet this station is too small and needs to be 15,333 to house two fire engines and crews.
    - One-time Building $5,737,500, Land up to $1,500,000, On-going $229,500
- Remodel Fire Station 1 at or near the current location of 2441 13th Street.
    - Constructed in 1957 at 7,941 square feet this station is too small and poorly designed. It needs to be 17,000 square feet to house two fire engines and crews plus a battalion chief.
    - One-time Building $3,220,000, On-going $128,800
- Remodel Fire Station 7 at or near the current location of 1380 55th Street.
    - Constructed in 2000 with 5,081 square feet this station is too small and needs to be 11,000 square feet to house one fire engine and crew.
    - One-time Building $2,100,000, On-going $42,000.
- Fire Training Center Phase 2 - Driving area and storage building
    - Construct a concrete driver training area totaling approximately 200,000square

feet. This was approved as a future phase of improvements in the original development approval. Construct a 10,000 square foot storage building for training props and equipment.

- One-time Concrete $2,000,000, Building $2,500,000, On-going $60,000.

- Fire Training Center Phase 3 - Additional classroom and office space.
  - To complete the original design of facilities eliminated in the construction due to budget constraints add more classrooms, offices and conference room space totaling 4,000 square feet.
  - One-time $1,400,000, On-going $56,000.

Table 7-1: Unfunded Projects

Description		One-Time		On-Going
	Building	Land	Equipment	
Station 3/ Admin/ Storage	$12,725,000	$8,600,000	$ 0	$ 459,000
Station 4	$ 4,125,000	$2,000,000	$ 0	$ 165,000
Station 6	$ 4,125,000	$ 0	$ 0	$ 165,000
Station 2	$ 5,737,500	$3,500,000	$ 0	$ 229,500
Station 5	$ 5,737,500	$1,500,000	$ 0	$ 229,500
Station 1	$ 3,220,000	$ 0	$ 0	$ 128,800
Station 7	$ 2,100,000	$ 0	$ 0	$ 42,000
FTC Phase 2	$ 4,500,000	$ 0	$ 0	$ 60,000
FTC Phase 3	$ 1,400,000	$ 0	$ 0	$ 56,000
TOTAL	**$43,670,000**	**$15,600,000**	**$ 0**	**$1,534,800**

City of Boulder

GREENWAYS

2015-2020 Capital Improvement Program

Program Overview

The City of Boulder Greenways System is comprised of a series of corridors along riparian areas including Boulder Creek and its 14 tributaries, which provide an opportunity to integrate multiple objectives, including habitat protection, water quality enhancement, storm drainage and floodplain management, alternative transportation routes for pedestrians and bicyclists, recreation and cultural resources.

The Greenways CIP follows an opportunistic approach, contributing funding toward projects that are being completed by other departments or private development in order to meet the various objectives of the Greenways Program. The Greenways CIP also looks to leverage funds with outside agencies in order to move projects forward that meet more than one objective of the Greenways Program, but may not be the highest priority when evaluating any one particular objective. Projects included in the Greenways CIP are typically called out in the Greenways Master Plan and are projects that Greenways staff can take the lead in coordinating.

Funding Overview

The total 2015 Greenways capital budget is $320,441, with $105,000 in the operating budget. Greenways projects are funded from the Transportation Fund, Stormwater and Flood Management Utility Fund, and the Lottery Fund. Annual funding distribution for the Greenways Capital Program for 2015 is as follows:

- Transportation: $97,500
- Flood Utility: $97,500
- Lottery Fund:$125,441

Starting in 2015, the Lottery contribution is expected to be reduced to $125,441, based on Greenways receiving 15% of the city's funding allocation, with a projection of total Lottery proceeds being $836,275.

2013 Flood Impact

The Stormwater and Flood Management Utility CIP budget was used to fund flood recovery efforts associated with drainageway infrastructure repair and the restoration of conveyance capacity. Sediment removal from the multi-use paths and path repair along the Greenways was funded through the Transportation and Parks and Recreation budgets.

As a result of the September flood, new major drainageway improvement projects have been identified in the 2015-2020 Stormwater and Flood CIP. The details of these improvements will be determined through the major drainageway mitigation planning and CEAP processes, which may identify future Greenways projects. Funding has therefore not been included in the 2015-2020 Greenways CIP for any of these potential new improvements.

Accomplishments and Highlights

Projects Completed in 2014:

- Goose Creek Restoration Project includes restoration improvements along Goose Creek between Foothills Highway and 55th Street. This project is expected to be completed in 2014. This project is primarily being funded through a Section 206 Restoration grant through the U.S. Army Corps of Engineers. The city's 35% funding match is being met mostly through credits from city owned real estate.
- A flood mitigation major drainageway plan for South Boulder Creek is anticipated to be completed by the end of 2014.
- The Urban Drainage and Flood Control District also completes maintenance projects along the major drainageways. In 2014 this includes a request for sediment removal along Wonderland Creek from Foothills Parkway to the confluence with Goose Creek. This maintenance project will help provide the necessary conveyance capacity required when the Wonderland Creek Greenways Improvement Project is completed.

Fourmile Canyon Creek Greenways Improvements

Projects Expected for Completion in 2015:

- Fourmile Canyon Creek at 19th Street is in preliminary design but was put on hold following the September 2013 flood event. It is anticipated that development of this project will continue in late 2014 with a CEAP for the stream reach upstream of Upland Avenue to be completed in 2015.
- Flood mapping studies for Upper Goose and Twomile Canyon Creeks; Skunk, Kings Gulch and BlueBell Canyon Creeks; Boulder Slough and Bear Canyon Creek are anticipated to be completed in 2015.

Projects Starting in 2015, but Not Completed:

- Construction of the Wonderland Creek Foothills to 30th Greenways Improvement Project: is anticipated to begin in 2015.

- Construction of the Wonderland Creek (28th Street) Diagonal to Winding Trail Greenways Improvement Project: is anticipated to begin in 2015.
- A flood mitigation plan was initiated in 2014 for Boulder Creek, Bear Canyon Creek and Gregory Canyon Creek: is anticipated to be completed 2015.

Highlights of 2016-2020 Projects:
The focus of the 2015-2020 Greenways CIP is on flood mitigation, bicycle and pedestrian multi-use paths and underpasses, and habitat and water quality improvements along the Fourmile and Wonderland Creek corridors. In addition to the projects along Fourmile Canyon Creek and Wonderland Creek, possible habitat restoration projects during the next few years include:

- Stream bank restoration: Boulder Creek at Eben Fine Park
- Confluence of Bear Creek and Boulder Creek at Foothills Community Hospital
- Dry Creek habitat improvements: Flatirons Golf Course
- Goose Creek: Railroad to 47th Street tree plantings
- South Boulder Creek: Minimum stream flow
- Removal of Russian Olive trees: East of 75th Street along Boulder Creek
- Fish Passage enhancement projects in association with Fishing is Fun grants.

Relationship to Guiding Principles and Prioritization

CIP Guiding Principles:
Greenways projects are identified in multiple master plans and meet the community sustainability goals. Most of the Greenways projects leverage outside or interdepartmental funding. Greenways habitat improvements seek to be sustainable and are intended to reduce the future maintenance required.

The Greenways CIP has been developed within the context of and is consistent with the Boulder Valley Comprehensive Plan (BVCP), the Transportation Master Plan (TMP), the major drainageway plans, the Comprehensive Flood and Stormwater Master Plan and the Greenways Master Plan. The Greenways Master Plan was updated in 2011 to reflect improvements that had been completed, and adopted changes that have been made in other master plans, city policies and ordinances that affect the Greenways Program since the last Master Plan update in 2001. Information from other existing master plans for seven additional tributaries was also incorporated into the Greenways Master Plan update. Future opportunities will also be coordinated with the Open Space and Mountain Park's Grassland Plan and Visitor Master Plan and Trail Study Area plans where appropriate.

Prioritization:
Many of the Greenways projects shown in the CIP are being designed and constructed in coordination with major flood or transportation improvements. The Greenways funding associated with these projects focuses on habitat restoration, water quality improvements and

trail connections. In addition to leveraging funding with the Transportation and Flood Utilities budgets, funding for Greenways projects is also available through the Urban Drainage and Flood Control District and Federal Transportation funds.

Projects not in Master Plans:
It should be noted that the city is still recovering from the September 2013 flood event that resulted in extensive flooding along most of the city's major drainageways. Following the flood, additional funds have been allocated in the Flood Utility CIP to reflect an increased interest in pursuing flood mitigation efforts along the city's major drainageways. Continued evaluation of the impacts from this event may result in additional changes to the Flood Utility and Greenways CIP in upcoming years.

New Projects

The 2015 - 2020 CIP continues to focus on Fourmile Canyon and Wonderland Creeks. The Flood Utility is currently updating the flood mapping for the following creeks and tributaries: Boulder Creek, Boulder Slough, Upper Goose Creek, Twomile Creek, Skunk Creek, Bluebell Creek and King's Gulch. Once the new mapping has been approved by FEMA, a flood mitigation analysis will be completed for each of these tributaries to determine if it is economically feasible to reduce the flood risk through construction of capital improvements. A flood mitigation plan is being initiated in 2014 for Boulder Creek, Gregory Canyon Creek and Bear Canyon Creek. Additional information on these efforts is provided in the Utilities Division Capital Improvement Program overview. This plan will identify potential economically feasible CIP projects which may provide opportunities for future Greenways improvements.

Operation and Maintenance Impacts

$105,000 is budgeted each year for Greenways operations and maintenance. $80,000 of the operating budget is dedicated to habitat maintenance. The Greenways habitat crew works closely with Parks and Open Space maintenance staff to provide on-going maintenance, as well as on collaborative projects as part of the operations budget. Major drainageway improvements are maintained by the flood maintenance staff and multi-use paths and underpasses are maintained by either Transportation or Parks maintenance, depending upon jurisdiction.

Deferred Projects, Eliminated or Changed Projects

None.

Unfunded Projects and Emerging Needs

None.

Board Action

The Greenways Advisory Committee met on May 22, 2014 and unanimously (5-0) recommended approval of the 2015-2020 Greenways Program CIP to Planning Board and City Council.

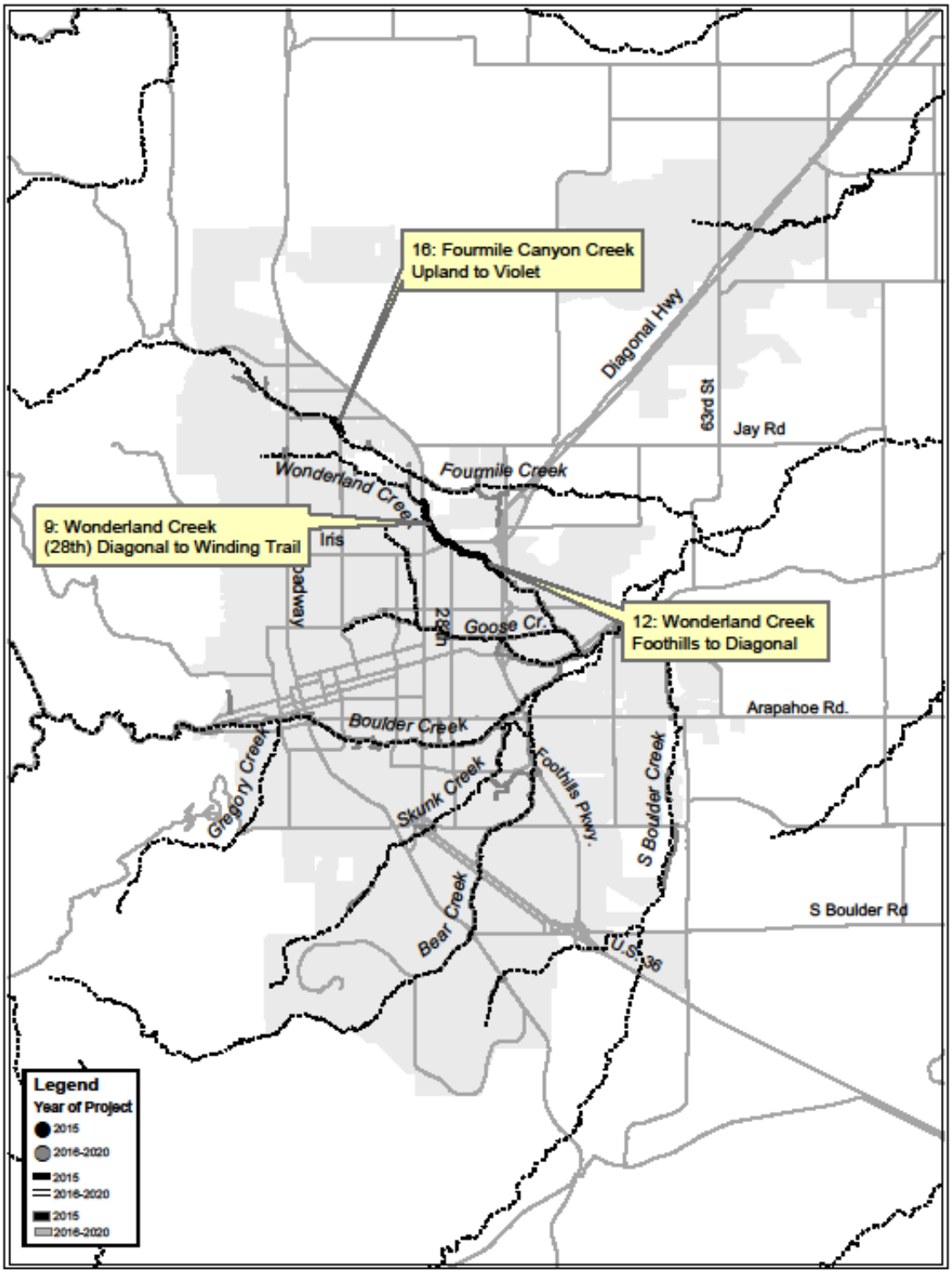
Table 8-1: 2015-2020 Funding Summary By Department

PUBLIC WORKS - GREENWAYS

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Enhancement										
Wonderland Creek (28th) Kalmia to Winding Trail	$ 7,805,657	$ 270,441	$ -	$ -	$ -	$ -	$ -	$ 270,441	$ 295,000	$ -
Fourmile Canyon Creek Upland to Violet	6,102,205	-	270,441	270,441	270,441	270,441	270,441	1,352,205	-	-
Wonderland Creek Foothills to 30th	13,424,808	-	-	-	-	-	-	-	391,716	-
Subtotal	$ 27,332,670	$ 270,441	$ 270,441	$ 270,441	$ 270,441	$ 270,441	$ 270,441	$ 1,622,646	$ 686,716	$ -
Capital Maintenance										
Miscellaneous Water Quality, Restoration and Trail Improvements	$ -	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 300,000	$ 50,000	$ -
Subtotal	**$ -**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 300,000**	**$ 50,000**	**$ -**
Total	**$ 27,332,670**	**$ 320,441**	**$ 320,441**	**$ 320,441**	**$ 320,441**	**$ 320,441**	**$ 320,441**	**$ 1,922,646**	**$ 736,716**	**$ -**

City of Boulder Captial Improvement Projects, 2015 - 2020

PW / Greenways



Project Name: Fourmile Canyon Creek Upland to Violet Flood Mitigation

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Greenways	**Subcommunity:**	North Boulder
Project Number:		**BVCPArea:**	Area I
CEAP Required:	Yes	**Map Number:**	81
		CEAP Status:	no

Project Description

This project includes improvements to Fourmile Canyon Creek from Upland to Violet, flood mitigation, environmental restoration and off-street trail connections. These improvements will be done in conjunction with Greenways, Transportation Division and the Parks Department. The Greenways Master Plan, Transportation Master Plan and Fourmile Flood Mitigation Plan show a path connection from Upland to Violet with flood/bicycle underpasses under Violet and Upland Avenues. The path connection will traverse Violet Park. 100-year flood improvements are proposed for the area around Crest View Elementary School. A project CEAP will be completed to determine the details of the project.

In response to the September 2013 flood event, additional flood mitigation funding is proposed for this drainageway in 2019 and 2020. Funding was also added in 2020 from Greenways.

Relationship to Guiding Principles

- ☑ Consistent with Master Plans
- ☑ Achieves Community Sustainability goals
- ☑ Includes sufficient funding for operation and maintenance
- ☐ Maintains and enhances city's business systems
- ☑ Provides capacity and flexibility in long term planning
- ☑ Sustains or improves existing assets
- ☑ Maximizes efficiency and demonstrates positive cost/benefit
- ☑ Fund includes sufficient reserves
- ☑ Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The CEAP for this project will be reviewed by the Greenways Advisory Committee.

Relationship with Other Departments

All work along the Greenways is coordinated through the Greenways staff group that includes representatives from the Open Space Department, Parks and Recreation Department, Planning Department and Transportation and Utilities Divisions. Work on Violet Park site will be coordinated with the Parks Dept.

Change from Past CIP

Additional funding is proposed in 2019 and 2020

Estimated Total Cost

Project Cost

Planning	$900,000
Acquisition	$600,000
Construction	$4,602,205
Total Project Cost	**$6,102,205**

Unfunded Amount

Unfunded Amount

Project Cost Total	$6,102,205
Funding Total	($6,102,205)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Tributary Greenways	$0	$0	$270,441	$270,441	$270,441	$270,441	$270,441
Stormwater & Flood Management Utility Fund	$0	$0	$500,000	$500,000	$500,000	$750,000	$2,500,000
Subtotal All Funds	$0	$0	$770,441	$770,441	$770,441	$1,020,441	$2,770,441

Total Funding Plan **$6,102,205**

Additional Annual Operations and Maintenance

Additional Annual O&M: $1,000 **Funding Source:** Stormwater and Flood and Transportation will provide maintenance

Additional Annual O&M Description:

will be covered by existing maintenance budgets

Project Name: Miscellaneous Water Quality, Restoration and Trail Improvements

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Greenways	**Subcommunity:**	System-wide
Project Number:		**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	

Project Description

Miscellaneous water quality, habitat resoration and trail improvements projects.

Relationship to Guiding Principles

- ☑ Consistent with Master Plans
- ☑ Achieves Community Sustainability goals
- ☑ Includes sufficient funding for operation and maintenance
- ☐ Maintains and enhances city's business systems
- ☑ Provides capacity and flexibility in long term planning
- ☑ Sustains or improves existing assets
- ☑ Maximizes efficiency and demonstrates positive cost/benefit
- ☑ Fund includes sufficient reserves
- ☑ Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Projects will be coordinated with Transportation, Utilities, Parks and Open Space or the developers of a property.

Relationship with Other Departments

Projects are developed with input from the City's Transportation, Utilities, Open Space, Parks Department, Boulder County and as well as through coordination with developers.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	

Unfunded Amount

Unfunded Amount

Project Cost Total	
Funding Total	($350,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Tributary Greenways	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000
Total Funding Plan	**$350,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:**

Additional Annual O&M Description:

These projects are enhancements to existing conditions and will be maintained by the city's Greenways habitat maintenance crew and/or Parks and Open Space maintenance staff. Initial maintenance levels when the project is first constructed will be higher, but ultimatley these projects should require less maintenance than the current conditions dictate.

Project Name: Wonderland Creek 28th Street Greenways Improvement Project

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Greenways	**Subcommunity:**	Crossroads
Project Number:	431012	**BVCPArea:**	Area I
CEAP Required:	Yes	**Map Number:**	9
		CEAP Status:	CEAP was completed in early 2013

Project Description

The Wonderland Creek Greenways Improvement Project at 28th Street involves the construction of flood mitigation improvements along Wonderland Creek from the Diagonal Highway to Winding Trail Drive, including two bicycle and pedestrian underpasses, at 28th Street and Kalmia Ave. The underpasses also serve as flood conveyance. These improvements are shown in the Greenways and Transportation Master Plans. Flood improvements, based on the Fourmile and Wonderland Flood Mitigation Plan and the Comprehensive Flood and Stormwater Master Plan, are being designed to convey the 100-year storm event.

Project funding includes $900,000 from Federal TIP ($100,000 in 2013 and $800,000 in 2014) and $275,000 from the Urban Drainage and Flood Control District.

The project is anticipated to be completed in 2016.

In response to the September 2013 flood event, money budgeted in prior years for this project has been used for flood recovery efforts. A portion of this funding is expected to be reimbursed through FEMA and will go into the fund balance. Funding for this poject is now shown in 2015 and is proposed to be bonded.

Relationship to Guiding Principles

- ☑ Consistent with Master Plans
- ☑ Achieves Community Sustainability goals
- ☑ Includes sufficient funding for operation and maintenance
- ☐ Maintains and enhances city's business systems
- ☑ Provides capacity and flexibility in long term planning
- ☑ Sustains or improves existing assets
- ☑ Maximizes efficiency and demonstrates positive cost/benefit
- ☑ Fund includes sufficient reserves
- ☑ Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The CEAP was completed in early 2013.

Relationship with Other Departments

All work along the Greenways is coordinated through the Greenways staff group that includes representatives from the Open Space Department, Parks and Recreation Department, Planning Department and Transportation and Utilities Divisions. There are no Parks or Open Space parcels in this reach of Wonderland Creek.

Change from Past CIP

Funding for this project is now shown in 2015 and is proposed to be bonded.

Estimated Total Cost

Project Cost

Planning	$1,200,000
Acquisition	$200,000
Construction	$6,405,657
Total Project Cost	**$7,805,657**

Unfunded Amount

Unfunded Amount

Project Cost Total	$7,805,657
Funding Total	($7,805,657)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Tributary Greenways	$295,000	$270,441	$0	$0	$0	$0	$0
Stormwater & Flood Management Utility Fund	$1,165,216	$6,075,000	$0	$0	$0	$0	$0
Subtotal All Funds	$1,460,216	$6,345,441	$0	$0	$0	$0	$0

Total Funding Plan **$7,805,657**

Additional Annual Operations and Maintenance

Additional Annual O&M: $1,000 **Funding Source:** Stormwater and Flood Management Utility Enterprise Fund

Additional Annual O&M Description:

will be covered by existing maintenance staff

Project Name: Wonderland Creek Foothills to 30th Greenways Improvement Project

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Greenways	**Subcommunity:**	Palo Park
Project Number:	431011	**BVCPArea:**	Area I
CEAP Required:	Yes	**Map Number:**	12
		CEAP Status:	CEAP Completed

Project Description

The Wonderland Creek Greenways Improvement Project involves the construction of a multi-use path and flood mitigation improvements along Wonderland Creek from Foothills Highway to the Diagonal Highway. These improvements are shown in the Greenways and Transportation Master Plans. The path connection will include an underpass at the Burlington Northern Railroad crossing near Foothills Highway and an at-grade crossing of Iris Avenue and 34th Street. Flood improvements, based on the Fourmile and Wonderland Flood Mitigation Plan and the Comprehensive Flood and Stormwater Master Plan, are being designed to convey the 100-year storm event and will include a box culvert under Iris Avenue. No flood improvements are being made along the existing channel north of Iris Avenue, as only one commercial structure is located in the 100-year floodplain and it is elevated.

Project funding includes $2 million in Federal TIP and $1.8 million from the Urban Drainage and Flood Control District.

The project is anticipated to be completed in 2016.

In response to the September 2013 flood event, money budgeted in prior years for this project has been used for flood recovery efforts. A portion of this funding is expected to be reimbursed through FEMA and will go into the fund balance. Funding for this poject is now shown in 2015 and is proposed to be bonded.

Relationship to Guiding Principles

- ☑ Consistent with Master Plans
- ☑ Achieves Community Sustainability goals
- ☑ Includes sufficient funding for operation and maintenance
- ☐ Maintains and enhances city's business systems
- ☑ Provides capacity and flexibility in long term planning
- ☑ Sustains or improves existing assets
- ☑ Maximizes efficiency and demonstrates positive cost/benefit
- ☑ Fund includes sufficient reserves
- ☑ Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Flood mitigation planning was completed in 2009. A CEAP was completed for this project.

Relationship with Other Departments

All work along the Greenways is coordinated through the Greenways staff group that includes representatives from the Open Space Department, Parks and Recreation Department, Environmental Affairs, Planning Department and Transportation and Utilities Divisions. Work on Howard Heuston Park will be coordinated with the Parks Dept.

Change from Past CIP

Funding for this project is now shown in 2015 and is proposed to be bonded.

Estimated Total Cost

Project Cost

Planning	$2,000,000
Acquisition	$200,000
Construction	$11,224,808
Total Project Cost	**$13,424,808**

Unfunded Amount

Unfunded Amount

Project Cost Total	$13,424,808
Funding Total	($13,424,808)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Tributary Greenways	$391,716	$0	$0	$0	$0	$0	$0
Stormwater & Flood Management Utility Fund	$3,033,092	$10,000,000	$0	$0	$0	$0	$0
Subtotal All Funds	$3,424,808	$10,000,000	$0	$0	$0	$0	$0

Total Funding Plan **$13,424,808**

Additional Annual Operations and Maintenance

Additional Annual O&M: $1,000 **Funding Source:** will be covered by existing maintenance staff

Additional Annual O&M Description:

[This page is intentionally blank.]

City of Boulder

INFORMATION TECHNOLOGY

2015-2020 Capital Improvement Program

Funding Overview

Following a 2009 ballot measure to remove Taxpayer Bill of Rights (TABOR) property tax revenue limits, the City has appropriated approximately $350k per year from the General Fund to a new Information Technology CIP. Though often supplemented by limited operating transfers from departments such as IT, this allocation has been the primary, predictive revenue source for IT capital investments, particularly major software procurements. This has resulted in a 2014 fund balance of nearly $1.6 million primarily dedicated to supplement the critical, bond-funded finance, human resources and payroll system) replacement project.

Both the Computer Replacement Fund (CRF) and the Telecommunications Fund (TF) have been used to progressively accumulate replacement reserves for existing personal computers, server equipment, network infrastructure, central telephone systems and associated operating system and database costs. Last year, the capital elements of the CRF were added to the portfolio of IT CIP projects. The Citywide telephone system was recently added, as well. These systems represent the critical IT capital infrastructure upon which all the major IT CIP projects and existing City computer applications fundamentally depend.

Additionally, funding from the Capital Improvement Bond (CIB) Fund supports a number of projects managed by IT. CIB funding (including partial funding) is indicated by the following symbol:

The City of Boulder website

Accomplishments and Highlights

Projects Completed in 2014:

- Complete the implementation of financial modules from the Tyler Munis system: Following extensive process evaluation, business process redesign and other implementation activities, the finance modules of the integrated Tyler Technologies "Munis" finance, payroll and human resources product are planned for final configuration, testing and staff training by the end of 2014. Estimated live operation of the finance modules is January 2015, concurrent with the beginning of the new fiscal year. (Funded by bond proceeds and IT CIP)

Projects Expected for Completion in 2015

- Complete the implementation of payroll and human resources modules of Tyler Munis system: Following final configuration, testing and staff training activities, the new payroll and human resources modules of the Tyler Technologies "Munis" system are expected to be operational at the beginning of April 2015. (Funded by bond proceeds and IT CIP)
- 2015 elements of the ongoing document management system implementation program: This project continues the work begun in 2012 to plan and execute the expansion of automated document management and digital imaging technologies to underserved departments and the public. Initial implementation of the new on-line archival records system and initial upgrading and expansion of the Citywide LaserFiche document management system will continue into early-2015. (Funded by bond proceeds and departmental reserves)
- Central IT Infrastructure enhancements: The City's virtual server hardware, software and storage systems are scheduled for replacement in 2015. This will include not only upgrades to central computer hardware, but will add an analysis of current and emerging storage and server technologies to ensure an optimal solution with available funds. (Funded by earmarked Computer Replacement Fund reserves)

Projects Starting in 2015, but Not Completed:

- Pilot business intelligence system: In conjunction with the major system replacement projects listed above, this project was originally designed to implement relatively stand-alone, pilot technologies that collect, store, analyze, and report on data - presenting a management-level view (e.g., dashboard) of the results. This functionality will now be delivered via capabilities in systems such as the new finance, human resources and payroll system replacement implementation. (Funded by bond proceeds, accumulated IT CIP reserves and IT operating funds)
- Begin implementation of new integrated permits, licensing and land records system: Following a needs assessment and procurement process undertaken in 2013, the EnerGov system was selected in early-2014 and implementation of this critical system replacement project will begin in mid-2014. The new system is estimated to reach live operation by the third quarter of 2016. (Funded by bond proceeds and restricted fund operating reserves)
- Asset and Maintenance Management software improvements: After concluding that the asset and maintenance management capabilities of the Tyler Munis (financial software) and EnerGov (permits and licensing software) products were not sufficient to meet citywide business needs, a consultant is being engaged to undertake an organization-wide reassessment of automation needs and business process improvement opportunities in these areas. The analysis will consider the capabilities of current

systems and recommend whether a single, integrated product or a distributed, "best of breed" approach should be undertaken to address organizational needs. (Funded by IT capital funds)

Highlights of 2015-2020 Projects:

- New finance, payroll and human resources system implementation
    - Complete the implementation of payroll and human resources modules of the Tyler Munis system (2015)
- Virtual server and storage infrastructure enhancements (2015)
- Ongoing implementation of document management implementation program (2015-2017)
- New permits, licensing and land records system implementation (2016)
- Replacement of security administration systems (2016)
- Asset and maintenance management software improvements (2016-2017)
- Incremental central telephone system hardware and software upgrades (2016-2019)

Relationship to Guiding Principles and Prioritization

CIP Guiding Principles:

The current IT Strategic Plan serves as the Master Plan for major, citywide automation initiatives over the planning horizon (mid-2009 through 2014). IT capital projects are integral to maintaining, supporting and enhancing city-wide business systems.

Prioritization:

Projects are further categorized using the city's business model approach to establish relative priorities. The comprehensive list of both completed and pending projects from the Plan is listed on the next page.

Figure 9-1: IT Strategic Plan Projects

IT Projects	Fiscally Constrained			Action			Vision		
	Essential	Desirable	Discretionary	Essential	Desirable	Discretionary	Essential	Desirable	Discretionary
1. Service Quality and Accessibility									
1.1 Develop eGovernment strategic plan		X							
1.2 Redesign the City's website				X					
1.3 Complete document management implementation				X					
2. IT Service and Decision Making Alignment									
2.1 Implement citywide IT governance	X								
2.2 Establish IT performance measures	X								
2.3 Create IT CIP fund	X								
2.4 Align IT charges with services	X								
2.5 Conduct financial management/ERP needs assessment					X				
2.6 Develop a document management implementation plan		X							
2.7 Adopt IT portfolio management						X			
2.8 Create a customer account representative position					X				
2.9 Centralize infrastructure and customer services functions	X								
2.10 Implement central IT service model enhancements				X					
3. Efficiency and Effectiveness									
3.1 Implement an integrated finance/HR system				X					
3.2 Implement citywide maintenance management automation				X					
3.3 Implement permit management				X					
4. Innovation									
4.1 Pilot a business intelligence system					X				
4.2 Create a plan for establishing a county/city GIS group		X							
5. Quality, Sustainable IT Infrastructure									
5.1 Migrate and optimize servers	X								
5.2 Complete replacing phone system with VoIP	X								
5.3 Conduct IT security audits/assessments					X				

A major update to the IT Strategic Plan is currently underway covering the period from 2015 to 2018.

Projects not in Master Plan:
The IT Strategic Plan serves as the department's master plan.

New Projects
N/A

Operation and Maintenance Impacts

Operation of IT systems is included in the department's operating budget. IT is participating in a citywide effort to analyze and assess replacement needs and funding structures, including a look

to how future technological changes and technology use behaviors may inform replacement charging models for the department's internal service funds.

Deferred Projects, Changes and Unfunded Needs

None

Unfunded Projects and Emerging Needs

Though critical, short-term technology investment needs are significantly aided by the one-time funding from the recent capital bond initiative, current annual IT CIP funding allocations of roughly $350k annually will not address the funding needs associated with new, emerging software-based automation opportunities that will continually arise. In addition, current ongoing CIP funding will not address the need to accumulate reserves for future replacements and/or expansion of critical enterprise software (e.g. finance and payroll) and departmental systems (e.g. police records management, parks and recreation registration, court case management and many others).

From a broader perspective, the Computer Replacement and Telecommunication internal service funds currently used to accumulate reserves for future IT infrastructure replacement (e.g. PCs, networks, servers, telephones, etc) are based on a funding model that only accounts for the replacement of current systems. As central and mobile computing infrastructure (e.g. mobile devices, wireless networks, virtualized servers, associated security systems), data storage, and use of cloud-based applications and data storage expand significantly over the next several years, we lack capital funding to address infrastructure capacity needs to sustain them.

A focus of the pending major update to the IT Strategic Plan (2015-2018) will include identification and costing of expanded automation and deferred capital replacement needs. At a basic level, it is anticipated that the updated Plan will move beyond planning for the needs of only enterprise systems (those impacting nearly all departments) by expanding to include the critical business and automation needs of individual departments – including current critical systems without future replacement funding strategies. The growth of electronic services, mobile computing, hardware and software virtualization and cloud computing (all of which the City is pursuing in current CIP projects or smaller tactical projects) will also be a key theme of the new Plan.

Table 9-1: 2015-2020 Funding Summary By Department

INFORMATION TECHNOLOGY

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Maintenance										
End User Device Replacement	$ -	$ 458,000	$ 458,000	$ 458,000	$ 458,000	$ 458,000	$ 458,000	$ 2,748,000	$ 458,000	$ -
Network Hardware Replacement	1,301,331	160,671	148,041	113,893	116,503	612,223	648,000	1,799,331	150,000	-
Security Administration	77,450	11,500	54,000	-	-	6,700	6,700	78,900	5,250	-
Server Admin Hardware Repalcement	767,000	615,000	10,500	-	81,000	35,000	740,000	1,481,500	25,500	-
VoIP Telephone System Replacement	633,000	-	133,000	-	-	500,000	-	633,000	-	
Data Backup and Disaster Recovery	129,000	-	-	-	44,000	85,000	-	129,000	-	-
Subtotal	$ 2,907,781	$ 1,245,171	$ 803,541	$ 571,893	$ 699,503	$ 1,696,923	$ 1,852,700	$ 6,869,731	$ 638,750	$ -
Total	**$ 2,907,781**	**$ 1,245,171**	**$ 803,541**	**$ 571,893**	**$ 699,503**	**$ 1,696,923**	**$ 1,852,700**	**$ 6,869,731**	**$ 638,750**	**$ -**

[This page is intentionally blank.]

Project Name: Data Backup and Disaster Recovery

Project at a Glance

Project Type:	Capital Maintenance		
Department:	Information Technology	**Subcommunity:**	System-wide
Project Number:		**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	
		CEAP Status:	

Project Description

The project reflects the hardware, software and support needed to ensure reliable high speed backup of files, databases and application stored on the city's enterprise servers and data storage sub-systems. Note that these systems are required not only for disaster preparedness and recovery purposes, but to meet legal records retention requirements.

No major changes are planned to this system until late 2018 / early 2019.

Please note there is also another project listed for this system which is included in the non-funded project category.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [ ] Achieves Community Sustainability goals
- [ ] Includes sufficient funding for operation and maintenance
- [x] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Planned changes to the system are subjected to the IT Change Control review process.

Relationship with Other Departments

City-wide Enterprise service supporting all city departments

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	**$129,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$129,000
Funding Total	($129,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Computer Replacement Fund	$0	$0	$0	$0	$44,000	$85,000	$0
Total Funding Plan	**$129,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $27,000 **Funding Source:** Computer Replacement Fund

Additional Annual O&M Description:

Operating costs for this system are reflective of the annual software maintenance fees for the backup software.

Project Name: End User Device Replacement

Project at a Glance

Project Type:	Capital Maintenance		
Department:	Information Technology	**Subcommunity:**	System-wide
Project Number:		**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	
		CEAP Status:	

Project Description

Funding for replacement of PC's, laptops, workgroup printers and scanners for the city's document management system system which are all heavily utilized by staff to meet the daily operational requirements of the city. Project includes replacement of end-user hardware on a regular basis at the end of it's useful life, independent of equipment failure or substandard performance. Pad devices are currently not included in our user device replacement cycle.

Relationship to Guiding Principles

- [ ] Consistent with Master Plans
- [ ] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [x] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [ ] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Relationship with Other Departments

City-wide Enterprise service supporting all city departments

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	

Unfunded Amount

Unfunded Amount

Project Cost Total	
Funding Total	($3,206,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Computer Replacement Fund	$458,000	$458,000	$458,000	$458,000	$458,000	$458,000	$458,000
Total Funding Plan	**$3,206,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** n/a

Additional Annual O&M Description:

Equipment is covered by manufactures warranty throughout lifecycle. No additional operating costs are incurred.

Project Name: Network Hardware Replacement

Project at a Glance

Project Type:	Capital Maintenance		
Department:	Information Technology	**Subcommunity:**	System-wide
Project Number:		**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	
		CEAP Status:	

Project Description

This is an ongoing project and includes the hardware and related software used to provide and support a reliable and secure high-speed data and voice communications infrastructure to connect City computing devices to internal data repositories and computing services, while supporting connectivity to the Internet and other external data resources and services.
Project involves maintenance and end of life equipment replacement.

Most elements of the network infrastructure have a useful life of six years. This is the maximum lifecycle recommended by the equipment vendor and industry best practices. From 2014 – 2018, approximately 10% of the city's network hardware will be replaced as part of on-going system maintenance plans. In 2019, nearly 50% of the system is due for replacement resulting in significant changes to the city's overall network infrastructure at that time.

Please note there is also an unfunded element to this system of $118,000 with corresponding annual O&M of $14,500, which will be reflected in the unfunded items section of the document.

Relationship to Guiding Principles

- [ ] Consistent with Master Plans
- [ ] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [x] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [ ] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Planned changes to the system are subjected to the IT Change Control review process.

Relationship with Other Departments

City-wide Enterprise service supporting all city departments.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	**$1,301,331**

Unfunded Amount

Unfunded Amount

Project Cost Total	$1,301,331
Funding Total	($1,949,331)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Computer Replacement Fund	$150,000	$160,671	$148,041	$113,893	$116,503	$612,223	$648,000
Total Funding Plan	**$1,949,331**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Computer Replacement Fund

Additional Annual O&M Description:

O&M costs related to funded portion of this project, are covered in the current budget.

Project Name: Security Administration

Project at a Glance

Project Type:	Capital Maintenance		
Department:	Information Technology	**Subcommunity:**	System-wide
Project Number:		**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	
		CEAP Status:	

Project Description

This is an ongoing program. Equipment used to provide and support network devices and software needed to ensure the city's network, server and computing infrastructure are secured against external Cyber-threats such as viruses, malware and hackers in compliance with FBI, CIP (Critical Infrastructure Protection) and PCI (Purchasing Card Industry) security standards. Project includes maintenance and end-of life-equipment replacement.

Minor replacements are planned during years 2014 and 2015, with a majority of the systems due for replacement during 2016. Planning of future enhancements will be included in the upcoming IT Strategic Plan redevelopment process.

Relationship to Guiding Principles

- [ ] Consistent with Master Plans
- [ ] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [x] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [ ] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

City-wide Enterprise service supporting all city departments.

Relationship with Other Departments

This is a new capital maintenance project to the CIP this year.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	**$77,450**

Unfunded Amount

Unfunded Amount

Project Cost Total	$77,450
Funding Total	($84,150)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Computer Replacement Fund	$5,250	$11,500	$54,000	$0	$0	$6,700	$6,700
Total Funding Plan	**$84,150**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Computer Replacement Fund

Additional Annual O&M Description:

Operating costs, including the maintenance and support contracts on the firewall hardware, are covered in the current budget.

Project Name: Server Admin Hardware Repalcement

Project at a Glance

Project Type:	Capital Maintenance		
Department:	Information Technology	**Subcommunity:**	System-wide
Project Number:		**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	
		CEAP Status:	

Project Description

This is an ongoing program. Hardware and related software necessary to provide and support the computing infrastructure that delivers critical services, including enterprise software applications (e.g. financial, payroll, permitting and licensing, electronic mail, etc.), critical departmental applications (e.g. police and fire records, court case management, recreation registration, etc.) enterprise database and data storage resources, internal/external web systems, and electronic document management repositories. Project includes maintenance and end of life equipment replacement.

Relationship to Guiding Principles

- [ ] Consistent with Master Plans
- [ ] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [x] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [ ] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

City-wide Enterprise service supporting all city departments.

Relationship with Other Departments

This is a new capital maintenance project to the CIP this year.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	**$767,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$767,000
Funding Total	($1,507,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Computer Replacement Fund	$25,500	$615,000	$10,500	$0	$81,000	$35,000	$740,000
Total Funding Plan	**$1,507,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:** Computer Replacement Fund

Additional Annual O&M Description:

Operating costs, including the support and maintenance payments on the server operating systems and other necessary licensesare covered in the current budget.

Project Name: VoIP Telephone System Replacement

Project at a Glance

Project Type:	Capital Maintenance		
Department:	Information Technology	**Subcommunity:**	System-wide
Project Number:		**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	
		CEAP Status:	

Project Description

This is an ongoing project and includes the end user hardware, server infrastructure and related software used to provide and support a reliable and secure phone system.

Project involves maintenance and end of life equipment replacement.

Most elements of the phone system have a useful life of six to nine years. This is the maximum lifecycle recommended by the equipment vendor and industry best practices. The system is scheduled for some hardware upgrades in 2016, and a major system replacement in 2019.

Relationship to Guiding Principles

- [ ] Consistent with Master Plans
- [ ] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [x] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [ ] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Planned changes to the system are subjected to the IT Change Control review process.

Relationship with Other Departments

City-wide Enterprise service supporting all city departments

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	**$633,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$633,000
Funding Total	($633,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Telecommunications Fund	$0	$0	$133,000	$0	$0	$500,000	$0
Total Funding Plan	**$633,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:** Telecommunications Fund

Additional Annual O&M Description:

O&M costs related to funded portion of this projec, are covered in the current budget.

[This page is intentionally blank.]

Funding Overview

Open Space and Mountain Parks' CIP projects are funded from two sources, the Open Space Fund and the Lottery Fund. Ninety two percent of Open Space Fund revenues derive from dedicated sales and use tax collections. There are three sales taxes that support the Open Space Fund: the 0.40% sales tax has no sunset; the 0.33% sales tax expires December 31, 2018; and the 0.15% sales tax expires December 31, 2019.

Open Space and Mountain Parks also expends Lottery Funds on CIP projects. The Lottery Fund derives its revenue from the Conservation Trust Fund. Lottery Funds are not restricted to OSMP.

Accomplishments and Highlights

Projects Completed in 2014:

- Land and Visitor Services
  - Anemone Loop Trail – Construct new trail on Anemone Hill and restore existing undesignated trails
  - Rebuilt Chapman Drive to repair rainfall damage.
  - Chautauqua Meadow – Rainfall damage repaired and implemented reroutes called for in the West Trail Study Area Plan
  - East Boulder and White Rocks Trail – Repaired flood damage.
  - Green Mountain Lodge access trail– Rerouted access because of flood damage on old trail.
  - Royal Arch – Repaired trail damage caused by rainfall/flood and/or rerouted the trail.
  - Sanitas Valley Trail – Rebuilt to repair flood damage.
  - South Boulder Creek Trail at South Boulder Road – Repaired the trail and installed new pedestrian bridge that will better convey high water.
  - Wittemyer – Finished construction of a new trail on perimeter of Wittemyer and restored existing undesignated trails.
  - Designed work on several trails – Seal Rock, Ranger, Saddle Rock, Green Mountain West Ridge, and Four Pines – in preparation for field work in 2015.
  - Gregory Canyon Trailhead Access – Removed and replaced damaged asphalt from access road
  - Flagstaff Summit – Designed work and developed and submitted grant

applications for funding.

- Completed construction of the Highway 93 underpass at the Community Ditch Trail.

- Ecological Systems
  - Forest Ecosystem Management Plan implementation – A number of forest thinning projects on OSMP land to restore forest health and help reduce the risk of wildfire on the western city boundary. Acquired $15,000 grant from the Colorado State Forest Service.
  - Integrated Pest Management – Manage weeds to comply with state weed laws, restore native plant communities and maintain biotic diversity on OSMP lands and controlled weed infestations from the 2013 flood.
  - Wildlife and fish habitat improvement projects – Habitat fencing, amphibian and prairie dog management, and stream and pond habitat enhancement.
  - Floodplain and riparian restoration of South Boulder Creek.
  - Riparian restoration of confluence of South Boulder Creek and Boulder Creek from impacts of 2013 flood.
  - The September 2013 flood impacted the creeks through this area by eroding and depositing sediment in the channel. This work will entail restoring stream bank and streambed structure, creating aquatic habitat and planting riparian trees and shrubs to create a sustainable riparian area.
- Cultural Resources
  - Weiser house – upgrades and repairs, including electrical and HVAC upgrades and new shingles on roof. The Weiser House is on the National Register of Historic Places.
  - Hunter-Kolb Farmhouse Rehabilitation – A historic structures assessment was completed and major repairs made to the house. The agriculture group plans to lease the house to a farming family.
  - Farmstead repairs/maintenance – Repairs and maintenance to the Lewis Farm and several other barns throughout the OSMP system were completed, including foundation repair, wood siding repair, glazing replacement, roof replacement, clean-up, masonry repair and painting.

Projects Expected for Completion in 2014:

- Land and Visitor Services
  - Almost all of the trail work planned for 2015 will be repairing trails that were damaged in the 2013 flood and thus are not listed here. This work will be done starting in April and be complete by October or November.
- Ecological Systems
  - South Boulder Creek Bridge downstream of South Boulder Road – Construct a pedestrian bridge to better manage neighborhood access to the South Boulder Creek Trail and reduce impacts to the riparian area from undesignated trial use.
  - Repair of South Boulder Creek-Boulder Creek confluence area impacted by the

September 2013 flood.

- Cultural Resources
  - Hartnagle Farmstead Rehabilitation – Historic Hartnagle Farmstead was begun in the late 1880s. The House and outbuildings are in disrepair, but because it is an ideal location and set-up for a small organic farm, OSMP plans to renovate the buildings and make them available for the agriculture program.
  - Foothills Nature Center rehabilitation – The FNC is in a building the city of Boulder considers historic and worthy of preservation. The house will need repairs and upgrades.

Hartnagle Barn before repairs.

Projects Starting in 2015, but Not Completed:

- Land and Visitor Services
  - None
- Ecological Systems
  - Restoration of South Boulder Creek riparian area and floodplain and of South Boulder Creek-Boulder Creek confluence area.
  - Native grassland restoration projects continue on selected parts of the OSMP system.
  - Monitoring projects are ongoing throughout the OSMP system to inform future management decisions.
- Cultural Resources
  - Continuation of farmstead repair and rehabilitation, particularly historic barns on the system.

Highlights of 2015-2020 Projects:

- Land and Visitor Services
  - Completion of rainfall and flood damage repairs to all trails and trailheads.
  - Completion of trail and trailhead projects called for in the West TSA Plan.
  - Completion of the North TSA Plan.
  - Implementation of the trail and trailhead projects called for in the North TSA Plan.
  - Completion of the East TSA Plan.
  - Completion of the South Boulder Creek in stream flow improvements in conjunction with the Gross Reservoir expansion.
  - Visitor Master Plan implementation and update.
- Ecological Systems
  - Forest Ecosystem Management Plan implementation
  - Grassland Ecosystem Management Plan implementation and update.

- Integrated Pest Management implementation
- Wildlife and fish habitat improvement projects
- Restoration Legacy Program implementation
- Installation of additional sediment containment basins on Flagstaff Drive.

- Cultural Resources
  - Continuation of farmstead repair and rehabilitation, particularly the historic barns on the system.
  - Explore opportunities for interpretative signs for cultural resources in system.

Relationship to Guiding Principles and Prioritization

CIP Guiding Principles:

All proposed projects in the 2015 – 2020 CIP are consistent with applicable guiding principles. Sufficient funds in the operating budget have been identified for ongoing maintenance and operations. Most projects in the proposed CIP go towards maintaining and improving existing assets. These projects are called out in the Visitor Master Plan, and/or the subsequent TSA Plans, the Forest Ecosystem Management Plan and the Grassland Ecosystem Management Plan. The projects add to the quality of life and visual appeal of the community that help to attract employment opportunities and sustain job retention in the Boulder Valley. Many of these projects improve the sustainability of our lands and the resources they support.

Cultural resource projects help to fulfill the city of Boulder's long term sustainability goals by upholding Boulder's Historic Preservation Ordinance (#4000 adopted 1974) which directs the city to "promote the public health, safety and welfare by protecting, enhancing, and perpetuating buildings, sites, and areas of the city reminiscent of past eras, events, and persons important in local, state, or national history or providing significant examples of architectural styles of the past…. to develop and maintain appropriate settings and environments for such buildings, sites, and areas to enhance property values, stabilize neighborhoods, promote tourist trade and interest, and foster knowledge of the city's living heritage."

Prioritization:

The over-riding factor in determining the priority of projects is the need to complete recovery from damage caused by the September, 2013 rainfall and floods and the direction given by City Council to implement the West TSA Plan as quickly as possible. Priority among the many flood related projects goes to infrastructure that suffered the most damage and experiences the highest use. Within the list of projects called for in the West TSA Plan, priority was given to projects that will have the most positive effect on resource protection and land sustainability within the system. Additionally, some projects were chosen due to their proximity to other large projects that are at the top of the priority list. The Open Space Board of Trustees directed that some projects be prioritized based on their smaller size and that neighborhoods were particularly interested in seeing these projects completed.

In addition, management plans establish the priority for projects.

Projects Not in Master Plans:
Establish an OSMP Facility Capital Replacement reserve to be used to fund major maintenance, upkeep and repair of facilities.

New Projects

- Establish and begin funding an OSMP Facility Capital Replacement reserve.
- Farmstead repairs throughout system.
- Agriculture Facilities Projects.
- Bear Canyon Road Flood Damage Repair and Mitigation.
- Boulder Creek and South Boulder Creek Confluence Area Riparian Restoration Flood Repair.
- Cultural Resource/Facility Restoration.
- Flagstaff Summit Improvements.
- Hartnagle House Restoration.
- South Mesa Road and Shanahan Ridge Trail Flood Repair.
- Restoration of Riparian and Wetland Habitat – Gregory Canyon Creek and Fancher Ponds Flood Repair.
- Royal Arch Trail Flood Repair.
- South Boulder Creek at Greenbelt Meadows Bridge.
- South Boulder Creek West Trail Flood Repair.
- Trail Repair (LF) – Lower Big Bluestem Trail Flood Repair.
- Viele House Foundation Repair.

Operation and Maintenance Impacts

As new and rerouted trails are built along with new trailheads, the need for operations and maintenance funds increases. The impact is slight in the near term and, in fact, may decrease since older infrastructure will be replaced with new. However, as trails and trailheads age they will need maintenance just as any aging facility does. It is anticipated additional funding will be required for operation and maintenance as the OSMP infrastructure expands.

Maintenance costs on the farmsteads will be needed to keep the buildings in usable condition.

Deferred Projects, Changes and Unfunded Needs

South Mesa trailhead interpretive sign project is unfunded. This project will be funded in 2014 should unexpended funds become available. Other deferred projects will be funded as future work plans are developed and funding is available.

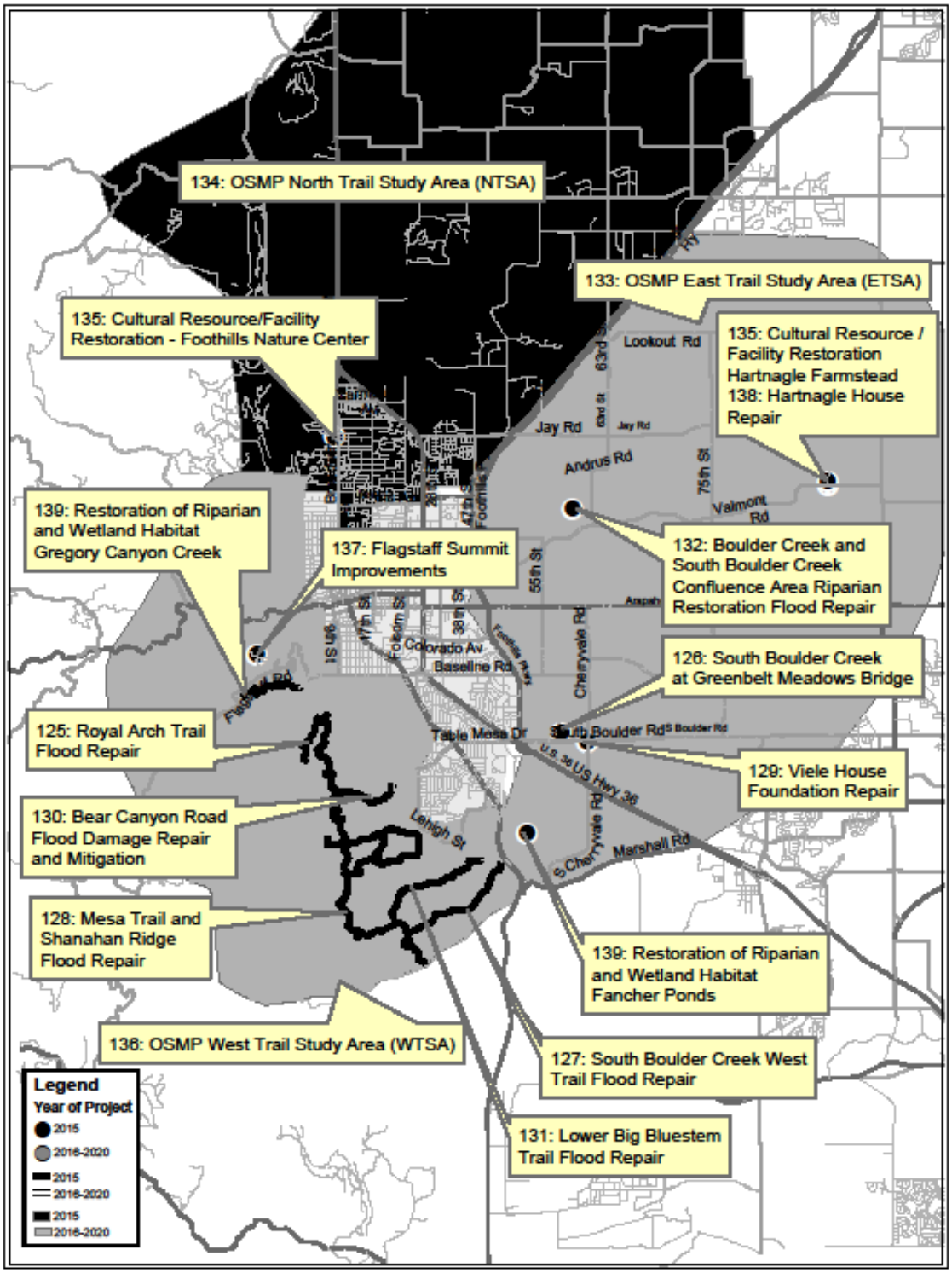
Table 10-1: 2015-2020 Funding Summary By Department

OPEN SPACE AND MOUNTAIN PARKS

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Enhancement										
Bear Canyon Road Flood Damage Repair and Mitigation	$ 150,000	$ 150,000	$ -	$ -	$ -	$ -	$ -	$ 150,000	$ -	$ -
Flagstaff Summit Improvements	250,000	250,000	-	-	-	-	-	250,000	-	-
OSMP North Trail Study Area (NTSA)	-	50,000	100,000	200,000	100,000	50,000	50,000	550,000	100,000	(650,000)
Restoration of Riparian and Wetland Habitat - Gregory Canyon Creek and Fancier Ponds Flood Repair	59,000	59,000	-	-	-	-	-	59,000	-	-
OSMP West Trail Study Area (WTSA)	-	-	550,000	450,000	600,000	50,000	50,000	1,700,000	1,119,486	(2,819,486)
Visitor Infrastructure - System Wide	-	-	250,000	200,000	200,000	500,000	500,000	1,650,000	350,000	-
OSMP East Trail Study Area (ETSA)	300,000	-	-	50,000	50,000	200,000	200,000	500,000	-	(200,000)
Subtotal	$ 759,000	$ 509,000	$ 900,000	$ 900,000	$ 950,000	$ 800,000	$ 800,000	$ 4,859,000	$ 1,569,486	$ (3,669,486)
Capital Maintenance										
Agriculture Facilities Projects	$ -	$ 100,000	$ 110,000	$ 110,000	$ 120,000	$ 120,000	$ 130,000	$ 690,000	$ -	$ (690,000)
Boulder Creek and South Boulder Creek Confidence Area Restoration Flood Repair	150,000	150,000	-	-	-	-	-	150,000	-	-
Cultural Resource/Facility Restoration	60,000	60,000	-	-	-	-	-	60,000	-	-
Hartnagle House Restoration	65,000	65,000	-	-	-	-	-	65,000	-	-
Lower Big Bluestem Trail Flood Repair	205,300	205,300	-	-	-	-	-	205,300	-	-
Royal Arch Trail Flood Repair	150,000	150,000	-	-	-	-	-	150,000	-	-
South Boulder Creek West Trail Flood Repair	100,000	100,000	-	-	-	-	-	100,000	-	-
South Mesa Road and Shanahan Ridge Trail	544,700	544,700	-	-	-	-	-	544,700	-	-
Viele House Foundation Repair	80,000	80,000	-	-	-	-	-	80,000	-	-
OSMP - Historical Structures & Trails - Stabilization and Restoration	-	-	355,300	355,300	355,300	355,300	355,300	1,776,500	686,000	-
Subtotal	$ 1,355,000	$ 1,455,000	$ 465,300	$ 465,300	$ 475,300	$ 475,300	$ 485,300	$ 3,821,500	$ 686,000	$ (690,000)
Land and Asset Acquisition										
Mineral Rights Acquisition	$ -	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 600,000	$ 100,000	$ -
OSMP Real Estate Acquisition Program	-	5,400,000	5,400,000	5,400,000	5,400,000	5,400,000	5,400,000	32,400,000	5,400,000	-
Water Rights Acquisition	-	200,000	200,000	200,000	200,000	200,000	200,000	1,200,000	200,000	-
Subtotal	$ -	$ 5,700,000	$ 5,700,000	$ 5,700,000	$ 5,700,000	$ 5,700,000	$ 5,700,000	$ 34,200,000	$ 5,700,000	$ -
New Capital Project										
South Boulder Creek at Greenbelt Meadows	$ 150,000	$ 150,000	$ -	$ -	$ -	$ -	$ -	$ 150,000	$ -	$ -
South Boulder Creek Instream Flow	-	150,000	2,000,000	-	-	-	-	2,150,000	250,000	(2,400,000)
Subtotal	$ 150,000	$ 300,000	$ 2,000,000	$ -	$ -	$ -	$ -	$ 2,300,000	$ 250,000	$ (2,400,000)
Total	**$ 2,264,000**	**$ 7,964,000**	**$ 9,065,300**	**$ 7,065,300**	**$ 7,125,300**	**$ 6,975,300**	**$ 6,985,300**	**$ 45,180,500**	**$ 8,205,486**	**$ (6,759,486)**

City of Boulder Captial Improvement Projects, 2015 - 2020

Open Space and Mountain Parks



Project Name: Agriculture Facilities Projects

Project at a Glance

Project Type:	Capital Maintenance		
Department:	Open Space & Mountain Parks	**Subcommunity:**	Area III
Project Number:	843016	**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	

Project Description

This project is proposed for capital maintenance related to the repair, replacement, or renovation of the existing OSMP agricultural infrastructure. This infrastructure is important for OSMP to support local food production and local agricultural activities. Projects will include agricultural fence replacement and renovation, and water infrastructure replacement and renovation. Eight to 15 fencing or irrigation infrastructure renovation projects will be selected for implementation each year. These projects will be durable assets with a useful life of 20 – 50 years.

Relationship to Guiding Principles

- [ ] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [ ] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

There is little public process required for these capital maintenance projects. The infrastructure is already present and these funds will generally be used to replace the existing infrastructure with facilities of similar design and function. Local ditch companies, water users and property neighbors will be consulted as necessary.

Relationship with Other Departments

The City of Boulder Utilities may be involved with some water infrastructure projects as they are often shareholders in the same local ditch companies as OSMP

Change from Past CIP

This is a new project in the OSMP CIP.

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	

Unfunded Amount

Unfunded Amount

Project Cost Total	
Funding Total	($690,000)
Total Unfunded	**($690,000)**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Open Space Fund	$0	$100,000	$110,000	$110,000	$120,000	$120,000	$130,000
Total Funding Plan	**$690,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Open Space Fund

Additional Annual O&M Description:

OSMP currently allocates $25,000 per year for fencing and water infrastructure maintenance and repairs

Project Name: Bear Canyon Road Flood Damage Repair and Mitigation

Project at a Glance

Project Type:	Capital Enhancement		
Department:	Open Space & Mountain Parks	**Subcommunity:**	Area III
Project Number:	730001	**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	130
		CEAP Status:	

Project Description

Required as a result of flood related damages to the facility, the project objectives are to:
•Restore the facility to pre-flood, capacity and function in accordance with applicable standards and best management practices for low volume roads.
•Stabilize and enhance adjacent wetlands and wildlife habitat at the "Bear Canyon Pool" site.
•Reduce the potential for damage by future disaster events with cost effective mitigation measures.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [ ] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Plans will be presented to OSBT for public and Board comment.

Relationship with Other Departments

Coordination with the following stakeholders is anticipated: US Government, NCA, Public Service Co of Colorado (Xcel Energy)

Change from Past CIP

This is a new project - a result of the 2013 Flood.

Estimated Total Cost

Project Cost

Planning	$30,000
Acquisition	
Construction	$120,000
Total Project Cost	**$150,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$150,000
Funding Total	($150,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Lottery Fund	$0	$150,000	$0	$0	$0	$0	$0
Total Funding Plan	**$150,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $2,000 **Funding Source:** Open Space Fund

Additional Annual O&M Description:

OSMP allocate funds each year for maintenance

Project Name: Boulder Creek and South Boulder Creek Confluence Area Riparian Restoration Flood Repair

Project at a Glance

Project Type:	Capital Maintenance		
Department:	Open Space & Mountain Parks	**Subcommunity:**	Area III
Project Number:	843006	**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	132
		CEAP Status:	

Project Description

This project will restore riparian habitat in the Boulder Creek and South Boulder Creek confluence area. The September 2013 flood impacted the creeks through this area by eroding banks and depositing sediment in the channel. The work will entail restoring streambank and streambed structure, creating aquatic habitat and planting riparian trees and shrubs to create a sustainable riparian area.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] *Maximizes efficiency and demonstrates positive cost/benefit*
- [ ] Fund includes sufficient reserves
- [ ] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

This project will be discussed at an OSBT public meeting in 2014

Relationship with Other Departments

None

Change from Past CIP

This is a new project - a result of the 2013 Flood.

Estimated Total Cost

Project Cost

Planning	$30,000
Acquisition	
Construction	$120,000
Total Project Cost	**$150,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$150,000
Funding Total	($150,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Open Space Fund	$0	$150,000	$0	$0	$0	$0	$0
Total Funding Plan	**$150,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Open Space Fund

Additional Annual O&M Description:

None

Project Name: Cultural Resource/Facility Restoration

Project at a Glance

Project Type:	Capital Maintenance		
Department:	Open Space & Mountain Parks	**Subcommunity:**	Area III
Project Number:	740001	**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	135
		CEAP Status:	

Project Description

Cultural resource and facility rehabilitation.

The Hartnagle farmstead outbuildings have been unused for many years and major rehabilitation is needed to make them usable for the farm tenants that OSMP plans to have leasing the property.

The Foothills Nature Center is in a small house that the City of Boulder believes to be historic. It needs major repair and upgrades to bring it up to good facility standards.

Hartnagle Outbuildings - Stabilization, repair and exterior improvements = $30,000.00
Foothills Nature Center - Repair improvement = $30,000.00

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [ ] Achieves Community Sustainability goals
- [ ] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The neighborhood adjacent to the Nature Center will need to be informed of the plans for the entire Foothills Nature Center campus.

Relationship with Other Departments

Depends upon the scope and location of the project. Viele/Van Vleet repair will go through LPAB and County HPAB since it is in both city and county; other projects will go through County for review depending upon scope of project.

Change from Past CIP

This is a new project in the OSMP CIP.

Estimated Total Cost

Project Cost

Planning	$5,000
Acquisition	
Construction	$55,000
Total Project Cost	**$60,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$60,000
Funding Total	($60,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Open Space Fund	$0	$60,000	$0	$0	$0	$0	$0
Total Funding Plan	**$60,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $2,000 **Funding Source:** Open Space Fund

Additional Annual O&M Description:

OSMP allocates funds each year for maintenance.

Project Name: Flagstaff Summit Improvements

Project at a Glance

Project Type:	Capital Enhancement		
Department:	Open Space & Mountain Parks	**Subcommunity:**	Area III
Project Number:	843067	**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	137
		CEAP Status:	

Project Description

Make the following improvements to facilities at the Summit of Flagstaff: Improve roads and traffic flow; increase amount and efficiency of parking; improve outhouses; improve access to buildings ensuring ADA access compliance, improve drainage.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [ ] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Plans will be presented at an Open House and to OSBT for public and Board comment.

Relationship with Other Departments

Coordination with Boulder County will be required for traffic flow. Local and county historical organizations will be involved in the planning process.

Change from Past CIP

This is a new project in the OSMP CIP.

Estimated Total Cost

Project Cost

Planning	$50,000
Acquisition	
Construction	$200,000
Total Project Cost	**$250,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$250,000
Funding Total	($250,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Open Space Fund	$0	$250,000	$0	$0	$0	$0	$0
Total Funding Plan	**$250,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $4,000 **Funding Source:** Open Space funds and a grant to be applied for.

Additional Annual O&M Description:

OSMP allocates funds each year for maintenance.

Project Name: Hartnagle House Restoration

Project at a Glance

Project Type:	Capital Maintenance		
Department:	Open Space & Mountain Parks	**Subcommunity:**	Area III
Project Number:	740002	**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	138
		CEAP Status:	

Project Description

The Hartnagle House was built in the early 1800s and was part of a homestead begun by early Boulder pioneers. It has been vacant for many years and will need major rehabilitation before it can be used as a residence for farmers who will use the outbuildings for their organic farm business.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [ ] Achieves Community Sustainability goals
- [ ] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

NA

Relationship with Other Departments

Any repairs to the Hartnagle Homestead which needs a building permit will go through County HPAB.

Change from Past CIP

This is a new project in the OSMP CIP.

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	$65,000
Total Project Cost	**$65,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$65,000
Funding Total	($65,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Open Space Fund	$0	$65,000	$0	$0	$0	$0	$0
Total Funding Plan	**$65,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $2,000 **Funding Source:** Open Space Fund

Additional Annual O&M Description:

OSMP Allocates funds each year for maintenance,

Project Name: Lower Big Bluestem Trail Flood Repair

Project at a Glance

Project Type:	Capital Maintenance		
Department:	Open Space & Mountain Parks	**Subcommunity:**	Area III
Project Number:	730002	**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	131
		CEAP Status:	

Project Description

Repair flood damage to Lower Big Bluestem trail.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [ ] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Since this is a maintenance project, no public process is necessary.

Relationship with Other Departments

No other city department has an interest in this road. OSMP will be coordinating with Xcel Energy whose maintenance staff use the road to access some of their facilities.

Change from Past CIP

This is a new project - a result of the 2013 Flood.

Estimated Total Cost

Project Cost

Planning	$20,000
Acquisition	
Construction	$185,300
Total Project Cost	**$205,300**

Unfunded Amount

Unfunded Amount

Project Cost Total	$205,300
Funding Total	($205,300)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Lottery Fund	$0	$205,300	$0	$0	$0	$0	$0
Total Funding Plan	**$205,300**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Open Space Funds

Additional Annual O&M Description:

OSMP allocates funds each year for maintenance

Project Name: Mineral Rights Acquisition

Project at a Glance

Project Type:	Land and Asset Acquisition		
Department:	Open Space & Mountain Parks	**Subcommunity:**	System-wide
Project Number:	935000	**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	

Project Description

This on-going program provides funding to purchase underlying mineral interests from private owners or others as they become available on the real estate market. Many of these interests in minerals, gas, oil and aggregates were severed from the lands before properties were purchased by the city and could cause future management issues. Funds also provide for research, mapping and analyzing potential acquisitions. This project is for an ongoing funding program. In 2015, $100,000 will be allocated for acquisition of mineral rights. The Mineral Rights Acquisition program provides funding to purchase underlying minerals as they become available. No mineral rights have been acquired in recent years that have been purchased separate from land purchases because of unavailability on the market. Funds not expended in one year are carried over to the next. In 2014, $361,184 of unexpended mineral rights acquisition funds were carried over from 2013 to 2014. In addition, should water rights or real property become available to purchase and funds allocated for that purpose are insufficient, mineral rights acquisition funds may be utilized to make up the deficiency. The definition of a CIP project includes "the purchase of the physical assets of the community". By purchasing the rights to the mineral, the city is purchasing a physical asset.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] *Maximizes efficiency and demonstrates positive cost/benefit*
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Annual funding is approved by both the Open Space Board of Trustees and City Council.

Relationship with Other Departments

The Open Space & Mountain Parks department works cooperatively with other city departments, primarily Parks and Recreation, Utilities and Transportation. The department also works with and promotes inter-governmental cooperation with national, state and local conservation and Open Space programs, such as Boulder County Open Space, Jefferson County Open Space, Louisville, Lafayette and Longmont, Colorado Open Space Alliance (COSA), GOCO, Colorado Department of Natural Resources, CDOW and others.

Change from Past CIP

No Changes.

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	

Unfunded Amount

Unfunded Amount

Project Cost Total	
Funding Total	($700,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Open Space Fund	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000
Total Funding Plan	**$700,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Open Space Fund

Additional Annual O&M Description:

Included in annual appropriations for operations

Project Name: OSMP - Historical Structures & Trails - Stabilization & Restoration

Project at a Glance

Project Type:	Capital Maintenance		
Department:	Open Space & Mountain Parks	**Subcommunity:**	Area III
Project Number:	730000	**BVCPArea:**	Area III
CEAP Required:	Yes	**Map Number:**	0
		CEAP Status:	

Project Description

Many historic structures and visitor infrastructure features on OSMP are in need of stabilization, reclamation, rehabilitation or replacement. Focus for 2014 will be on structures in the West Trail Study Area (WTSA). This will be the second year of a planned seven year implementation period for projects identified in the WTSA Plan. Historic site assessments and related stabilization, reclamation and rehabilitation will be conducted on historic structures on Flagstaff Summit and other areas in the WTSA area. In addition, major maintenance and restoration projects will be completed on the historic trails system that was largely constructed by the Civilian Conservation Corps (CCC) or by citizen use. Additionally, renovation of various trail heads will be undertaken. Related efforts will continue across this landscape over the planning period. This project is for an ongoing funding program. Projects worked on in 2013 included interpretive signs to highlight area's history per the West Trail Study Area Plan including the South Mesa Trailhead and Flagstaff cultural districts. Projects anticipated for 2015 and beyond include Viele House basement repair/mitigation; Hartnagle House repair/stabilization; interpretive signs for the Flagstaff Historic Cultural District; and repair/stabilize historic/cultural structures and sites as necessary. For 2015, individual project sheets have been prepared for each project.

Relationship to Guiding Principles

- ☑ Consistent with Master Plans
- ☑ Achieves Community Sustainability goals
- ☑ Includes sufficient funding for operation and maintenance
- ☐ Maintains and enhances city's business systems
- ☑ Provides capacity and flexibility in long term planning
- ☑ Sustains or improves existing assets
- ☑ Maximizes efficiency and demonstrates positive cost/benefit
- ☐ Fund includes sufficient reserves
- ☐ Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Projects are approved by the OSBT through the public process. Projects whose scope requires a CEAP are also approved by City Council under the CEAP call-up provision. In addition, the public has input via email and public meetings in the trail study area planning process.

Relationship with Other Departments

Where appropriate OSMP coordinates with City of Boulder Parks and Recreation, County transportation and CDOT concerning access issues in this area. In addition, for this project OSMP will coordinate with Boulder County Planning, city and county historic preservation staff.

Change from Past CIP

No Changes. Two previous CIP's (Bear Canyon & L. Big Blue) fund from Lottery.

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	

Unfunded Amount

Unfunded Amount

Project Cost Total	
Funding Total	($2,462,500)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Lottery Fund	$686,000	$0	$355,300	$355,300	$355,300	$355,300	$355,300
Total Funding Plan	**$2,462,500**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $2,000 **Funding Source:** Open Space Fund

Additional Annual O&M Description:

Open Space & Mountain Parks allocates funds from its operating budget each year for maintenance.

Project Name: OSMP East Trail Study Area (ETSA)

Project at a Glance

Project Type:	Capital Enhancement		
Department:	Open Space & Mountain Parks	**Subcommunity:**	Area III
Project Number:	843080	**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	133
		CEAP Status:	

Project Description

The ETSA contains approximately 10,900 acres and includes the eastern quadrant of the Boulder Valley and extends from SH 119 / Diagonal south to SH 36. It includes the Dry Creek, Whiterocks and tallgrass Prairie East sub-areas. The Plan will delineate a small number of new trails, designation and major maintenance for some undesignated trails and closure and reclamation of other undesignated trails, trail head improvements and upgraded and/or additional regulatory, way-finding and interpretive signs. The Plan will be implemented starting in 2019 with full implementation taking up to ten years. In 2014, $0 will be spent but full implementation may cost as much as $500,000.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [ ] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

It has not been determined, at this time, how the ETSA Plan will be developed. In any case, there will be ample opportunity for the public to give input via email and public meetings.

Relationship with Other Departments

Where appropriate OSMP coordinates with City of Boulder Parks and Recreation, Boulder County Transportation and CDOT concerning access issues to this area.

Change from Past CIP

No Changes.

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	**$300,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$300,000
Funding Total	($500,000)
Total Unfunded	**($200,000)**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Open Space Fund	$0	$0	$0	$50,000	$50,000	$200,000	$200,000
Total Funding Plan	**$500,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $2,000 **Funding Source:** Open Space Fund

Additional Annual O&M Description:

Monitor, maintain,rehabilitate trails when needed

Project Name: OSMP North Trail Study Area (NTSA)

Project at a Glance

Project Type:	Capital Enhancement		
Department:	Open Space & Mountain Parks	**Subcommunity:**	Area III
Project Number:	843070	**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	134
		CEAP Status:	

Project Description

The NTSA encompasses approximately 9,500 acres and includes the North Foothills area north of Lee Hill Road and the Boulder Valley Ranch area extending east to SH 119 / Diagonal. The Plan will delineate a small number of new trails, designation and major maintenance for some undesignated trails and closure and reclamation of other undesignated trails, trail head improvements and upgraded and/or additional regulatory, way-finding and interpretive signs. The Plan will be completed in 2015 with implementation beginning in 2016 taking up to ten years to complete.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [ ] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

It has not been determined, at this time, how the NTSA Plan will be developed. In any case, there will be ample opportunity for the public to give input via email and public meetings.

Relationship with Other Departments

Where appropriate OSMP coordinates with City of Boulder Parks and Recreation, Boulder County Transportation and CDOT concerning access issues to this area.

Change from Past CIP

No Changes.

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	

Unfunded Amount

Unfunded Amount

Project Cost Total	
Funding Total	($650,000)
Total Unfunded	**($650,000)**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Open Space Fund	$100,000	$50,000	$100,000	$200,000	$100,000	$50,000	$50,000
Total Funding Plan	**$650,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $2,000 **Funding Source:** Open Space Fund

Additional Annual O&M Description:

Monitor, maintain, rehabilitate trails when needed

Project Name: OSMP Real Estate Acquisition Program

Project at a Glance

Project Type:	Land and Asset Acquisition		
Department:	Open Space & Mountain Parks	**Subcommunity:**	System-wide
Project Number:	720000	**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	

Project Description

This project is the acquisition of additional acres of open space, subject to available funding, within the Open Space and Mountain parks acquisition plan area as approved by the OSBT and City Council. Funding is provided from the projected restricted Open Space sales tax revenue. The project includes funding for the acquisitions, surveys, appraisals, professional fees and other related acquisition and immediate management needs. This project is for an ongoing funded program. In 2015, $5,400,000 is allocated to acquisition of real property. During 2014, the Berman Brothers and Dagle properties were purchased. These acquisitions met the following open space goals: preservation of natural areas, water resources and land for passive recreation; utilization of land to prevent encroachment on floodplains; and preservation of land for its contribution to the quality of life of the community. Management costs are budgeted in the operating budget of OSMP.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [ ] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

All acquisitions are presented to the Open Space Board of Trustees and require approval by City Council.

Relationship with Other Departments

The Open Space & Mountain Parks department works cooperatively with other City of Boulder Departments, primarily Parks and Recreation, Greenways, Transportation, Utilities and Planning. The department also works with and promotes inter-governmental cooperation with national, state and local conservation and Open Space programs, such as Boulder County Open Space, Jefferson County Open Space, Louisville, Lafayette, Superior, Longmont, Colorado Open Space Alliance (COSA), GOCO, Colorado Dept of Natural Resources, CDOW and others including the Trust for Public Lands, The Conservation Fund and The Nature Conservancy.

Change from Past CIP

No Changes.

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	

Unfunded Amount

Unfunded Amount

Project Cost Total	
Funding Total	($37,800,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Open Space Fund	$5,400,000	$5,400,000	$5,400,000	$5,400,000	$5,400,000	$5,400,000	$5,400,000
Total Funding Plan	**$37,800,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Open Space Fund

Additional Annual O&M Description:

OSMP maintenance costs are primarily related to visitation and visitor infrastructure. Acquisition of land does not necessarily increase operating costs at a significant level. Immediate needs are addressed with CIP acquisition funds. These needs are identified to Council at the time the acquisition is approved. Visitor infrastructure improvements are identified in the respective TSA plan. Funding for these improvements is allocated from OSMP's visitor infrastructure CIP. Operating costs are allocated from the OSMP operating budget. Neither the VI CIP allocation nor operating budget necessitate significant increases year to year.

Project Name: OSMP West Trail Study Area (WTSA)

Project at a Glance

Project Type:	Capital Enhancement		
Department:	Open Space & Mountain Parks	**Subcommunity:**	Area III
Project Number:	843060	**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	136
		CEAP Status:	

Project Description

The WTSA encompasses approximately 11,300 acres and lies west of the city limits and extends from Eldorado Springs Drive north to Lee Hill Road. The Plan for this TSA has been adopted by City Council. The adopted plan lists over 100 projects including new trails, designation and major maintenance for some undesignated trails and closure and reclamation of other undesignated trails, trail head improvements and upgraded and/or additional regulatory, way-finding and interpretive signs and restoration of both areas and trails. The implementation of the plan is scheduled to be done over a 7 year period. It was started in 2012. In 2014, $500,000 will be spent on over 10 trail and trailhead projects. Among the over ten individual tasks included in this project are: Redrocks Trail Improvements, Repair Amphitheater Trail, Rework Flagstaff Trail approaches to Flagstaff Drive, Redesign Fern Canyon, Shadow Canyon and Mesa junction and Reroute Long's Canyon. Funding is identified on individual projects sheets.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [ ] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The WTSA Plan had a large amount of public input during its development by the Community Collaborative Group (CCG). In addition considerable public input was taken via email and public meetings that led to its adoption. In addition, each major trail project will include additional opportunities for public input on that particular project.

Relationship with Other Departments

Where appropriate OSMP coordinates with City Parks and Recreation, County transportation and CDOT concerning access issues to this area.

Change from Past CIP

Specific projects are being funded from Lottery allocations in 2015.

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	

Unfunded Amount

Unfunded Amount

Project Cost Total	
Funding Total	($2,819,486)
Total Unfunded	**($2,819,486)**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Open Space Fund	$1,119,486	$0	$550,000	$450,000	$600,000	$50,000	$50,000
Total Funding Plan	**$2,819,486**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $2,000 **Funding Source:** Open Space Fund

Additional Annual O&M Description:

Monitor, maintain, rehabilitate trails when needed

Project Name: Restoration of Riparian and Wetland Habitat – Gregory Canyon Creek and Fancher Ponds Flood Repair

Project at a Glance

Project Type:	Capital Enhancement		
Department:	Open Space & Mountain Parks	**Subcommunity:**	Area III
Project Number:	843007	**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	139
		CEAP Status:	

Project Description

This project will restore habitat for Northern Leopard Frogs and riparian habitat impacted by the September 2013 flood. Fancher Ponds will be improved to better support the conservation of a frog species whose populations are declining across its range. Gregory Canyon Creek was severely eroded during the flood and requires restoration to improve hydrologic and ecological functioning to the creek.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [ ] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

This project will be discussed at an OSBT public meeting in 2014.

Relationship with Other Departments

None

Change from Past CIP

This is a new project - a result of the 2013 Flood.

Estimated Total Cost

Project Cost

Planning	$8,000
Acquisition	
Construction	$51,000
Total Project Cost	**$59,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$59,000
Funding Total	($59,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Open Space Fund	$0	$59,000	$0	$0	$0	$0	$0
Total Funding Plan	**$59,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Open Space Fund

Additional Annual O&M Description:

None

Project Name: Royal Arch Trail Flood Repair

Project at a Glance

Project Type:	Capital Maintenance		
Department:	Open Space & Mountain Parks	**Subcommunity:**	Area III
Project Number:	843066	**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	125
		CEAP Status:	

Project Description

Due to damage incurred during the September, 2013 rainfall event, at least three sections of this trail were either partially or completely washed away during the extreme rainfall event in September, 2013. Each of these sections will need considerable repair work or will need to have a rerouted trail established to go around the washed away section.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [ ] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Plans will be presented to OSBT for public and Board comment. If the reroute option is pursued, a more extensive public process including public open houses will be followed. Climbing organizations (BCC FCC) and the US Fish and Wildlife agency will be invited for comment.

Relationship with Other Departments

None

Change from Past CIP

This is a new project - a result of the 2013 Flood.

Estimated Total Cost

Project Cost

Planning	$10,000
Acquisition	
Construction	$140,000
Total Project Cost	**$150,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$150,000
Funding Total	($150,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Open Space Fund	$0	$150,000	$0	$0	$0	$0	$0
Total Funding Plan	**$150,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $10,000 **Funding Source:** Open Space Fund

Additional Annual O&M Description:

OSMP allocates funds each year for maintenance

Project Name: South Boulder Creek at Greenbelt Meadows Bridge

Project at a Glance

Project Type:	New Capital Project		
Department:	Open Space & Mountain Parks	**Subcommunity:**	Area III
Project Number:	843008	**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	126
		CEAP Status:	

Project Description

A pedestrian bridge will be built to better serve the Greenbelt Meadows neighborhood adjacent to South Boulder Creek. The bridge will cross South Boulder Creek and connect the South Boulder Creek Trail with the neighborhood. This will provide a much needed access location for the community, eliminate undesignated trails on the west side of the creek and reduce impacts from dogs and their guardians to the riparian area.

Relationship to Guiding Principles

- ☐ Consistent with Master Plans
- ☑ Achieves Community Sustainability goals
- ☑ Includes sufficient funding for operation and maintenance
- ☐ Maintains and enhances city's business systems
- ☐ Provides capacity and flexibility in long term planning
- ☑ Sustains or improves existing assets
- ☐ Maximizes efficiency and demonstrates positive cost/benefit
- ☐ Fund includes sufficient reserves
- ☐ Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Outreach to the neighborhood and trail users in the area will occur via public meetings. The project will also be discussed at a public OSBT meeting.

Relationship with Other Departments

City of Boulder Utilities will be involved with floodplain issues and Greenways trail issues.

Change from Past CIP

This is a new project - a result of the 2013 Flood.

Estimated Total Cost

Project Cost

Planning	$40,000
Acquisition	$75,000
Construction	$35,000
Total Project Cost	**$150,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$150,000
Funding Total	($150,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Open Space Fund	$0	$150,000	$0	$0	$0	$0	$0
Total Funding Plan	**$150,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Open Space Fund

Additional Annual O&M Description:

Bridge maintenance will occur through the OSMP facilities management program

Project Name: South Boulder Creek Instream Flow

Project at a Glance

Project Type:	New Capital Project		
Department:	Open Space & Mountain Parks	**Subcommunity:**	Area III
Project Number:	843005	**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	

Project Description

This project implements an Intergovernmental Agreement (IGA) to establish and operate a mitigation plan to address aquatic resource impacts from an expansion of Gross Reservoir. Partners in the IGA include the City of Boulder, Denver Water and the City of Lafayette. The IGA creates a permanent 5,000 acre feet storage "environmental pool" to implement a year-round instream flow program for South Boulder Creek. In order to use the water in this "environmental pool" for instream flows, several ditch diversion structures need to be built on South Boulder Creek. These project components include the design and construction of diversion dam bypass structures to pass water down the creek and several stream gauges to administer instream flow waters. These structures are estimated to cost $400,000 with $150,000 set aside in 2013, $100,000 in 2014 and $150,000 in 2015. Denver Water is contributing approximately $4 million and Lafayette is contributing approximately $2.4 million toward the environmental pool. The project completion date is based on Denver Water's projection that it will begin construction of the expanded reservoir in 2016. This project is ongoing through 2016 at which point Gross reservoir is to be expanded and the City of Boulder's portion of the Gross Reservoir enlargement costs will be $2,000,000. Total CIP project cost for this project is $2,400,000.

Relationship to Guiding Principles

- ☑ Consistent with Master Plans
- ☑ Achieves Community Sustainability goals
- ☑ Includes sufficient funding for operation and maintenance
- ☐ Maintains and enhances city's business systems
- ☑ Provides capacity and flexibility in long term planning
- ☑ Sustains or improves existing assets
- ☑ Maximizes efficiency and demonstrates positive cost/benefit
- ☐ Fund includes sufficient reserves
- ☑ Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

This item was heard by Boulder City Council and included public participation on January 5, 2010. Boulder City Council had a second public hearing for this project on February 16, 2010 where it approved the IGA's initiating this project.

Relationship with Other Departments

Open Space and Mountain Parks is working closely with Public Works on this. Public Works plans to line Wittemeier Ponds as its contribution to the project. Public Works will also use Colorado Big Thompson (CBT) units it has to help fill the environmental pool. Other partners for this project include Denver Water and the City of Lafayette.

Change from Past CIP

No Changes.

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	

Unfunded Amount

Unfunded Amount

Project Cost Total	
Funding Total	($2,400,000)
Total Unfunded	**($2,400,000)**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Open Space Fund	$250,000	$150,000	$2,000,000	$0	$0	$0	$0
Total Funding Plan	**$2,400,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:**

Additional Annual O&M Description:

Project Name: South Boulder Creek West Trail Flood Repair

Project at a Glance

Project Type:	Capital Maintenance		
Department:	Open Space & Mountain Parks	**Subcommunity:**	Area III
Project Number:	843065	**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	127
		CEAP Status:	

Project Description

This trail was severely eroded in the September, 2013 rainfall event. While the trail is open to the public, it is so badly damaged that most users are not staying on the trail and are creating undesignated parallel trails. To prevent further degradation of the adjacent natural resources it is important that this trail be repaired to pre-flood conditions.

Relationship to Guiding Principles

- [ ] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [ ] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No public process is planned.

Relationship with Other Departments

Local fire, law enforcement and rescue agencies use the lower part of the trail for access into the area along with the City of Louisville Water Department.

Change from Past CIP

This is a new project - a result of the 2013 Flood.

Estimated Total Cost

Project Cost

Planning	$5,000
Acquisition	
Construction	$95,000
Total Project Cost	**$100,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$100,000
Funding Total	($100,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Open Space Fund	$0	$100,000	$0	$0	$0	$0	$0
Total Funding Plan	**$100,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $1,000 **Funding Source:** Open Space Fund

Additional Annual O&M Description:

OSMP allocates funds each year for maintenance

Project Name: South Mesa Road and Shanahan Ridge Trail Flood Repair

Project at a Glance

Project Type:	Capital Maintenance		
Department:	Open Space & Mountain Parks	**Subcommunity:**	Area III
Project Number:	843068	**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	128
		CEAP Status:	

Project Description

Each of these trails was severely eroded in the September, 2013 rainfall event. They are all in the same area of the OSMP system and are connected to each other so it makes sense to repair all of them at the same time. This system of trails provides routes for emergency fire and medical access.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [ ] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Plans will be presented to OSBT for public and Board comment.

Relationship with Other Departments

Local fire, law enforcement and rescue agencies along with city utilities, local and county historic organizations.

Change from Past CIP

This is a new project - a result of the 2013 Flood.

Estimated Total Cost

Project Cost

Planning	$70,000
Acquisition	
Construction	$474,700
Total Project Cost	**$544,700**

Unfunded Amount

Unfunded Amount

Project Cost Total	$544,700
Funding Total	($544,700)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Open Space Fund	$0	$544,700	$0	$0	$0	$0	$0
Total Funding Plan	**$544,700**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $10,000 **Funding Source:** Open Space Fund

Additional Annual O&M Description:

OSMP allocates funds each year for maintenance

Project Name: Viele House Foundation Repair

Project at a Glance

Project Type:	Capital Maintenance		
Department:	Open Space & Mountain Parks	**Subcommunity:**	Area III
Project Number:	740003	**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	129
		CEAP Status:	

Project Description

The Viele House is a City of Boulder Historic Landmark. It was built in the late 1800s and is part of an historic farmstead still in use. Construction of the intersection at Cherryvale and Table Mesa has caused natural drainage of ground and ditch water to back up into the area, and has filled the basement for a period of many years. Water drainage was corrected in 2014, and now repairs to the foundation need to be made before the house further deteriorates.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [ ] Achieves Community Sustainability goals
- [ ] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Relationship with Other Departments

Viele/Van Vleet repair will go through LPAB and County HPAB since it is in both city and county.

Change from Past CIP

This is a new project in the OSMP CIP.

Estimated Total Cost

Project Cost

Planning	$10,000
Acquisition	
Construction	$70,000
Total Project Cost	**$80,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$80,000
Funding Total	($80,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Open Space Fund	$0	$80,000	$0	$0	$0	$0	$0
Total Funding Plan	**$80,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $2,000 **Funding Source:** Open Space Fund

Additional Annual O&M Description:

OSMP allocates funds each year for maintenance

Project Name: Visitor Infrastructure - System Wide

Project at a Glance

Project Type:	Capital Enhancement		
Department:	Open Space & Mountain Parks	**Subcommunity:**	System-wide
Project Number:	843000	**BVCPArea:**	Area III
CEAP Required:	Yes	**Map Number:**	0
		CEAP Status:	

Project Description

This program provides funding on a system-wide basis for capital maintenance and new construction on existing trails and trail heads, new trails and trail heads, other facilities that improve the visitor experience (e.g. safe road crossings), and capital restoration of areas where visitor impacts are high. This project is for an ongoing funding program. In 2015, no funds will be spent on this project as individual projects are identified and funded.

Relationship to Guiding Principles

- ☑ Consistent with Master Plans
- ☑ Achieves Community Sustainability goals
- ☑ Includes sufficient funding for operation and maintenance
- ☐ Maintains and enhances city's business systems
- ☑ Provides capacity and flexibility in long term planning
- ☑ Sustains or improves existing assets
- ☑ Maximizes efficiency and demonstrates positive cost/benefit
- ☐ Fund includes sufficient reserves
- ☐ Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Projects are approved by the OSBT through the public process. Projects whose scope requires a CEAP are also approved by City Council under the CEAP call-up provision. In addition, the public has input via email and public meetings in the trail study area planning process.

Relationship with Other Departments

Where appropriate OSMP coordinates with City of Boulder Parks and Recreation, Boulder County Transportation and CDOT concerning access issues to this area.

Change from Past CIP

Individual & specific projects are being funded by OSMP CIP.

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	

Unfunded Amount

Unfunded Amount

Project Cost Total	
Funding Total	($2,000,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Open Space Fund	$350,000	$0	$250,000	$200,000	$200,000	$500,000	$500,000
Total Funding Plan	**$2,000,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $2,000 **Funding Source:** Open Space Fund

Additional Annual O&M Description:

Monitor, maintain, rehabilitate trails when needed

Project Name: Water Rights Acquisition

Project at a Glance

Project Type:	Land and Asset Acquisition		
Department:	Open Space & Mountain Parks	**Subcommunity:**	System-wide
Project Number:	930000	**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	

Project Description

This on-going project provides funding to purchase additional water rights from private owners or others for use on Open Space for agricultural and environmental purposes. Program funding includes water acquisitions in the Coal Creek, South Boulder, Boulder and Lefthand Creek watersheds. Funding will also be used for professional fees, legal and engineering fees, analysis and mapping necessary to manage and protect the water rights portfolio. Because of continuing wildlife and habitat concerns, the Open Space and Mountain Parks Resource Operations staff will continue to work with other city departments to assist in enhancing in-stream flow where possible. Senior water rights can exceed $100,000 per share. Additionally, the department has annual expenditures for the attorney fees and engineering fees that are required, as noted in this project's description, to defend the department's water rights portfolio. This project is for an ongoing funding program. In 2014, $200,000 will be allocated for acquisition of water rights. The Water Rights Acquisition program provides funding to purchase additional water shares for use on Open Space for agricultural and environmental purposes, as water becomes available in the Coal Creek, South Boulder, Boulder and Lefthand Creek water sheds. However, no water rights have been purchased in the past year. For 2014, there is $535,091 available for water rights acquisition comprised of $200,000 from the 2014 CIP and $335,091 carried over from unexpended 2013 water rights CIP. The definition of a CIP project includes "the purchase of the physical assets of the community". By purchasing the water rights, the city is purchasing a physical asset.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Annual funding is approved by both the Open Space Board of Trustees and City Council.

Relationship with Other Departments

The Open Space & Mountain Parks department works cooperatively with other City of Boulder Departments, primarily Parks and Recreation, Utilities and Transportation. The department also works with and promotes inter-governmental cooperation with national, state and local conservation and Open Space programs, such as Boulder County Open Space, Jefferson County Open Space, Louisville, Lafayette and Longmont, Colorado Open Space Alliance (COSA), GOCO, Colorado Department of Natural Resources, CDOW and others.

Change from Past CIP

No Changes.

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	

Unfunded Amount

Unfunded Amount

Project Cost Total	
Funding Total	($1,400,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Open Space Fund	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000
Total Funding Plan	**$1,400,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Open Space Fund

Additional Annual O&M Description:

Included in annual appropriations for operations

[This page is intentionally blank.]

Funding Overview

.25 Cent Sales Tax Fund

With the renewal of this tax in November 2012, the revenues from this funding source were pledged "to fund Parks and Recreational services, development, renovation and refurbishment, and parkland acquisition for passive and active recreational uses" (.25 Cent Sales Tax ballot language).

Permanent Parks and Recreation Fund

The Permanent Parks and Recreation Fund consists of a .9 mill levy of assessed valuation of all taxable property in the city, gifts and donations to the fund, and proceeds from the sale of park or recreation property or equipment. The fund also includes revenues from a portion of a development excise tax assessed on each new residential unit constructed or annexed to the city except for those units that are designated as permanently affordable. The City Charter requires that the "…Fund shall not be used for any purpose other than the acquisition of park land or the permanent improvement of park and recreation facilities." (Charter Sec 161)

Lottery Fund

The Lottery Fund is based on proceeds from the Conservation Trust Fund that is distributed by the State of Colorado on a per capita basis to entities. Funding can be used for the acquisition, development and maintenance of new conservation sites, capital improvements for recreational purpose.

Capital Development Fund

The capital development fund accounts for citywide development impact fee collections allocated to growth-related parks and recreation facility development.

Boulder Junction Improvement Fund

The Boulder Junction Improvement Fund was created in 2011 for the Boulder Junction Key Public Improvements. Funding is provided from development related revenues generated in the Boulder Junction Area that will be reinvested into key public improvements in this area.

Additionally, funding from the Capital Improvement Bond (CIB) Fund supports a number of projects managed by DUHMD/PS. CIB funding is indicated by the following symbol:

2013 Flood Impact

The magnitude of the 2013 flood to Parks and Recreation was approximately $1.6M in damages to many parks and facilities located along urban stream corridors. This amount is roughly half of the department's annual CIP budget and will be mostly reimbursed through FEMA over the next few years. Fortunately, for the flood recovery projects, the department was able to utilize existing capital improvement bond funds that were allocated to address critical deficiencies within existing assets such as playgrounds, sports fields, shelters and other parks amenities. By utilizing the existing bond funds, the department was able to minimize any long term impacts to the long term CIP other than having to prioritize available funds in the near-term during the recovery. Once the reimbursement funds from FEMA return to the department, staff will begin implementing and completing projects that were put on hold during the flood recovery process. These projects include many of the parks and facilities that were prioritized during the initial project planning during the capital improvement bond initiative.

Accomplishments and Highlights

Projects to be Completed in 2014:

- Boulder Reservoir Infrastructure Improvements: In 2014, major utility upgrades were completed with the construction of a new sanitary sewer system and water line. Additional improvements include dock renovations, parking lot repair and various interior and exterior building improvements
- Mesa Memorial Park: Construction of the new neighborhood park in south Boulder along Table Mesa Drive between Yale and Hartford. This new neighborhood park provides several amenities for neighbors within a half mile radius to enjoy and meet the needs for parks facilities in the neighborhood
- Boulder Reservoir Site/Management Plan: This project continues to address programmatic, business and operational needs, as well as identify capital improvement programming, and monitoring efforts for long-term reinvestments designed to enhance water quality, protect natural resources and optimize recreational opportunities. Currently, the project is in the data collection and public engagement phase to review the current conditions with the community and begin identifying indicators and monitoring practices that will inform future management actions
- Flatirons Golf Course Irrigation Replacement: Completed the irrigation replacement with a new innovative system that allows increased water efficiency, operational efficiencies and improved playability of the course
- Elks Neighborhood Park: Construction of the neighborhood park in North Boulder adjacent to 28th Street

Boulder Reservoir entry construction.

- Valmont City Park Planning: Updated the concept plan for the park through research, community engagement and community partnerships. The new plan reflects the current needs and trends of the community for parks and recreation facilities and will allow future funding opportunities to be discovered to allow implementation

Projects Expected for Completion in 2015:

- Aquatic Facility Plan: Planning and feasibility analysis to determine demand and capacity of aquatics needs throughout the community
- Parks and Recreation Facility Renovations: Crestview Park will renovated with turf and irrigation upgrades, ADA compliance and replacement of park amenities as part of the ongoing Capital Bond Funding
- Park Shelter Replacements/Improvements: A new reservation pavilion will be installed at Harlow Platts Park to serve the park users by allowing for reservations and special events
- Urban Forest Strategic Management Plan: Comprehensive plan to provide specific management direction through policies that will balance the long-term sustainability of the urban forest with the outcomes of the community's sustainability framework
- Planning, Design and Construction Standards: Development of comprehensive guidelines and standards for the planning, design and construction of urban parks and facilities. This plan will engage all staff and stakeholders in determining process, roles and responsibility in addition to complimenting current local and federal guidelines and standards. The completion of this critical plan will enable the department to accurately and efficiently plan and develop parks and recreation facilities based upon community goals, operational efficiency and industry best practices
- Historic Railroad Coach Restoration: Renovation of the city-owned railroad coach currently located at the Railroad Museum in Golden, CO. The coach has antique wood siding that is in critical need of repair to maintain the coach at an acceptable standard as indicated in a recent grant from the State Historical Fund. Delaying this project would cause further deterioration and more costly repairs at a later date
- Coot Lake Restoration: Stabilization and restoration of the north bank of Coot Lake that currently poses a critical safety issue and continued degradation of the resource values of the lake. The project will include trail restoration, bank stabilization and vegetative restoration of this important and highly used natural area within the city's system
- Court Repairs and Renovation: This project will provide funding to provide critical repairs and complete replacements to several tennis and basketball courts throughout the parks and recreation system to ensure operational efficiency, user safety and an acceptable condition based on the asset management system
- Recreation Center Enhancements: Pending the outcome and strategies of the Recreation Facility Strategic Plan, this project will fund the initial implementation projects outlined within the plan. A critical project that has been identified previously

includes renovating the front desk area at the North Boulder Recreation Center to increase operational efficiency of user access and safety of center customers.

Projects Starting in 2015, but Not Completed:

- Emerald Ash Borer Response Measures: As a result of the recent discovery of the Emerald Ash Borer (EAB), a response plan is currently in development to slow the spread of the pest and maintain a safe community from the potential hazards of multiple dead and dying trees within the urban core of the community. This project would provide annual funding to hire contractors for removal and replacement of the trees affected by the EAB to re-establish streetscapes and park areas that contribute to many of the sustainability goals of the city.
- Playground and Irrigation System Replacement/Renovation: Ongoing program to annually address removal and replacement of critical park amenities as scheduled and programmed within the department's asset database.

Highlights of 2016-2020 Projects:

- Pearl Street Mall Irrigation Replacement: Ongoing renovation of critical irrigation infrastructure and tree replacement to maintain and enhance the Pearl Street Mall. The mall is a critical asset to the community and provides community engagement, economic development and preservation of a unique landmark
- Recreation Facility Strategic Plan: Planning study and analysis to guide the future repair, renovation and improvement of recreation facilities through an assessment of the existing physical systems. Additionally, operational efficiencies, improvements and remodeling strategies will be reviewed to ensure the facilities are meeting the needs and demands of the community comparable to other facilities. This plan will be done in collaboration with the Facilities and Asset Management Division.

Relationship to Guiding Principles and Prioritization

CIP Guiding Principles:

A principle objective of the current Parks and Recreation Master Plan Update focuses on maintaining existing parks and recreation facilities by "taking care of what we have." As a result, the department has prioritized CIP projects based on meeting essential safety and compliance considerations, as well as maintaining existing facilities through ongoing annual repair and refurbishment programs and life-cycle replacement programs of park playground equipment and irrigation infrastructure systems. In most cases, projects identified in the 2015-2020 CIP are indented to improve ongoing maintenance needs. Projects such as Pearl Street Mall Irrigation System Replacement and Playground and Irrigation System Replacements strive to improve long-term operational needs and protect existing assets while reducing annual maintenance costs.

A second important objective is to improve efficiencies in operational and capital investments resulting in extending life cycles of equipment and facilities whenever possible. The proposed CIP

projects contribute to improving citywide energy efficiency and water conservation efforts addressing existing parks and recreational facilities. Projects are also consistent with the communities overall greenhouse gas and carbon footprint reduction objectives. Projects such as the Recreation Facility Strategic Plan will address department-wide efficiencies aimed at improving operational practices and seeking alternative funding opportunities needed to support the department's mission.

In addition, due to new federal ADA regulations, the department is required to respond to specific mandates and timelines to audit all parks and recreational facilities and to improve identified facilities to meet new federal ADA regulations, The ADA Compliance Improvements project will continue to address the new federal mandates and ensure the department remains in compliance with access issues for parks and recreational facilities.

Prioritization:
The following guiding principles are applied when identifying and evaluating priority capital improvement projects. The proposed projects identified in the 2015-2020 CIP are consistent with the CIP Guiding Principles and the current Parks and Recreation Master Plan.

- Safety/Compliance (S): Projects represent important deficiencies or safety and compliance concerns. Project may focus on annual infrastructure repair and replacement and/or refurbishment of park play equipment and amenities, irrigation systems, landscape and turf upgrades and facility improvements
- Commitment (C): Projects that are required by law or a ballot initiative, or are in-process of development as part of a prior development agreement and/or are required to be completed within a specific period of time
- Efficiencies (E): The department will consistently seek efficiency improvements in both operational and capital investments. Projects will represent important operational and/or maintenance efficiencies resulting in improved life cycles, cost efficiencies and savings in resources, energy or water usage (e.g., Flatirons Golf Course Irrigation System Replacement, Computerized Irrigation System)
- Revenue (R): The department will invest in facilities and programs that generate revenues to support valued recreational opportunities in the Boulder community. Projects will enhance the department's ability to earn revenue beyond initial investment and operational costs and may include possible collaboration/ partnership opportunities leveraging outside funding sources.

Projects not in Master Plans:
None.

New Projects

- Recreation Facility Strategic Plan: Planning study and analysis to guide the future repair, renovation and improvement of recreation facilities through an assessment of the existing physical systems, operational efficiencies, improvements and remodeling

strategies to ensure the facilities are meeting the needs and demands of the community comparable to other facilities

- Urban Forest Strategic Management Plan: Comprehensive plan to provide specific management direction through policies that will balance the long-term sustainability of the urban forest with the outcomes of the community's sustainability framework
- Planning, Design and Construction Standards: Development of comprehensive guidelines and standards for the planning, design and construction of urban parks and facilities
- Historic Railroad Coach Restoration: Renovation of the city-owned railroad coach currently located at the Railroad Museum in Golden, CO. Delaying this project would cause further deterioration and more costly repairs at a later date
- Coot Lake Restoration: Stabilization and restoration of the north bank of Coot Lake that currently poses a critical safety issue and continued degradation of the resource values of the lake. The project will include trail restoration, bank stabilization and vegetative restoration of this important and highly used natural area within the City's system
- Emerald Ash Borer Response Measures: As a result of the recent discovery of the Emerald Ash Borer (EAB), a response plan is currently in development to slow the spread of the pest and maintain a safe community from the potential hazards of multiple dead and dying trees within the urban core of the community
- Court Repairs and Renovation: This project will provide funding to provide critical repairs and complete replacements to several tennis and basketball courts throughout the parks and recreation system to ensure operational efficiency, user safety and an acceptable condition based on the asset management system
- Recreation Center Enhancements: Pending the outcome and strategies of the Recreation Facility Strategic Plan, this project will fund the initial implementation projects outlined within the plan.

Operation and Maintenance Impacts

The department prioritizes capital projects based upon maintaining existing assets and decreasing the maintenance backlog of the department's portfolio of parks and facilities. Therefore, the majority of projects included in the department's Capital Improvement Program will decrease maintenance costs as a result of replacement of aging infrastructure and efficiencies associated with new and improved facilities and systems. All of these projects will actually reduce the O&M costs over time. However, as the department fulfills commitments relative to long-term planning needs such as the Boulder Junction Pocket Park and Violet Neighborhood Park in the future, the department will need to further prioritize and explore funding opportunities to maintain these new facilities.

Deferred Projects, Eliminated or Changed Projects

Due to the September flood of 2013, the department had to focus on some of the critical damages to parks and recreation infrastructure. Overall the department sustained about $2M in damages

to infrastructure that the majority is eligible FEMA reimbursement. Some of the regularly scheduled infrastructure renovations had to be delayed due to this unexpected increase in work load and funding needs. However, as funds are reimbursed by FEMA, the department will have the opportunity to return to the normal prioritization of infrastructure renovations as scheduled through the department's asset management program and typically funded through the CIP. Additionally, as a result of limited capital funding for the proposed 2015-2020 CIP, in 2015, funding for the Playground and Park Irrigation System Replacement will support other critical systems needs such as the Pearl Street Mall Irrigation System Replacement and the Urban Parks Computerized Irrigation System Replacement, efforts that require critical timelines for completion.

Unfunded Projects and Emerging Needs

In the long-term, additional funding will need to be secured to develop any new major facilities as well as improve service standards for maintenance operations and to fund deferred maintenance. The department's Master Plan includes a list of priority items to complete, based on various funding levels. Staff continues to evaluate deferred maintenance needs, including park sites and recreation facility needs and will be implementing an Asset Management Plan (AMP) to assist in capital planning and day-to-day operations. The current maintenance and facility improvements backlog, including major repairs and replacements is significant. The department anticipates that this backlog will continue until funding levels reach appropriate amounts to accommodate life-cycle projections for the department's assets.

The current budget reflects an economic reality that is not predicted to shift anytime soon, and it is within this reality that the department must plan for the future. With a maintenance backlog estimated at over $27 million, the department faces difficult trade-off decisions about how to manage and operate its facilities and provide its programs. City guidelines regarding capital improvement prioritize the maintenance of current assets over the development of new facilities, and through the Master Planning process, the community has indicated strong support for this concept. Even with the indications of a modest economic turnaround and the passage of the .25 Cent Sales Tax renewal, the department must focus on maintaining and improving all deteriorating assets. Simultaneously the department must respond to the community's shifting values related to new facilities by providing adequate facilities to meet those needs and by making them accessible to the entire community.

To mitigate the impacts of limited funding, staff is:

- Working collaboratively with Facilities and Asset Management (FAM) workgroup to prioritize funding for deferred, major and ongoing facility maintenance
- Deferring low priority improvements and new capital projects that cannot be funded operationally
- Reevaluating work plans and investing in projects that mitigate ongoing maintenance

and operational expenses
- Redirecting funding or accelerating projects to achieve energy efficiencies at recreation facilities.

The department has unfunded significant deficiency and high priority projects included in the current capital investment strategy program. Key projects include:

- System-wide compliance with federal standards for the Americans with Disabilities Act
- Increased capacity and additional facilities for youth and adult sports
- Expansion and enhancement of recreation centers that accommodate increased demand for weight rooms and fitness areas
- Boulder Reservoir infrastructure upgrades to increase operational efficiencies and improve public amenities
- Park infrastructure upgrades for the Civic Area and Pearl Street Mall
- Major parking lot renovations at key sports facilities
- New park development to achieve appropriate levels of service for planned neighborhood parks such as Violet Park and Heatherwood Park
- Infrastructure associated with Valmont City Park Phase 2 development.

Advisory Board Action

On April 28, 2014, the Parks & Recreation Advisory Board voted (6-0) to approve the recommended 2015-2020 Capital Improvement Program.

[This page is intentionally blank.]

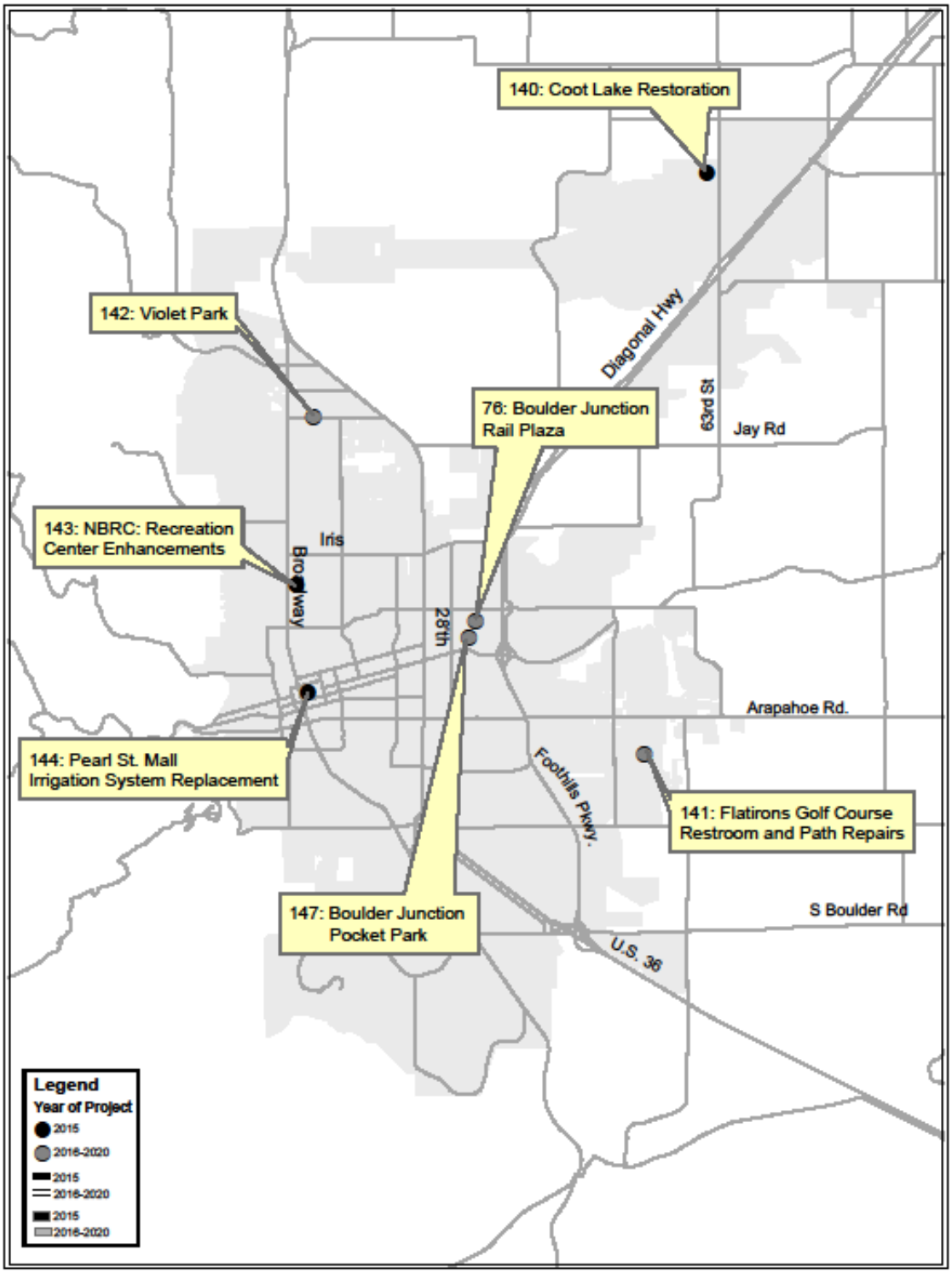
Table 11-1: 2015-2020 Funding Summary By Department

PARKS AND RECREATION

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Enhancement										
Rec Center Enhancements .25	$ 460,000	$ -	$ 180,000	$ 280,000	$ -	$ -	$ -	$ 460,000	$ -	$ -
ADA Compliance Improvements	800,000	100,000	100,000	200,000	200,000	-	-	600,000	200,000	-
Coot Lake Restoration	250,000	250,000	-	-	-	-	-	250,000	-	-
Emerald Ash Borer Response Measures	890,000	230,000	220,000	220,000	220,000	-	-	890,000	-	-
Recreation Center Enhancements	1,220,000	280,000	100,000	-	280,000	280,000	280,000	1,220,000		
Artificial Turf Field Installation	1,500,000	-	500,000	500,000	500,000	-	-	1,500,000	-	-
Lighting Ordinance Implementation	500,000	-	250,000	250,000	-	-	-	500,000	-	-
Playground and Park Irrigation System Renovation	1,500,000	-	300,000	300,000	300,000	300,000	300,000	1,500,000	-	-
Playground and Park Irrigation System Renovation - Lottery	1,151,200	-	230,300	230,000	230,300	230,300	230,300	1,151,200	-	-
Subtotal	$ 8,271,200	$ 860,000	$ 1,880,300	$ 1,980,000	$ 1,730,300	$ 810,300	$ 810,300	$ 8,071,200	$ 200,000	$ -
Capital Maintenance										
Historic Railroad Coach Restoration	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ 100,000	$ -	$ -
Pearl Street Mall Irrigation System Replacement	1,500,000	550,000	-	-	-	-	-	550,000	550,000	400,000
Pearl Street Mall Irrigation System Replacement - Lottery	-	200,000	-	-	-	-	-	200,000	400,000	-
Pool Replastering	230,000	75,000	-	-	-	-	-	75,000	155,000	-
Flatirons Golf Course Restroom and Path Repairs	-	-	200,000	-	-	-	-	200,000	-	(200,000)
Court Repairs and Renovation	280,000	-	-	-	280,000	-	-	280,000	-	-
Parking Lot Repair	860,000	-	-	-	220,000	420,000	220,000	860,000	-	-
Subtotal	$ 2,970,000	$ 925,000	$ 200,000	$ -	$ 500,000	$ 420,000	$ 220,000	$ 2,265,000	$ 1,105,000	$ 200,000
Capital Planning Studies										
Parks and Recreation Planning, Design, and Construction Standards	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ 100,000	$ -	$ -
Recreation Facility Strategic Plan	150,000	150,000	-	-	-	-	-	150,000	-	-
Urban Forest Management Plan	120,000	120,000	-	-	-	-	-	120,000	-	-
Subtotal	$ 370,000	$ 370,000	$ -	$ -	$ -	$ -	$ -	$ 370,000	$ -	$ -
Land and Asset Acquisition										
Boulder Junction Rail Plaza	$ 1,874,000	$ -	$ -	$ -	$ 374,000	$ 1,500,000	$ -	$ 1,874,000	$ -	$ -
Subtotal	$ 1,874,000	$ -	$ -	$ -	$ 374,000	$ 1,500,000	$ -	$ 1,874,000	$ -	$ -
New Capital Project										
Boulder Junction Pocket Park	$ 1,926,227	$ -	$ 750,000	$ 350,000	$ 350,000	$ -	$ -	$ 1,450,000	$ 476,227	$ -
Violet Park	500,000	-	-	-	-	500,000	-	500,000	-	-
Subtotal	$ 2,426,227	$ -	$ 750,000	$ 350,000	$ 350,000	$ 500,000	$ -	$ 1,950,000	$ 476,227	$ -
Transfer										
Tributary Greenways Program - Lottery	$ -	$ 125,400	$ 125,400	$ 125,400	$ 125,400	$ -	$ -	$ 501,600	$ 150,000	$ -
Subtotal	$ -	$ 125,400	$ 125,400	$ 125,400	$ 125,400	$ -	$ -	$ 501,600	$ 150,000	$ -
Total	**$ 15,911,427**	**$ 2,280,400**	**$ 2,955,700**	**$ 2,455,400**	**$ 3,079,700**	**$ 3,230,300**	**$ 1,030,300**	**$ 15,031,800**	**$ 1,931,227**	**$ 200,000**

City of Boulder Captial Improvement Projects, 2015 - 2020

Parks & Recreation



Project Name: ADA Compliance Improvements

Project at a Glance

Project Type:	Capital Enhancement		
Department:	Parks & Recreation	**Subcommunity:**	Multiple Subcommunities
Project Number:		**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	

Project Description

In response to the new Department of Justice ADA regulations, the Parks and Recreation Department was required to complete an audit of all park and recreational facilities by March 2012. The initial audit began in 2011 to assess up to 10 recreational facilities and 20 park sites and was completed in late 2012. The audit and assessment led to the development of a transition plan for the department that will prioritize the schedule for improvements for ADA compliance within parks and facilities. Upon completion of the plan, the department now has a comprehensive list, priorities and costs for the system-wide ADA improvements. Funding has then been set aside annually to complete required ADA improvements in order to meet new federal mandated deadlines for compliance. Many years of funding will need to be allocated to provide full ADA compliance. Therefore, the department is utilizing the transition plan to idenify key priorities each year.

In 2015, funding will be prioritized for the Boulder Reservoir which is a unique, stand-alone facility in the community and requires compliance with docks and other recreation amenities.

Relationship to Guiding Principles

- ☑ Consistent with Master Plans
- ☑ Achieves Community Sustainability goals
- ☑ Includes sufficient funding for operation and maintenance
- ☐ Maintains and enhances city's business systems
- ☐ Provides capacity and flexibility in long term planning
- ☑ Sustains or improves existing assets
- ☑ Maximizes efficiency and demonstrates positive cost/benefit
- ☐ Fund includes sufficient reserves
- ☑ Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The department developed the ADA Transition Plan for parks, facilities and programs throughout 2012. In addition to internal City coordination among several departments, Parks and Recreation staff also engaged several community groups, facilitated an open house and presented information through the Parks and Recreation Advisory Board.

Relationship with Other Departments

The Parks and Recreation Department will continue to coordinate with FAM and Public Works during the implementation of the plan including monitoring and updating progress relative to other capital projects.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$50,000
Acquisition	$0
Construction	$750,000
Total Project Cost	**$800,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$800,000
Funding Total	($800,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Parks & Recreation .25 Cent Sales Tax Fund	$200,000	$100,000	$100,000	$200,000	$200,000	$0	$0
Total Funding Plan	**$800,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** .25 Cent Sales Tax

Additional Annual O&M Description:

The ADA compliance improvements have no significant impact on operating costs either positive or negative.

Project Name: Artificial Turf Field Installation

Project at a Glance

Project Type:	Capital Enhancement		
Department:	Parks & Recreation	**Subcommunity:**	System-wide
Project Number:		**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	

Project Description

As recommended in the department's master plan, the Parks and Recreation Department intends to improve existing natural turf athletic fields and to replace existing turf fields with new synthetic turf in select park sites. The conversion of fields to artificial turf will increase the capacity of field use within the community by extending the season of use of the fields and allow more programmed uses resulting in improved revenues from field rentals and tournament play. The department has recently conducted feasibility studies and intends to design and construct priority field improvements at locations determined through the athletic field study. Specific park sites could include Valmont City Park, Foothills Community Park, Pleasantview Sports Complex, East Boulder Community Park or Harlow Platts Park.

This project allows the department to focus on youth engagement and activity as indiciated in the department's master plan by providing appropriate facilties and opportunities for youth sports. Additionally, this project will provide efficicency and improvement in maintenance and operations in order to allow the department more flexibility in maintenance of athletic fields throughout the community. Finally, the artificial turf does not require water use as does natural turf fields, therefore reducing water consumption and conserving natural resources associated with the department's enivronmental sustainability goals.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The planning and design process will include input from park neighbors, user groups and the Parks and Recreation Advisory Board.

Relationship with Other Departments

Parks and Recreation will coordinate with Planning and Development Services, Utilities, Transportation and other departments as necessary.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$50,000
Acquisition	
Construction	$1,450,000
Total Project Cost	**$1,500,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$1,500,000
Funding Total	($1,500,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Permanent Parks & Recreation Fund	$0	$0	$500,000	$500,000	$500,000	$0	$0
Total Funding Plan	**$1,500,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Existing Park Operations Maintenance Funds

Additional Annual O&M Description:

O&M costs will be decreased as a result of the project. Annual maintenance includes adding new rubber to the field and sweeping as necessary.

Project Name: Boulder Junction Pocket Park

Project at a Glance

Project Type:	New Capital Project		
Department:	Parks & Recreation	**Subcommunity:**	Crossroads
Project Number:		**BVCPArea:**	
CEAP Required:	No	**Map Number:**	147
		CEAP Status:	

Project Description

The Parks and Recreation Department has identified funding to address the future pocket park land acquisition and development associated with the Boulder Junction redevelopment project. This project is a long range infill redevelopment that will include civic public spaces and/or pocket parks that will require Parks and Recreation input, technical expertise and perhaps funding contributions. The proposed pocket improvement will include land acquisition for a 3/4-acre civic park, construction of Goose Creek multi-use path connection, grading and drainage improvements, hardscape pavers, retaining walls, landscape, irrigation and civic park amenities to support the park space.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The planning process will include an appropriate public process, which will be identified in the scope of the plan.

Relationship with Other Departments

The Parks and Recreation Department will coordinate with Public Works-Utilities/Transportation, Housing and Planning, and other departments, landowners and agencies as appropriate.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$60,000
Acquisition	$750,000
Construction	$1,116,227
Total Project Cost	**$1,926,227**

Unfunded Amount

Unfunded Amount

Project Cost Total	$1,926,227
Funding Total	($1,926,227)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Boulder Junction Improvement Fund	$476,227	$0	$750,000	$350,000	$350,000	$0	$0
Total Funding Plan	**$1,926,227**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $6,668 **Funding Source:** Not Determined

Additional Annual O&M Description:

Annual maintenance will include irrigation, mowing, trash removal, snow removal, maintenance of land

Project Name: Boulder Junction Rail Plaza

Project at a Glance

Project Type:	Land and Asset Acquisition		
Department:	Parks & Recreation	**Subcommunity:**	Crossroads
Project Number:		**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	76
		CEAP Status:	

Project Description

This project was included in the list of Key Public Improvements as part of the Transit Village Area Plan (TVAP) - Implementation Plan. This project includes the land acquisition costs for the development of the Rail Plaza in 2019, pending coordination with private development in the location of the plaza.

Relationship to Guiding Principles

- [ ] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The development and adoption of the TVAP was the result of a 3-year planning process that included design charrettes, open houses and numerous meetings with property owners in the area. The plan was approved by Planning Board and City Council.

Relationship with Other Departments

The TVAP was a coordinated multi-department effort between Planning, Public Works (Transportation and Utilities), Housing and Human Services, Parks and Recreation, Downtown & University Hill Management Divisions & Parking Services and other departments. These departments continue to collaborate on private development coordination issues in Boulder Junction, implementation of Key Public Improvements and coordination with RTD on the development of a bus transfer facility/possible Transit-Oriented Development and future Northwest Rail facilities.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	
Acquisition	$374,000
Construction	$1,500,000
Total Project Cost	**$1,874,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$1,874,000
Funding Total	($1,874,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Boulder Junction Improvement Fund	$0	$0	$0	$0	$374,000	$1,500,000	$0
Total Funding Plan	**$1,874,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:**

Additional Annual O&M Description:

Project Name: Coot Lake Restoration

Project at a Glance

Project Type:	Capital Enhancement		
Department:	Parks & Recreation	**Subcommunity:**	Area III
Project Number:		**BVCPArea:**	Outside Planning Area
CEAP Required:	No	**Map Number:**	140
		CEAP Status:	

Project Description

The department's recent master plan identifies the critical need for "close to home" opportunities for residents to engage with natural areas and recreation facilities. Coot Lake, located adjacent to the Boulder Reservoir accomodates this opportunity for many residents in Boulder and throughout the region. A key implementation project outlined in the Boulder Reservoir Master Plan includes restoration and improvement to Coot Lake adjacent to the Boulder Reservoir. This project will provide stabilization and restoration of the north bank of Coot Lake that currently poses a critical safety issue and continued degradation of the resource values of the lake. The project will include trail restoration, bank stabilization and vegetative restoration of this important and highly used natural area within the City's system. This project will also provide updated amenities and signage to improve the visitor experience and meet current standards for park design and improvement.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Throughout the project the community will be engaged in the planning and design of the improvements as well as potential volunteer projects to engage the community in the implementation.

Relationship with Other Departments

The Parks and Recreation Department will be working closely with staff from Public Works, Water Quality and Water Conservation to determine appropriate strategies, implementation and monitoring processes.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	$250,000
Total Project Cost	**$250,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$250,000
Funding Total	($250,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Parks & Recreation .25 Cent Sales Tax Fund	$0	$250,000	$0	$0	$0	$0	$0
Total Funding Plan	**$250,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:**

Additional Annual O&M Description:

Proposed enhancements to the park will not significantly impact the existing O&M needs.

Project Name: Court Repairs and Renovation

Project at a Glance

Project Type:	Capital Maintenance		
Department:	Parks & Recreation	**Subcommunity:**	System-wide
Project Number:		**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	
		CEAP Status:	

Project Description

This project will provide major repairs and replacement of many of the city's basketball and tennis courts as mandated by the city's asset management program to ensure a safe and functional playing surface for many of the court sports.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Relationship with Other Departments

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	$280,000
Total Project Cost	**$280,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$280,000
Funding Total	($280,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Parks & Recreation .25 Cent Sales Tax Fund	$0	$0	$0	$0	$280,000	$0	$0
Total Funding Plan	**$280,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:**

Additional Annual O&M Description:

Project Name: Emerald Ash Borer Response Measures

Project at a Glance

Project Type:	Capital Enhancement		
Department:	Parks & Recreation	**Subcommunity:**	System-wide
Project Number:		**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	
		CEAP Status:	

Project Description

In late September 2013, the department's Forestry staff discovered an Emerald Ash Borer (EAB) infestation within the city. The subsequent delimitation survey showed that EAB is well established within a corridor in central Boulder. Over the next 15 years, EAB management, including tree removal, tree replacement, wood disposal and pesticide treatments will have a significant direct budgetary impact to the city and private residents. The loss of tree canopy will have considerable economic, social, and environmental impacts for decades. In April, an Information Item detailing the 2014 Emerald Ash Borer work plan was sent to City Council.

As a result of the recent discovery of the Emerald Ash Borer (EAB), a response plan is currently in development to slow the spread of the pest and maintain a safe community from the potential hazards of multiple dead and dying trees within the urban core of the community. This project would provide funding to hire contractors for removal and replacement of the trees affected by the EAB to re-establish streetscapes and park areas that contribute to many of the sustainability goals of the city. This project will include renovation of parking areas, streetscapes, park areas and other sites to remove and replace the trees. The work will include concrete repair, irrigaiton renovatoin and turf restoration.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The community has already been engaged in the process and able to comment on the reponse measures. Additionally, staff continue to provide open houses and information through media to increase awareness in the community about the impacts of the issue.

Relationship with Other Departments

The Interdepartmental EAB working group will meet over the next year to discuss EAB management on a city-wide scale and ensure consistency across departments. This group will develop a series of recommendations that will be presented to boards and city council during the first quarter of 2015.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	$890,000
Total Project Cost	**$890,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$890,000
Funding Total	($890,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Parks & Recreation .25 Cent Sales Tax Fund	$0	$230,000	$220,000	$220,000	$220,000	$0	$0
Total Funding Plan	**$890,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:**

Additional Annual O&M Description:

Project Name: Flatirons Golf Course Restroom and Path Repairs

Project at a Glance

Project Type:	Capital Maintenance		
Department:	Parks & Recreation	**Subcommunity:**	Southeast Boulder
Project Number:		**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	141
		CEAP Status:	

Project Description

The Flatirons Golf Course is the city's only course and provides a unique and highly valued service to the resident's. The department's master plan as well as other supporting plans prioritize the maintenance and management of the course to ensure the community's needs are met in a safe and aesthetic facility. Currently the course is in need of repairs to the many cart paths along the course to ensure safety and accessibility to all users. Additionally, the restrooms on the course are in need of repairs and renovations to ensure safety and functionality of the golfers on the course. This project achieves many of the city's sustainability goals as well as the key themes of the department.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

A series of open houses and community meetings will be conducted to inform and engage the public in the design and construction process.

Relationship with Other Departments

Parks and Recreation staff will work closely with multiple departments including Public Works and Community Planning and Sustainability.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$20,000
Acquisition	
Construction	$180,000
Total Project Cost	

Unfunded Amount

Unfunded Amount

Project Cost Total	
Funding Total	($200,000)
Total Unfunded	**($200,000)**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Parks & Recreation .25 Cent Sales Tax Fund	$0	$0	$200,000	$0	$0	$0	$0
Total Funding Plan	**$200,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:**

Additional Annual O&M Description:

Project Name: Historic Railroad Coach Restoration

Project at a Glance

Project Type:	Capital Maintenance		
Department:	Parks & Recreation	**Subcommunity:**	Outside Planning Area
Project Number:		**BVCPArea:**	Outside Planning Area
CEAP Required:	No	**Map Number:**	
		CEAP Status:	

Project Description

Renovation of the city-owned railroad coach currently located at the Railroad Museum in Golden, CO. The coach has antique wood siding that is in critical need of repair to maintain the coach at an acceptable standard as indicated in a recent grant from the State Historical Fund. Delaying this project would cause further deterioration and more costly repairs at a later date.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

This project includes maintenance of an existing asset and doesn't warrant public engagement other than notification of the work being completed.

Relationship with Other Departments

This project doesn't require coordination with other departments.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	$100,000
Total Project Cost	**$100,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$100,000
Funding Total	($100,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Parks & Recreation .25 Cent Sales Tax Fund	$0	$100,000	$0	$0	$0	$0	$0
Total Funding Plan	**$100,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:**

Additional Annual O&M Description:

This project will not increase or decrease annual operating costs.

Project Name: Lighting Ordinance Implementation

Project at a Glance

Project Type:	Capital Enhancement		
Department:	Parks & Recreation	**Subcommunity:**	System-wide
Project Number:		**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	

Project Description

Based on the departments lighting study, facilities have been identified that are not compliant with the city's lighting ordinance. Based on the study, many opportunities have been identified for energy conservation. The department will implement lighting retrofits in accordance with the city's lighting ordinance and to maximize energy efficiency. The department is accumulating funding in anticipation of replacement and retrofitting lighting fixtures. Criteria for determining the schedule for replacement will include cost, energy savings and safety. In 2016 and 2017, $500,000 will be spent on upgrades to exterior lighting throughout city parks and recreation facilities to meet local lighting ordinance requirements. This project does not include outside funding sources.

Relationship to Guiding Principles

- ☑ Consistent with Master Plans
- ☑ Achieves Community Sustainability goals
- ☑ Includes sufficient funding for operation and maintenance
- ☐ Maintains and enhances city's business systems
- ☑ Provides capacity and flexibility in long term planning
- ☑ Sustains or improves existing assets
- ☑ Maximizes efficiency and demonstrates positive cost/benefit
- ☐ Fund includes sufficient reserves
- ☑ Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

City lighting ordinance compliance is required by 2017. No public process is anticipated. The public will be notified on a project by project basis.

Relationship with Other Departments

The department will coordinate with Planning, FAM, OEA, CAO, as needed or required.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$50,000
Acquisition	
Construction	$450,000
Total Project Cost	**$500,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$500,000
Funding Total	($500,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Permanent Parks & Recreation Fund	$0	$0	$250,000	$250,000	$0	$0	$0
Total Funding Plan	**$500,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** General Fund and .25 Cent Sales Tax Fund

Additional Annual O&M Description:

The implementation of the new fixtures will reduce energy consumption and maintenance costs as a result of the efficiency upgrades.

Project Name: Parking Lot Repair

Project at a Glance

Project Type:	Capital Maintenance		
Department:	Parks & Recreation	**Subcommunity:**	System-wide
Project Number:		**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	
		CEAP Status:	

Project Description

The department's master plan includes a key theme of "taking care of what we have" which directs the department to focus on the necessary preventative and restorative maintenance of infrastructure throughout the parks and recreation system. Many of the parking lots throughout the city's parks and facilities are in need of repair and replacement in order to continue to maintain saftety, functionality and accessibility. This project will provide appropriate resurfacing and repair necessary to meet standards and compliance.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Relationship with Other Departments

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$35,000
Acquisition	
Construction	$825,000
Total Project Cost	**$860,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$860,000
Funding Total	($860,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Permanent Parks & Recreation Fund	$0	$0	$0	$0	$220,000	$420,000	$220,000
Total Funding Plan	**$860,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:**

Additional Annual O&M Description:

Project Name: Parks and Recreation Planning, Design and Construction Standards

Project at a Glance

Project Type:	Capital Planning Studies		
Department:	Parks & Recreation	**Subcommunity:**	System-wide
Project Number:		**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	
		CEAP Status:	

Project Description

The department has a critical need to develop a guiding document that will outline process, policy, roles and standards for the planning and development of the city's parks and recreation facilities. This project will provide the development of comprehensive guidelines and standards for the planning, design and construction of urban parks and facilities. This plan will engage all staff and stakeholders in determining process, roles and responsibility in addition to complimenting current local and federal guidelines and standards. The completion of this critical plan will enable the department to accurately and efficiently plan and develop parks and recreation facilities based upon community goals, operational efficiency and industry best practices.

The department is currently refining the asset management program that staff utilizes to guide capital project prioritization, major repairs and even daily work orders in order to continue managing the department's assets at acceptable standards. The planning, design and construction standards will allow the department to more effectively and efficiently plan and develop parks and facilities to all applicable standards as well as identify strategic processes that engage all staff and stakeholders.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The public will be engaged in certain aspects of the planning process.

Relationship with Other Departments

Department staff and consultants will work closely with all applicable city departments. The planning process will also specifically engage Planning and Development Services staff to incorporate and compliment the City's design and construction standards.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$100,000
Acquisition	
Construction	
Total Project Cost	**$100,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$100,000
Funding Total	($100,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Permanent Parks & Recreation Fund	$0	$100,000	$0	$0	$0	$0	$0
Total Funding Plan	**$100,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:**

Additional Annual O&M Description:

This plan has no capital or maintenance costs associated with the completion of the project.

Project Name: Pearl Street Mall Irrigation System Replacement

Project at a Glance

Project Type:	Capital Maintenance		
Department:	Parks & Recreation	**Subcommunity:**	Central Boulder
Project Number:		**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	144
		CEAP Status:	

Project Description

The irrigation system on the Pearl Street Mall is the original system that was installed in the 1970's and a complete renovation is needed. The new irrigation system will utilize new technology for customizing irrigation needs to specific areas and will be extremely efficient in water use resulting in water and energy savings as well as labor savings. This project meets many of the City's Sustainability goals as well as departmental goals. This project will begin in 2010 and be complete by 2015.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The department will coordinate with Pearl Street Mall merchants to schedule repair work and ample public notice will be provided.

Relationship with Other Departments

Parks and Recreation staff will coordinate with the Downtown and University Hill Management group and Public Works.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$5,000
Acquisition	$0
Construction	$1,495,000
Total Project Cost	**$1,500,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$1,500,000
Funding Total	($1,700,000)
Total Unfunded	**$400,000**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Permanent Parks & Recreation Fund	$550,000	$550,000	$0	$0	$0	$0	$0
Lottery Fund	$400,000	$200,000	$0	$0	$0	$0	$0
Subtotal All Funds	$950,000	$750,000	$0	$0	$0	$0	$0

Total Funding Plan **$1,700,000**

Additional Annual Operations and Maintenance

Additional Annual O&M: ($113,000) **Funding Source:**

Additional Annual O&M Description:

The improvements to Pearl Street Mall irrigaiton will drastically reduce the annual O&M due to water savings through efficient irrigation infrastructure and reduce staff time in repairing existing infrastructure.

Project Name: Playground and Park Irrigation System Renovation

Project at a Glance

Project Type:	Capital Enhancement		
Department:	Parks & Recreation	**Subcommunity:**	System-wide
Project Number:		**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	

Project Description

Boulder's park system is foundational to the mission of the Parks and Recreatoin Department. Upon completion of the department's master plan in 2013, the department committed to ongoing renovations of playgrounds and irrigation systems to ensure safe, functoinal and attractive facilities. The specific playground and park irrigation system that will be renovated will be decided on an annual basis through an asset management program and communicated to the public. Projects are necessary to comply with goals and commitments identified in the department's master plan. The department evaluates and prioritizes needs based on criteria including safety and code compliance, age of the equipment, location in the city, and opportunities for efficiencies, collaboration or partnerships with other departments or the surrounding neighborhood.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [ ] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The department will conduct outreach to the neighborhood on the needs and design of the playground. Typically, two public meetings are conducted - an initial one to gather suggestions and a follow-up meeting to review design options. The project is posted on the department's website and regular updates are posted. A email group may also be created to update interested community members. The PRAB will be updated on a regular basis.

Relationship with Other Departments

Parks and Recreation will coordinate with Planning, Utilities, Water Conservation and Transportation as necessary.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	*$200,000*
Acquisition	
Construction	$2,451,200
Total Project Cost	**$2,651,200**

Unfunded Amount

Unfunded Amount

Project Cost Total	*$2,651,200*
Funding Total	($2,651,200)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Permanent Parks & Recreation Fund	$0	$0	$300,000	$300,000	$300,000	$300,000	$300,000
Lottery Fund	$0	$0	$230,300	$230,000	$230,300	$230,300	$230,300
Subtotal All Funds	$0	$0	$530,300	$530,000	$530,300	$530,300	$530,300

Total Funding Plan **$2,651,200**

Additional Annual Operations and Maintenance

Additional Annual O&M: ($12,664) **Funding Source:** Lottery fund and .25 Cent Sales Tax Fund

Additional Annual O&M Description:

Improvements will result in decrease of maintenance from a water conservation and labor persepctive.

Project Name: Pool Replastering

Project at a Glance

Project Type:	Capital Maintenance		
Department:	Parks & Recreation	**Subcommunity:**	Multiple Subcommunities
Project Number:		**BVCPArea:**	
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	

Project Description

The Parks and Recreation Department manages and operates 11 pools within the city including indoor and outdoor leisure pools, lap pools and hot tubs. As part of ongoing maintenance and repairs to recreation facilities, the Department must prioritize and schedule the replastering of the pools in order to continue to provide safe, clean and accesible facilities for public use. The pools must be replastered every five years and the Department must schedule funds to achieve lifecycles of the plastering. This project will allow replastering of specifc pools based on an annual prioritization schedule by staff. Additionally, new replastering products are available that provide long-term maintenance and operational efficiencies. Pools are an integral component in generating reveunes for the city and allowing the Department to provide recreation programs and instruction to the community.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Ongoing facility maintenance - public process not necessary

Relationship with Other Departments

The Parks and Recreation Department will continue to coordinate with FAM in the annual prioritization of replastering projects and scheduling of facility maintenance to minimize disruption to the customers.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	$230,000
Total Project Cost	**$230,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	*$230,000*
Funding Total	($230,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Permanent Parks & Recreation Fund	$155,000	$75,000	$0	$0	$0	$0	$0
Total Funding Plan	**$230,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:**

Additional Annual O&M Description:

This project has no significant impact on O&M costs as it is repetitive maintenance on existing assets.

Project Name: Recreation Center Enhancements

Project at a Glance

Project Type:	Capital Enhancement		
Department:	Parks & Recreation	**Subcommunity:**	North Boulder
Project Number:		**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	2
		CEAP Status:	

Project Description

The department's master plan indicates several key themes that relate to health and wellness, youth activity, community engagement and asset mangement. To continue supporting these key themes, the department will be providing repairs, renovaitons and upgrades to recereation centers. In 2015, the department will complete a strategic plan for all recreation centers that illustrates implemenation priority for critical projects. Pending the outcome and strategies of the Recreation Facility Strategic Plan, this project will fund the initial implementation projects outlined within the plan. A critical project that has been identified previously includes renovating the front desk area at the North Boulder Recreation Center to increase operational efficiency of user access and safety of center customers.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

As the scope of work is further defined, the necessity of public input will be determined.

Relationship with Other Departments

Parks and Recreation staff will coordinate with FAM, Public Works/Utilities, Planning and any other identified department stakeholders as necessary.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$122,000
Acquisition	
Construction	$1,098,000
Total Project Cost	**$1,680,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$1,680,000
Funding Total	($1,680,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Permanent Parks & Recreation Fund	$0	$280,000	$100,000	$0	$280,000	$280,000	$280,000
Parks & Recreation .25 Cent Sales Tax Fund	$0	$0	$180,000	$280,000	$0	$0	$0
Subtotal All Funds	$0	$280,000	$280,000	$280,000	$280,000	$280,000	$280,000

Total Funding Plan **$1,680,000**

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:**

Additional Annual O&M Description:

This project will improve the existing facility which will be incorporated into the existing O&M of the center.

Project Name: Recreation Facility Strategic Plan

Project at a Glance

Project Type:	Capital Planning Studies		
Department:	Parks & Recreation	**Subcommunity:**	System-wide
Project Number:		**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	
		CEAP Status:	

Project Description

The department's master plan indicates an action item of completing a comprehensive planning study and analysis to guide the future repair, renovation and improvement of recreation facilities to meet community needs and current trends to provide recereation opportunities to the community. This plan will begin with a thorough assessment of the existing physical systems including: structural, mechanical, electrical, plumbing systems, building cladding, roofing, and interior systems. The assessment shall also extend to the following architectural systems: life safety (egress and fire protection) and ADA accessibility. The assessment shall note both the condition of each element, its current code compliance and changes required to bring it into current code compliance. The assessment will address the mechanical, electrical and architectural systems related to energy efficiency and shall note changes required to bring the structure into compliance with the 2012 IECC. City of Boulder flood requirements will also be assessed. Additionally, operational efficiencies, improvements and remodeling strategies will be reviewed to ensure the facilities are meeting the needs and demands of the community comparable to other facilities.

The outcome of this plan will allow the department to work closely with FAM and other departments to effectively manage the City's recreation facilities in terms of regular improvements, ongoing preventative maintenace and major repairs based on conditions and lifecycle of assets. This plan will also inform the department of recommended upgrades that will encourage community use and provide amenities comparable to other communities in order to meet demand.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The community will be invited to open houses to review the planning process and participate in surveys relative to needs and trends in recreation facilities throughout the community.

Relationship with Other Departments

Parks and Recreation will work closely with multiple city workgroups such as FAM, Risk Management, Planning and Development Services and Human Services.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$150,000
Acquisition	
Construction	
Total Project Cost	**$150,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$150,000
Funding Total	($150,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Parks & Recreation .25 Cent Sales Tax Fund	$0	$150,000	$0	$0	$0	$0	$0
Total Funding Plan	**$150,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:**

Additional Annual O&M Description:

This is a planning study and not associated with any capital or maintenance costs. When future capital projects are planned, the O&M will be identified for those distinct projects.

Project Name: Tributary Greenways Program - Lottery

Project at a Glance

Project Type:	Transfer		
Department:	Parks & Recreation	**Subcommunity:**	Multiple Subcommunities
Project Number:		**BVCPArea:**	
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	

Project Description

The program is intended to improve and protect the many riparian corridors that pass through the city. Improvements include pedestrian/bicycle paths, drainage and flood control structures, and preservation and enhancement of natural features. A portion of the capital funding for this program was shifted to needed maintenance of existing system beginning in 2002. See Greenways CIP/Budget section. Project funding is ongoing. This represents the Lottery Fund contribution to the program.

Relationship to Guiding Principles

- ☐ Consistent with Master Plans
- ☐ Achieves Community Sustainability goals
- ☐ Includes sufficient funding for operation and maintenance
- ☐ Maintains and enhances city's business systems
- ☐ Provides capacity and flexibility in long term planning
- ☐ Sustains or improves existing assets
- ☐ Maximizes efficiency and demonstrates positive cost/benefit
- ☐ Fund includes sufficient reserves
- ☐ Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

CEAP's are completed for all significant greenways projects and are reviewed by appropriate boards. See Greenway CIP for more detailed information.

Relationship with Other Departments

The Greenways program requires coordinating with Transportation, Open Space, Flood Utility, Planning and Parks Departments.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	

Unfunded Amount

Unfunded Amount

Project Cost Total	
Funding Total	($651,600)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Lottery Fund	$150,000	$125,400	$125,400	$125,400	$125,400	$0	$0
Total Funding Plan	**$651,600**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:**

Additional Annual O&M Description:

no addiitonal - funding is for the program, specific projects are outlined in the Greenways CIP

Project Name: Urban Forest Management Plan

Project at a Glance

Project Type:	Capital Planning Studies		
Department:	Parks & Recreation	**Subcommunity:**	System-wide
Project Number:		**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	
		CEAP Status:	

Project Description

The Parks and Recreation Department has recognized a need to develop a comprehensive plan to provide specific management direction through policies that will balance the long-term sustainability of the urban forest with the outcomes of the community's sustainability framework. The U.S. Forest Service estimates there are over 656,000 trees within the City of Boulder with a combined value of $1.2 billion. The department's Forestry division currently manages over 38,000 trees within parks and streetscapes throughout the community. Due to ongoing threats and constraints to the health and viability of the urban forest, this long-range management plan will allow the City to more effetively and efficiently manage the forest based upon the goals of the community and relevant city plans. This management plan will include a complete inventory of the City's urban forest, current and receommended management practices, opportunities and constraints, partnerships and implementation strategies. In 2014, initial planning and management strategies will be developed in conjunction with the Emerald Ash Borer response that will help inform the planning scheduled for 2015.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The community will be engaged throughout the process to learn about the benefits of the urban forest, provide input relative to priorities and implementation as well as review all deliverables throughout the process.

Relationship with Other Departments

All city departments will be engaged in the process as necessary.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$120,000
Acquisition	
Construction	
Total Project Cost	**$120,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$120,000
Funding Total	($120,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Parks & Recreation .25 Cent Sales Tax Fund	$0	$120,000	$0	$0	$0	$0	$0
Total Funding Plan	**$120,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:**

Additional Annual O&M Description:

There are no capital or maintenance costs associated with the management planning study. The plan will outline various funding implicatoins and scenarios that will include O&M. These costs would be included in any future CIP project as an outcome of the plan.

Project Name: Violet Park

Project at a Glance

Project Type:	New Capital Project		
Department:	Parks & Recreation	**Subcommunity:**	North Boulder
Project Number:		**BVCPArea:**	Area I
CEAP Required:	Yes	**Map Number:**	3
		CEAP Status:	

Project Description

Violet Park is an undeveloped neighborhood park located along Violet Avenue east of Broadway in North Boulder. The park was acquired several years ago to satisfy the level of service requirements for the City to meet the needs of the growing community by providing park land and amenities to North Boulder. This project will allow funding for the initial development of the park in conjunction with the planned Fourmile Canyon Creek Greenway improvements through this reach of the creek. The Greenway Project will provide funding for the multi-use path while the park funding will allow for initial phase of development of the park. By combining the projects, the City will realize an economy of scale with both projects developing concurrently. Funding for ongoing Operations and Maintenance costs has not yet been identified. It is anticipated that this will be identified prior to completion of the project in 2019.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

A formal CEAP process will be initiated in late 2013 that will engage all staff and community members located within the area of the proposed improvements.

Relationship with Other Departments

The project will engage Public Works and Planning and Development Services.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$30,000
Acquisition	
Construction	$470,000
Total Project Cost	**$500,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$500,000
Funding Total	($500,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Permanent Parks & Recreation Fund	$0	$0	$0	$0	$0	$500,000	$0
Total Funding Plan	**$500,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $2,529 **Funding Source:** Existing Parks O&M funding - .25 Cent Sales Tax Fund

Additional Annual O&M Description:

This cost is based upon the required O&M budget for the proposed development that will occur.

[This page is intentionally blank.]

Funding Overview

The Police Department is funded by the General Fund. Currently there is no specific capital funding source for General Fund departments and capital needs are addressed on a case by case basis, as funds are available. Strategies for addressing unfunded capital needs are being developed (see Appendix B) and will be presented to council in the coming months.

Potential sources of funding for the capital projects noted below include each of the following or any combination of:

- an increase in sales and use tax
- an increase in property tax mill levy
- bond funding
- use of existing operating funding to build a capital fund or pool of money available for capital projects.

Past capital improvement funding has been provided through grant funding. Typical grants received by the Police Department are funded at the Federal level, usually through the U.S. Department of Justice, and are awarded once a year. The Police department currently receives the Justice Assistance Grant (JAG) that is used to fund equipment purchases. The JAG grant is based on crime statistics and has been decreasing in value in the last few years. The average amount awarded is approximately $23,000.

Another source of funding for capital projects is the use of Asset Forfeiture funds. These funds are from seized assets that were used during the commission of crimes.

Additionally, funding from the Capital Improvement Bond (CIB) Fund supports a number of projects citywide. CIB funding is indicated by the following symbol:

Accomplishments and Highlights

Projects Completed in 2014:

- In-Car Video System: purchase of a server to increase the storage capacity for the in-car video system. The in-car video system project will be completed by December of 2014 and the system installed for use in the patrol vehicles.

Projects Expected for Completion in 2015:

- Replacement of the Records Management System (RMS): a replacement RMS will be purchased with funds from the Asset Forfeiture Fund. The acquisition of a new RMS is a priority project as the current RMS runs on Windows XP, an outdated operating system.

Projects Starting in 2015, but Not Completed:
None

Highlights of 2016-2020 Projects:
None

Relationship to Guiding Principles

CIP Guiding Principles:
The Department's recently adopted Master Plan serves as the guide to priority capital funding for the Police Department. Capital projects seek to create efficiency and leverage outside funding sources such as grants.

Prioritization:
The Police Department is working together with IT, FAM and Finance to analyze technology, facility and equipment replacement needs, as well as emerging technology needs and solutions. The results of this analysis will help prioritize funding.

Projects not in a Master Plan:
None

New Projects

The RMS was not in the previous CIP but the ability to use the Asset Forfeiture funds for this purchase allowed for the project to be included in the CIP for 2015.

Operation and Maintenance Impacts

None

Deferred, Eliminated, or Changed Projects

None

Unfunded Projects and Emerging Needs

In the future, the Boulder Police Department (BPD) will incorporate new initiatives into the planning and budget processes as city resources allow. Examples include: upgrading technology in order to improve response times and increase efficiency; and expanding the Public Safety

Building to better accommodate staffing and technology needs. Specific, high priority unfunded projects include:

- Public Safety Building Expansion and Renovation: Construct a 9,700 expansion for Police functions with additional parking for 30 to 50 spaces in a parking garage, along with associated renovations to the existing facility. Estimated cost $7.9 million.
- City-wide Radio Infrastructure: Over the next 5 years, much of the city's radio infrastructure will need to be replaced due both to age and new unfunded narrow-banding mandates expected from the Federal Communications Commission (FCC). This will include the need for new infrastructure as well as new radios, and radio pack sets for all departments using the radio system. Estimated cost $2 million.
- Gold Elite Radio Consoles: The new expected narrowing banding mandates of the FCC will make this type of system necessary in the Police/Fire Communications Center. Estimated cost $1.5 million.
- Body Cameras: New technology is becoming standard for departments in protecting both the officers and the community that they serve. Estimated cost $72,000.

Table 12-1: 2015-2020 Funding Summary By Department

POLICE

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Maintenance										
Records Management System	$ 950,000	$ 850,000	$ 100,000	$ -	$ -	$ -	$ -	$ 950,000	$ -	$ -
Subtotal	$ 950,000	$ 850,000	$ 100,000	$ -	$ -	$ -	$ -	$ 950,000	$ -	$ -
Total	**$ 950,000**	**$ 850,000**	**$ 100,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 950,000**	**$ -**	**$ -**

[This page is intentionally blank.]

Project Name: Records Management System

Project at a Glance

Project Type:	Capital Maintenance		
Department:	Police	**Subcommunity:**	Crossroads
Project Number:		**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	
		CEAP Status:	

Project Description

The Records Management System (RMS) is an important tool to more efficiently use the current technology to document crime, analyze crime trends, and determine appropriate police response. The acquistion of a new RMS is a priority project since the current RMS runs on Windows XP, an outdated operating system. The department has received approval from the U.S. Department of Justice to use up to $950,000 of Asset Forfeiture Funds to purchase a new RMS.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [x] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The new RMS will be put out to the appropriate public process to bid.

Relationship with Other Departments

N/A

Change from Past CIP

Newly identified.

Estimated Total Cost

Project Cost

Planning	
Acquisition	$950,000
Construction	
Total Project Cost	**$950,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$950,000
Funding Total	($950,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Asset Forfeiture Fund	$0	$850,000	$100,000	$0	$0	$0	$0
Total Funding Plan	**$950,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $100,000 **Funding Source:** General Fund

Additional Annual O&M Description:

This would be for the maintenance agreement and future replacement of the RMS.

Funding Overview

Investment in Transportation infrastructure is occurring through five separate funds listed below. An update to the Transportation Master Plan is underway and anticipated to be completed in 2014. The plan update will influence projects and guide funding in future years Capital Improvements Programs (CIP's).

Airport Fund

The Airport Fund accounts for the operations of the city-owned municipal airport and supports airport investment. It is supported primarily by lease revenue and entitlement funds from the Federal Aviation Administration (FAA).

Transportation Fund

The Transportation Fund accounts for construction, operation and maintenance of all major thoroughfares, local streets, bikeways, walkways and other transportation systems. Funding for city transportation projects comes from several different sources: 0.60% dedicated sales tax, Highway Users Tax, County Road and Bridge funds, State Highway Maintenance and Landscape Funds, and Moving Ahead for Progress in the 21st Century Act (MAP-21) federal. In November of 2013, Boulder voters passed two tax initiatives that increase the transportation fund by .15% dedicated sales tax annually for the next 16 years. This additional tax will be used to fund deferred transportation maintenance and some key multi-modal improvements. This is the first year to incorporate the additional funding into the CIP budget process.

Transportation Development Fund

The Transportation Development Fund accounts for development fees to be utilized for the construction of transportation capital improvements related to new development and growth. Funding for the Transportation Development Fund is provided primarily through the transportation excise tax (TET) revenues. The TET was instituted in the 1980s to fund transportation improvements related to growth and is paid by new commercial and residential development.

Boulder Junction Improvement Fund

The Boulder Junction Improvement Fund was created in 2011 for the Boulder Junction Key Public Improvements. Funding is provided from development related revenues generated in the Boulder Junction Area that will be reinvested into Key Public Improvements in this area. Transportation Excise and Transportation and General Fund Construction Use Taxes collected from development

in the area will be used on these improvements in addition to other money budgeted in the Transportation CIP. Other department funding sources will also be used for these projects.

Capital Bond Fund

Additionally, funding from the Capital Improvement Bond (CIB) Fund supports a number of projects managed by Transportation. CIB funding is indicated by the following symbol:

2013 Flood Impact

Benefitting from the Greenways system, built in partnership with the flood utility, and state and federal grants, the transportation system had limited damage during the 2013 flood. The Transportation operating reserve, 2011 capital bond proceeds for maintenance and repair, and increased investment in ongoing maintenance allowed for immediate response and eventual repair to flood-damaged infrastructure. However, since flood repair and recovery became the top repair and reconstruct priority, other repair projects at the top of the list were deferred. There is a cascading impact as those prior priority projects are moved to 2015 and then 2015 projects to 2016 and so on. As the CIP evolves over time, Transportation will continue to seek partnerships to invest in resilient infrastructure. An upcoming opportunity is the Denver Regional Council of Governments (DRCOG) Transportation Improvements Program (TIP) federal funding award process. As in past award cycles, if the city successfully applies for grants that benefit flood mitigation, projects will then be incorporated in the 2016 – 2021 CIP.

14th Street Transit Center Improvements

Accomplishments and Highlights

The projects in the capital improvements program are selected and developed to implement TMP priorities. The TMP prioritized a system of multimodal corridors in the city for strategic investment and completion. The term multimodal corridor has now been replaced with "complete street." Complete Streets not only includes the street itself but also facilities for the associated ¼ mile travel shed on either side.

Projects to be Completed in 2014

- 28th Street Multi-Use Path: on the west side of 28th Street from Arapahoe to Mapleton.
- Arapahoe Reconstruction: from Folsom to 15th Street .
- Junction Place Bridge over Goose Creek: (landscaping likely Spring 2015) .
- Transit Stop Improvements: CDOT FASTER funded – various locations throughout Boulder.
- South Boulder Road and Manhattan Safe Routes to School project: including pedestrian improvements and a signal at the intersection.

- Violet Intersection Realignment: at 28th Street.
- Pearl Parkway Multi-way Boulevard: South side of Pearl – 30th east to the railroad tracks.

Projects Expected for Completion in 2015:

- Pearl Parkway Multi-use Path TIP Project: North side of Pearl from 30th to 47th and Multi -way Boulevard on the north side of Pearl from 30th east to the railroad tracks.
- Diagonal – 28th Street to East of 30th Street: Reconstruction and multi-modal Improvements.
- Foothills/Valmont Operational Improvements.
- 28th Street Improvements from Pearl to Valmont: including the completion of multi-use paths on both sides of 28th Street and the third bus/bike/right-turning vehicle lane.
- 63rd Street widening: Between Arapahoe and Valmont where it has not already occurred including a structure replacement over the Leggett ditch.

Projects Starting in 2015, but not Completed:

- 28th Street Multi-Use Path: Path and On-Street Bicycle Facility Improvements from Iris to Yarmouth.
- Baseline Underpass: East of Broadway and associated Multi-use Path and sidewalk Improvements.
- 29th/Valmont Safety Project: with Federal Hazard Elimination Grant – installation of a traffic signal and associated pedestrian improvements.

Highlights of 2016-2020 Projects:

- 28th Street improvements: Baseline to Iris are planned to be fully funded by 2016.
- The next TIP application process will begin in late 2014 with funding starting in 2015.
- Consistent with Budget Guiding Principles and Priority Based Budgeting, a strategic funding line item in the CIP is for TIP local match and TMP Implementation, allowing flexibility as the TMP Update is completed later this year and to allow the leveraging of external funding.
- Transportation Corridor Scoping and Prioritization Projects were added for Canyon Boulevard, East Arapahoe, and 30th/Colorado timed to follow the city-wide coordinated conceptual planning processes in these areas.
- A Major Capital Reconstruction Project was added using the new transportation funds to allow flexibility for repair or reconstruction of major assets in the transportation system.
- Xcel has identified deficiencies in street light poles that need to be repaired and funding has been programmed to cover the projected costs.
- Airport CIP: Rehabilitation of Airport Parking Ramp in 2018 and the Airport Runway in 2018/2020. Funding is (95%, 2.5%, 2.5%) FAA, Colorado Department of Transportation (CDOT), and city respectively.

Relationship to Guiding Principles and Prioritization

CIP Guiding Principles:

Airport Fund

The Airport Master Plan was updated in 2007, and its purpose is to assess current and future needs of the airport and provide a plan for facility and management improvements for the next 20 years. Recommended projects were identified and categorized into a Fiscally Constrained Plan, Action Plan, and a Vision Plan. Investments are focused on maintaining infrastructure and facilities. The Airport Fund is one of a handful of general aviation airports in Colorado which is not supported by a general fund. The airport is supported through user fees that leverage external funding from federal and state sources for improvements and capital maintenance. In addition to flight training and recreational use, the airport provides an emergency response role and fulfills the demand of the aviation business sector such as weather research and aviation-related design and manufacturing that would move outside of Boulder without the airport. The airport served as a key city facility in the September, 2013, flood emergency response effort.

Transportation Funds

All proposed projects in the 2015-2020 CIP are consistent with the TMP, last updated in 2008, and its budget guiding principles. An update to the TMP is currently underway. The citywide CIP Guiding Principles share many of the same traits as the TMP Budget Guiding Principles including focusing on maintenance and safety of the existing system, leveraging external funding and supporting community sustainability goals.

Transportation projects are important improvements for advancing the community sustainability framework goals, including environmental, social and economic objectives.

Maintenance of the existing system continues as the highest funding priority of the TMP and is reflected throughout the Transportation CIP and operating budget.

Transportation projects meet legal mandates such as ADA requirements for transportation improvements, and for purchasing and contract administration for projects receiving state/federal grants. Public safety is also a key focus of all transportation projects - designs meet local, state and federal standards and some funding is specifically for hazard eliminations like the 29th/ Valmont project.

Leveraging funding is prevalent in the transportation CIP and extensive outside money is acquired using the limited city transportation dollars. Transportation also promotes community partnerships by working with other agencies such as RTD, Boulder County, CU and CDOT. Transportation coordinates projects with other departments including community planning and sustainability, water/wastewater/storm, parks and recreation, and open space to implement

improvements simultaneously to save construction and future maintenance costs. Transportation works to maintain adequate reserves and flexibility in the CIP and operating budgets to respond to emergencies and revenue fluctuations.

Prioritization:
Aligning with the policies of the Transportation Master Plan is an important aspect of the Transportation Budget's guiding principles. The TMP calls for developing a balanced multimodal system that offers transportation choices. In City Council/Board budget processes, a list of Transportation budget guiding principles has been developed and updated to reflect the positive vote in November, 2013. It includes priorities and strategies that are used to develop the Transportation CIP. The newly revised principles are:
Transportation Budget Guiding Principles – Credible, Clear and Consistent

- As top priority, maintain and operate the existing, valuable multi-modal system, including investments in safety.
- As additions are made to the system, address ongoing operation and maintenance needs.
- Continue to advance innovations in the design, construction, operation and maintenance of the system.
- Strategically enhance the Complete Street network, prioritizing projects that have maximum impact improving safety, mobility and efficiency.
- Advance corridor studies integrating the city's Sustainability Framework and Resiliency.
- Leverage external funds extending the ability of local dollars to implement city goals.
- Continuously strive for efficiency and effectiveness in how work is accomplished.
- Assure budget decisions are sustainable over time.
- Keep in mind the goal of identifying long-term, sustainable funding that is tied to vehicle use.

<u>Boulder Junction Improvement Fund</u>
As a part of the adopted Transit Village Area Plan (TVAP) (September 2007, Revised August 2010) and related 2007 TVAP Implementation Plan, several Key Public Improvements were identified for public funding with the following key guiding principles:

- Identify mechanisms to fairly distribute public improvement benefits and burdens among all area property owners.
- Complete key connections and improvements needed ahead of new development.
- The publicly-funded Key Public Improvements should benefit the City as a whole or implement the vision and goals for the TVAP area.
- The proposed transportation connections in this area are consistent with the adopted TVAP Transportation Connections Plan and the TMP.

Projects Not in Master Plans:
The TMP Update process is underway. The plan goes to City Council for acceptance in July 2014. Results from the update have been used to inform the 2015-2020 CIP.

New Projects

Three new projects were added in the 2015 to 2017 CIP to fund Transportation Corridor Scoping and Prioritization work on Canyon Boulevard, East Arapahoe and at 30th Street/Colorado Avenue. The timing of these projects is intended to follow the citywide conceptual planning processes and will identify key projects and costs to be programmed in future CIP planning processes.

Another added project in the 2015 to 2020 CIP is for major capital reconstruction. Transportation has on-going maintenance programs in the operating budget such as overlay and sidewalk repair that take care of on-going maintenance needs. This item will complete work similar to the Capital Bond category titled "Replace substandard bridges, structures, signs and systems." This funding could apply to major capital assets for any transportation mode. The first year of funding will include an assessment and prioritization of needs for items such as major roadways, bridge crossings and retaining walls.

The last new project is titled "Deficient Street Light Pole Replacement" and is to pay Xcel to repair identified structurally deficient street light poles that have rusted or been damaged in other ways.

Operation and Maintenance Impacts

The City Council approved placing two tax initiatives on the November, 2013 ballot and both were passed by the Boulder voters. One tax is a bridge for six years, starting in 2014, and the other tax is for the following ten years, starting in 2020. The two together result in 0.15% tax increase annually that will fund deferred and newly identified transportation maintenance needs and some key public improvements.

The transportation division has been adding a significant portion of the transportation sales tax collection increases over the last few years into the maintenance and operations of the system and will now have a more significant boost with the tax passed last November.

Deferred, Eliminated, or Changed Projects

Transportation Fund

- Funding amounts were increased annually in the Pedestrian Facilities Enhancement by $50k and in the Bikeway Facilities Enhancements by $100k.
- Funding for the 28th Street: Baseline to Iris improvements project was eliminated in 2017 as project funding completion is anticipated in 2016.
- Funding for the TIP Local Match/TMP Implementation was increased to an average of $3.8 mil annually over the six year planning horizon. The TIP selection process is

anticipated to occur in 2014, and the TMP update is planned to be completed in 2014. This money will be moved to specific projects as they are funded or identified.

Transportation Development Fund

- Funding for the 28th Street: Baseline to Iris improvements project was eliminated in 2017 as project completion is anticipated in 2016.
- Added funding for TIP Local Match/TMP Implementation was added in anticipation of the outcome of TMP Implementation. This project includes $1.75 Mil total in the 2015 to 2020 CIP.

Boulder Junction Improvement Fund

The Boulder Junction Improvement Fund CIP continues to be refined to best coordinate timing with private developments and to respond to other unanticipated coordination issues. The Boulder Junction Improvement Fund CIP reflects minor changes compared to the 2014-2019 CIP. Funding for development coordination in the out years of 2018 and 2019 was deleted anticipating that Phase I improvements will be complete. If future needs are identified funding will be added through subsequent CIP process.

Unfunded Projects and Emerging Needs

Unfunded Projects

Funding Required for Unfunded Improvements:

The unfunded projects list in the Transportation Fund is informed by the TMP update currently in process and area/corridor planning processes including next phase Civic Area planning, Envision East Arapahoe and 30th Street/Colorado Avenue planning. The transportation project needs identified in the plans are currently unfunded. Planning and design efforts would help inform future capital bond initiatives and potential leveraged funding opportunities, such as through competitive TIP or state grant opportunities. Also, Boulder Junction implementation continues to have additional transportation connections needs that are not currently funded beyond the first phase of high priority Key Public Improvements in the Phase 1 area.

Quiet zone implementation to allow for quieter railroad crossings continues to come up as a community desire and is not currently funded. The current evaluation identifies approximately $5M in capital improvements needed for the city's railroad crossings to be Quiet Zone compliant.

Evaluating the bigger picture transportation unfunded improvements, the 2014 TMP will establish updated funding at three levels —Current Funding, Action Plan, and Vision Plan – through 2035.

Emerging Need: Corridor /Area Planning

As noted above, in areas of change such as Civic Area, East Arapahoe and CU Boulder's East campus, capital improvements will likely need funding in the future.

Advisory Board Action

On June 9, 2014, the Transportation Advisory Board voted 5-0 to recommend approval of the proposed 2015-2020 Transportation Fund, Transportation Development Fund and Boulder Junction Improvement Capital Improvement Programs.

[This page is intentionally blank.]

Table 13-1: 2015-2020 Funding Summary By Department

PUBLIC WORKS - TRANSPORTATION

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Enhancement										
28th St (Baseline to Iris)	$ -	$ 860,000	$ 860,000	$ -	$ -	$ -	$ -	$ 1,720,000	$ -	$ -
28th St (Baseline to Iris) II	-	470,000	470,000	-	-	-	-	940,000	-	-
Boulder Junction - Junction Pl Enhancements (Goose Creek to Bluff)	877,000	477,000	-	-	-	-	-	477,000	400,000	-
Miscellaneous Development Coordination	-	50,000	50,000	50,000	50,000	50,000	50,000	300,000	-	-
Signal Maintenance and Upgrade	-	-	-	-	200,000	-	-	200,000	200,000	-
Subtotal	**$ 877,000**	**$ 1,857,000**	**$ 1,380,000**	**$ 50,000**	**$ 250,000**	**$ 50,000**	**$ 50,000**	**$ 3,637,000**	**$ 600,000**	**$ -**
Capital Maintenance										
Deficient Street Light Pole Replacement	$ 1,280,823	$ 321,000	$ 265,000	$ 265,000	$ -	$ 121,000	$ 121,000	1,093,000	$ 187,823	$ -
Major Capital Reconstruction	-	800,000	800,000	800,000	800,000	800,000	800,000	4,800,000	-	-
Pedestrian Facilities - Repair, Replacement, ADA	-	629,000	629,000	629,000	629,000	629,000	629,000	3,774,000	-	-
Subtotal	$ 1,280,823	$ 1,750,000	$ 1,694,000	$ 1,694,000	$ 1,429,000	$ 1,550,000	$ 1,550,000	$ 9,667,000	$ 187,823	$ -
Capital Planning Studies										
Transportation Corridor Scoping and Prioritization - Canyon Blvd	$ 200,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	100,000	$ 100,000	$ -
Transportation Corridor Scoping and Prioritization - East Arapahoe	200,000	100,000	100,000	-	-	-	-	200,000	-	-
Transportation Corridor Scoping and Prioritization - 30th/Colorado	200,000	-	100,000	100,000	-	-	-	200,000	-	-
Subtotal	$ 600,000	$ 200,000	$ 200,000	$ 100,000	$ -	$ -	$ -	$ 500,000	$ 100,000	$ -
New Capital Project										
Bikeway Facilities - Enhancements	$ -	$ 225,000	$ 225,000	$ 225,000	$ 225,000	$ 225,000	$ 225,000	$ 1,350,000	$ -	$ -
Boulder Junction - Development Coordination	825,000	75,000	75,000	75,000	-	-	-	225,000	450,000	150,000
Pedestrian Facilities Enhancements-Missing Links, Crossing Treatments	-	125,000	125,000	125,000	125,000	125,000	125,000	750,000	-	-
TIP Local Match/TMP Implementation	-	3,300,000	3,300,000	4,200,000	4,000,000	4,000,000	4,000,000	22,800,000	-	-
Boulder Junction - Traffic Signal at Bluff Street and 30th Street	228,000	-	-	228,000	-	-	-	228,000	-	-
Boulder Junction - Traffic Signal at Junction Place and Valmont	304,000	-	-	304,000	-	-	-	304,000	-	-
TIP Local Match/TMP Implementation II	-	-	-	470,000	300,000	400,000	400,000	1,570,000	-	-
Subtotal	$ 1,357,000	$ 3,725,000	$ 3,725,000	$ 5,627,000	$ 4,650,000	$ 4,750,000	$ 4,750,000	$ 27,227,000	$ 450,000	$ 150,000

Table 13-1: 2015-2020 Funding Summary By Department (Cont.)

PUBLIC WORKS - TRANSPORTATION (Cont.)

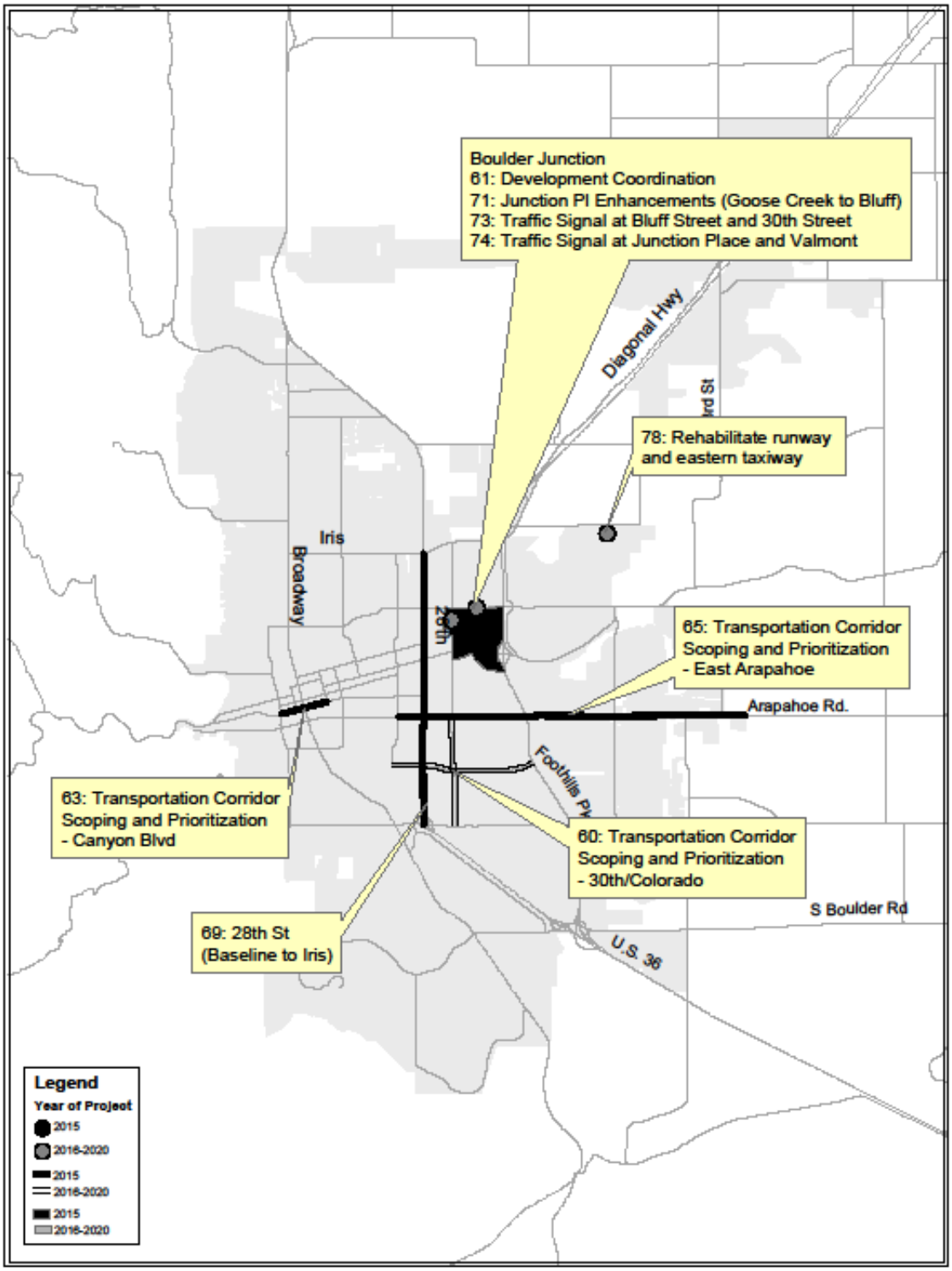
	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Transfer										
Tributary Greenways Program - Transportation - Transfer	$ -	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 585,000	$ 97,500	$ -
Subtotal	$ -	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 585,000	$ 97,500	$ -
Total	**$ 4,114,823**	**$ 7,629,500**	**$ 7,096,500**	**$ 7,568,500**	**$ 6,426,500**	**$ 6,447,500**	**$ 6,447,500**	**$ 41,616,000**	**$ 1,435,323**	**$ 150,000**

PUBLIC WORKS - MUNICIPAL AIRPORT

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Maintenance										
Rehabilitate Runway and Eastern Taxiway	$ 4,935,000	$ -	$ -	$ -	$ 435,000	$ -	$ 4,500,000	$ 4,935,000	$ -	$ -
Subtotal	$ 4,935,000	$ -	$ -	$ -	$ 435,000	$ -	$ 4,500,000	4,935,000	$ -	$ -
								-		
Total	**$ 4,935,000**	**$ -**	**$ -**	**$ -**	**$ 435,000**	**$ -**	**$ 4,500,000**	4,935,000	**$ -**	**$ -**

City of Boulder Captial Improvement Projects, 2015 - 2020

PW / Transportation & Municipal Airport



[This page is intentionally blank.]

Project Name: 28th St (Baseline to Iris)

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Transportation	**Subcommunity:**	Multiple Subcommunities
Project Number:	781743	**BVCPArea:**	Area I
CEAP Required:	Yes	**Map Number:**	69
		CEAP Status:	Completed 2001 - Baseline to Arapahoe / 2002 - Pearl to Iris

Project Description

The 28th Street (Baseline to Iris) funding is for the implementation of complete street elements for all modes of transportation on the 28th Street corridor between Baseline and Iris. Recommended improvements include: urban design, landscaping, and streetscape elements throughout the corridor; transit amenities including queue jumps, transit stops and site furniture; bicycle and pedestrian facilities including constructing multi-use paths; adding raised crossings at free right turn lanes; and traffic efficiency elements including adding left turn lanes at various intersections and widening the Boulder Creek Bridge.

Portions of the 28th Street corridor implementation completed to date include all of the south section from Arapahoe to Baseline. Portions of the north section completed from Pearl Street to Iris Avenue, include the intersections at Iris Ave., Pearl St. and Valmont - south to Bluff Street along with the installation of pedestrian crossings and bike/bus/right turning vehicle lanes in the vicinity of the intersections. The last 28th Street project completed was the installation of a multi-use path on the west side of 28th from Baseline to Colorado that was constructed in 2012-2013.

Implementation of a balanced multi-modal corridor, or "complete streets," transportation system is a focus area in the Transportation Master Plan and 28th Street from Iris to Arapahoe has been identified as the highest ranking transportation corridor, and 28th from Arapahoe to Baseline is the third highest ranking corridor in the city. The planning study and the CEAP for the southern section-Baseline to Arapahoe and the northern section-Pearl to Iris were completed and received City Council approval. Funding for the northern and southern sections began pre 1997 and will end in 2016 and has been combined with federal funding, the Transportation Development Fund, and Capital Bond funding. The improvements between Arapahoe and Pearl are based on the TMP and the BVRC connections plan. The project meets the sustainability goals by providing alternative travel choices that when used reduce congestion and green house gas emissions and reduces the demand for transportation related energy sources.

The next project phase planned in the 28th Street corridor is the "28th Street - Transit and multi-use path Improvements Project" between Arapahoe and Valmont beginning/completing construction in 2014/2015. This project includes the replacement of the existing sidewalks along 28th Street with a 10' wide concrete multi-use path (plus associated scope) along the west side between Arapahoe and Valmont, and along the east side of 28th between Pearl and Valmont. In addition, 28th Street will be widened in areas between Spruce and Valmont in order to complete missing sections of the additional bus/bike/right turning vehicle lanes in both directions between Pearl and Valmont. The multi-use paths between Arapahoe and Mapleton on both sides of 28th Street will generally be funded with the Capital Bond - Transportation New Multi-Use Path Connections funding, and some smaller portion of the 28th street transportation and transportation development funding.

One last phase of construction will remain after the work described above that includes the transportation facilities between Valmont and (north of) Glenwood. This work includes construction of the 3rd lane (bus/bike/right turning vehicle) and multi-use path (both sides). This work would be completed in 2016/2017.

Funding needs for all remaining work divided by the funding source is described below:

Transportation Fund - Project #781743
1. Planning: $100,000
2. Acquisition: $400,000
3. Construction: $3,000,000

Transportation Development Fund - Project #711019
1. Planning: $100,000
2. Acquisition: $400,000
3. Construction: $1,900,000

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The CEAP for the southern section - Baseline to Arapahoe and the northern section - Pearl to Iris- have been approved by City Council. Any of the middle section improvements from Arapahoe to Pearl, will implement the Council approved BVRC Connections Plan.

Relationship with Other Departments

This project requires coordination with the Utility Division for utility upgrades and modifications, with RTD for construction impacts to existing routes and on transit improvements, CDOT on design proposals because 28th Street is a State Highway, CU for any work along their frontage, Arts Commission on the solicitation and review of public art incorporated into the project, the Planning Department for proposed development projects and land use modifications as possible, and the Real Estate Division for the purchase of easements and ROW needed for the proejct.

Change from Past CIP

Funding for 2017 was eliminated as the project can be completed with 2016 funds.

28th St (Baseline to Iris) continued

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	**$0**

Unfunded Amount

Unfunded Amount

Project Cost Total	$0
Funding Total	($2,660,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Transportation Fund	$0	$860,000	$860,000	$0	$0	$0	$0
Transportation Development Fund	$0	$470,000	$470,000	$0	$0	$0	$0
Subtotal All Funds	$0	$1,330,000	$1,330,000	$0	$0	$0	$0

Total Funding Plan **$2,660,000**

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:** Transportation Fund Operating Budget

Additional Annual O&M Description:

Project may result in minimal incremental increases in on-going maintenance costs which will be programmed in the Transportation Fund budget.

Project Name: Bikeway Facilities - Enhancements

Project at a Glance

Project Type:	New Capital Project		
Department:	PW/ Transportation	**Subcommunity:**	Multiple Subcommunities
Project Number:	781692	**BVCPArea:**	Areas I & II
CEAP Required:	No	**Map Number:**	
		CEAP Status:	

Project Description

The Bikeway facilities funding is an ongoing program for smaller bikeway facilities. The construction of bike facilities is included in almost all transportation CIP projects. This program provides additional funding for smaller bikeway projects and/or projects not specifically associated with other capital projects.

Projects constructed with this funding meet the Transportation Master Plan goal of developing an integrated multimodal transportation system. Projects will be consistent with the current TMP Bicycle System Plan and the projects are prioritized yearly. This program also allows for construction of opportunistic improvements and construction of other identified bike projects. Types of projects include providing missing links and enhanced crossings.

In 2015 and 2016, funds will be spent on completing the southern confluence path connection along Valmont Road to Indian Road and for path connections to the east of the Valmont Bikepark. In further out years, funds will be spent on completing multi-use path connections in the confluence area as well as identifying and constructing improvements to improve connectivity to the future US 36 Bikeway.

Annual funding was increased starting in 2014 due to the passage of the 2013 Transportation Tax.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The Public Process for each project will vary. Some projects, depending on the complexity, may require a CEAP. A public meeting was held for the Confluence path projects as part of the CDOT wetlands mitigation in this same general area.

Relationship with Other Departments

This program is coordinated with other departments depending on the particular project. Currently projects are being coordinated with the Greenways program when a project is within the Greenways system, and the Open Space Dept. and the Parks Dept if a project is on or adjacent to Open Space property or Parks property. Additionally, the confluence path project will be coordinated with CDOT's US36 Wetlands Mitigation Project in this same area, the Open Space/Mountain Parks Department because the proposed paths are on Open Space property and Boulder County on permitting including flood permitting as the project is outside of the city limits but on city property.

Change from Past CIP

Annual funding was increased by $100k due to the 2013 Transportation Tax

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	

Unfunded Amount

Unfunded Amount

Project Cost Total	
Funding Total	($1,350,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Transportation Fund	$0	$225,000	$225,000	$225,000	$225,000	$225,000	$225,000
Total Funding Plan	**$1,350,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:** Transportation Fund Operating Budget

Additional Annual O&M Description:

Project may result in minimal incremental increases in on-going maintenance costs which will be programmed in the Transportation Fund budget.

Project Name: Boulder Junction - Development Coordination

Project at a Glance

Project Type:	New Capital Project		
Department:	PW/ Transportation	**Subcommunity:**	Crossroads
Project Number:	751001	**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	61
		CEAP Status:	

Project Description

This project began in 2011, and funding is for ongoing planning and development coordination within the Phase 1 area of Boulder Junction, bounded by 30th Street, BNSF Railroad, Valmont Road and the Irrigation Ditch/Boulder Slough (south of Pearl Parkway). Over the life of this project, work includes base mapping for the Phase 1 Boulder Junction area, conceptual design and cost estimate updates for identified and unidentified possible Key Public Improvements, engineering support, Pearl electrical undergrounding costs and coordination, and coordination of various public improvements with area private development projects.

This project is necessary as part of implementation and coordination associated with the city-funded Key Public Improvements as part of the Transit Village Area Plan (TVAP) - Implementation Plan, and related private development in the Boulder Junction area. The transportation connections as part of the TVAP Connections Plan, are also included in the Transportation Master Plan, and support both plan goals of creating a fine-grained, multimodal network of transportation connections that support a pedestrian friendly environment, create safe and convenient access to transit, and support necessary connections for area redevelopment.

In 2014, project funding was spent on additional surveying/ROW support, engineering review support and public project coordination tasks for 3100 Pearl, Depot Square and remaining Steel Yards developments, BNSF Railroad coordination support, private utility coordination and other tasks. In 2015, $75,000 is anticipated to be spent on on-going surveying, engineering and design support in coordination with private development including: Depot Square, Nickel Flats (Steel Yards), remaining Steel Yards and other private developments, supporting public infrastructure project design, and BNSF Railroad coordination with multiple projects. The private development projects have uncertain schedules, making it difficult to anticipate development coordination support needs.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The development and adoption of the TVAP was the result of a 3-year planning process that included design charrettes, open houses and numerous meetings with property owners in the area. The plan was approved by Planning Board and City Council.

Relationship with Other Departments

The TVAP was a coordinated multi-department design effort between Planning, Public Works (Transportation and Utilities), Housing and Human Services, Parks and Recreation, Downtown & University Hill Management Divisions & Parking Services and other departments. These departments continue to collaborate on private development coordination issues in Boulder Junction, implementation of Key Public Improvements and coordination with RTD on the development of a bus transfer facility (as part of Depot Square development), possible other future Transit-Oriented Development and future Northwest Rail facilities.

Change from Past CIP

This funding ends in 2017 and may be added if needed.

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	**$825,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$825,000
Funding Total	($675,000)
Total Unfunded	**$150,000**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Boulder Junction Improvement Fund	$450,000	$75,000	$75,000	$75,000	$0	$0	$0
Total Funding Plan	**$675,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** N/A

Additional Annual O&M Description:

N/A

Project Name: Boulder Junction - Junction Pl Enhancements (Goose Creek to Bluff)

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Transportation	**Subcommunity:**	Crossroads
Project Number:	751xxx	**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	71
		CEAP Status:	

Project Description

This project includes the "enhancement" of this section of Junction Place, over and above the standard "collector" classification roadway required of future adjoining private developments. The exact nature of the enhancement is still being defined, but is anticipated to include items such as: bike facilities, and possible enhancements to 1) street and sidewalk surface materials, 2) landscaping, 3) streetscape elements and other possible items.

This project was included in the list of Key Public Improvements for public funding as part of the Transit Village Area Plan (TVAP) - Implementation Plan, and is also a part of the TVAP Connections Plan and the Transportation Master Plan. This project supports both TVAP and TMP plan goals of creating a fine-grained, multimodal network of transportation connections that supports a pedestrian friendly environment, creates safe and convenient access to transit, and supports necessary connections for area redevelopment. In particular, Junction Place is viewed as a central spine to the Phase 1 Boulder Junction area, linking 32nd Street north to Pearl Parkway, and continuing north ultimately to Valmont Road.

Costs for these enhancements will be negotiated during private development reviews. Implementation is anticipated to be coordinated with reconstruction of this section of Junction Place, with some cost participation anticipated by private development and applicable "enhancement" costs paid by the City.

For funding purposes, this project design is assumed to start in 2014, with construction anticipated in 2015. The timing of project design and construction is dependent on redevelopment of adjoining properties (such as remaining Steel Yards lots, Air Gas, Sutherlands, etc) and other factors. The timing of private development projects is uncertain, which creates some uncertainties in this public project implementation.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The development and adoption of the TVAP was the result of a 3-year planning process that included design charrettes, open houses and numerous meetings with property owners in the area. The plan was approved by Planning Board and City Council.

Relationship with Other Departments

The TVAP was a coordinated multi-department design effort between Planning, Public Works (Transportation and Utilities), Housing and Human Services, Parks and Recreation, Downtown & University Hill Management Divisions & Parking Services and other departments. These departments continue to collaborate on private development coordination issues in Boulder Junction, implementation of Key Public Improvements and coordination with RTD on the development of a bus transfer facility (as part of Depot Square development), possible other future Transit-Oriented Development and future Northwest Rail facilities.

Change from Past CIP

Portion of funding advanced to 2014 via ATB in Dec 2013

Estimated Total Cost

Project Cost

Planning	$88,000
Acquisition	
Construction	$789,000
Total Project Cost	**$877,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$877,000
Funding Total	($877,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Boulder Junction Improvement Fund	$400,000	$477,000	$0	$0	$0	$0	$0
Total Funding Plan	**$877,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:** Transportation Fund Operating Budget

Additional Annual O&M Description:

Project may result in minimal incremental increases in on-going maintenance costs.

Project Name: Boulder Junction - Traffic Signal at Bluff Street and 30th Street

Project at a Glance

Project Type:	New Capital Project		
Department:	PW/ Transportation	**Subcommunity:**	Crossroads
Project Number:	751xxx	**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	73
		CEAP Status:	

Project Description

This project includes fronting the design/construction cost of a new traffic signal at the intersection of Bluff Street and 30th Street.

This project was included in the list of Key Public Improvements for public funding as part of the Transit Village Area Plan (TVAP) - Implementation Plan, and is also a part of the TVAP Connections Plan and the Transportation Master Plan. This project supports both TVAP and TMP plan goals of creating a fine-grained, multimodal network of transportation connections that supports a pedestrian friendly environment, creates safe and convenient access to transit, and supports necessary connections for area redevelopment. In particular, this new traffic signal will facilitate transit and traffic movements, provide safe pedestrian crossings, and facilitate connections from surrounding neighborhoods and future redevelopment projects.

Implementation is anticipated to be coordinated with adjoining private redevelopment. Reimbursement for a portion of these City funds may be obtained from private area redevelopment.

This project is anticipated to occur in 2017, in conjunction with future private redevelopment near this intersection. The timing of private development projects is uncertain, which creates some uncertainties in this public project implementation.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [ ] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The development and adoption of the TVAP was the result of a 3-year planning process that included design charrettes, open houses and numerous meetings with property owners in the area. The plan was approved by Planning Board and City Council.

Relationship with Other Departments

The TVAP was a coordinated multi-department design effort between Planning, Public Works (Transportation and Utilities), Housing and Human Services, Parks and Recreation, Downtown & University Hill Management Divisions & Parking Services and other departments. These departments continue to collaborate on private development coordination issues in Boulder Junction, implementation of Key Public Improvements and coordination with RTD on the development of a bus transfer facility (as part of Depot Square development), possible other future Transit-Oriented Development and future Northwest Rail facilities.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$25,000
Acquisition	
Construction	$203,000
Total Project Cost	**$228,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$228,000
Funding Total	($228,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Boulder Junction Improvement Fund	$0	$0	$0	$228,000	$0	$0	$0
Total Funding Plan	**$228,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:** Transportation Fund Operating Budget

Additional Annual O&M Description:

Project may result in minimal incremental increases in on-going maintenance costs.

Project Name: Boulder Junction - Traffic Signal at Junction Place and Valmont

Project at a Glance

Project Type:	New Capital Project		
Department:	PW/ Transportation	**Subcommunity:**	Crossroads
Project Number:	751xxx	**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	74
		CEAP Status:	

Project Description

This project includes fronting the design/construction cost of a new traffic signal at the intersection of proposed Junction Place and Valmont Road.

This project was included in the list of Key Public Improvements for public funding as part of the Transit Village Area Plan (TVAP) - Implementation Plan, and is also a part of the TVAP Connections Plan and the Transportation Master Plan. This project supports both TVAP and TMP plan goals of creating a fine-grained, multimodal network of transportation connections that supports a pedestrian friendly environment, creates safe and convenient access to transit, and supports necessary connections for area redevelopment. In particular, this new traffic signal will facilitate transit and traffic movements, provide safe pedestrian crossings, and facilitate connections from surrounding neighborhoods and future redevelopment projects.

Implementation is anticipated to be coordinated with adjoining private redevelopment. Reimbursement for a portion of these City funds may be obtained from private area redevelopment.

This project is anticipated to occur in 2017, in conjunction with future private redevelopment near this intersection. The timing of private development projects is uncertain, which creates some uncertainties in this public project implementation.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The development and adoption of the TVAP was the result of a 3-year planning process that included design charrettes, open houses and numerous meetings with property owners in the area. The plan was approved by Planning Board and City Council.

Relationship with Other Departments

The TVAP was a coordinated multi-department design effort between Planning, Public Works (Transportation and Utilities), Housing and Human Services, Parks and Recreation, Downtown & University Hill Management Divisions & Parking Services and other departments. These departments continue to collaborate on private development coordination issues in Boulder Junction, implementation of Key Public Improvements and coordination with RTD on the development of a bus transfer facility (as part of Depot Square development), possible other future Transit-Oriented Development and future Northwest Rail facilities.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$25,000
Acquisition	
Construction	$279,000
Total Project Cost	**$304,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$304,000
Funding Total	($304,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Boulder Junction Improvement Fund	$0	$0	$0	$304,000	$0	$0	$0
Total Funding Plan	**$304,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:** Transportation Fund Operating Budget

Additional Annual O&M Description:

Project may result in minimal incremental increases in on-going maintenance costs.

Project Name: Deficient Street Light Pole Replacement

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Transportation	**Subcommunity:**	System-wide
Project Number:	781xxx	**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	
		CEAP Status:	n/a

Project Description

This project will provide funds to be paid to Xcel Energy for the replacement of Xcel Energy street light poles that are structurally deficient due to corrosion or physical impact damage. On site inspection by Xcel has revealed 155 poles require immediate replacement, 54 poles require replacement within one year, 217 poles require replacement within two to three years, and 99 poles require replacement within five to six years. Based on historic cost data, Xcel estimates the average replacement cost to be $2,439 per pole. This street light repair project has been mandated by Xcel Energy and is consistent with their practice in communities throughout the front range at this time.

Relationship to Guiding Principles

- [ ] Consistent with Master Plans
- [ ] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No public process performed or anticipated. Xcel will do the work and the light poles will be removed and replaced in their exisitng location.

Relationship with Other Departments

n/a

Change from Past CIP

This item has been added to the 2015 CIP - some funding was required in 2014.

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	$1,280,823
Total Project Cost	**$1,280,823**

Unfunded Amount

Unfunded Amount

Project Cost Total	$1,280,823
Funding Total	($1,280,823)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Transportation Fund	$187,823	$321,000	$265,000	$265,000	$0	$121,000	$121,000
Total Funding Plan	**$1,280,823**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:**

Additional Annual O&M Description:

The funding will repair existing street light poles lessening on-going operating costs.

Project Name: Major Capital Reconstruction

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Transportation	**Subcommunity:**	System-wide
Project Number:	781xxx	**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	
		CEAP Status:	

Project Description

The Major Capital Reconstruction project provides funding to repair existing transportation assets that are close to or at the end of their useful life. Repairs could be for roadway, bikeway, pedestrian or transit capital assets. This funding is a result of the transportation tax that passed in November of 2013. The majority of the tax dollars were for maintenance of our exist transportation assets. This project will allow major assets to be replaced or repaired and the specific project identification process and prioritization will start with the initial funding year of 2015.

A portion of the 2015 budget, the first year of funding this category, will be used to evaluate and prioritize the various capital repairs such as major street reconstruction, bridge crossings and retaining walls. This item is similar to the 2011 capital bond category titled "Replace substandaard bridges, structures, signs and systems." This funding will provide the ability to complete the capital repairs that are not elligible for grant funding or to be used as leveraged funds for this type of project as opportunities arise.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Project processes will be identified as the individual projects are identified. If assets are replaced in the same capacity as they exist today the public will be notified about the construction impacts. If there are substantive changes to the asset a public process will be identified and completed.

Relationship with Other Departments

Transportation will coordinate with the Utilties Department on upgrades, modifications or improvements to existing utilities as identified in each project, the Planning Department to coordinate with any adjacent planned development and other impacted departments and agencies depending on the location of the repairs such as Parks Dept., DUHMD, CU, or CDOT if the project exists on their property or adjacent to their property.

Change from Past CIP

This project has been added to the 2015 CIP and out years.

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	

Unfunded Amount

Unfunded Amount

Project Cost Total	
Funding Total	($4,800,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Transportation Fund	$0	$800,000	$800,000	$800,000	$800,000	$800,000	$800,000
Total Funding Plan	**$4,800,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:**

Additional Annual O&M Description:

This project will repair existing assets and will in turn reduce any maintenance costs related to the assets that are repaired.

Project Name: Miscellaneous Development Coordination

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Transportation	**Subcommunity:**	Multiple Subcommunities
Project Number:	711004	**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	

Project Description

This ongoing funding is intended to construct infrastructure improvements in coordination with or prompted by potential private development. Throughout the year, situations arise where infrastructure improvements required in the vicinity of a proposed development should be made at the same time as the development, and for which a developer cannot be required to construct. Improvements that are typically included are bike and pedestrian, functional efficiency, safety, system preservation, and transit system improvements. This project is growth related because it addresses needs from new development. A major goal in the Transportation Master Plan is to create an integrated, multimodal system and one that is supportive of land use patterns.

In 2014 and 2015, the money will be used for issues that arise during the year that are small items required to be constructed as a result of development or to coordinate with a development project. The projects are not known at this time.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Projects generally require coordination with adjacent neighborhoods and property owners.

Relationship with Other Departments

Close coordination with the Development Review work group and the Planning Department is required as this money is to fund improvements or connections adjacent to or required by development that is not the responsibility of the developer.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	

Unfunded Amount

Unfunded Amount

Project Cost Total	
Funding Total	($300,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Transportation Development Fund	$0	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000
Total Funding Plan	**$300,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:** Transportation Fund Operating Budget

Additional Annual O&M Description:

Project may result in minimal incremental increases in on-going maintenance costs which will be programmed in the Transportation Fund budget.

Project Name: Pedestrian Facilities - Repair, Replacement, ADA

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Transportation	**Subcommunity:**	Multiple Subcommunities
Project Number:	781773	**BVCPArea:**	Areas I & II
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	

Project Description

This ongoing program allows for repair, replacement and construction of existing and new sidewalks, and construction of access ramps. Sidewalk repair priorities have been established in the Sidewalk Repair Program and yearly funding is spent accordingly. Compliance with ADA is resulting in additional expenditures for access ramps and driveway modifications.

This program meets the Transportation Master Plan goal of creating an integrated, multimodal transportation system, emphasizing the role of the pedestrian mode as the primary mode of travel as it is the beginning and end of every travel trip. The program also meets federal ADA requirements of working towards bringing sidewalks and access ramps up to the current federal standards. And, the TMP investment policies identify maintenance as the highest priority item to fund.

In 2014, $629,000 will be spent on design, survey, project management, and construction for the 2014 Annual Sidewalk Repair Program in the downtown area. This area, generally between 9th Street and 20th Street from Arapahoe Road to Spruce Street, is expected to be complete this year. In 2015 the program will begin work in the area west of Broadway between Arapahoe Road and Baseline Road.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

A neighborhood meeting is held for the identified repair area owners in advance of the work starting and individual notices are mailed out yearly to the adjacent property owners.

Relationship with Other Departments

Coordination with the Parks Department - City Forester is required adjacent to city street trees to minimize impacts to the trees. Coordination with the city Utility Division regarding water meter location and relocation if possible. The work in the downtown area will be coordinated with DUHMD and the Parks Department because they maintain various elements in this area.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	

Unfunded Amount

Unfunded Amount

Project Cost Total	
Funding Total	($3,774,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Transportation Fund	$0	$629,000	$629,000	$629,000	$629,000	$629,000	$629,000
Total Funding Plan	**$3,774,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:**

Additional Annual O&M Description:

Adjacent property owners are generally responsible for sidewalk maint. This project does reduce some need to place temporary asphalt patches on damaged sidewalks.

Project Name: Pedestrian Facilities Enhancements-Missing Links, Crossing Treatments

Project at a Glance

Project Type:	New Capital Project		
Department:	PW/ Transportation	**Subcommunity:**	Multiple Subcommunities
Project Number:	781002	**BVCPArea:**	Areas I & II
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	

Project Description

The Pedestrian Facilities budget is an ongoing funding program that includes the installation of missing sidewalk links and pedestrian crossing/safety treatments and potentially social paths and sidewalk widening improvements. The list of identified missing sidewalk links has been prioritized for construction. Crossing treatment improvements are prioritized citywide and include median refuge islands, crosswalk lighting, flashing signs, neck-downs, signing, lighting, and/or pedestrian signals.

This program meets the Transportation Master Plan goal of creating an integrated, multimodal transportation system emphasizing the role of the pedestrian mode as the primary mode of travel as it is the beginning and end of every travel trip.

Last year the program budget went towards a portion of the construction cost for the pedestrian crossing on Spine Rd at Gunpark Dr. and design and construction of the Valmont Rd. path pedestrian bridge. In 2014, the money will be spent on pedestrian crossing location at Spine Road and Chapparal Court, Table Mesa and Yale, and Broadway and Poplar. This funding was increased by $50k starting in 2014 due to the passage of the 2013 Transportation Tax.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

TAB approved the Proposed Prioritized list of Missing Sidewalk Links on May 10, 2004. TAB made a recommendation to support the use of the Pedestrian Crossing Treatment Installation Guidelines in 2005 and the document went to the City Council as information item in 2006. These guidelines were updated in 2012.

The Public Process for installing missing sidewalks links is on-going and may involve a process for one or more locations per year. Staff works with neighborhoods and adjacent property owners on individual improvements.

Relationship with Other Departments

Coordination with the Parks Department - City Forester - is required when the missing links are impacting existing street trees and the Utilities department to address any utility conflicts.

Change from Past CIP

Annual funding was increased by $50k with the passage of the 2013 tax.

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	

Unfunded Amount

Unfunded Amount

Project Cost Total	
Funding Total	($750,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Transportation Fund	$0	$125,000	$125,000	$125,000	$125,000	$125,000	$125,000
Total Funding Plan	**$750,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:** Transportation Fund Operating Budget

Additional Annual O&M Description:

Adjacent property owners are responsible for sidewalk maintenance by code. Crossing treatments have minimal maintenance requirements.

Project Name: Signal Maintenance and Upgrade

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Transportation	**Subcommunity:**	System-wide
Project Number:	711778	**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	

Project Description

The Signal Maintenance and Upgrade project is an on-going program that is used for the installation of growth-related new traffic signals and signal upgrades. Budgeting as a capital project at $200,000 every four years as opposed to budgeting one-quarter of this amount every year is consistent with the project implementation, as this is approximately the cost to signalize or upgrade one intersection.

The decision to install a new traffic signal is made on the basis of a signal warrant study, which uses data collected at the study location (peak period traffic volumes and delay, accident history) to determine if the benefits of a traffic signal at that location (potential for reduced side street delay during peak periods, increased pedestrian and cyclist access, potential for reduction in right-angle accidents) outweigh the downsides (increased main street delay, increased side street delay during off-peak periods, increased pedestrian and cyclist delay during off-peak periods, potential for increase in rear-end accidents). Locations in Boulder that have been identified as potential future signal locations are studied periodically. If there are multiple locations where new signals are desired, they are prioritized based on the magnitude of the identified benefit at each location.

Signalized intersections meet the Transportation Master Plan goals of helping to creating a fine-grained, multimodal network of transportation connections that support a bicycle and pedestrian friendly environment by providing better and safer access across busy streets at peak times.

This funding could also be used for growth related reconstruction of existing traffic signals, to provide operational benefits (such as adding double left-turns), or to address deficiencies (such as aging, corroded poles). The funding is currently available in 2014 and will be available again in 2018.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The public process associated with new traffic signal installations is determined by the location of the new signal and the availability of other alternatives to address the issues to be addressed by the signal installation.

Relationship with Other Departments

New traffic signal installations are coordinated with Xcel Energy, which provides power to operate traffic signals.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	

Unfunded Amount

Unfunded Amount

Project Cost Total	
Funding Total	($400,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Transportation Development Fund	$200,000	$0	$0	$0	$200,000	$0	$0
Total Funding Plan	**$400,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:** Existing operating budgets

Additional Annual O&M Description:

If the funding is used to upgrade an existing signal the maintenance costs will remain the same or go down. If a new signal is installed the project may result in minimal incremental increases in on-going maintenance costs which will be programmed in the Transportation Fund budget.

Project Name: TIP Local Match/TMP Implementation

Project at a Glance

Project Type:	New Capital Project		
Department:	PW/ Transportation	**Subcommunity:**	System-wide
Project Number:	781052	**BVCPArea:**	Areas I & II
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	As appropriate

Project Description

This ongoing funding is for the implementation of projects identified in the Transportation Master Plan that will be prioritized in the current update to the master plan. This money will also be used as local match to leverage potential federal and state funding for projects submitted in future year's DRCOG TIP submittal process (the next process starts in 2014 with funding available in 2015) or other funding match opportunities, developing conceptual plans for projects prior to submitting for possible external funding, or for smaller high priority projects identified through the TMP process. If the city succeeds in acquiring external project funds this money will become the city's funding match. And, in this case, new projects will be created in the CIP that will include the external funding and the city's match.

This budget item allows flexibility to be ready to implement high priority projects that are identified through the TMP update planned to be completed in 2014. The highest priority projects identified in the TMP that best meet the DRCOG scoring criteria are submitted to compete for federal funding. Prior to finalizing the list of projects to submit for DRCOG TIP funding, staff will work with TAB to identify the best projects and then submit the project list to council for their review prior to submitting for potential funding.

The annual funding amounts in this category have increased from last year's CIP to allow flexibility and to be ready to implement projects defined in the TMP update that will be completed in 2014.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Public Process, CEAP and design to be determined in relationship to specific projects.

Relationship with Other Departments

As the projects are identified and refined necessary interdepartmental coordination will be identified.

Change from Past CIP

More funding has been added to this CIP line item

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	**$0**

Unfunded Amount

Unfunded Amount

Project Cost Total	$0
Funding Total	($24,370,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Transportation Fund	$0	$3,300,000	$3,300,000	$4,200,000	$4,000,000	$4,000,000	$4,000,000
Transportation Development Fund	$0	$0	$0	$470,000	$300,000	$400,000	$400,000
Subtotal All Funds	$0	$3,300,000	$3,300,000	$4,670,000	$4,300,000	$4,400,000	$4,400,000

Total Funding Plan **$24,370,000**

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:**

Additional Annual O&M Description:

N/A

Project Name: Transportation Corridor Scoping and Prioritization - 30th/Colorado

Project at a Glance

Project Type:	Capital Planning Studies		
Department:	PW/ Transportation	**Subcommunity:**	Multiple Subcommunities
Project Number:	781xxx	**BVCPArea:**	
CEAP Required:	No	**Map Number:**	60
		CEAP Status:	

Project Description

The city is anticipated to begin a multi-departmental 30th Street and Colorado Avenue Corridor planning effort in 2015. This planning process is expected to be begin in 2015 and is anticipated to conceptually identify some key transportation projects. As a result of the city wide process that will result on 30th Street and on Colorado Avenue, transportation anticipates this funding in 2016 and 2017 will be used to further study and complete a next level of planning to identify the individual projects and the associated costs and priorities so that the projects can be included and implemented in later capital project funding.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [ ] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [ ] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

This process will be identified to coordinate with the city wide planning process for these corridors that is anticipted to be completed in 2015.

Relationship with Other Departments

Close coordination with Community Planning and Sustainabilty, Public Works - Utilties, and the Parks Department in order to have a comprehensive and coordinated plan between the departments and agencies for the development of the corridors. The University of Colorado/Boulder is a major property owner on both of these corridors and the proposed build out of the campus will require a connected transportation system between the various housing, classroom and office spaces that will exist in this area.

Change from Past CIP

This project has been added to the CIP in 2015

Estimated Total Cost

Project Cost

Planning	$200,000
Acquisition	
Construction	
Total Project Cost	**$200,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$200,000
Funding Total	($200,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Transportation Fund	$0	$0	$100,000	$100,000	$0	$0	$0
Total Funding Plan	**$200,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:**

Additional Annual O&M Description:

N/A

Project Name: Transportation Corridor Scoping and Prioritization - Canyon Blvd

Project at a Glance

Project Type:	Capital Planning Studies		
Department:	PW/ Transportation	**Subcommunity:**	Central Boulder
Project Number:	781xxx	**BVCPArea:**	
CEAP Required:	No	**Map Number:**	63
		CEAP Status:	

Project Description

The city wide Civic Area Master Planning process completed in 2013 identified Canyon Boulevard and connections to the north and south between the civic area municipal campus and the downtown commercial areas as key transportation corridors. As a result of the city wide process that identified these corridors, transportation will further study and complete a next level of planning and coordination with agency partners such as CDOT, RTD and Via to identify the individual projects and the associated costs and priorities so that the projects can be included and implemented in later capital project funding.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [ ] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

This process will be coodinated with the city wide planning effort in the Civic Area that is the next step as a result of the 2013 Civic Area master Planning process. The proximity of Canyon to Boulder Creek and the potential for impacting the floodway is a major issue for these projects.

Relationship with Other Departments

This process will be coordinated and administed jointly with Communitiy Planning and Sustainability, Public Works - Utilities, Parks Department and the Downtown and University Hill Management District. This process will also be coordinated with outside agency partners such as CDOT as Canyon is a CDOT owned facility, RTD and Via to accommodate the exisitng routes, transit stop ammenities and access to the existing 14th Street Transit station.

Change from Past CIP

This project has been added to the 2015 CIP

Estimated Total Cost

Project Cost

Planning	$200,000
Acquisition	
Construction	
Total Project Cost	**$200,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$200,000
Funding Total	($200,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Transportation Fund	$100,000	$100,000	$0	$0	$0	$0	$0
Total Funding Plan	**$200,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:**

Additional Annual O&M Description:

N/A

Project Name: Transportation Corridor Scoping and Prioritization - East Arapahoe

Project at a Glance

Project Type:	Capital Planning Studies		
Department:	PW/ Transportation	**Subcommunity:**	East Boulder
Project Number:	781xxx	**BVCPArea:**	
CEAP Required:	No	**Map Number:**	65
		CEAP Status:	

Project Description

The city is beginning a multi-departmental Envision East Arapahoe planning effort on Arapahoe between Folsom and the eastern city limits. This initial planning process is expected to be completed in 2014 and is anticipated to conceptually identify some key transportation projects. As a result of the city wide process that will result on East Arapahoe, transportation anticipates this funding in 2015 and 2016 will be used to further study and complete a next level of planning and coordination with agency partners such as CDOT, RTD, and CU to identify the individual projects and the associated costs and priorities so that the projects can be included and implemented in later capital project funding.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [ ] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Public process will be identified after the initial city wide planning process is completed in 2014. There are several floodways that cross Arapahoe within these limits. This is a CDOT facilitiy and any improvements will need to be reviewed and approved by CDOT staff. A portion of Arapahoe is adjacent to CU property from 30th to the east.

Relationship with Other Departments

Close coordinaiton with Community Planning and Sustainabilty to better integrate land use and transportation, Public Works - Utilities on replacement, modifications and upgrades to the city's utility systems, the Parks Department along the golf course frontage, CDOT for design review and approval because Arapahoe is a CDOT owned facility, University of Colorado - Boulder along CU's frontage and to enhance connections to the planned redevelopment on CU's East Campus, and RTD on current transit facilities, future planned bus rapid transit and associated stop design and ammenities.

Change from Past CIP

This project has been added to the 2015 CIP

Estimated Total Cost

Project Cost

Planning	$200,000
Acquisition	
Construction	
Total Project Cost	**$200,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$200,000
Funding Total	($200,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Transportation Fund	$0	$100,000	$100,000	$0	$0	$0	$0
Total Funding Plan	**$200,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:**

Additional Annual O&M Description:

N/A

Project Name: Tributary Greenways Program - Transportation - Transfer

Project at a Glance

Project Type:	Transfer		
Department:	PW/ Transportation	**Subcommunity:**	Multiple Subcommunities
Project Number:	781630	**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	
		CEAP Status:	

Project Description

The funding will provide transportation's contribution to the overall greenways program. Funding will be opportunistic and prioritized with the other funding in the Greenways CIP. These funds will be combined with funding from the Stormwater and Flood Management Utility Fund and the Lottery Fund. This project is for an ongoing funding program.

A portion of the capital funding for this program was shifted to needed maintenance of existing system beginning in 2002. In 2012 the money for maintenance was moved to an operating budget. See Greenways CIP/Budget section.

Relationship to Guiding Principles

- ☐ Consistent with Master Plans
- ☐ Achieves Community Sustainability goals
- ☐ Includes sufficient funding for operation and maintenance
- ☐ Maintains and enhances city's business systems
- ☐ Provides capacity and flexibility in long term planning
- ☐ Sustains or improves existing assets
- ☐ Maximizes efficiency and demonstrates positive cost/benefit
- ☐ Fund includes sufficient reserves
- ☐ Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

CEAP's are completed for all significant greenways projects and are reviewed by appropriate boards. See Greenway CIP for more detailed information.

Relationship with Other Departments

The Greenways program requires coordinating with Transportation, Open Space, Flood Utility, Planning and Parks Departments.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	

Unfunded Amount

Unfunded Amount

Project Cost Total	
Funding Total	($682,500)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Transportation Fund	$97,500	$97,500	$97,500	$97,500	$97,500	$97,500	$97,500
Total Funding Plan	**$682,500**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Transportation/Utilities operating or Urban Drain.

Additional Annual O&M Description:

Project may result in minimal incremental increases in on-going maintenance costs which will be programmed in the Transportation or Utilities Fund budget.

Project Name: Rehabilitate runway and eastern taxiway

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Municipal Airport	**Subcommunity:**	East Boulder
Project Number:	771XXX	**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	78
		CEAP Status:	

Project Description

Project includes subgrade stabilization, re-paving, and re-painting of Runway 8/26 and eastern half of Taxiway Alpha. Design will begin in 2018 and construction is scheduled to begin in 2020.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [ ] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [x] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [ ] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

This project was included in the Airport Master Plan Update process, which included open house meetings and mailings to airport neighbors, and was approved by City Council in 2007.

Relationship with Other Departments

None at this time.

Change from Past CIP

New project.

Estimated Total Cost

Project Cost

Planning	$435,000
Acquisition	
Construction	$4,500,000
Total Project Cost	**$4,935,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$4,935,000
Funding Total	($4,935,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Airport Fund	$0	$0	$0	$0	$435,000	$0	$4,500,000
Total Funding Plan	**$4,935,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $50,000 **Funding Source:** FAA: $3,791,500
CDOT: $860,638
Airport Fund: $282,861

Additional Annual O&M Description:

By 2020, pavement will have exceeded 20-year life span and require approximately $50,000 of maintenance a year. Maintenance, such as crack fill and seal coat, will be come less and less effective. Without rehabilitation, asphalt could be unsafe for aircraft landing and taking off from the airport.

Funding Overview

Each of the city's three utility funds is established as a separate enterprise fund designed to finance and account for each utility's facilities and services. Funding for the Utilities Division capital improvement program is derived primarily from monthly utility fees.

Any revenue increases for 2015 will be reviewed by the Water Resources Advisory Board and considered by City Council. Approval of revenue increases that are different from what is listed above may impact the 2015-2020 CIP.

In addition to the monthly utility fees, significant revenue sources include Plant Investment Fees (PIFs) from new development or redevelopment and hydroelectric sales. Sales from monthly utility fees can be variable and reflect the overall growth of the service area and yearly weather fluctuations.

Other revenue sources include reimbursements from the Urban Drainage & Flood Control District (UDFCD), this is for stormwater/ flood management projects), Colorado Department of Transportation (CDOT) state and federal grants, and revolving loans from the Colorado Department of Public Health and Environment (none anticipated at this time). These revenues are project specific and are highly variable depending on the external agency's funding situation and priorities. Currently, the following projects are anticipated to qualify for such revenues:

- Pre-Flood Acquisition
- Wonderland Creek
- Fourmile Canyon Creek
- South Boulder Creek

If the above mentioned funds are insufficient, projects may be funded by issuing revenue bonds with the debt service financed by general utility charges. For the years 2015-2020, it is anticipated that new bonds will be issued for the following projects:

<u>Water</u>:

- Betasso Water Treatment Plant Improvements ($12 million in 2016) to fund improvements to maintain compliance with federal Safe Drinking Water Act regulations.
- Southern Water Supply Pipeline II (Carter Lake Pipeline) ($33.9 million in 2018).

- Barker Dam Improvements ($8 million in 2019) to fund repairs to the outlet works.

Wastewater:

- Sanitary Sewer Rehabilitation ($10 million in 2015) to replace and rehabilitate sections of the reinforced concrete pipe (RCP) sewer.
- WWTF Improvements ($18.5 million in 2020) to fund phosphorus treatment to meet Regulation 85 requirements.

Stormwater and Flood Management:

- Wonderland Creek Flood Mitigation project ($16 million in 2015) .
- South Boulder Creek Flood Mitigation ($10 million in 2018) to fund improvements designed to mitigate flood hazards in the South Boulder Creek West Valley area.

The following table summarizes the debt obligations of the utilities, the year the debt is retired and the average annual debt payment. Items shown in italics are projects that are anticipated to be funded by issuing bonds.

Table 14-1 Existing and Planned Infrastructure Financed by Debt

Utility	Projects	Year Debt is Retired	Approximate Annual Debt Payment
Water	Boulder Reservoir WTF Improvements	2016	$858,000
	Multiple Projects including Silver Lake Pipeline, Barker Purchase	2019	$2,522,000
	Lakewood Pipeline	2021	$2,066,000
	Betasso WTP Imp. (2016)	*2036*	*$1,140,000*
	Carter Lake Pipeline (2018)	*2038*	*$3,224,000*
	Barker Dam Improvements (2019)	*2039*	*$763,000*
Wastewater	*Sanitary Sewer Rehabilitation (2015)*	*2035*	*950,000*
	WWTF Liquid and Solid Stream Improvements	2025	$3,500,000
	WWTF Headworks/Digester/UV Improvements	2030	$674,000
	WWTP Improvements – Reg 85 (2020)	2040	$1,757,500
Storm/Flood	Multiple projects including Goose Creek Flood Mitigation	2018	$385,000
	Wonderland Creek Flood Mitigation (2015)	2035	*$1,520,000*
	South Boulder Creek Flood Mitigation (2017)	*2037*	*950,000*

The water utility also pays a portion of the Northern Colorado Water Conservancy District's debt related to the Windy Gap project. This debt will be retired in 2017 and Boulder's annual debt payment is approximately $1,650,000.

The utility continues to maintain a high credit rating, most recently Aa1 from Moody's and AAA from Standard and Poor's. This is due to sound financial practices, one of the most important of which is maintaining sufficient reserves.

The 2015-2020 capital improvement program (CIP) was developed using the following proposed 2014 revenue increases from monthly utility fees. These rate increases should generate sufficient revenue to fund a reasonable amount of mitigation projects in response to the September 2013

flood disaster as discussed below. Additional city staff needed to implement the proposed additional capital improvement project work will be needed and funding for these positions is anticipated in the proposed rate increases.

- Water – 5%
- Wastewater – 25%
- Stormwater/ Flood Management – 71%

Anticipated FEMA reimbursement as discussed below has been considered in formulating the proposed rate increases.

2013 Flood Impact

The 2013 flood disaster significantly affected the city's utilities system and finances. City utility funds have been used to fund recovery efforts and the following is a summary of current and anticipated expenses:

Water Utility	$ 1.5 million
Wastewater Utility	$ 1.5 million
Stormwater and Flood Management Utility	$ 6.0 million

In some instances, funding previously saved up for future, identified CIP projects was used to cover flood recovery. As a result, additional or different sources of funding will be needed to complete those projects. For example, in order to fund the flood disaster recovery costs for the Stormwater and Flood Management Utility, cash originally appropriated for the Wonderland Creek project is being used. As a result, the Utilities Division will be issuing bonds for the Wonderland Creek project next year.

The flood disaster also highlighted certain vulnerabilities in the city's utility infrastructure. Although the water system infrastructure performed admirably and sustained minimal damage, the sanitary sewer, storm water and major drainageway systems were overwhelmed by rain of up to 18 inches in a relatively short period of time and resulting runoff, groundwater infiltration and inflow to the city's open channel and pipe conveyance systems. Although the rain event is estimated to have a recurrence interval of 1000 years, the city's major draiangeways only experienced flood flows characterized by a recurrence interval of 25-50 years.

City staff is in the process of identifying and quantifying the disaster impacts and have developed a proposed CIP budget that contemplates additional work to make the infrastructure more robust and mitigate future rainfall/runoff event impacts.

New projects have been identified or funding increased for mitigation projects including:
Wastewater Utility:

- September 2013 Flood Disaster Recovery

- Collection System Monitoring
- Condition Assessment Program
- Sanitary Sewer Rehabilitation
- Sanitary Sewer Manhole Rehabilitation
- IBM Pump Station
- Digester Complex Improvements

Stormwater and Flood Management Utility:

- September 2013 Flood Disaster Recovery
- South Boulder Creek Flood Mitigation
- Skunk Creek Flood Mitigation
- Twomile Canyon Creek Flood Mitigation
- Bluebell Canyon Creek – King's Gulch Flood Mitigation
- Fourmile Canyon Creek Flood Mitigation
- Bear Canyon Creek Flood Mitigation
- Gregory Canyon Creek Flood Mitigation
- Boulder Creek Flood Mitigation
- Wonderland Creek Flood Mitigation
- Local Drainage Improvements
- Storm Sewer Rehabilitation
- Transportation Coordination

Accomplishments And Highlights

Water Utility:

In addition to the September 2013 flood disaster there have been several developments over the past year that should be considered in formulating the Water Utility CIP. These developments are discussed and addressed below under the Highlights of 2016-2020 Projects section.

Projects to be Completed in 2014:

- Phase 1 of the Sunshine Pipeline inspection and replacement
- Kossler Reservoir Concrete Facing Rehabilitation
- Barker Gravity Pipeline Repairs – ongoing repairs in order of priority and availability.
- Barker Dam Outlet Gate Test – ongoing plan to test / inspect gates as reservoir level allows
- Green Lake No. 2 Assessment and Rehabilitation Study
- Albion Dam Assessment and Rehabilitation Alternatives Study
- Replacement of approximately 20,000 feet of water main
- Mixing improvements at Devil's Thumb storage tank
- Gunbarrel Tank painting and structural steel rehabilitation
- Boulder Reservoir Water Treatment Facility Post Filter Mixing Improvements

- Betasso Residuals Study and Filter Analysis
- Betasso and Boulder Reservoir treated water effluent meter replacements

Projects Expected for Completion in 2015:

- Barker Dam Outlet Investigation for Gate No.10 – due to leakage and concerns with the age of this 1905 gate, a bulkhead design and installation plan will be completed with the assistance of a consulting engineer specializing in high pressure bulkheads.
- Silver Lake Dam Outlet Inspection – as part of dam safety requirements, the outlet system will be fully inspected and the condition assessment will be documented.
- Goose Lake Dam Outlet Inspection – as part of dam safety requirements, the outlet system will be fully inspected and the condition assessment will be documented.
- Silver Lake Hydroelectric Rehabilitation – the bypass valve is scheduled for rehabilitation due to operational damage.
- Betasso capital improvement project design.
- Replacement of approximately 20,000 feet of water main.

Projects Starting in 2015, but not Completed:

- Lakewood Pipeline Internal Inspection – assessment of corrosion potential and general condition of steel pipe, welds and interior lining.
- Watershed Improvements – Various aging valves in the upper watershed will be replaced with more modern systems.
- Barker Gravity Pipeline Maintenance Repairs – ongoing repairs to the gravity system will continue on a priority and/or emergency basis.
- 18" Transmission line replacement from the mouth of Boulder Canyon to Chautauqua Reservoir.
- Kohler Storage Tank roof replacement.
- Phase 2 of the Sunshine Pipeline inspection and replacement.
- Devil's Thumb Storage Tank site, security and water quality improvements.

Highlights of 2016-2020 Projects:

- Annual funding for waterline replacement of $3,000,000 (2014 dollars) is proposed in order to provide for the replacement of additional waterlines located in residential streets scheduled to be reconstructed by the city's Transportation Division. Completing water main replacement just ahead of street resurfacing results in significant savings since pavement restoration costs can be eliminated. Coordination also reduces the risk that the useful life of a newly reconstructed street will be impacted by a main break.
- It is recommended that the city continue its annual maintenance program of the Barker Gravity Line by prioritizing pipeline repair projects based on the most critical needs, providing enough earthen cover to protect the pipeline, and anchoring the pipeline in areas prone to landslides. Replacement or lining of pipe sections are options that may be used in different parts of the pipeline.

- It is recommended that capital funding be allocated in the 2015-2016 time period to address issues related to aging equipment and underperforming treatment processes at the Betasso Water Treatment Facility.
- Funding for the final design of the Carter Lake Pipeline is identified in 2017 and construction is identified in 2018. Project costs were updated with a new construction estimate provided by Northern in 2014 and forecasted costs have increased. The pipeline is considered the best long-term solution to water quality, operational and security vulnerability issues related to drawing water directly from either the Boulder Feeder Canal or Boulder Reservoir. The recent disaster event revealed that the pipeline could also mitigate the potential for future problems in delivering water from the Boulder Reservoir WTP during future disaster events. The pipeline would potentially provide an opportunity to develop a new hydroelectric facility and funding for construction of this facility is allocated in 2020.
- The Barker Dam outlet facilities are over 100-years old and in need of significant rehabilitation. As a result of the successful testing and operation of the existing outlet gates as described above, funding has been delayed by 1 year for final design (now 2018) and construction (now 2019) of the rehabilitation project. The outlet facilities would also provide an opportunity to develop a new hydroelectric facility and funding for construction of this facility is allocated in 2020.
- The 2014-2015 assessment of rehabilitation options for Green Lake No. 2 and Albion dams will confirm the path forward on re-establishing operational levels of storage on these dams. Construction funding of these projects is not shown in the 2015-2020 CIP at this time because of the unknown results of the assessment and cost/benefit of associated improvements.
- Funding for treated water transmission infrastructure includes both assessment and replacement of critical pressure zone 3 pipes. During the summer of 2013 several transmission mains experienced failures that were repaired and revealed the need to replace certain pipe segments sooner than anticipated.

<u>Wastewater Utility:</u>

Impacts of the September 2013 flood disaster are the primary drivers of changes being considered in the Wastewater Utility CIP.

Projects to be Completed in 2014:

- IBM Lift Station Design Improvements
- Nitrogen Upgrades Design Improvements
- Wastewater collection system condition assessment and debris removal
- Wastewater Collection System Master Plan (WWCSMP) Update - to integrate flood inundation data from the 2013 flood event.
- Wastewater Interceptor Evaluation
- Inflow & Infiltration (I&I) Evaluation

Projects Expected for Completion in 2015:

- IBM Lift Station Construction
- WWTF Process Automation System (PAS recommendations implementation.

Projects Starting in 2015, but not Competed:

- Nitrogen Upgrades Construction Improvements. The city received a new discharge permit for the 75th Street wastewater treatment facility (WWTF) with an effective date of May 1, 2011. The City has begun a Nitrogen Upgrades design project that will be completed this year for submittal to CDPHE. This project will include improvements to meet new permit regulations for new total inorganic nitrogen (TIN) and daily maximum ammonia limits. This project's construction cost is estimated at $4,000,000 and will be completed in 2016.
- Inflow & Infiltration (I&I) Evaluation project recommendations. Upon completion of the 2014 I&I Evaluation, Utilities staff will begin rehabilitation of the wastewater collection system to specifically address the inflow component of the I&I. These repairs will focus on single point large volume contributions to the system like illicit drain or pump connections.

Highlights of 2015-2019 Projects:

- Staff recommends a more robust wastewater collection system condition assessment program and has including preliminary funding in the 2015-2020 CIP. The condition assessment may reveal additional rehabilitation needs that are not fully anticipated in this preliminary budget.
- Increased funding for the annual Sanitary Sewer Rehabilitation project is being considered at a base rate of $750,000 per year in 2014 dollars escalating at 4% annually. Increased funding for Sanitary Sewer Manhole Rehabilitation project is also being considered.
- New CDPHE regulations concerning nutrient criteria, specifically Regulation 85 and Regulation 31, were adopted by the Colorado Department of Public Health and Environment (CDPHE) in March 2012. The criteria will pose serious treatment challenges for the WWTF and will have significant financial impacts. City staff has estimated approximately $18.5 million of funding in 2020 to address the phosphorus treatment improvements required to address Regulation 85. Regulation 31 contains much more stringent provisions and funding for this regulation is identified in the 20-year CIP with $11 million in 2029.
- The Process Automation System (PAS) Strategic Plan, which was completed in 2013, included approximately $6,000,000 in instrumentation and controls (I&C) recommendations to be completed at the WWTF. Funding for these improvements is estimated at $600,000 per year (escalated at 4% annually) for the next 10 years.
- Additional funding for construction of overflow improvements at the IBM lift station necessary to meet the CDPHE permit regulations will be completed in 2015.

- A system-wide inflow and infiltration (I&I) study of the wastewater collection system will be completed in 2014. The purpose of this evaluation is to quantify the rainfall induced I&I component entering the wastewater collection system. This I&I study was scheduled this year to take advantage of historically high groundwater conditions. Because of the saturated soil conditions, a give rainfall event will likely result in a more significant I&I system response. The data collected from this evaluation will be used to advise system repairs to minimize I&I component entering the collection system during rainfall events.
- Wastewater Interceptor Replacement/Rehabilitation - Bond Project. Utilities staff has identified the need for a $10,000,000 bond in the 2015-2020 CIP to fund improvements to the City's largest sanitary sewer interceptor. In 2014, city staff hired Redzone Robotics to perform a condition assessment of 31,000 feet of the interceptor. Initial data received from the contractor indicate that sections of the interceptor have experienced significant internal corrosion and that the sewer is at risk of failure and potential collapse. Utilities staff will begin an evaluation in 2014 to identify the project's magnitude and schedule.
- Digester Complex Improvements. The secondary digester cover has failed on numerous occasions. This failure occurs when moisture gets inside the roof and causes an imbalance in the roof structure, and the cover tips rendering it inoperable. When this occurs, the facility must be taken off-line, emptied, cleaned and repaired. Utilities staff has identified a project to replace the secondary digester cover in the 2015-2020 CIP. The estimated construction cost is $2,000,000, with $200,000 identified for the design in 2019.
- A comprehensive list of WWTF rehabilitation projects has been identified from the Wastewater Utility Fund Asset Management tool, and included in the 20-year CIP based on staff input, engineering studies and the asset management database. For the current 6-year CIP, funding for the rehabilitation projects has been allocated to various WWTF components as shown in the detailed CIP list.

Stormwater and Flood Management:

Based on analysis of the September 2013 event, the majority of the disaster impacts were related to the event exceeding the capacity of existing stormwater infrastructure. Similar to the Wastewater Utility, the impacts of the September 2013 flood disaster are the primary drivers of changes being considered in the Stormwater and Flood Management Utility CIP. More information will be made available in the near future and staff plans to refine these preliminary recommendations based on this information during this budget process.

Besides the significant direct flood recovery costs that have been and will need to be absorbed, significant additional mitigation project work has been identified as discussed and addressed below under the Highlights of 2016-2020 Projects section. Mitigation of flood hazards along

major drainageways has been the major thrust of the city's Stormwater and Flood Management utility for the last three decades. Boulder has by far the largest number of flood insurance policies (required on all federally backed mortgages) and largest insured value. City of Boulder residents and businesses pay nearly $3M in total annual flood insurance premiums. Investment in flood mitigation serves to reduce the associated risks and costs.

Projects to be Completed in 2014:

- A flood mitigation planning study for Boulder Creek, Gregory Creek and Bear Canyon Creek is currently being initiated in conjunction with the Urban Drainage and Flood Control District. This plan will identify feasible flood improvement projects along these drainageways.
- It is anticipated that the following mapping studies will be completed in 2014: Skunk Creek, Bluebell Creek and King's Gulch, Boulder Slough and the Bear Canyon Creek/Harrison Avenue levee.
- The South Boulder Creek Flood Mitigation Plan is anticipated to be completed in 2014.
- Utilities will complete a brief update to the 2007 Stormwater Master Plan (SMP) to integrate flood inundation data from the 2013 flood event.

Bear Canyon Creek during the flood. A flood mitigation planning study will be done here in 2014.

Projects Expected for Completion in 2015:

- Fourmile Canyon Creek at 19th Street is in preliminary design but was put on hold following the September 2013 flood event. It is anticipated that development of this project will continue in late 2014 with a CEAP completed in for the upstream reach in 2015.
- Flood mapping studies for Upper Goose and Twomile Canyon Creeks are anticipated to be completed in 2015.

Projects Starting in 2015, but not Completed:

- Utilities staff will begin the design of stormwater drainage improvements along Pearl Street between 17th Street and 20th Street to help mitigate flooding that occurs regularly in this area.
- Utilities staff will begin the design of stormwater drainage improvements in the Upper Goose Creek drainage area in anticipation of the Upper Goose Creek Drainageway improvements identified in the 6-year CIP.
- Construction of the Wonderland Creek Foothills to 30th Greenways Improvement Project is anticipated to begin in 2015.
- Construction of the Wonderland Creek (28th Street) Diagonal to Winding Trail

Greenways Improvement Project is anticipated to begin in 2015.

- A flood mitigation plan was initiated in 2014 for Boulder Creek, Bear Canyon Creek and Gregory Canyon Creek and is anticipated to be completed 2015.

Highlights of 2016-2020 Projects:

- Flood mitigation improvements in the near term focus on Wonderland and Fourmile Canyon Creeks. The Wonderland Creek Foothills to 30th Street project is proposed to implement flood mitigation measures along Wonderland Creek from just upstream of Iris Avenue to Foothills Parkway and extend the multi-use trail from Foothills Parkway to the intersection of Iris Avenue and 30th Street. This project will include a bicycle and pedestrian underpass under the Burlington Northern Railroad. The Wonderland Creek at 28th Street project (Diagonal to Winding Trail) is the next upstream reach and will also include flood mitigation and path improvements, including bicycle and pedestrian underpasses at 28th Street and Kalmia Avenue. Funding for the construction of these improvements is proposed to be bonded in 2015, based on the current total estimated cost assuming the additional $2.9 million received through the Transportation Improvement Program (TIP). Funding originally budgeted for this project has been reprioritized to address immediate flood recovery expenses.
- Flood mitigation improvements along Fourmile Canyon Creek, 19th to 22nd Streets include 100 year flood mitigation at 19th Street, a multi-use path and an emergency access connection from 19th Street to Tamarack Avenue and a bicycle and pedestrian underpass at 19th Street. Funding is shown for additional improvements along Fourmile Canyon Creek between Upland and Violet in outlying years.
- Funding is shown in 2015 for design of flood mitigation improvements along South Boulder Creek, Bear Canyon Creek, Gregory Creek and Boulder Creek and will be based on the recommendations of the mitigation planning studies. Funding is shown for construction of these improvements starting in 2016, with bond money shown in 2018 for South Boulder Creek.
- Funding for design of flood mitigation capital improvements along Skunk, Bluebell, King's Gulch, Twomile and Upper Goose Creeks is shown starting in 2017 and will be based on the updated mapping and a mitigation planning effort.
- Funding for the design and construction of localized drainage improvements throughout the city. These improvements include storm water collection and conveyance facilities designed to convey the 2-year and 5-year storm events.

Relationship To Guiding Principles And Prioritization

CIP Guiding Principles:

The proposed Utilities Division CIP is consistent with the CIP guiding principles in that 1) all projects have been identified and prioritized through Council accepted master plans 2) capital improvements are designed to achieve community sustainability goals, 3) funds to operate and

maintain the project or program have been identified, 4) adequate financial capacity and flexibility is available to respond to emerging, unanticipated needs (except for the WWTF permit issue identified below, 5) the maintenance and enhancement of city-wide business systems is captured elsewhere in the CIP, 6) projects sustain or improve maintenance of existing assets before investing in new assets, 7) project have been identified to meet legal mandates, maintain public safety and security, leverage external investments, promote community partnerships, reduce operating cost and improve efficiency, 8) capital projects have been screened through a cost/ benefit analysis, 9) the CIP provides sufficient reserves to allow for a strong bond rating and the ability to address emergencies and natural disasters.

The projects identified in the 2015-2020 CIP are intended to implement these guiding principles and are consistent with the department master plans identified below.

In 2002 it was decided to develop an overarching master plan for each of the City's three utilities. More detailed plans have been developed for major functional areas. Recent master plans include recommendations for CIP projects over a 20-year time period. The project recommendations consider the prioritization listed below as well as information from the Utilities Division asset management system. This system includes replacement cost, useful life and condition rating which have been documented for each significant utility asset. This information informs the six-year CIP.

Current Utilities Division master plans include:

Water:

- Source Water Master Plan – 2009
- Treated Water Master Plan (TWMP) – 2011
- Water Utility Master Plan (WUMP) – 2011

Wastewater:

- Wastewater Collection System Master Plan – 2010
- Wastewater Utility Master Plan – 2010

Stormwater/ Flood Management:

- Stormwater Master Plan –2007
- Comprehensive Flood and Stormwater (CFS) Master Plan – 2004

Prioritization:

The overall program and funding priorities are reflected in the timing of projects over the six-year CIP time period. In addition to master plan recommendations, the following factors were considered in determining the overall program and funding priorities:

Water and Wastewater:

- Reliability of water and wastewater collection, delivery and treatment
- Water quality and other environmental regulations

- Worker health and safety
- Opportunity to collaborate with other city projects, such as Transportation projects
- Opportunity to collaborate with other utility providers to leverage funds or obtain federal or state grants
- Potential for operation and maintenance cost savings
- Accommodating new growth and development

Stormwater and Flood Management:

- Life safety (high hazard) mitigation
- Flood emergency response capability
- Critical facility (vulnerable population) hazard mitigation
- Property damage mitigation
- Collaboration with other Greenways Program Objectives
- Potential for operation and maintenance cost savings
- Accommodating new growth and development

Within current appropriations all projects proposed have sufficient funds for ongoing operations and maintenance, and 90% of the Water Utility and Wastewater Utility projects are focused on maintaining or improving existing assets. Other Water and Wastewater Utility projects are intended to construct facilities required to comply with new regulations. In the Stormwater and Flood Management Utility, the majority of the project funding is focused on life safety and critical facility hazard mitigation issues.

Projects Not in Master Plans:
Most Utilities Division projects in the 2015-2020 CIP have been previously identified in associated master plans. However, several projects have been added based on information gleaned from the September 2013 flood disaster.

NEW PROJECTS

The following new projects have been identified in the 6-year CIP:

Water:

- Devil's Thumb Storage Tank
- Sunshine Transmission Pipe
- Silver Lake Dam
- Goose Lake Dam
- Silver Lake Hydroelectric/PRV
- Water System Security/Quality Improvements

Wastewater:

- WWTP Nutrient Management Grant

- Condition Assessment Program

Stormwater/ Flood Management:

- Twomile Canyon Creek Flood Mitigation
- Bluebell Canyon Creek – King's Gulch Flood Mitigation
- Bear Canyon Creek Flood Mitigation
- Gregory Canyon Creek Flood Mitigation
- Boulder Creek Flood Mitigation
- Local Drainage Improvements

Operations and Maintenance Impacts

The majority of the utilities expenditures are for rehabilitating and improving the capital infrastructure either through the capital improvements program (cash financed) or through annual debt payments for revenue bonds that have been issued to fund capital improvements. The infrastructure is core in carrying out the utilities' mission of delivering safe and reliable water to our customers, ensuring that water is available for fire protection, conveying and treating wastewater and stormwater and mitigating the effects of flood events. Rehabilitating and improving the capital infrastructure reduces the need to react to failures, associated expense and disruption to customers and the community.

It should be noted that the proposed CIP assumes funding for the replacement/rehabilitation of existing Utilities assets at a level of 75% of the predicted rate based on a recent asset management analysis. Staff believes this will be adequate and sustainable since renewal and rehabilitation techniques and approaches can be accomplished at a lower cost than complete replacement.

The proposed CIP budget should be adequate to address essential projects within the six-year planning time frame. The delays in the projects listed above are not expected to have a significant negative effect on the service level of the city's utilities systems. Therefore there are no unfunded needs identified within the 6-year CIP.

However, to continue to meet capital project needs, including the recommended asset replacement goals of 60-75%, maintain compliance with Federal and State permit regulations and respond to the September 2013 flood disaster, utility rate increases will be needed as indicated in the following table. The preliminary 2015 increases are in bold.

Table 11-2 Utility Rate Increases

	2014	**2015**	2016	2017
Water	4%	**5%**	8%	8%
Wastewater	5%	**25%**	5%	5%
Stormwater/Flood Management	3%	**71%**	4%	4%

The revenue increase represents the amount of additional revenue to be generated from the monthly utility charges. The actual rate increase (e.g. $ per 1,000 gallons) may or may not be equal to the revenue increase depending on whether any changes in consumption or use are factored in when calculating the actual rates. For example, if there were a projected decrease in consumption, in order to generate 4% more revenue from last year's budget, monthly rates may need to increase greater than 4% to generate the needed revenue requirements.

Staff will continue to monitor and refine the asset replacement analysis and adjust the actual replacement rate within the 60-75 percent range as part of the annual budget process. Asset replacement at 75 percent of the predicted level has been used to formulate the 2015-2020 CIP budget.

Construction Cost Inflation

Construction cost inflation is tracked using the Engineering News Record (ENR) Cost Index for Denver and the Colorado Department of Transportation (CDOT) Colorado Construction Cost Index. The ENR index is a composite index based on costs for: 1) local portland cement, 2) local 2x4 lumber, 3) national structural steel, and 4) local union wages plus fringes for carpenters, bricklayers and iron workers. The CDOT index is a composite index based on costs for 1) unclassified excavation, 2) hot bituminous pavement 3) concrete pavement, 4) structural steel and 5) reinforcing steel. The ENR index is more reflective of equipment and building construction such as projects that occur at the treatment plants. The Colorado Construction Cost Index is more reflective of heavy civil construction such as roadway and major drainageway work. The following table presents information concerning these indices through December 2013:

Table 11-3 Changes to ENR Index and CDOT Index

	2012 Change	Running Average Yearly Change	
		5 years	10 years
ENR Construction Cost Index for Denver	7.65%	4.29%	4.71%
CDOT Colorado Construction Cost Index	16.55%	4.42%	11.44%

Based on this information it is recommended that capital improvement construction costs continue at a rate of 4% during the planning period. Using an average inflation calculation is in keeping with the principle of consistent rate increases over time rather than periodic large rate increases.

Deferred Projects, Eliminated or Changed Projects

Funding for several projects has been changed in response to the impact of the September 2013 flood disaster.

Unfunded Projects and Emerging Needs

The following unfunded projects have been identified:

Water

- Albion Dam – Unfunded
- Wittemyer Ponds – Unfunded
- Boulder Reservoir Water Treatment Facility – Unfunded

Wastewater

- Tier 1 Goose Creek 1/1A Master Plan Project – Unfunded

Stormwater/ Flood Management

- South Boulder Creek Flood Mitigation Phase II – Unfunded

The Utilities Division has developed and maintains a 20-year CIP and associated financial plan. Large Utilities Division projects require many years for planning and a longer term horizon is needed to capture the time period required for overall project implementation. A 20-year plan provides a basis for longer term financial planning that is needed to support decision making regarding project timing, issuance of revenue bonds and rate increases. The above mentioned projects are indicated in the 20-year CIP.

Emerging needs have been identified as part of the recent Water Utility Master Plan. During the development of this master plan, a technical analysis was performed regarding the city's water treatment facilities and other infrastructure. The analysis indicates that this infrastructure should be adequate to meet water demand needs well into the future with little need for capacity expansion. However, a comprehensive analysis of existing assets pointed to the poor condition and aging of some mechanical and electrical equipment at the Betasso Water Treatment Facility. The Betasso Water Treatment Facility is the city's primary Water Treatment Facility and has deteriorated during almost 50 years of continuous operation despite on-going maintenance and rehabilitation. These issues, combined with inherent deficiencies in certain treatment process, are the reasons that large capital funding is recommended in 2015-2016.

Regulatory changes are another source of uncertainty and create emerging needs. For example, as explained in the Accomplishments and Highlights section of this memo, the city received a new discharge permit for the 75th Street Wastewater Treatment Facility in 2011 with new effluent limits. Complying with these limits will require a combination of regulatory negotiations,

environmental studies and Water Treatment Facility capital improvements.

Advisory Board Action

The preliminary 2015 Utilities budget and 2015-2020 CIP was first presented to the WRAB on April 21, 2014 as a discussion item. WRAB hosted a public hearing and continued their discussion of the preliminary 2015 Utilities budget and 2015-2020 CIP on May 19, 2014. Seven members of the public addressed the WRAB during the public hearing and generally advocated for a more aggressive capital improvement program focusing on the rehabilitation of the sanitary sewer system and additional flood mitigation.

At the June 16, 2014 meeting WRAB hosted a public hearing during which seven members of the public spoke advocating a more aggressive capital improvement program focusing on the rehabilitation of the sanitary sewer system and additional flood mitigation.
After discussion, WRAB passed the following motion by a 4-0 vote:

The Water Resources Advisory Board recommends approval of the 2015-2020 CIP for the Water, Wastewater, and Stormwater/Flood Management Utilities proposed in Attachment A including proposed rate adjustments to support 2015 revenue increases of 5% in the water utility, 25% in the wastewater utility, and 71% in the stormwater and flood control utility.

Table 14-4: 2013-2018 Funding Summary By Department

PUBLIC WORKS - STORMWATER AND FLOOD MANAGEMENT UTILITY

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Enhancement										
Local Drainage Improvements	$ -	$ 780,000	$ 811,200	$ 843,648	$ 877,394	$ 912,490	$ 948,989	5,173,721	$ -	$ -
Bear Canyon Creek Flood Mitigation	600,000	100,000	500,000	-	-	-	-	600,000	-	-
Boulder Creek Flood Mitigation	5,600,000	500,000	2,500,000	2,500,000	-	-	-	5,500,000	100,000	-
Gregory Creek Flood Mitigation	600,000	100,000	500,000	-	-	-	-	600,000	-	-
South Boulder Creek Flood Mitigation Phase I	24,000,000	250,000	750,000	750,000	10,150,000	-	-	11,900,000	300,000	11,800,000
Stormwater Quality Improvements	-	156,000	162,000	169,000	175,500	182,500	190,000	1,035,000	104,000	-
Upper Goose Creek Drainage	17,905,163	175,000	750,000	750,000	750,000	1,000,000	-	3,425,000	-	-
Utility Billing Computer System Replacement	-	50,000	-	-	-	-	-	50,000	-	-
Wonderland Creek - Foothills to 30th Street	-	10,000,000	-	-	-	-	-	10,000,000	3,033,092	-
Wonderland Creek at 28th Street	-	6,075,000	-	-	-	-	-	6,075,000	1,165,216	-
Fourmile Canyon Creek - Upland to Violet	-	-	500,000	500,000	500,000	750,000	2,500,000	4,750,000	-	-
Bluebell and King's Gultch Flood Mitigation	600,000	-	-	100,000	500,000	-	-	600,000	-	-
Skunk Creek Flood Mitigation	600,000	-	-	100,000	500,000	-	-	600,000	-	-
Twomile Canyon Creek Flood Mitigation	600,000	-	-	100,000	500,000	-	-	600,000	-	-
Subtotal	$ 50,505,163	$ 18,186,000	$ 6,473,200	$ 5,812,648	$ 13,952,894	$ 2,844,990	$ 3,638,989	$ 50,908,721	$ 4,702,308	$ 11,800,000
Capital Maintenance										
Storm Sewer Rehabilitation	$ -	$ 260,000	$ 270,400	$ 281,200	$ 292,500	$ 304,000	$ 632,700	$ 2,040,800	$ -	$ -
Transportation Coordination	-	312,000	324,500	337,500	351,000	365,000	633,000	2,323,000	260,000	-
Subtotal	$ -	$ 572,000	$ 594,900	$ 618,700	$ 643,500	$ 669,000	$ 1,265,700	$ 4,363,800	$ 260,000	$ -
Land and Asset Acquisition										
Preflood Property Acquisition	$ -	$ 500,000	$ 500,000	$ 550,000	$ 600,000	$ 633,000	$ 660,000	$ 3,443,000	$ -	
Subtotal	$ -	$ 500,000	$ 500,000	$ 550,000	$ 600,000	$ 633,000	$ 660,000	$ 3,443,000	$ -	$ -
Transfer										
Tributary Greenways Program - Stormwater & Flood	$ -	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 585,000	$ -	$ -
Subtotal	$ -	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 585,000	$ -	$ -
Total	**$ 50,505,163**	**$ 19,355,500**	**$ 7,665,600**	**$ 7,078,848**	**$ 15,293,894**	**$ 4,244,490**	**$ 5,662,189**	**$ 59,300,521**	**$ 4,962,308**	**$ 11,800,000**

Table 14-2: 2013-2018 Funding Summary By Department (Cont.)

PUBLIC WORKS - WASTEWATER UTILITY

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Enhancement										
Utility Billing Computer System Replacement	$ 115,000	$ 50,000	$ -	$ -	$ -	$ -	$ 65,000	$ 115,000	$ -	$ -
Wastewater Treatment Activated Sludge	710,961	389,376	-	58,493	-	-	-	447,869	-	-
Wastewater Treatment Facility Instrumentation/Control	9,131,068	540,800	-	674,918	701,915	729,992	759,191	3,406,816	695,600	5,028,652
Wastewater Treatment Facility Permit Improvements - Funded	23,337,234	1,650,000	150,000	-	750,000	1,500,000	18,625,000	22,675,000	662,234	-
Marshall Landfill	100,000	-	100,000	-	-	-	-	100,000	-	-
Wastewater Treatment Facility Electrical	1,420,000	-	120,000	1,200,000	-	-	-	1,320,000	100,000	-
Wastewater Treatment Facility Laboratory	100,000	-	50,000	-	-	-	-	50,000	50,000	-
Wastewater Treatment Facility Pumps	448,413	-	150,000	-	-	-	-	150,000	298,413	-
Goose Creek Sanitary Sewer Interceptor Rehabilitation	2,019,578	-	-	-	25,000	647,590	1,346,988	2,019,578	-	-
Subtotal	$ 37,382,254	$ 2,630,176	$ 570,000	$ 1,933,411	$ 1,476,915	$ 2,877,582	$ 20,796,179	$ 30,284,263	$ 1,806,247	$ 5,028,652
Capital Maintenance										
Condition Assessment Program	$ 5,173,721	$ 780,000	$ 811,200	$ 843,648	$ 877,394	$ 912,490	$ 948,989	$ 5,173,721	$ -	$ -
IBM Lift Station Improvements	1,300,000	500,000	-	-	-	-	-	500,000	-	800,000
Sanitary Sewer Manhole Rehabilitation	1,264,660	208,000	216,320	224,973	233,972	24,331	253,064	1,160,660	104,000	-
Sanitary Sewer Rehabilitation	23,193,721	12,030,000	2,061,200	2,093,648	2,127,394	2,162,490	2,198,989	22,673,721	520,000	-
Collection System Monitoring	100,000	-	-	-	-	-	-	-	100,000	-
Wastewater Treatment Facility Digester Complex	2,200,000	-	-	-	-	200,000	2,000,000	2,200,000	-	-
Wastewater Treatment Facility Cogeneration	184,481	-	-	-	-	-	184,481	184,481	-	-
Subtotal	$ 33,416,583	$ 13,518,000	$ 3,088,720	$ 3,162,269	$ 3,238,760	$ 3,299,311	$ 5,585,523	$ 31,892,583	$ 724,000	$ 800,000
Total	**$ 70,798,837**	**$ 16,148,176**	**$ 3,658,720**	**$ 5,095,680**	**$ 4,715,675**	**$ 6,176,893**	**$ 26,381,702**	**$ 62,176,846**	**$ 2,530,247**	**$ 5,828,652**

Table 14-2: 2015-2020 Funding Summary By Department (Cont.)

PUBLIC WORKS - WATER UTILITY

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
Capital Enhancement										
Barker Dam and Reservoir	$ 498,560	$ 378,560	$ -	$ -	$ -	$ -	$ -	$ 378,560	$ 120,000	$ -
Betasso Water Treatment Facility	13,325,000	700,000	12,125,000	-	-	-	-	12,825,000	500,000	-
Devil's Thumb Security Fence	50,000	50,000	-	-	-	-	-	50,000	-	-
Sunshine Transmission Pipe	2,000,000	1,000,000	-	-	-	-	-	1,000,000	1,000,000	-
Water System Security Upgrades	840,000	150,000	150,000	150,000	150,000	150,000	90,000	840,000	-	-
Barker Dam Outlet	9,062,557	-	50,000	175,000	803,414	8,034,143	-	9,062,557	-	-
Boulder Reservoir Water Treatment Facility - Funded	164,000	-	164,000	-	-	-	-	164,000	-	-
Lakewood Hydroelectric / Pressure Reducing Facility	430,000	-	130,000	-	-	300,000	-	430,000	-	-
Utility Billing Computer System Replacement	529,104	-	-	500,000	-	-	-	500,000	29,104	-
Lakewood Dam	124,707	-	-	-	124,707	-	-	124,707	-	-
Pearl Street Hydroelectric / Pressure Reducing Facility	267,664	-	-	-	24,333	243,331	-	267,664	-	-
Green Lake 2 Dam	5,223,557	-	-	-	-	75,000	468,051	543,051	-	4,680,506
Wittemyer Ponds - Funded	5,519,533	-	-	-	-	100,000	473,735	573,735	-	4,945,798
Subtotal	$ 38,034,682	$ 2,278,560	$ 12,619,000	$ 825,000	$ 1,102,454	$ 8,902,474	$ 1,031,786	$ 26,759,274	$ 1,649,104	$ 9,626,304
Capital Maintenance										
Barker Gravity Pipeline Repair	$ -	$ 378,560	$ 667,416	$ 612,436	$ 636,933	$ 662,410	$ 688,907	$ 3,646,662	$ -	$ -
Goose Lake Dam	20,000	20,000	-	-	-	-	-	20,000	-	-
Kohler Storage Tank	903,362	103,487	799,875	-	-	-	-	903,362	-	-
Lakewood Pipeline	846,730	270,400	-	-	-	316,330	-	586,730	260,000	-
Silver Lake Dam	75,000	75,000	-	-	-	-	-	75,000	-	-
Silver Lake Hydroelectric / PRV	150,000	150,000	-	-	-	-	-	150,000	-	-
Waterline Replacement	24,329,088	3,224,000	3,352,960	3,487,078	3,626,562	3,771,624	3,224,033	20,686,257	3,642,831	-
Watershed Improvements	260,000	80,000	80,000	-	-	-	100,000	260,000	-	-
Water Transmission Facilities (Zone 3)	250,000	-	1,200,000	-	-	250,000	-	1,450,000	-	(1,200,000)
Barker-Kossler Penstock Repair	116,986	-	-	116,986	-	-	-	116,986	-	-
Betasso Storage Tank	292,465	-	-	292,465	-	-	-	292,465	-	-
Sunshine Hydroelectric / Pressure Reducing Station	271,875	-	-	271,875	-	-	-	271,875	-	-
Water Transmission Facilities (Zone 2)	500,000	-	-	250,000	-	-	250,000	500,000	-	-
Betasso Hydroelectric / Pressure Reducing Facility	250,000	-	-	-	250,000	-	-	250,000	-	-
Water Transmission Facilities (Zone 1)	250,000	-	-	-	250,000	-	-	250,000	-	-
Farmer's Ditch	108,160	-	-	-	-	108,160	-	108,160	-	-
Subtotal	$ 28,623,666	$ 4,301,447	$ 6,100,251	$ 5,030,840	$ 4,763,495	$ 5,108,524	$ 4,262,940	$ 29,567,497	$ 3,902,831	$ (1,200,000)

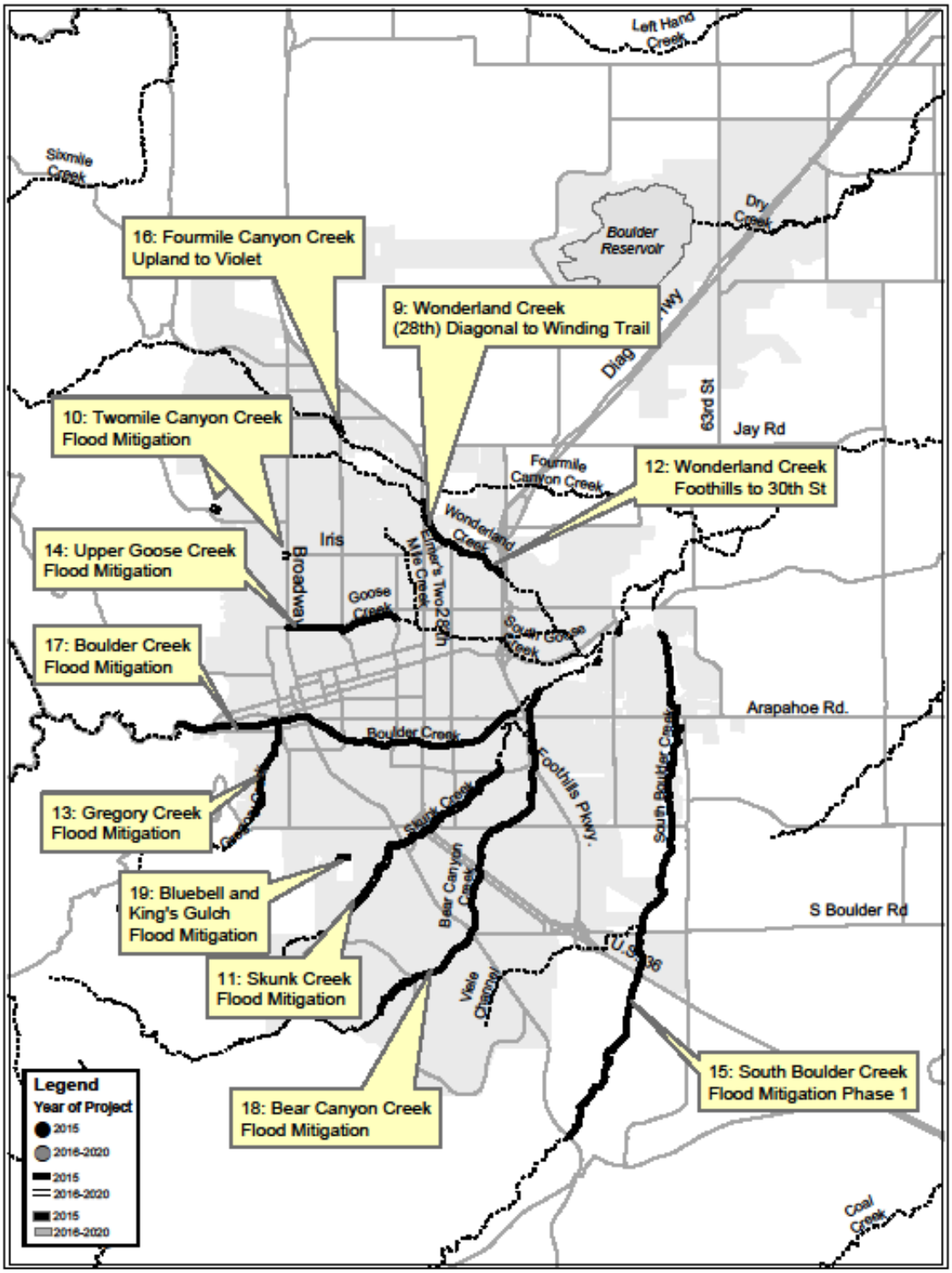
Table 14-2: 2015-2020 Funding Summary By Department (Cont.)

PUBLIC WORKS - WATER UTILITY (Cont.)

	Estimated Total Cost	2015 Recommended	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2015 - 2020 Total	Previously Allocated Funding	Unfunded Amount
New Capital Project										
Annexation Related Water System Expansion	$ 5,000,000	$ 2,500,000	$ 2,500,000	$ -	$ -	$ -	$ -	$ 5,000,000	$ -	$ -
NCWCD Conveyance - Carter Lake Pipeline	38,568,583	500,000	850,000	2,036,322	33,938,701	-	-	37,325,023	1,243,560	-
Barker Dam Hydroelectric	4,024,805	-	50,000	361,346	3,613,459	-	-	4,024,805	-	-
Source Water Monitoring	293,200	-	50,000	50,000	50,000	50,000	-	200,000	93,200	-
Carter Lake Hydroelectric	2,800,000	-	-	-	50,000	250,000	2,500,000	2,800,000	-	-
Subtotal	$ 50,686,588	$ 3,000,000	$ 3,450,000	$ 2,447,668	$ 37,652,160	$ 300,000	$ 2,500,000	$ 49,349,828	$ 1,336,760	$ -
Total	**$ 117,344,936**	**$ 9,580,007**	**$ 22,169,251**	**$ 8,303,508**	**$ 43,518,109**	**$ 14,310,998**	**$ 7,794,726**	**$ 105,676,599**	**$ 6,888,695**	**$ 8,426,304**

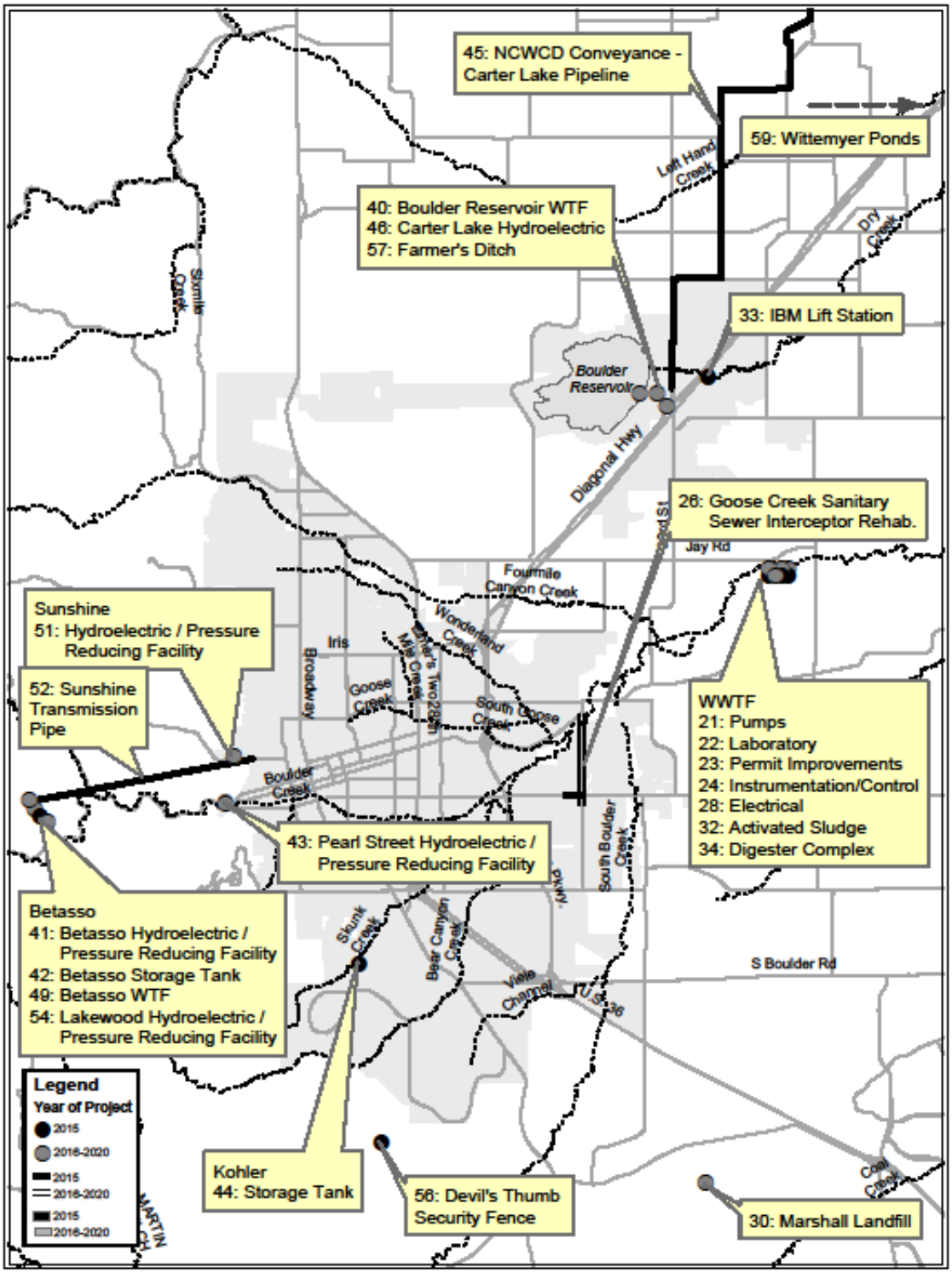
City of Boulder Captial Improvement Projects, 2015 - 2020

PW / Utilities (Stormwater and Flood Management)



City of Boulder Captial Improvement Projects, 2015 - 2020

PW / Utilities (Wastewater, Water)



Project Name: Bear Canyon Creek Flood Mitigation

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Stormwater & Flood Management Utility	**Subcommunity:**	Multiple Subcommunities
Project Number:	431010	**BVCPArea:**	Area I
CEAP Required:	Yes	**Map Number:**	18
		CEAP Status:	To be initiated in 2015

Project Description

A flood mitigation plan is being developed which will identify feasible mitigation improvements. Funding for the CEAP and design of these improvements is shown in 2015, with construction funding in 2016.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The flood mitigation plan will be reviewed through a public process.

Relationship with Other Departments

Flood mitigation alternatives will be developed in coordination with Parks, Open Space, Transportation, the University of Colorado and the Boulder Valley School District. Impacted parcels will not be known until flood mitigation alternatives are identified.

Change from Past CIP

new funding

Estimated Total Cost

Project Cost

Planning	$100,000
Acquisition	$0
Construction	$500,000
Total Project Cost	**$600,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$600,000
Funding Total	($600,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Stormwater & Flood Management Utility Fund	$0	$100,000	$500,000	$0	$0	$0	$0
Total Funding Plan	**$600,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:**

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Bluebell and King's Gulch Flood Mitigation

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Stormwater & Flood Management Utility	**Subcommunity:**	South Boulder
Project Number:		**BVCPArea:**	Area I
CEAP Required:	Yes	**Map Number:**	19
		CEAP Status:	2017

Project Description

A flood mitigation plan will be developed that will identify feasible mitigation improvements. Funding for the CEAP and design of these improvements is shown in 2017 with construction in 2018.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The flood mitigation plan will be reviewed through a public process.

Relationship with Other Departments

Flood mitigation alternatives will be developed in coordination with Transportation, University of Colorado, Parks, NOAA, NIST and NCAR. Impacted parcels will not be known until flood mitigation alternatives are identified.

Change from Past CIP

new project

Estimated Total Cost

Project Cost

Planning	$60,000
Acquisition	$100,000
Construction	$440,000
Total Project Cost	**$600,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$600,000
Funding Total	($600,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Stormwater & Flood Management Utility Fund	$0	$0	$0	$100,000	$500,000	$0	$0
Total Funding Plan	**$600,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $1,000 **Funding Source:** will be covered by existing maintenance budgets

Additional Annual O&M Description:

Project Name: Boulder Creek Flood Mitigation

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Stormwater & Flood Management Utility	**Subcommunity:**	Multiple Subcommunities
Project Number:	431015	**BVCPArea:**	Areas I & II
CEAP Required:	Yes	**Map Number:**	17
		CEAP Status:	2015

Project Description

This project will provide funds for possible flood mitigation work along Boulder Creek. Funding for the CEAP and design of these improvements is shown in 2015, with construction funding in 2016 and 2017

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The flood mitigation plan will be reviewed through a public process.

Relationship with Other Departments

Flood mitigation alternatives will be developed in coordination with Parks, Open Space, Transportation, the University of Colorado and the Boulder Valley School District. Impacted parcels will not be known until flood mitigation alternatives are identified.

Change from Past CIP

funding was added in 2015-2017

Estimated Total Cost

Project Cost

Planning	$500,000
Acquisition	$500,000
Construction	$4,600,000
Total Project Cost	**$5,600,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$5,600,000
Funding Total	($5,600,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Stormwater & Flood Management Utility Fund	$100,000	$500,000	$2,500,000	$2,500,000	$0	$0	$0
Total Funding Plan	**$5,600,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:**

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Gregory Creek Flood Mitigation

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Stormwater & Flood Management Utility	**Subcommunity:**	Central Boulder
Project Number:	431702	**BVCPArea:**	Area I
CEAP Required:	Yes	**Map Number:**	13
		CEAP Status:	2015

Project Description

A flood mitigation plan is being developed which will identify feasible mitigation improvements. Funding for the CEAP and design of these improvements is shown in 2015, with construction funding in 2016.

Relationship to Guiding Principles

- ☑ Consistent with Master Plans
- ☑ Achieves Community Sustainability goals
- ☑ Includes sufficient funding for operation and maintenance
- ☐ Maintains and enhances city's business systems
- ☑ Provides capacity and flexibility in long term planning
- ☑ Sustains or improves existing assets
- ☑ Maximizes efficiency and demonstrates positive cost/benefit
- ☑ Fund includes sufficient reserves
- ☑ Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Flood mitigation options will be reviewed through a public process.

Relationship with Other Departments

Flood mitigation alternatives will be developed in coordination with Transportation, Open Space, Boulder Valley School District and Boulder County. Impacted parcels will not be known until flood mitigation alternatives are identified.

Change from Past CIP

New project

Estimated Total Cost

Project Cost

Planning	$60,000
Acquisition	$100,000
Construction	$440,000
Total Project Cost	**$600,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$600,000
Funding Total	($600,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Stormwater & Flood Management Utility Fund	$0	$100,000	$500,000	$0	$0	$0	$0
Total Funding Plan	**$600,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $1,000 **Funding Source:** will be covered by existing maintenance budgets

Additional Annual O&M Description:

Project Name: Local Drainage Improvements

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Stormwater & Flood Management Utility	**Subcommunity:**	Multiple Subcommunities
Project Number:		**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	
		CEAP Status:	

Project Description

This capital project will provide funds to improve local drainage problems, many of which came to light as a result of the 2013 flood disaster and have persisted ever since. Areas that are likely to receive attention are the west valley of South Boulder Creek, and the Chautauqua and University Hill neighborhoods.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [ ] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

Transportation

Change from Past CIP

New Project

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	$5,173,721
Total Project Cost	

Unfunded Amount

Unfunded Amount

Project Cost Total	
Funding Total	($5,173,721)
Total Unfunded	

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Stormwater & Flood Management Utility Fund	$0	$780,000	$811,200	$843,648	$877,394	$912,490	$948,989
Total Funding Plan	**$5,173,721**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:** Stormwater and Flood Management Enterprise Utility

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Preflood Property Acquisition

Project at a Glance

Project Type:	Land and Asset Acquisition		
Department:	PW/ Stormwater & Flood Management Utility	**Subcommunity:**	System-wide
Project Number:	431622	**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	NA

Project Description

This project provides on-going funding for the purchase of properties in areas prone to flooding especially the city's high hazard regulatory area. Properties have been identified and prioritized along each of the city's major drainageways. Property owners have been contacted regarding the city's interest. The city periodically updates its flood mapping to reflect changing conditions and improvements in flood modeling. The highest risk properties are identified for purchase, based on updated mapping for each of the drainageways.

This project is for an ongoing funding program. Funding has been escalated to reflect inflation.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Property owners have been contacted regarding the city's interest in purchasing.

Relationship with Other Departments

Acquisition of parcels may require coordination with the city's Greenways Program, Transportation and Parks and Recreation.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	

Unfunded Amount

Unfunded Amount

Project Cost Total	
Funding Total	($3,443,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Stormwater & Flood Management Utility Fund	$0	$500,000	$500,000	$550,000	$600,000	$633,000	$660,000
Total Funding Plan	**$3,443,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Stormwater and Flood Management Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Skunk Creek Flood Mitigation

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Stormwater & Flood Management Utility	**Subcommunity:**	South Boulder
Project Number:		**BVCPArea:**	Area I
CEAP Required:	Yes	**Map Number:**	11
		CEAP Status:	2017

Project Description

A flood mitigation plan will be developed which will identify feasible mitigation improvements. Funding for the CEAP and design of these improvements is shown in 2017, with construction funding in 2018.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The flood mitigation plan will be reviewed through a public process.

Relationship with Other Departments

Flood mitigation alternatives will be developed in coordination with Transportation, University of Colorado, Parks, NOAA, NIST and NCAR. Impacted parcels will not be known until flood mitigation alternatives are identified.

Change from Past CIP

new project

Estimated Total Cost

Project Cost

Planning	$60,000
Acquisition	$100,000
Construction	$440,000
Total Project Cost	**$600,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$600,000
Funding Total	($600,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Stormwater & Flood Management Utility Fund	$0	$0	$0	$100,000	$500,000	$0	$0
Total Funding Plan	**$600,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $1,000 **Funding Source:** will be covered by existing maintenance budgets

Additional Annual O&M Description:

Project Name: South Boulder Creek Flood Mitigation Phase I

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Stormwater & Flood Management Utility	**Subcommunity:**	Multiple Subcommunities
Project Number:	431202	**BVCPArea:**	System-wide
CEAP Required:	Yes	**Map Number:**	15
		CEAP Status:	No

Project Description

This project is to mitigate flooding along South Boulder Creek from U.S. 36 to the confluence with Boulder Creek, based on recommendations in the Comprehensive Flood and Stormwater Master Plan. Flood mitigation alternatives have been evaluated and a draft recommendation is currently going through a public review process. Information has been presented in two open houses, twice to the Water Resources Advisory Board (WRAB) and at several stakeholder meetings. The proposed alternative includes construction of a regional flood detention facility located just south of US36, along with downstream capacity improvements. This alternative would eliminate the overtopping of US36 during a 100-year storm event and greatly reduce downstream flood risks.

It is anticipated that the project will be designed and constructed in three phases, each approximately $15-$25 million. The recommended first phase would construct the regional flood detention facility at US36. Funding shown in the CIP is for the first phase and is intended as seed money in the hopes of securing outside grants or federal money to complete the selected alternative.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The project has been presented to the public in two open houses, twice to the Water Resources Advisory Board (WRAB) and several stakeholder meetings. Following further refinement of the recommended alternative, the city will conduct an open house, coordinate with stakeholders, and present to the WRAB and City Council. These remaining public processes are anticipated to occur in late 2014 and in 2015.

Relationship with Other Departments

Flood mitigation alternatives will be developed in coordination with Open Space, Colorado Department of Transportation, University of Colorado and Boulder Valley School District. The proposed alternatives would potentially impact the following parcels: CU South Campus, US 36, Manhattan Middle School and Flatirons Golf Course.

Change from Past CIP

Funding moved out to 2018, increased and proposed for bonding

Estimated Total Cost

Project Cost

Planning	$1,000,000
Acquisition	$2,000,000
Construction	$21,000,000
Total Project Cost	**$24,000,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$24,000,000
Funding Total	($12,200,000)
Total Unfunded	**$11,800,000**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Stormwater & Flood Management Utility Fund	$300,000	$250,000	$750,000	$750,000	$10,150,000	$0	$0
Total Funding Plan	**$12,200,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Stormwater and Flood Management Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Storm Sewer Rehabilitation

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Stormwater & Flood Management Utility	**Subcommunity:**	System-wide
Project Number:	431760	**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	NA

Project Description

The project provides funds for the rehabilitation of existing storm sewers. This project is for an ongoing funding program. The program is funded at $250,000 per year (2013) escalated by an inflation index for future years.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

Transportation Division

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$0
Acquisition	$0
Construction	
Total Project Cost	

Unfunded Amount

Unfunded Amount

Project Cost Total	
Funding Total	($2,040,800)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Stormwater & Flood Management Utility Fund	$0	$260,000	$270,400	$281,200	$292,500	$304,000	$632,700
Total Funding Plan	**$2,040,800**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Stormwater and Flood Management Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Stormwater Quality Improvements

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Stormwater & Flood Management Utility	**Subcommunity:**	System-wide
Project Number:	431775	**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	NA

Project Description

This project will fund stormwater quality projects as identified in the Stormwater Master Plan to improve water quality in Boulder Creek and it's tributaries. This project is for an ongoing funding program. The program is funded at $100,000 per year (2013) escalated by an inflation index for future years.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

Transportation Division

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	

Unfunded Amount

Unfunded Amount

Project Cost Total	
Funding Total	($1,139,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Stormwater & Flood Management Utility Fund	$104,000	$156,000	$162,000	$169,000	$175,500	$182,500	$190,000
Total Funding Plan	**$1,139,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Stormwater and Flood Management Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Transportation Coordination

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Stormwater & Flood Management Utility	**Subcommunity:**	System-wide
Project Number:	431780	**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	NA

Project Description

This project will fund the reconstruction of existing storm sewers, the construction of new storm sewers and water quality improvements as part of on-going Transportation Division improvement projects. This project is for an ongoing funding program. The program is funded at $250,000 per year (2013) escalated by an inflation index for future years.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [ ] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

Coordination with the City's Transportation Division

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	
Acquisition	$0
Construction	
Total Project Cost	

Unfunded Amount

Unfunded Amount

Project Cost Total	
Funding Total	($2,583,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Stormwater & Flood Management Utility Fund	$260,000	$312,000	$324,500	$337,500	$351,000	$365,000	$633,000
Total Funding Plan	**$2,583,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Stormwater and Flood Management Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Tributary Greenways Program - Stormwater & Flood

Project at a Glance

Project Type:	Transfer		
Department:	PW/ Stormwater & Flood Management Utility	**Subcommunity:**	System-wide
Project Number:	431630	**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	NA

Project Description

The program is intended to improve and protect the many riparian corridors that pass through the city. Improvements include pedestrian/bicycle paths, drainage and flood control structures, and preservation and enhancement of natural features. A portion of the capital funding for this program was shifted to needed maintenance of existing system beginning in 2012. See Greenways CIP/Budget section. Project funding is ongoing. This project represents the Utilities Division contribution to the program.

Relationship to Guiding Principles

- ☐ Consistent with Master Plans
- ☐ Achieves Community Sustainability goals
- ☐ Includes sufficient funding for operation and maintenance
- ☐ Maintains and enhances city's business systems
- ☐ Provides capacity and flexibility in long term planning
- ☐ Sustains or improves existing assets
- ☐ Maximizes efficiency and demonstrates positive cost/benefit
- ☐ Fund includes sufficient reserves
- ☐ Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

The Greenways Program is coordinated with parks, utilities, planning, OSMP

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	

Unfunded Amount

Unfunded Amount

Project Cost Total	
Funding Total	($585,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Stormwater & Flood Management Utility Fund	$0	$97,500	$97,500	$97,500	$97,500	$97,500	$97,500
Total Funding Plan	**$585,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Stormwater and Flood Management Utility Enterprise Fund

Additional Annual O&M Description:

Decreased funding to move operating expenses of $52,500 to Operating budget

Project Name: Twomile Canyon Creek Flood Mitigation

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Stormwater & Flood Management Utility	**Subcommunity:**	Multiple Subcommunities
Project Number:		**BVCPArea:**	Area I
CEAP Required:	Yes	**Map Number:**	10
		CEAP Status:	2017

Project Description

A flood mitigation plan will be developed which will identify feasible mitigation improvements. Funding for the CEAP and design of these improvements is shown in 2017, with construction funding in 2018.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The flood mitigation plan will be reviewed through a public process.

Relationship with Other Departments

Flood mitigation alternatives will be developed in coordination with Open Space, Parks, Boulder Valley School District and Transportation. Impacted parcels will not be known until flood mitigation alternatives are identified.

Change from Past CIP

new project

Estimated Total Cost

Project Cost

Planning	$60,000
Acquisition	$100,000
Construction	$440,000
Total Project Cost	**$600,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$600,000
Funding Total	($600,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Stormwater & Flood Management Utility Fund	$0	$0	$0	$100,000	$500,000	$0	$0
Total Funding Plan	**$600,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $1,000 **Funding Source:** will be covered by existing maintenance budgets

Additional Annual O&M Description:

Project Name: Upper Goose Creek Drainage

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Stormwater & Flood Management Utility	**Subcommunity:**	Central Boulder
Project Number:	431459	**BVCPArea:**	Area I
CEAP Required:	Yes	**Map Number:**	14
		CEAP Status:	No

Project Description

This project will fund the construction of a drainage improvements in the Upper Goose Creek drainage basin located between 9th and 19th Streets. This project was identified as the highest priority in the 2007 Stormwater Master Plan. Utilities will fund this project beginning in 2015 and continuing through 2029. The project has numerous components that will be completed in several phases.The "unfunded' amount reflected below simply refers to funding for the total of all project phases beyond 2019.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The public process will be initiated in 2012.

Relationship with Other Departments

Coordination with the City's Transportation Division. Impacted parcels will not be known until flood mitigation alternatives are identified.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$2,000,000
Acquisition	$0
Construction	$15,905,163
Total Project Cost	**$17,905,163**

Unfunded Amount

Unfunded Amount

Project Cost Total	$17,905,163
Funding Total	($3,425,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Stormwater & Flood Management Utility Fund	$0	$175,000	$750,000	$750,000	$750,000	$1,000,000	$0
Total Funding Plan	**$3,425,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Stormwater and Flood Management Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Collection System Monitoring

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Wastewater Utility	**Subcommunity:**	System-wide
Project Number:	421450	**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	NA

Project Description

This project provides funds for monitoring of the City's wastewater collection system. This will be accomplished by using temporary flow measuring devices placed in selected manholes. Funds have been allocated on a 5-year cycle in both 2012 and 2017. The 2014 funding is intended to supplement the 2012 funding carryover to 2013. This project is for an ongoing funding program.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

None

Change from Past CIP

Funding deleted in 2017

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	**$100,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$100,000
Funding Total	($100,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Wastewater Utility Fund	$100,000	$0	$0	$0	$0	$0	$0
Total Funding Plan	**$100,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Wastewater Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Condition Assessment Program

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Wastewater Utility	**Subcommunity:**	System-wide
Project Number:		**BVCPArea:**	
CEAP Required:	No	**Map Number:**	
		CEAP Status:	

Project Description

The Wastewater Utility Condition Assessment Program is intended to provide an ongoing comprehensive assessment of the City's sanitary sewer collection system. There are approximately 360 miles of sanitary sewer pipe in the collection system. The program is funded starting at $780,000 per year (2015) escalated at 4% annually for the 2015-2020 CIP. This project is for an ongoing funding program.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

OSMP

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$0
Acquisition	
Construction	$5,173,721
Total Project Cost	**$5,173,721**

Unfunded Amount

Unfunded Amount

Project Cost Total	$5,173,721
Funding Total	($5,173,721)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Wastewater Utility Fund	$0	$780,000	$811,200	$843,648	$877,394	$912,490	$948,989
Total Funding Plan	**$5,173,721**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:** Wastewater Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Goose Creek Sanitary Sewer Interceptor Rehabilitation

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Wastewater Utility	**Subcommunity:**	East Boulder
Project Number:	421002	**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	26
		CEAP Status:	

Project Description

This project will provide funds for rehabilitation of the Goose Creek Sanitary Sewer Interceptor, which was identified as a Tier 1 rehabilitation project in the 2009 Wastewater Collection System Master Plan (WWCSMP). An "interceptor" sewer refers to a large diameter pipe with very few connections, as opposed to a "collector" sewer which is a medium diameter pipe with numerous smaller diameter sanitary service pipe connections. Utilities staff is in the process of updating the WWCSMP to incorporate data from the September 2013 flood event. This master plan update will evaluate whether this project remains one of the high priorities for the Wastewater Utility. The "unfunded' amount reflected below simply refers to funding for the project beyond 2019.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

None

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$200,000
Acquisition	$0
Construction	$1,819,578
Total Project Cost	**$2,019,578**

Unfunded Amount

Unfunded Amount

Project Cost Total	$2,019,578
Funding Total	($2,019,578)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Wastewater Utility Fund	$0	$0	$0	$0	$25,000	$647,590	$1,346,988
Total Funding Plan	**$2,019,578**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Wastewater Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: IBM Lift Station Improvements

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Wastewater Utility	**Subcommunity:**	System-wide
Project Number:		**BVCPArea:**	
CEAP Required:	No	**Map Number:**	33
		CEAP Status:	

Project Description

The city owns and operates one sanitary sewer pump station located along the Diagonal Hwy northeast of Boulder. The pump station, which conveys raw sewage to the wastewater collection system thrugh a forcemain, is referred to as the IBM Lift Station because it was originally constructed to serve the IBM facility located along Highway 119. The Utiities workgroup will complete improvements to the lift station in 2015 and 2016 to address CDPHE permit requirements as well as mechanical and electrical upgrades.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

None

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$200,000
Acquisition	$0
Construction	$1,100,000
Total Project Cost	**$1,300,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$1,300,000
Funding Total	($500,000)
Total Unfunded	**$800,000**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Wastewater Utility Fund	$0	$500,000	$0	$0	$0	$0	$0
Total Funding Plan	**$500,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:** Wastewater Utility Enterprise Fund

Additional Annual O&M Description:

The $800,000 unfunded amount is in the 2014 project CIP.

Project Name: Marshall Landfill

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Wastewater Utility	**Subcommunity:**	Area III
Project Number:		**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	30
		CEAP Status:	NA

Project Description

This project will fund the decommissioning of the Marshall Landfill Treatment Facility. The facility was originally constructed to eliminate groundwater contamination at the original landfill site. The money will be used for landfill cap maintenance and repair and demolition of the groundwater treatment facility.

Based on EPA approval, the groundwater collection system was shut down on Nov. 30, 2004. The treatment plant and collection system equipment will need to be preserved. In addition, there are approximately 180 sampling and monitoring wells located on the site, many of which are no longer used or necessary. Part of the shutdown process will entail sealing the unnecessary wells in place. This work would be required by the EPA as part of the Superfund site decommissioning process.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

None

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$20,000
Acquisition	$0
Construction	$80,000
Total Project Cost	**$100,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$100,000
Funding Total	($100,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Wastewater Utility Fund	$0	$0	$100,000	$0	$0	$0	$0
Total Funding Plan	**$100,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Wastewater Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Sanitary Sewer Manhole Rehabilitation

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Wastewater Utility	**Subcommunity:**	System-wide
Project Number:	421454	**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	NA

Project Description

This project provides for the rehabilitation and improvement to the existing wastewater manholes that are part of the city's sewer system. The program is funded at $100,000 per year (2013) escalated by an inflation index for future years. This project is for an ongoing funding program.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

Trasnportation Division

Change from Past CIP

Additional funding included

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	$1,264,660
Total Project Cost	**$1,264,660**

Unfunded Amount

Unfunded Amount

Project Cost Total	$1,264,660
Funding Total	($1,264,660)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Wastewater Utility Fund	$104,000	$208,000	$216,320	$224,973	$233,972	$24,331	$253,064
Total Funding Plan	**$1,264,660**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Wastewater Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Sanitary Sewer Rehabilitation

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Wastewater Utility	**Subcommunity:**	System-wide
Project Number:	421002	**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	NA

Project Description

This project provides for the rehabilitation and improvement to the existing collector sewer piping of the city's wastewater collection system. The program is funded at approximately $2,00,000 per year (2014) escalated at 4% annually for the 2015-2020 CIP. This project is for an ongoing funding program.

Also included is funding for the rehabilitation of the city's sanitary interceptor sewer in 2015. Estimated costs associated with this project are $10,000,000 and it is anticipated revenue bonds will be issues.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

Transportation Division

Change from Past CIP

Addition funding for rehabilitation of the sanitary interceptor sewer included.

Estimated Total Cost

Project Cost

Planning	$0
Acquisition	$0
Construction	$23,193,721
Total Project Cost	**$23,193,721**

Unfunded Amount

Unfunded Amount

Project Cost Total	$23,193,721
Funding Total	($23,193,721)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Wastewater Utility Fund	$520,000	$12,030,000	$2,061,200	$2,093,648	$2,127,394	$2,162,490	$2,198,989
Total Funding Plan	**$23,193,721**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Wastewater Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Wastewater Treatment Facility Activated Sludge

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Wastewater Utility	**Subcommunity:**	Area III
Project Number:	421357	**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	32
		CEAP Status:	NA

Project Description

This project will fund the rehabilitation of the facility's activated sludge process. The "activated sludge" system refers to the facility's biological (as opposed to physical or chemical) treatment process. The biological treatment process requires aerating the wastewater to grow microorganisms necessary to remove the organics in the wastewater. The 2015 funding is required to modify the aeration system in the Solids Contact Tanks. The 2017 funding is to provide maintenance on the three large blowers that provide the air to the aeration basins and the solids contact tanks. The "unfunded' amount reflected below simply refers to funding for the project beyond 2019.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

None

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$100,000
Acquisition	$0
Construction	$610,961
Total Project Cost	**$710,961**

Unfunded Amount

Unfunded Amount

Project Cost Total	$710,961
Funding Total	($447,869)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Wastewater Utility Fund	$0	$389,376	$0	$58,493	$0	$0	$0
Total Funding Plan	**$447,869**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Wastewater Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Wastewater Treatment Facility Cogeneration

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Wastewater Utility	**Subcommunity:**	Area III
Project Number:	421329	**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	25
		CEAP Status:	NA

Project Description

This project will fund rehabilitation of the cogeneration (generation of electricty and heat from methane gas produced by the anaerobic digesters) facilities at the 75th Street WWTP. The 2013 funding is for a major overhaul of the co-gen engines that occurs every seven years.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [ ] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

None

Change from Past CIP

Funding added in 2020

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	$184,481
Total Project Cost	**$184,481**

Unfunded Amount

Unfunded Amount

Project Cost Total	$184,481
Funding Total	($184,481)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Wastewater Utility Fund	$0	$0	$0	$0	$0	$0	$184,481
Total Funding Plan	**$184,481**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:** Wastewater Utility Enterprise und

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Wastewater Treatment Facility Digester Complex

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Wastewater Utility	**Subcommunity:**	Area III
Project Number:		**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	34
		CEAP Status:	

Project Description

This project is to fund the WWTF's secondary digester cover replacement. The existing secondary digester roof is a floating steel cover that was designed to move up and down to store methane gas. The roof has failed by tilting on three occasions in recent years when mositure entered the roof and caused an imbalance. The replacement construction cost is estimated at approximately $2,000,000, and is funded in 2020. Design funding of $200,000 is allocated in 2019.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

None

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$200,000
Acquisition	$0
Construction	$2,000,000
Total Project Cost	**$2,200,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$2,200,000
Funding Total	($2,200,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Wastewater Utility Fund	$0	$0	$0	$0	$0	$200,000	$2,000,000
Total Funding Plan	**$2,200,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:** Wastewater Utility Enterprise Fund

Additional Annual O&M Description:

Project Name: Wastewater Treatment Facility Electrical

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Wastewater Utility	**Subcommunity:**	Area III
Project Number:	421439	**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	28
		CEAP Status:	NA

Project Description

This project will fund the rehabilitation of various existing electrical systems at the 75th Street WWTF. Maintaining the facility's electrical infrastructure is a critical component to ensure adequate treatment. This project will include the replacement of numerous major electrical components. The 2014 funding is to replace the solids processing building motor control centers (MCC's). The 2016 and 2017 funding is for the design and construction respectively for similar large electrical system's throughout the facility.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

None

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$100,000
Acquisition	$0
Construction	$1,320,000
Total Project Cost	**$1,420,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$1,420,000
Funding Total	($1,420,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Wastewater Utility Fund	$100,000	$0	$120,000	$1,200,000	$0	$0	$0
Total Funding Plan	**$1,420,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Wastewater Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Wastewater Treatment Facility Instrumentation/Control

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Wastewater Utility	**Subcommunity:**	Area III
Project Number:	421437	**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	24
		CEAP Status:	NA

Project Description

This project will fund the rehabilitation and/or replacement of instrumentation & control facilities at the 75th Street WWTF. These recommendations are based on the 2013 Process Automation System (PAS) Strategic Plan.The "unfunded' amount reflected below simply refers to funding for the project beyond 2019.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

None

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$900,000
Acquisition	$0
Construction	$8,231,068
Total Project Cost	**$9,131,068**

Unfunded Amount

Unfunded Amount

Project Cost Total	$9,131,068
Funding Total	($4,102,416)
Total Unfunded	**$5,028,652**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Wastewater Utility Fund	$695,600	$540,800	$0	$674,918	$701,915	$729,992	$759,191
Total Funding Plan	**$4,102,416**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:** Wastewater Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Wastewater Treatment Facility Laboratory

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Wastewater Utility	**Subcommunity:**	Area III
Project Number:		**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	22
		CEAP Status:	

Project Description

This project will provide funds for the rehabilitation and improvement of the existing chemical/biological laboratory and the 75th St. WWTF. The funds will be used for the replacements of counters, sinks, cabinets, and other laboratory equipment.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

None

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$10,000
Acquisition	$0
Construction	$90,000
Total Project Cost	**$100,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$100,000
Funding Total	($100,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Wastewater Utility Fund	$50,000	$0	$50,000	$0	$0	$0	$0
Total Funding Plan	**$100,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Wastewater Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Wastewater Treatment Facility Permit Improvements

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Wastewater Utility	**Subcommunity:**	Area III
Project Number:	421617	**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	23
		CEAP Status:	NA

Project Description

This project is intended to address additional WWTF facilities required to meet new effluent regulations identified in the 2011 Colorado Discharge Permit System (CDPS) Permit. In March 2011 the city received a new discharge permit for the 75th Street wastewater treatment facility (WWTF) with an effective date of May 1, 2011. The 2014-2016 funding is to address the current permit for daily max ammonia and notrogen. The 2017-2019 funding is to address design needs associated with the anticipated Colorado Department of Public Health and Environment Regulation 85 permit requirements.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

None

Change from Past CIP

Funding for construction of improvement added in 2020

Estimated Total Cost

Project Cost

Planning	$1,500,000
Acquisition	$0
Construction	$21,837,234
Total Project Cost	**$23,337,234**

Unfunded Amount

Unfunded Amount

Project Cost Total	$23,337,234
Funding Total	($23,337,234)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Wastewater Utility Fund	$662,234	$1,650,000	$150,000	$0	$750,000	$1,500,000	$18,625,000
Total Funding Plan	**$23,337,234**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:** Wastewater Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Wastewater Treatment Facility Pumps

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Wastewater Utility	**Subcommunity:**	Area III
Project Number:	411339	**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	21
		CEAP Status:	NA

Project Description

This project will fund the rehabilitation of existing pumps at the 75th Street WWTF. The 2014 funding is for the secondary pump station including the variable frequency drives (VFD's). The 2016 funding is for future pumps based on the asset management needs.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

None

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$40,000
Acquisition	$0
Construction	$408,413
Total Project Cost	**$448,413**

Unfunded Amount

Unfunded Amount

Project Cost Total	$448,413
Funding Total	($448,413)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Wastewater Utility Fund	$298,413	$0	$150,000	$0	$0	$0	$0
Total Funding Plan	**$448,413**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Wastewater Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Annexation Related Water System Expansion

Project at a Glance

Project Type:	New Capital Project		
Department:	PW/ Water Utility	**Subcommunity:**	System-wide
Project Number:	411433	**BVCPArea:**	Area II
CEAP Required:	No	**Map Number:**	
		CEAP Status:	

Project Description

This project provides funding for the installation of water mains in one or more Area II neighborhoods. It is anticipated the existing county rights-of way would be annexed to the city and used for the installation of the water and/or sewer mains. Residents would be able to connect to the city's wastewater system after paying the appropriate fees.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Pre-Annexation negotiations.

Relationship with Other Departments

Planning-Annex Area II properties
CAO-Annexation agreements and legal documents (easements)
Finance-Reimbursement agreements and payment plans
Boulder County and Transportation-Prioritization of pavement rehabilitation and entity responsibility
City Transporation-Prioritization of pavement rehabilitation and entity responsibility
Fire & Police- Response boundaries

Change from Past CIP

Offered to help out flood affected residents not on city utilities.

Estimated Total Cost

Project Cost

Planning	$500,000
Acquisition	
Construction	$4,500,000
Total Project Cost	**$5,000,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$5,000,000
Funding Total	($5,000,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$0	$2,500,000	$2,500,000	$0	$0	$0	$0
Total Funding Plan	**$5,000,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Water Utility Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget.

Project Name: Barker Dam and Reservoir

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Water Utility	**Subcommunity:**	Outside Planning Area
Project Number:	411110	**BVCPArea:**	Outside Planning Area
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	NA

Project Description

This project will provide funds for deficiency corrections at the existing Barker Dam, including security related projects.

These repairs and improvements are required as part of the agency (SEO and FERC) Dam Safety Inspection Evaluations and while not an immediate safety concern, they are necessary to eliminate the potential of storage limitations being enforced/regulated. This project will begin in 2015. The project is anticipated to complete construction in 2016.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

None

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$60,000
Acquisition	
Construction	$438,560
Total Project Cost	**$498,560**

Unfunded Amount

Unfunded Amount

Project Cost Total	$498,560
Funding Total	($498,560)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$120,000	$378,560	$0	$0	$0	$0	$0
Total Funding Plan	**$498,560**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Water Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Barker Dam Hydroelectric

Project at a Glance

Project Type:	New Capital Project		
Department:	PW/ Water Utility	**Subcommunity:**	Outside Planning Area
Project Number:		**BVCPArea:**	Outside Planning Area
CEAP Required:	Yes	**Map Number:**	0
		CEAP Status:	To be initiated in 2016

Project Description

Design and construction of a new hydroelectric facility to be integrated into the Barker Dam Outlet Works Project. The anticipated capacity is 1.5 megawatts total. Alternative approaches to the project will be considered by city staff and technical consultants as part of a technical analysis to be initiated in 2016. Information regarding the alternative approaches will be provided as part of the CEAP which has not been started yet.

This project will begin in 2017. The project is anticipated to complete construction in 2019.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The CEAP will be initiated in 2016

Relationship with Other Departments

Energy Strategy and Electric Utility Development

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$411,346
Acquisition	
Construction	$3,613,459
Total Project Cost	**$4,024,805**

Unfunded Amount

Unfunded Amount

Project Cost Total	$4,024,805
Funding Total	($4,024,805)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$0	$0	$50,000	$361,346	$3,613,459	$0	$0
Total Funding Plan	**$4,024,805**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $37,000 **Funding Source:** Water Utility Enterprise Fund

Additional Annual O&M Description:

Operating costs will be offset by increased hydroelectric revenue.

Project Name: Barker Dam Outlet

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Water Utility	**Subcommunity:**	Outside Planning Area
Project Number:	411109	**BVCPArea:**	Outside Planning Area
CEAP Required:	Yes	**Map Number:**	0
		CEAP Status:	To be initiated in 2016

Project Description

This project will provide funds for the replacement of the existing outlet works system of Barker Dam. The Barker Dam outlet facilities are over 100-years old and in need of significant rehabilitation. The current configuration of the outlet gates requires that Barker Reservoir be nearly emptied to perform a thorough inspection once every 5-10 years. Reconfiguration of the outlet facilities would potentially eliminate the need to empty the reservoir for gate inspection. As currently envisioned, the project would require construction of a vertical shaft near the north embankment, inlet tunnels and one outlet tunnel, an outlet distribution facility, a pipeline to Barker Gravity Line, and valve house. The outlet facilities would provide the opportunity to develop a hydroelectric generation facility as well. Alternative approaches to the project will be considered by city staff and technical consultants as part of a technical analysis to be initiated in 2016. Information regarding the alternative approaches will be provided as part of the CEAP.

This project will begin in 2016. The project is anticipated to complete construction in 2019.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The CEAP will be initiated in 2016.

Relationship with Other Departments

None

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$1,028,414
Acquisition	
Construction	$8,034,143
Total Project Cost	**$9,062,557**

Unfunded Amount

Unfunded Amount

Project Cost Total	$9,062,557
Funding Total	($9,062,557)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$0	$0	$50,000	$175,000	$803,414	$8,034,143	$0
Total Funding Plan	**$9,062,557**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Water Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Barker Gravity Pipeline Repair

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Water Utility	**Subcommunity:**	Outside Planning Area
Project Number:	411106	**BVCPArea:**	Outside Planning Area
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	NA

Project Description

This project will provide funds for ongoing repairs to the existing Barker gravity pipeline. Barker Gravity Pipeline is a critical component of the city's source water system because it conveys the city's Barker Reservoir/Middle Boulder Creek water to Betasso Water Treatment Plant (WTP). Stored water from Barker Reservoir and direct flows from Middle Boulder Creek are used to meet approximately 35 percent of the city's annual water needs. The city has, as part of an ongoing maintenance effort, already replaced and rehabilitated segments of the 11-mile Barker Gravity Pipeline that demonstrated the most degradation in condition or highest likelihood of failure. It is recommended the city continue its annual maintenance program, prioritizing based on the most critical needs, and also consider providing enough earthen cover to protect the pipeline, and anchor the pipeline in areas prone to landslides or other damaging events. Section replacement or specific lining techniques are options that may each work well in different parts of the pipeline depending on access considerations. The city will continue to coordinate with the USFS concerning maintenance activities on federal land. The projected funds will allow for continued minor rehabilitation efforts (repair of leaks, siphons, etc, as has been done over the past several years) and an evaluation of pilot replacement/lining alternatives through 2016 with continued mainatence every year through 2019.

In addition, the funding for this project in 2016 will also support on-going federal permitting issues associated with the Barker Water System. A request has been made to convert the current Federal Energy Regulatory Commission(FERC) licensed project to a FERC small conduit exemption from licensing. There are significant technical and legal analysis and documentation required to support this request and to obtain a separate land use authorization (i.e. Special Use Permit) from the U.S. Forest Service for continued occupancy of federal land by the Barker Gravity Pipeline.

This project is for an ongoing funding program. In 2013, $350,000 will be spent on the project as described above and escalated in the years 2014 to 2019 to allow for continued prioritized repairs.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [ ] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

None

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$100,000
Acquisition	
Construction	$3,546,662
Total Project Cost	

Unfunded Amount

Unfunded Amount

Project Cost Total	
Funding Total	
Total Unfunded	

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund		$378,560	$667,416	$612,436	$636,933	$662,410	$688,907
Total Funding Plan							

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Water Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Barker-Kossler Penstock Repair

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Water Utility	**Subcommunity:**	Outside Planning Area
Project Number:	411107	**BVCPArea:**	Outside Planning Area
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	NA

Project Description

This project will provide funds for analysis and repair of the existing Barker-Kossler Penstock including the need for replacement or targeted repairs as recommended form analyses including metallurgical and corrosion experts.

This project will begin in 2017.
Costs:

1. Planning: $ 15,000
2. Land Acquisition: $ 0
3. Construction: $ 101,986

The project is anticipated to complete construction in 2017.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

None

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$16,986
Acquisition	
Construction	$100,000
Total Project Cost	**$116,986**

Unfunded Amount

Unfunded Amount

Project Cost Total	$116,986
Funding Total	($116,986)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$0	$0	$0	$116,986	$0	$0	$0
Total Funding Plan	**$116,986**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Water Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Betasso Hydroelectric / Pressure Reducing Facility

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Water Utility	**Subcommunity:**	Outside Planning Area
Project Number:	411974	**BVCPArea:**	Outside Planning Area
CEAP Required:	No	**Map Number:**	41
		CEAP Status:	NA

Project Description

This project will fund rehabilitations to the Betasso Hydroelectric / Pressure Reducing Facility including a required 10 year scheduled maintenance overhaul of the existing turbine-generator equipment.

This project will begin in 2015. The project is anticipated to complete construction in 2017.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

None

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$10,000
Acquisition	
Construction	$240,000
Total Project Cost	**$250,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$250,000
Funding Total	($250,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$0	$0	$0	$0	$250,000	$0	$0
Total Funding Plan	**$250,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Water Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Betasso Storage Tank

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Water Utility	**Subcommunity:**	Outside Planning Area
Project Number:		**BVCPArea:**	Outside Planning Area
CEAP Required:	No	**Map Number:**	42
		CEAP Status:	

Project Description

This project will provide funds for the rehabilitation and exterior painting of the Betasso Storage Tank. The facility is an elevated steel tank that has deteriorated due to weather and other environmental factors that primarily affect the protective paint coating. This project will begin in 2017 and is anticipated to complete construction in 2018.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

None

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$14,623
Acquisition	
Construction	$277,842
Total Project Cost	**$292,465**

Unfunded Amount

Unfunded Amount

Project Cost Total	$292,465
Funding Total	($292,465)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$0	$0	$0	$292,465	$0	$0	$0
Total Funding Plan	**$292,465**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Water Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Betasso Water Treatment Facility

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Water Utility	**Subcommunity:**	Outside Planning Area
Project Number:	411947	**BVCPArea:**	Outside Planning Area
CEAP Required:	No	**Map Number:**	49
		CEAP Status:	2015?

Project Description

This project will provides funds for rehabilitations and improvements to the Betasso Water Treatment Facility. The Betasso is the city's primary Water Treatment Facility and has deteriorated during almost 50 years of continuous operation despite ongoing maintenance and rehabilitation. Also, pretreatment capacity limitations of the existing flocculation/sedimentation process result in residuals that comprise more water content than desired. This results in inadequate residuals dewatering capacity using the existing drying beds and lagoons. The city is currently using private contract hauling services to overcome this limitation.

Funding in 2014 will be used to fund a pre-treatment and residual study, chemical storage tanks and piping and rehabilitation of the combined influent flow meter.

Funding in 2014 and 2015 will be used for design of the major rehabilitation and improvement project.

Funding in 2016 is for the construction of the major rehabilitation and improvement project and includes:

$5,249,658 Water fund
$11,996,245 Bond Proceeds
$475,000 Bond Issuance Costs

The project is anticipated to to be completed in 2018.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Follow up with County on a 1041 exemption will be completed in late 2014/early 2015 along with an alternative analysis prepared for WRAB. Depending on City and County staff determinations a CEAP may be required in 2015.

Relationship with Other Departments

Enbergy efficiency coordination with CP&S

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$1,200,000
Acquisition	$125,000
Construction	$12,000,000
Total Project Cost	**$13,325,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$13,325,000
Funding Total	($13,325,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$500,000	$700,000	$12,125,000	$0	$0	$0	$0
Total Funding Plan	**$13,325,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Water Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Boulder Reservoir Water Treatment Facility - Funded

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Water Utility	**Subcommunity:**	Gunbarrel
Project Number:	411652	**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	40
		CEAP Status:	

Project Description

This project will provide funds for on-going maintenance and rehabilitation of the Boulder Reservoir Water Treatment Facility. Funding in 2016 will be used to replace effluent flow meters, chemical feed and process controls, pressure and flow instruments and filter controls.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

None

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$35,000
Acquisition	$0
Construction	$129,000
Total Project Cost	**$164,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$164,000
Funding Total	($164,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$0	$0	$164,000	$0	$0	$0	$0
Total Funding Plan	**$164,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Water Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Carter Lake Hydroelectric

Project at a Glance

Project Type:	New Capital Project		
Department:	PW/ Water Utility	**Subcommunity:**	Gunbarrel
Project Number:		**BVCPArea:**	Area I
CEAP Required:	Yes	**Map Number:**	46
		CEAP Status:	No

Project Description

This project provides funds for the planning,design and construction of a potential new hydroelectric facility at or near the Boulder Reservoir Water Treatment Facility. The possibility of this facility would be made available by the construction of the Carter Lake Pipeline Project as the pipeline head pressure would have to be dissipated before flowing into the Water Treatment Facility. Funding allocated in the current CIP is for planning, design and construction.

This project will begin in 2018 with an Alternatives Study and the CEAP process.
Costs:

1. Planning and Design: $ 300,000 (2017 and 2018)
2. Land Acquisition: $ 0
3. Construction: $ 2,500,000 (2019 Bond)

The project is anticipated to complete construction in 2020.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The CEAP will be initiated in 2018.

Relationship with Other Departments

Energy Utility Office

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$300,000
Acquisition	
Construction	$2,500,000
Total Project Cost	**$2,800,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$2,800,000
Funding Total	($2,800,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$0	$0	$0	$0	$50,000	$250,000	$2,500,000
Total Funding Plan	**$2,800,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:** Water Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget (needs to be confirmed)

Project Name: Devil's Thumb Security Fence

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Water Utility	**Subcommunity:**	Area III
Project Number:	411674	**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	56
		CEAP Status:	

Project Description

Add fence at Devil's Thumb.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

Coordinate with OSMP and Boulder County permitting regarding fence/camera location and access.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	$50,000
Total Project Cost	**$50,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$50,000
Funding Total	($50,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$0	$50,000	$0	$0	$0	$0	$0
Total Funding Plan	**$50,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Water Utility Fund.

Additional Annual O&M Description:

No increase, funded by existing operating budget.

Project Name: Farmer's Ditch

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Water Utility	**Subcommunity:**	Outside Planning Area
Project Number:	411550	**BVCPArea:**	
CEAP Required:	No	**Map Number:**	57
		CEAP Status:	

Project Description

Re-evaluation of Farmer's Ditch capacity to divert Boulder Creek water to Boulder Reservoir from the 13.52 cfs of Farmers Ditch rights decreed for instream flow and municipal uses in Case No. 90CW193 and conveyed to the CWCB for instream flow use on Boulder Creek. This has the potential to increase municipal water yield based on Hydrosphere memo dated June 2008 and Love & Associates hydraulic analysis and improvement plan report dated Sept. 1996. This is more of a "complete by build-out" project. No construction cost escalation between 2008 and 2013.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Relationship with Other Departments

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	
Acquisition	
Construction	
Total Project Cost	**$108,160**

Unfunded Amount

Unfunded Amount

Project Cost Total	$108,160
Funding Total	($108,160)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$0	$0	$0	$0	$0	$108,160	$0
Total Funding Plan	**$108,160**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:**

Additional Annual O&M Description:

Project Name: Goose Lake Dam

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Water Utility	**Subcommunity:**	Outside Planning Area
Project Number:		**BVCPArea:**	
CEAP Required:	No	**Map Number:**	58
		CEAP Status:	

Project Description

To meet SEO Dam Safety requirements, in 2015 the city will conduct an inspection and assessment of the Outlet System at Goose Lake Dam including the intake, conduit and valve system.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Relationship with Other Departments

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$1,000
Acquisition	
Construction	$19,000
Total Project Cost	**$20,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$20,000
Funding Total	($20,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$0	$20,000	$0	$0	$0	$0	$0
Total Funding Plan	**$20,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:**

Additional Annual O&M Description:

Project Name: Green Lake 2 Dam

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Water Utility	**Subcommunity:**	Outside Planning Area
Project Number:	411627	**BVCPArea:**	Outside Planning Area
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	NA

Project Description

This project will provide funds for the evaluation of alternatives and design of the rehabilitation of Green Lake 2 Dam, located in the City's Watershed. Green Lake 2 Dam is in need of extensive rehabilitation to allow continued storage of water. Funding allocated in the current CIP is for analysis of alternatives in 2019 and then design plus construction in 2020/2021.

This project which was originally scheduled to begin in 2013 has been shifted out due to other prioritized Water Resource projects. Estimated total cost is $5,223,557 including construction and prior funding. The project is anticipated to complete construction in 2021.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

None

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$543,051
Acquisition	
Construction	$4,680,506
Total Project Cost	**$5,223,557**

Unfunded Amount

Unfunded Amount

Project Cost Total	$5,223,557
Funding Total	($543,051)
Total Unfunded	**$4,680,506**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$0	$0	$0	$0	$0	$75,000	$468,051
Total Funding Plan	**$543,051**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Water Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Kohler Storage Tank

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Water Utility	**Subcommunity:**	South Boulder
Project Number:	411671	**BVCPArea:**	Area I
CEAP Required:	No	**Map Number:**	44
		CEAP Status:	

Project Description

This project will provide funds for the design and rehabilitation of the Kohler Storage Tank roofing system and siding to seal the tank from the outside environment. This project will begin in 2015 and is anticipated to complete construction in 2016.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

None

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$20,000
Acquisition	
Construction	$883,362
Total Project Cost	**$903,362**

Unfunded Amount

Unfunded Amount

Project Cost Total	$903,362
Funding Total	($903,362)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$0	$103,487	$799,875	$0	$0	$0	$0
Total Funding Plan	**$903,362**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Water Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Lakewood Dam

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Water Utility	**Subcommunity:**	Outside Planning Area
Project Number:	411981	**BVCPArea:**	Outside Planning Area
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	NA

Project Description

This project will provide funds for security improvements at Lakewood Reservoir that are required to update to the level of all city facilities subject to public access and as recommended in the Source Water Master Plan and subsequent consultant reports.

This project will begin in 2018. The project is anticipated to complete construction in 2019.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

None

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$10,000
Acquisition	
Construction	$114,707
Total Project Cost	**$124,707**

Unfunded Amount

Unfunded Amount

Project Cost Total	$124,707
Funding Total	($124,707)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$0	$0	$0	$0	$124,707	$0	$0
Total Funding Plan	**$124,707**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Water Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget.

Project Name: Lakewood Hydroelectric / Pressure Reducing Facility

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Water Utility	**Subcommunity:**	Area III
Project Number:	411801	**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	54
		CEAP Status:	NA

Project Description

This project provides funds for the rehabilitation of the Lakewood Turbine Generator and Pressure Reducing Valve (PRV). The Turbine Generator is scheduled to be over-hauled in 2015 and the PRV valve will be taken offline and a major over-haul will be completed per manufacture's recommendations in 2019.

This project will begin in 2016 with the Turbine Generator Over-Haul.
Costs (2016):

1. Planning: $ 10,000
2. Land Acquisition: $ 0
3. Construction: $ 120,000

The generator project is anticipated to complete construction in 2016.

PRV Valve Overhaul Costs (2019):
1. Planning: $ 10,000
2. Land Acquisition: $ 0
3. Construction: $ 290,000

The Lakewood PRV project is anticipated to complete construction in 2019.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

None

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$20,000
Acquisition	
Construction	$410,000
Total Project Cost	**$430,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$430,000
Funding Total	($430,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$0	$0	$130,000	$0	$0	$300,000	$0
Total Funding Plan	**$430,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:** Water Utility Enterprise Fund

Additional Annual O&M Description:

To be determined, operating costs will be offset by increased hydroelectric revenue.

Project Name: Lakewood Pipeline

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Water Utility	**Subcommunity:**	Outside Planning Area
Project Number:	411780	**BVCPArea:**	Outside Planning Area
CEAP Required:	Yes	**Map Number:**	0
		CEAP Status:	Yes

Project Description

Funds have been budgeted in 2014 for re-inspection of the Lakewood Pipeline due to concerns with the original pipeline construction. Based on observations made during the 2009 inspection it is recommended that the frequency of inspections be reduced to one every five years. No funds have been budgeted for pipeline repair costs. Funds would be transferred from the Lakewood Pipeline Remediation Reserve to cover the costs.

Estimated costs are determined from intial estimate in 2008 for inspections costing $250,000 every 5 years and escalated from the year of the estimate (2008).

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

None

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$30,000
Acquisition	$0
Construction	$816,730
Total Project Cost	**$846,730**

Unfunded Amount

Unfunded Amount

Project Cost Total	$846,730
Funding Total	($846,730)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$260,000	$270,400	$0	$0	$0	$316,330	$0
Total Funding Plan	**$846,730**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Water Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: NCWCD Conveyance - Carter Lake Pipeline

Project at a Glance

Project Type:	New Capital Project		
Department:	PW/ Water Utility	**Subcommunity:**	Outside Planning Area
Project Number:	411547	**BVCPArea:**	Outside Planning Area
CEAP Required:	Yes	**Map Number:**	45
		CEAP Status:	No

Project Description

This project will provide funds for the planning, design and construction of a pipeline from Carter Lake to the Boulder Reservoir Water Treatment Facility. The Pipeline is considered the best long-term solution to water quality, operational and security vulnerability issues related to drawing water directly from either the Boulder Feeder Canal or Boulder Reservoir. The pipeline construction and alignment was approved by Boulder County under the 1041 permit process in 2012 and a significant portion of the right-of-way was acquired. Acquisition of additional easements is anticipated in 2014-2016. Information from the 1041 permit will be incorporated into the CEAP document. The Northern Colorado Water Conservancy District is the lead agency and the City of Boulder and the Left Hand Water District are project participants. The pipeline would also provide the opportunity to develop a hydroelectric generation facility. No additional O&M expenses is anticipated since the pipeline will be owned by the NCWCD and water delivery charges should not change because of the pipeline.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

A 1041 permit application for this project has ben submitted to Boulder County and it is anticipated a permit will be issued in 2012. Information from the 1041 permit will be incorporated into the CEAP.

Relationship with Other Departments

None

Change from Past CIP

updated construction cost estimate information obtained from NCWCD in 2014

Estimated Total Cost

Project Cost

Planning	$2,036,322
Acquisition	$2,593,560
Construction	$33,938,701
Total Project Cost	**$38,568,583**

Unfunded Amount

Unfunded Amount

Project Cost Total	$38,568,583
Funding Total	($38,568,583)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$1,243,560	$500,000	$850,000	$2,036,322	$33,938,701	$0	$0
Total Funding Plan	**$38,568,583**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Water Utility Enterprise Fund

Additional Annual O&M Description:

To Be Determined

Project Name: Pearl Street Hydroelectric / Pressure Reducing Facility

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Water Utility	**Subcommunity:**	Area III
Project Number:		**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	43
		CEAP Status:	

Project Description

This project provides for the installation of a hydoelectric turbine and generator at the city's Pearl Street pressure reducing facility. Currently water pressure is reduced using a pressure reducing valve which wastes the available energy in the water. This energy could be used to produce electricity and the project would add hydroelectric generation to the facility. This project will begin in 2018 and is anticipated to complete construction in 2020.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

Coordinate on energy efficiency with CP&S

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$24,333
Acquisition	
Construction	$243,331
Total Project Cost	**$267,664**

Unfunded Amount

Unfunded Amount

Project Cost Total	$267,664
Funding Total	($267,664)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$0	$0		$0	$24,333	$243,331	$0
Total Funding Plan	**$267,664**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:** Water Utility Enterprise Fund

Additional Annual O&M Description:

To be determined, operating costs will be offset by increased hydroelectric revenue.

Project Name: Silver Lake Dam

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Water Utility	**Subcommunity:**	Outside Planning Area
Project Number:		**BVCPArea:**	
CEAP Required:	No	**Map Number:**	
		CEAP Status:	

Project Description

As per Dam Safety Requirements and SEO Inspections at the dam, the city is required to conmplete an inspection of the Outlet System including the intake, conduit and valving in 2015.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Relationship with Other Departments

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$5,000
Acquisition	
Construction	$70,000
Total Project Cost	**$75,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$75,000
Funding Total	($75,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$0	$75,000	$0	$0	$0	$0	$0
Total Funding Plan	**$75,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:**

Additional Annual O&M Description:

Project Name: Silver Lake Hydroelectric / PRV

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Water Utility	**Subcommunity:**	Outside Planning Area
Project Number:	411970	**BVCPArea:**	
CEAP Required:	No	**Map Number:**	
		CEAP Status:	

Project Description

This project will fund the required rehabilitation of the Silver Lake Hydroelectric / Pressure Reducing Facility including scheduled maintenance items and Bypass Valve repairs.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Relationship with Other Departments

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$10,000
Acquisition	
Construction	$140,000
Total Project Cost	**$150,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$150,000
Funding Total	($150,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$0	$150,000	$0	$0	$0	$0	$0
Total Funding Plan	**$150,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:**

Additional Annual O&M Description:

Project Name: Source Water Monitoring

Project at a Glance

Project Type:	New Capital Project		
Department:	PW/ Water Utility	**Subcommunity:**	System-wide
Project Number:		**BVCPArea:**	
CEAP Required:	No	**Map Number:**	
		CEAP Status:	NA

Project Description

To be consistent with the Source Water Master Plan reccomendations and new agency directives for measuring water allocations; city staff will improve flow measurement and water quality sampling systems for source water system. This project, though not previously included in the 2013-2018 CIP, began in 2013. Costs include design and construction of the various potential system improvements.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

Relationship with Other Departments

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$30,000
Acquisition	
Construction	$263,200
Total Project Cost	**$293,200**

Unfunded Amount

Unfunded Amount

Project Cost Total	$293,200
Funding Total	($293,200)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$93,200	$0	$50,000	$50,000	$50,000	$50,000	$0
Total Funding Plan	**$293,200**						

Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:**

Additional Annual O&M Description:

Project Name: Sunshine Hydroelectric / Pressure Reducing Station

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Water Utility	**Subcommunity:**	Area III
Project Number:		**BVCPArea:**	Area III
CEAP Required:	No	**Map Number:**	51
		CEAP Status:	

Project Description

This project will provide funds for the rehabilitation of the Sunshine Hydro/PRV Station including flow meter and rehabilitation or replacement of the existing control system. This project will begin in 2017 and is anticipated to complete construction in 2018.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated

Relationship with Other Departments

Coordinate with CP&S on energy efficiency.
Coordinate with OSMP on access.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$27,188
Acquisition	
Construction	$244,687
Total Project Cost	**$271,875**

Unfunded Amount

Unfunded Amount

Project Cost Total	$271,875
Funding Total	($271,875)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$0	$0	$0	$271,875	$0	$0	$0
Total Funding Plan	**$271,875**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Water Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Sunshine Transmission Pipe

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Water Utility	**Subcommunity:**	Outside Planning Area
Project Number:	411006	**BVCPArea:**	Outside Planning Area
CEAP Required:	No	**Map Number:**	52
		CEAP Status:	

Project Description

This project will provide funds for the rehabilitation/inspection of the Sunshine Transmission Pipe. The pipe is a cement mortar lined steel pipeline that has deteriorated during its operation over a period of several decades. Funding in 2013 was re-allocated for replacement of the 26" steel Sunshine Line between Sunshine Hydro and 4th/Mapleton based on leaks and criticality. Inspection, installation of access mandholes and rehabilitation or replacement of the existing cement mortar lining above Sunshine Hydro will now be Phase 2.

This project began in 2013. Phase 1 of the project is anticipated to complete construction in early 2015. Phase 2 of the project will begin in 2014 and extend through early 2016.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated. County 1041 exemption received.

Relationship with Other Departments

Coordinate with OSMP and Boulder County on aceesy and traffic contral.
Work with City Transportation on surface restoration.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$125,000
Acquisition	
Construction	$1,875,000
Total Project Cost	**$2,000,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$2,000,000
Funding Total	($2,000,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$1,000,000	$1,000,000	$0	$0	$0	$0	$0
Total Funding Plan	**$2,000,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Water Utility Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Utility Billing Computer System Replacement

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Water Utility	**Subcommunity:**	System-wide
Project Number:	411453	**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	

Project Description

This project is for the replacement of the existing Utility Billing Computer System. The project is expected to begin in 2017 and be completed in 2018.

Relationship to Guiding Principles

- ☑ Consistent with Master Plans
- ☑ Achieves Community Sustainability goals
- ☑ Includes sufficient funding for operation and maintenance
- ☑ Maintains and enhances city's business systems
- ☑ Provides capacity and flexibility in long term planning
- ☑ Sustains or improves existing assets
- ☑ Maximizes efficiency and demonstrates positive cost/benefit
- ☑ Fund includes sufficient reserves
- ☑ Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

This project will be coordinated with IT and Finance.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$104,104
Acquisition	$0
Construction	$790,000
Total Project Cost	**$644,104**

Unfunded Amount

Unfunded Amount

Project Cost Total	$644,104
Funding Total	($694,104)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$29,104	$0	$0	$500,000	$0	$0	$0
Stormwater & Flood Management Utility Fund	$0	$50,000	$0	$0	$0	$0	$0
Wastewater Utility Fund		$50,000	$0	$0	$0	$0	$65,000
Subtotal All Funds	$29,104	$100,000	$0	$500,000	$0	$0	$65,000

Total Funding Plan **$694,104**

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Existing operating budget

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Water System Security Upgrades

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Water Utility	**Subcommunity:**	System-wide
Project Number:	411440	**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	

Project Description

This project will provide funds for water system security upgrades. New Federal guidelines call for increased protection of drinking water systems from terrorist and other threats. City staff recently updated the water system security vulnerability assessment. Numerous recommendations for security vulnerability improvements have been made.

This project will begin in 2015.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

OSMP and Boulder County for acceess , permitting and facility location.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$84,000
Acquisition	$756,000
Construction	
Total Project Cost	**$840,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$840,000
Funding Total	($840,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$0	$150,000	$150,000	$150,000	$150,000	$150,000	$90,000
Total Funding Plan	**$840,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $20,000 **Funding Source:** Water Utility Fund, Existing Water Quality budget

Additional Annual O&M Description:

Maintain panels and replace instruments.

Project Name: Water Transmission Facilities (Zone 1, East Side of Boulder)

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Water Utility	**Subcommunity:**	Multiple Subcommunities
Project Number:	411002	**BVCPArea:**	Areas I & II
CEAP Required:	No	**Map Number:**	
		CEAP Status:	

Project Description

This project provides for the rehabilitation and improvement to the Zone 1 transmission piping of the city's water system. An extensive network of transmission piping exists, some of which is over 50 years old. It is projected this piping will require replacement or other rehabilitation. In some cases deficiencies in this system have been identified due to fire flow requirements of the Insurance Services Office (ISO).

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated

Relationship with Other Departments

CDOT, OSMP and Boulder County for access.
Coordinate with Transportation CIP for surface restoration.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$50,000
Acquisition	
Construction	$200,000
Total Project Cost	**$250,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$250,000
Funding Total	($250,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$0	$0	$0	$0	$250,000	$0	$0
Total Funding Plan	**$250,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Water Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Water Transmission Facilities (Zone 2, Central Boulder)

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Water Utility	**Subcommunity:**	Multiple Subcommunities
Project Number:	411004	**BVCPArea:**	Area II
CEAP Required:	No	**Map Number:**	
		CEAP Status:	

Project Description

This project provides for the rehabilitation and improvement to the Zone 2 transmission piping of the city's water system. An extensive network of transmission piping exists, some of which is over 50 years old. It is projected this piping will require replacement or other rehabilitation.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

Coordinate with Transportation CIP for surface restoration.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$100,000
Acquisition	
Construction	$400,000
Total Project Cost	**$500,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$500,000
Funding Total	($500,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$0	$0	$0	$250,000	$0	$0	$250,000
Total Funding Plan	**$500,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Water Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Water Transmission Facilities (Zone 3, West Side of Boulder)

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Water Utility	**Subcommunity:**	System-wide
Project Number:	411005	**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	
		CEAP Status:	NA

Project Description

This project provides for the rehabilitation and improvement to the Zone 3 transmission piping of the city's water system. An extensive network of transmission piping exists, some of which is over 50 years old. It is projected this piping will require replacement or other rehabilitation. In some cases deficiencies in this system have been identified due to fire flow requirements of the Insurance Services Office (ISO).

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

CDOT, OSMP and Boulder County for access.
Coordinate with Transportation CIP for surface restoration.

Change from Past CIP

$1,200,000 added to fund replacement of problematic main.

Estimated Total Cost

Project Cost

Planning	$50,000
Acquisition	
Construction	$200,000
Total Project Cost	**$250,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$250,000
Funding Total	($1,450,000)
Total Unfunded	**($1,200,000)**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$0	$0	$1,200,000	$0	$0	$250,000	$0
Total Funding Plan	**$1,450,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Water Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget.

Project Name: Waterline Replacement

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Water Utility	**Subcommunity:**	System-wide
Project Number:	411389	**BVCPArea:**	System-wide
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	NA

Project Description

This project provides funds for the annual reconstruction of waterlines that are part of the city's water distribution system. Many of the city's existing waterlines are corroded or otherwise deteriorated and must be replaced. The city currently experiences approximately 60-80 main breaks per year and these cause unplanned outages in water service as well as disruption to vehicle travel and damage to public and private property. Although the number of main breaks is not considered excessive, the average age of the city's distribution system is over 40 years and it is anticipated that substantial funds will be required to maintain a functioning water distribution system over time. In some cases deficiencies in this system have been identified due to fire flow requirements of the Insurance Services Office (ISO).

Funding for annual waterline replacement continues at a rate of $2,100,000 in 2012 dollars, escalated by an inflation index annually. This should be sufficient to maintain the current service level, as defined by water main breaks, over the next decade.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

Coordinate with Transportation CIP for surface restoration.

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$2,432,909
Acquisition	
Construction	$21,896,179
Total Project Cost	**$24,329,088**

Unfunded Amount

Unfunded Amount

Project Cost Total	$24,329,088
Funding Total	($24,329,088)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$3,642,831	$3,224,000	$3,352,960	$3,487,078	$3,626,562	$3,771,624	$3,224,033
Total Funding Plan	**$24,329,088**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Water Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Watershed Improvements

Project at a Glance

Project Type:	Capital Maintenance		
Department:	PW/ Water Utility	**Subcommunity:**	Outside Planning Area
Project Number:		**BVCPArea:**	Outside Planning Area
CEAP Required:	No	**Map Number:**	0
		CEAP Status:	NA

Project Description

This project will provide funding for miscellaneous improvements in the city's Silver Lake watershed including valve and mechanical equipment upgrades as well as monitoring system rehabilitation or replacement in response to the 2008 Source Water Waster Plan recommendations.

This project will begin in 2014 at the yearly costs per year until 2016 (i.e. 3 years), as follows:

1. Planning: $ 12,000
2. Land Acquisition: $ 0
3. Construction: $ 68,000
4. Total per year: $ 80,000

The project is anticipated to be completed in 2016 (i.e. 3 x $ 80,000 = $ 240,000).

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

No additional public process is anticipated.

Relationship with Other Departments

None

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$10,000
Acquisition	
Construction	$250,000
Total Project Cost	**$260,000**

Unfunded Amount

Unfunded Amount

Project Cost Total	$260,000
Funding Total	($260,000)
Total Unfunded	**$0**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$0	$80,000	$80,000	$0	$0	$0	$100,000
Total Funding Plan	**$260,000**						

Additional Annual Operations and Maintenance

Additional Annual O&M: $0 **Funding Source:** Water Utility Enterprise Fund

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Wittemyer Ponds

Project at a Glance

Project Type:	Capital Enhancement		
Department:	PW/ Water Utility	**Subcommunity:**	Outside Planning Area
Project Number:		**BVCPArea:**	Outside Planning Area
CEAP Required:	Yes	**Map Number:**	59
		CEAP Status:	No

Project Description

This project provides funding for the lining of Wittemyer Ponds based on the probability that Denver Water will receive a permit for the enlargement of Gross Reservoir in the near future. Based on the Intergovernmental Agreements (IGA) between Boulder, Lafayette and Denver Water, Boulder has agreed to use its water rights to fill the Environmental Pool to the degree that Lafayette is unable to do so with its water rights. Long term, Boulder's Open Space and Mountain Parks Department (OSMP) would provide the necessary water rights and the Water Utility would provide space in a lined Wittemyer Ponds complex. However, because OSMP currently doesn't have any water rights that can readily be used for this purpose, the Water Utility would use its CBT and Windy Gap water to the extent it doesn't affect municipal water deliveries. OSMP would pay the Utilities Division for the water that is used solely for this purpose since some of the water could be leased to downstream users. Detailed plans and studies are needed to determine how this will be accomplished. Longer term, OSMP would either change the water rights associated with some of its ditch company shares, or acquire new water. Although lining of Wittemyer is not necessarily required to get the Gross program underway, it would be useful to recapture the dedicated instream flow water. Without the lined ponds, any water used for Gross will be lost and more overall water will be needed.

Funding allocated in the current CIP is for planning and design only. Construction funding ($4,945,798 unfunded in the City 2015-2020 CIP) is allocated in the Water Utility 20-year CIP in 2021 and is expected to be fully allocated in 2020 in the City 2016-2021 CIP.

This project will begin in 2019 and is anticipated to be complete in 2021/2022.

Relationship to Guiding Principles

- [x] Consistent with Master Plans
- [x] Achieves Community Sustainability goals
- [x] Includes sufficient funding for operation and maintenance
- [ ] Maintains and enhances city's business systems
- [x] Provides capacity and flexibility in long term planning
- [x] Sustains or improves existing assets
- [x] Maximizes efficiency and demonstrates positive cost/benefit
- [x] Fund includes sufficient reserves
- [x] Meets legal mandates, improves public safety, leverages external investments, promotes community partnerships, or improves efficiency

Public Process Status, Issues

The strategy for public process will be defined during next year's budget process.

Relationship with Other Departments

Open Space & Mountain Parks

Change from Past CIP

Estimated Total Cost

Project Cost

Planning	$573,735
Acquisition	
Construction	$4,945,798
Total Project Cost	**$5,519,533**

Unfunded Amount

Unfunded Amount

Project Cost Total	$5,519,533
Funding Total	($573,735)
Total Unfunded	**$4,945,798**

Capital Funding Plan

Source	Prior to 2015	2015	2016	2017	2018	2019	2020
Water Utility Fund	$0	$0	$0	$0	$0	$100,000	$473,735
Total Funding Plan	**$573,735**						

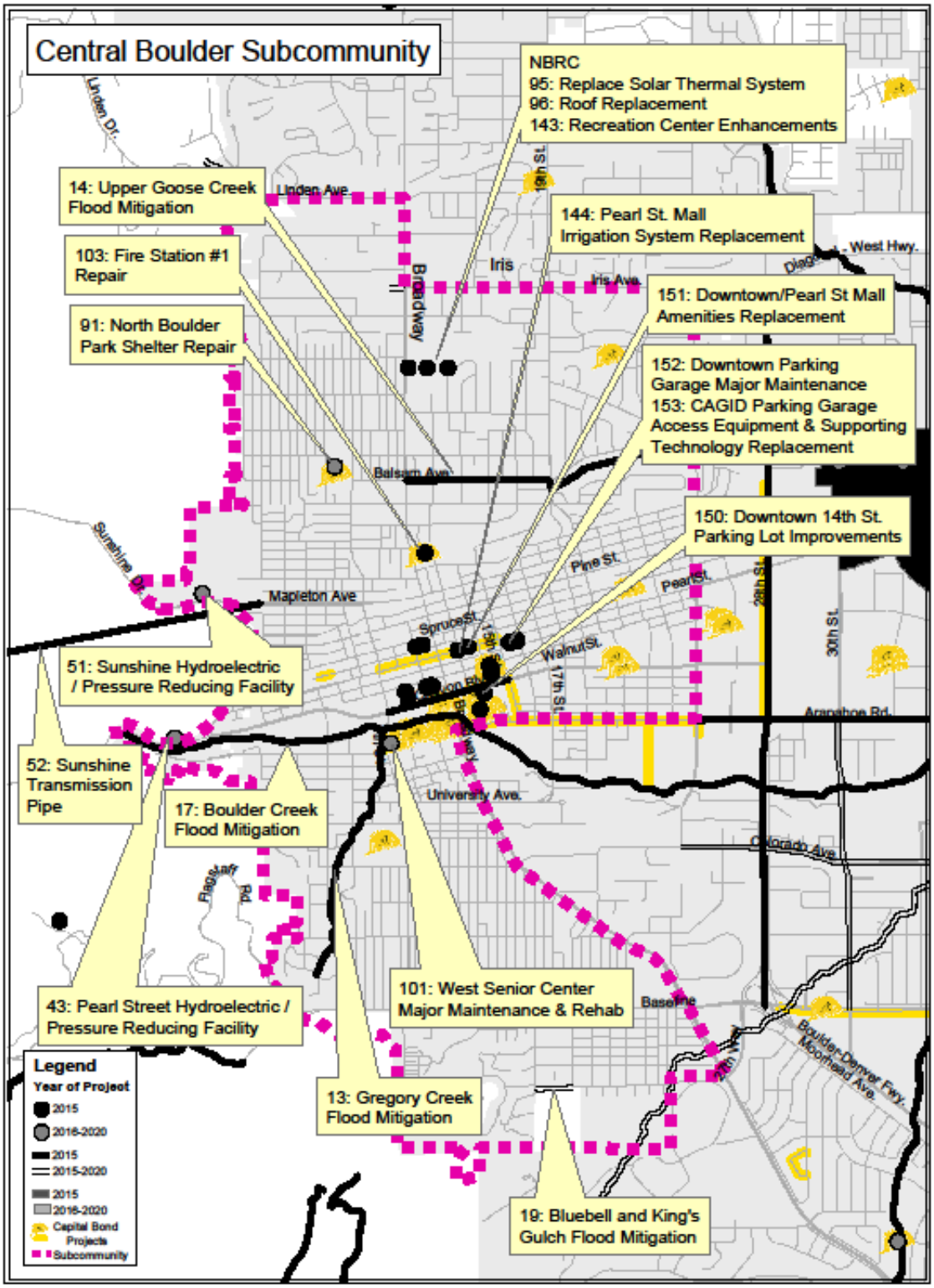
Additional Annual Operations and Maintenance

Additional Annual O&M: **Funding Source:** Water Utility Enterprise Fund

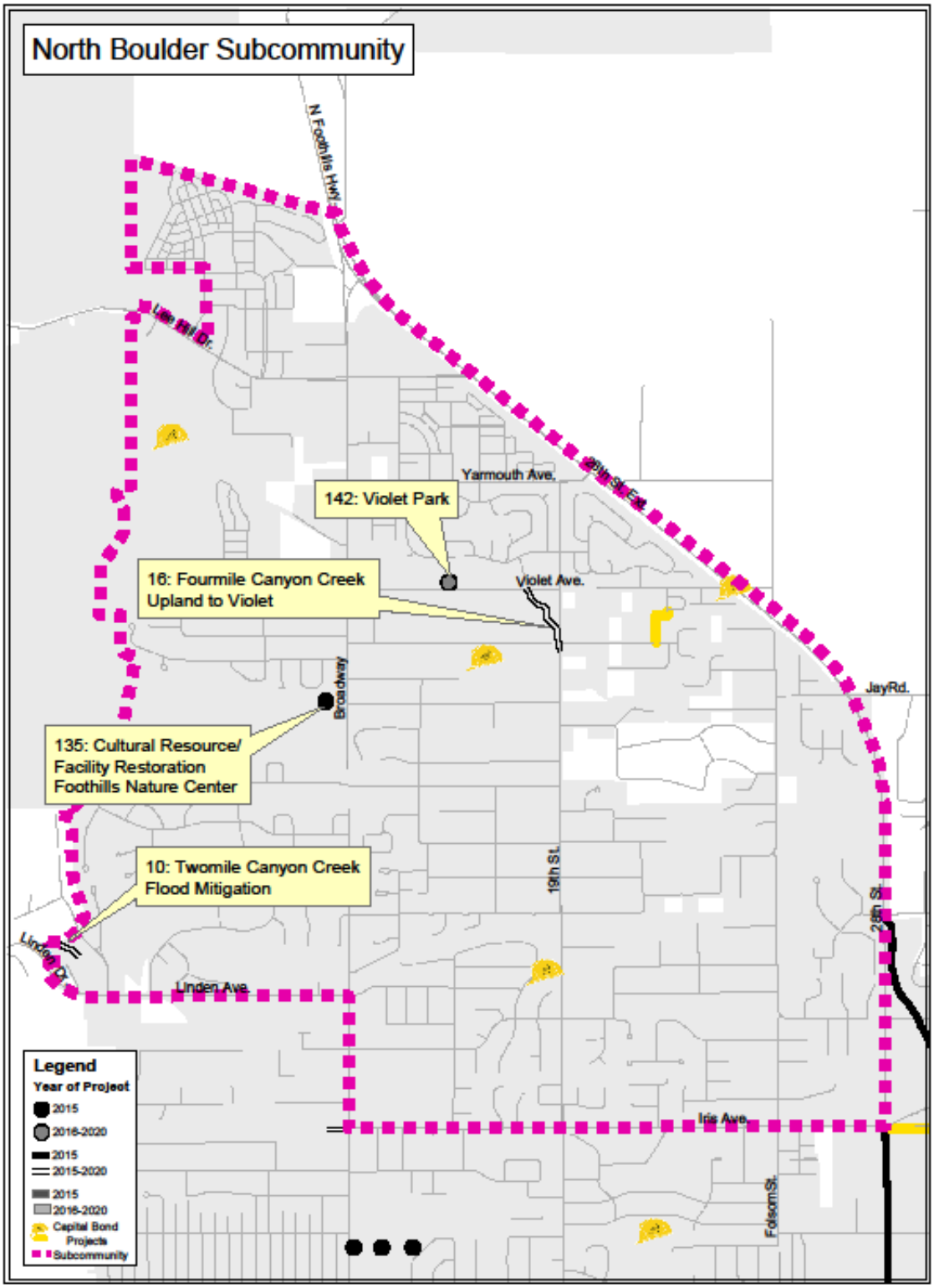
Additional Annual O&M Description:

No increase, funded by existing operating budget.

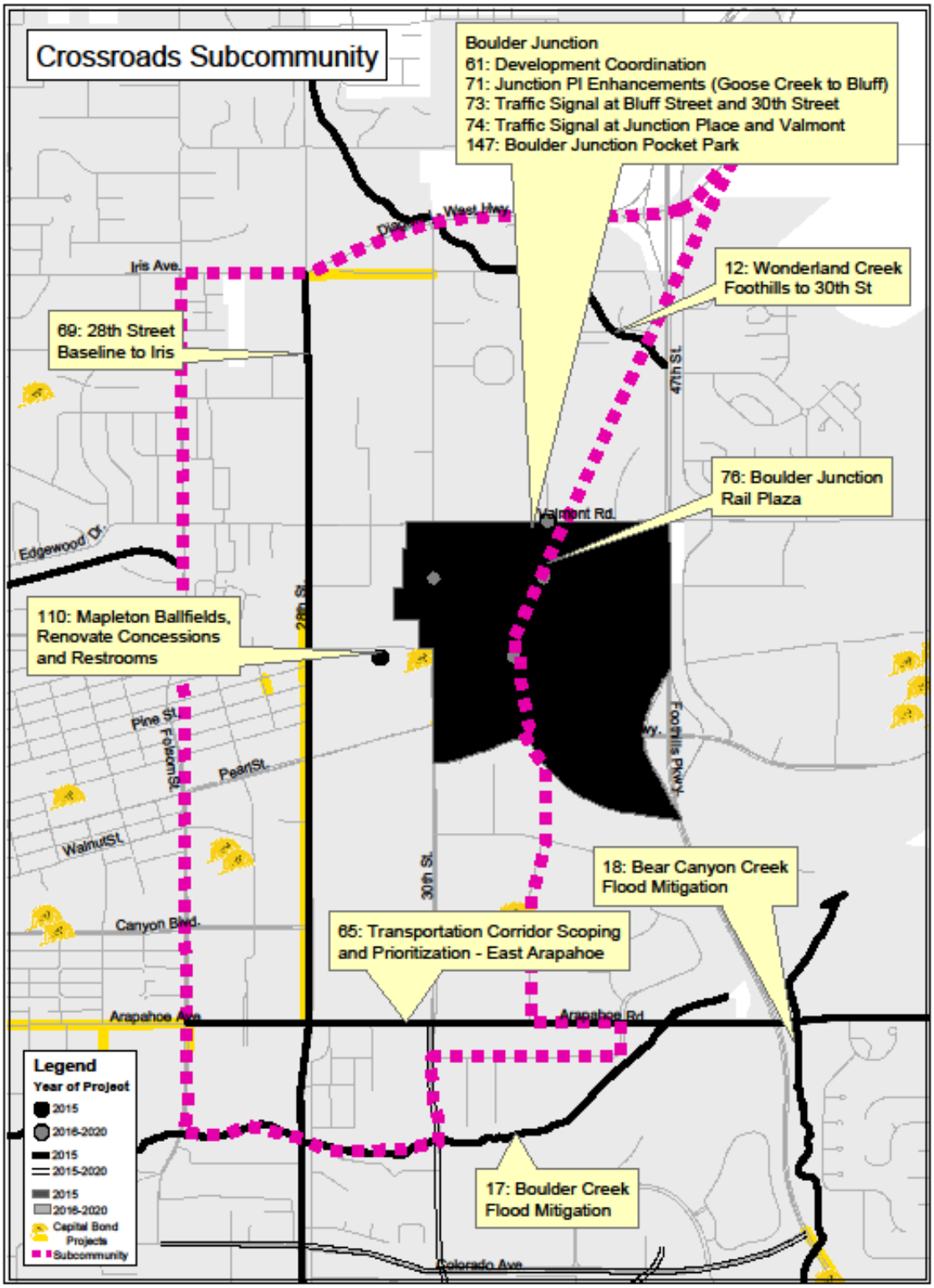
City of Boulder Captial Improvement Projects, 2015 - 2020



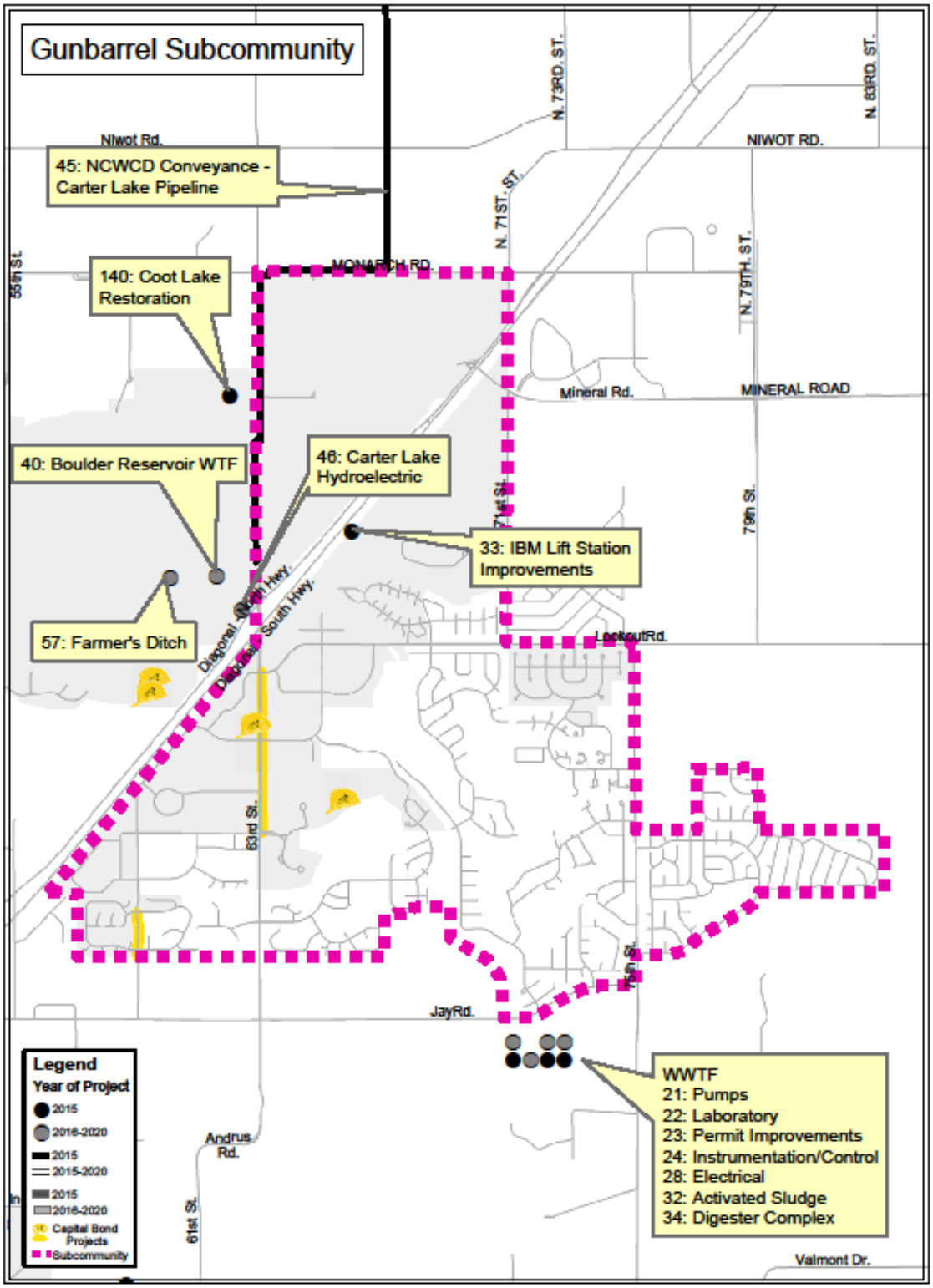
City of Boulder Captial Improvement Projects, 2015 - 2020



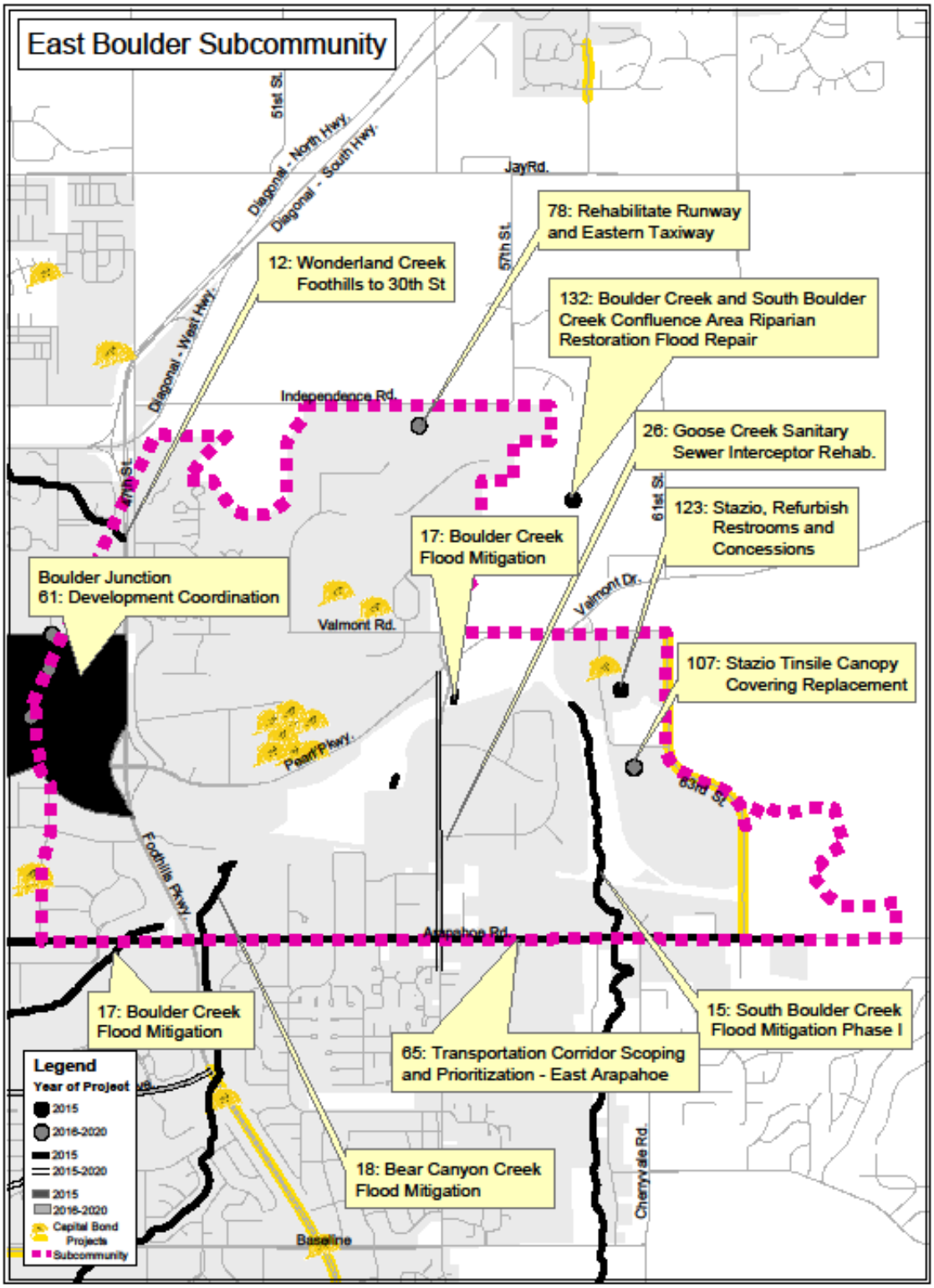
City of Boulder Captial Improvement Projects, 2015 - 2020



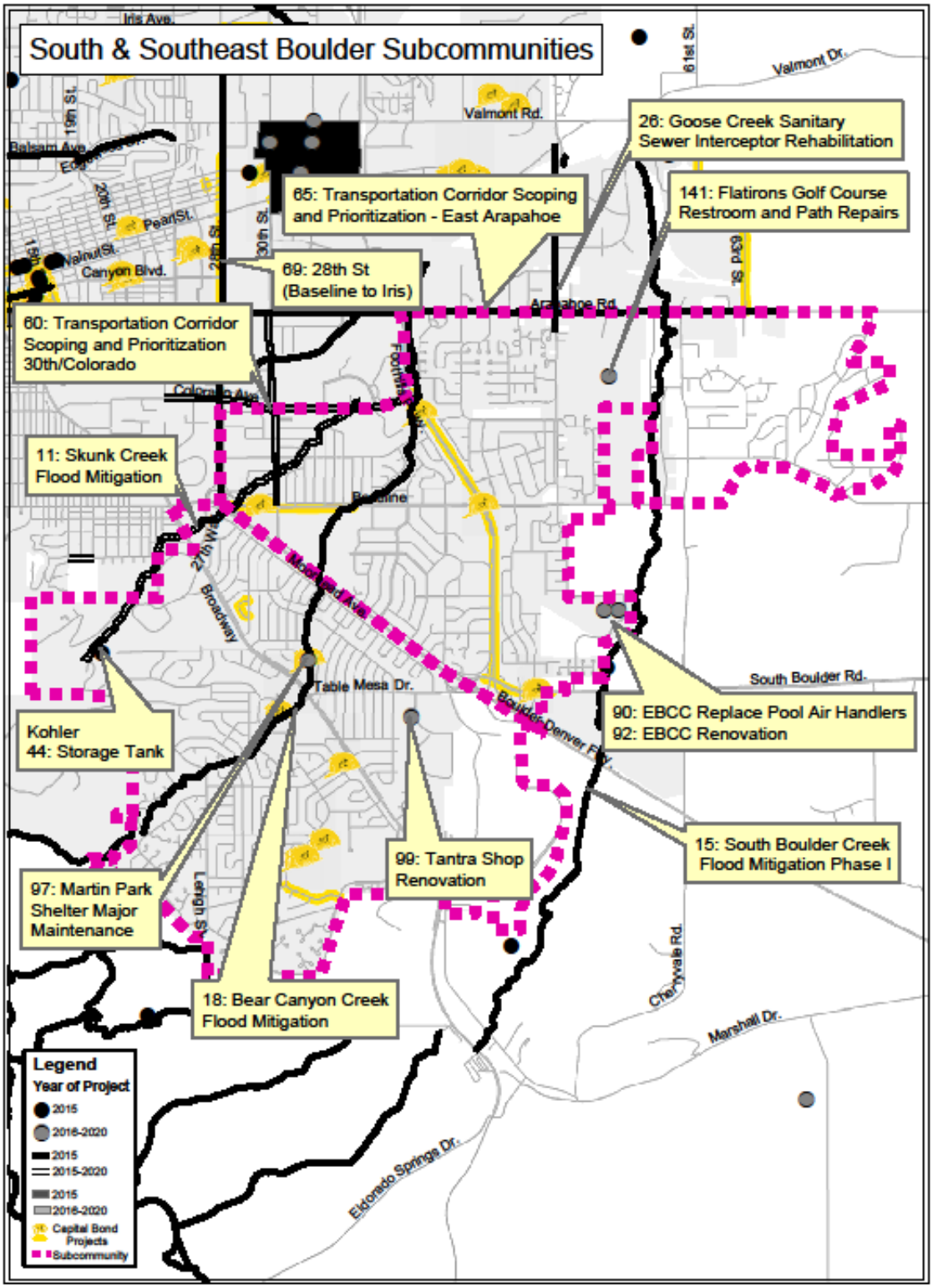
City of Boulder Captial Improvement Projects, 2015 - 2020



City of Boulder Captial Improvement Projects, 2015 - 2020



City of Boulder Captial Improvement Projects, 2015 - 2020



Appendix B, UNFUNDED PROJECTS

The provision of adequate urban facilities and services to support the community's quality of life is a core tenet of the Boulder Valley Comprehensive Plan. The Capital Improvement Program is a major tool for coordinating and targeting public capital expenditures within changing budget constraints. The goal is to maintain and, in some cases, enhance service levels and standards over time, with new growth paying a fair share of the costs.

Historical Funding Patterns in Boulder

The city has a rich history of investing in the community and its quality of life. Prior to the 2000s, the community consistently invested significant resources in capital facilities. Funding was provided through a combination of ballot measures for specific facilities and land purchases, federal funds, and discretionary revenues. Examples of investments include:

- Buying park lands and open space
- Providing and upgrading public facilities such as libraries, recreation centers and sports fields
- Building places for community business and services such as the municipal campus buildings, and operations centers, for example, the "Yards"
- Building multimodal community connections such as the Greenways system, bikeways, and intersection improvements
- Investing to create special places like the Pearl Street Mall and Chautauqua area.
- Today, community members and visitors continue to benefit from these many facilities and lands on a regular basis.

The 2000s, by contrast, were often economically difficult at local, regional, national, and even global levels. The cost of delivering services and taking care of our infrastructure has increased dramatically. Global demand has resulted in energy and construction costs far outpacing the consumer price index. While there has been some relief in material costs recently, there is no sign

that there will be a return to historic prices. At the same time, there have been two economic declines, increased regional competition, and cultural change in shopping habits impacting the revenue side of the equation. The city's revenue in absolute dollars has not returned to where it was in 2000. Furthermore, the purchasing power of current funding is significantly less than 2000.

Planning Efforts to Increase Capital Funding

In 2011 the city engaged in a capital investment strategy. At council's direction, staff engaged a stakeholder group and collected public feedback on capital investment in the city. The result of this was a voter approved capital bond (see Special Highlight: Capital Improvement Bond section of this document), which has provided over $50 million dollars for capital investment in the city. The 20-year debt service for this is being covered from operating General Fund dollars.

A round two of the capital investment strategy was put on hold in 2012, as costs and scopes for additional potential capital projects were not yet fully known and polling did not support another ballot issue at that time.

The city has also been involved in developing a Civic Area Plan, which maps out potential investment, including significant capital investment, in Boulder's Civic Area. And most recently, the city has begun to update the long-term financial planning started with the Blue Ribbon Commissions One and Two, which identified the structural gap between revenues and expenditures long-term. This effort, the Comprehensive Financial Strategy (CFS) project, included a look a capital needs across the city. The CFS project started by looking at capital needs and making recommendations to council for short-term capital project funding. Additionally the CFS is looking at larger infrastructure investment needs, long-term capital deficiencies, placemaking capital investment and long-term operating needs. The CFS brings together the overall long-term financial strategic planning of the city, recognizing the interconnectedness of capital investment and operating planning to provide the most efficient and effective public service, meeting community needs now and in the future.

The first phase of CFS work has led to council consideration of a Pay As You Go ballot issue to fund a few key areas of capital investment in the city, including efforts to increase safety, revitalize the University Hill, begin catalytic projects in the Civic Area and invest in culture and the arts in the city.

A second phase on CFS work will include prioritizing additional capital needs and desires and bringing forward items for consideration of a larger scale (and possibly longer-term) capital bond, to be funded by new revenues.

Finally, in conjunction with ongoing operating analysis and the review of the long-term financial structural gap, the city will be exploring other options, such as creating a capital fund with annual contributions from ongoing revenues, to address capital needs.

Unfunded Projects

In each department's section of this document, departments have identified key unfunded projects and emerging needs. The following tables provide a more comprehensive list of unfunded capital needs in the city. These items have been identified over time from the capital investment strategy work, department strategic and master plans, CFS analysis, information learned from the September 2013 Flood, and public input. The lists are not exhaustive (and dollar amounts are very rough estimates), but rather they illusttrate the challenges and opportunities that lie ahead. The items are categorized into the three themes developed in the CFS process but has not yet been prioritized. Prioritization and refining efforts will be ongoing as a part of continued CFS work.

Table 16-1: Unfunded Projects — Emergency Preparedness

Departmen	Project	Total Cost	Est O&M	Description
Fire	Fire Facilities - Station 3/ Administration / Storage	$ 19,200,000	$ 381,000	Relocate Fire Station #3 out of the 100 year floodplain, and combine and co-locate the new Fire Station #3, planned at 17,000 sq ft, and Fire Administration Offices planned at 11,000 sq ft, and construct storage for fire vehicles and equipment into one new facility. Fire administration offices currently occupy 3,737 square feet in the Public Safety building. A space analysis identified the space need of at least 10,000 square feet. The storage building project planned at 10,000 sq ft would provide a facility to efficiently store reserve fire apparatus and stockpile of emergency supplies on existing land adjacent to Fire Station #7. The projected building cost for this project is $10.6 million plus estimated land cost of between $2,500,000 and $8,600,000.
Fire	Replace Fire Station Alerting Equipment	$ 500,000	$ 60,000	Replace the existing fire station alerting system. The current fire station's alerting system to notify fire fighters of an emergency is accomplished using a homemade system of decades old equipment. Even with repairs made in 2013 the existing alerting system remains fragile and will not allow the fire department to take full advantage of the new Computer Aided Dispatch (CAD) system.
Fire	Fire Training Center Phase 3	$ 1,200,000	$ -	Add one classroom, five offices, a conference room and one "dirty" classroom that were all deleted from the original project scope to meet budget. This project is planned at 4,000 square feet.
Fire	Fire Training Center Storage Building	$ 2,200,000	$ 45,000	Provide a 10,000 sq ft storage facility for training props and equipment
Fire	Replace Fire Station 4	$ 5,300,000	$ 132,000	Constructed in 1967, Fire Station 4, located at 4100 Darley Avenue, is too small to remain functional. Fire engines have to be specially designed to fit into the garage. This station encompasses 2,000 square feet. A new station is planned at 11,000 square feet. Replacing this facility would allow ADA compliance, provide energy efficiency, increase operational effectiveness and improve conditions for the fire crews living there, and allow any of the city's fire engines to operate out of the station. The projected building cost for this project is $3.3 million plus estimated land cost between $1.0 million and $2.0 million.
Fire	Replace Fire Station 6	$ 3,300,000	$ 132,000	The area around Fire Station 6, located at 5145 N 63rd Street, has experienced significant development since the station was constructed in 1979. The station is too small and not energy efficient, despite extensive work by the city's Facilities and Asset Management department. A new station is planned at 11,000 square feet. Replacing this fire station will allow ADA compliance, provide energy efficiency, and increase operational efficiency and safety for firefighters. The city owns two acres of land at the current station site.
Fire	Replace Fire Station 2	$ 8,100,000	$ 184,000	Constructed in 1959 and located at 2225 Baseline Road, Fire Station 2 is too small to accommodate its crew, engines, and equipment. The station encompasses 4,752 square feet. A new station is planned at 15,333 square feet. Replacing this facility would allow ADA compliance, provide energy efficiency, increase operational effectiveness, and improve conditions for the fire crews living there. The projected building cost for this project is $4.6 million plus estimated land cost between $1.5 million and $3.5 million.

Table 16-1: Unfunded Projects — Emergency Preparedness (Cont.)

Departmen	Project	Total Cost	Est O&M	Description
Fire	Replace Fire Station 5	$ 6,100,000	$ 184,000	Relocate and expand Fire Station 5 currently located at 4365 19th Street to provide ADA compliance, energy efficiency, increase operational effectiveness, and improve conditions for fire crews living there. A new station is planned at 15,333 square feet. The projected building cost for this project is $4.6 million plus estimated land cost between $1.0 million and $1.5 million.
Fire	Remodel Fire Station 1	$ 2,800,000	$ -	Remodel and expand Fire Station 1 located at 2441 13th Street adding 9,200 square feet. This will allow ADA compliance, improve energy efficiency, increase operational effectiveness, and improve conditions for crews living there.
Fire	Remodel Fire Station 7	$ 1,800,000	$ -	Remodel and expand Fire Station 7 locatedd at 1380 55th Street adding 6,000 square feet to provide ADA compliance, improve energy efficiency, increase operational effectiveness, and improve conditions for crews living there.
IT	Data Backup and Disaster Recovery Upgrades	$ 175,000	$ 8,750	This project is a companion to the Data Backup and Disaster Recovery project reflected as a funded capital maintenance project. The element reflected here relates to the unfunded needs for this system on the horizon. As the data storage demands of the city organization continue to grow - we need to purchase additional capacity to support that demand. Specifically - it is anticipated that in 2015 and again in 2017 we will need to buy additional capacity on our backup software system. In 2019, when the system is replaced it is likely that a much higher capacity storage system will be needed to support the data needs of the city. This is anticipated due to the rapidly expanding data needs including extended file retention and storage of larger multimedia files (photo, video and audio). While the capital maintenance project has funding for the replacement of a similar system in the 2018/2019 timeframe - significantly increase capacity is not funded.
Police	City-wide radio infrastructure	$ 1,500,000	$ 150,000	Over the next 5 years, much of the city's radio infrastructure will need to be replaced either because of age, or because of new unfunded narrow-banding mandates from the Federal Communications Commission (FCC).
Police	Incident Command Vehicle (ICV)	$ 450,000	$ 52,650	The department has had the current ICV since 2000 it is scheduled to be replaced in 2016 but increasing technology for this type of vehicle, computers on site, etc., have the department falling short when it will be time to replace it.
Police	Gold Elite Radio Consoles	$ 1,500,000	$ 150,000	Over the next 5 years new narrowing banding mandates will be required by the FCC, these systems will be needed in the Communications Department.
Police	Body Cameras	$ 72,000	$ 14,000	New technology is becoming a necessity for departments in protecting both the officers and the community that they serve.
Police	Radios - Police Only	$ 208,000	$ 41,600	Police radios will need to be replaced by 2018 because of the new narrow banding mandate from the FCC
Police	Pack sets - Police Only	$ 100,000	$ 20,000	Police pack sets will need to be replaced by 2018 because of the new narrow banding mandate from the FCC
Police	Public Safety Building Expansion and IT Consolidation	$ 7,900,000	$ 150,000	Construct a 9,700 sq ft expansion for Police functions, and a 6,400 sq ft addition for IT offices, with additional parking for 30 to 50 spaces in a parking garage, along with associated renovations to the existing facility.

Table 16-1: Unfunded Projects — Emergency Preparedness (Cont.)

Departmen	Project	Total Cost	Est O&M	Description
Police	Renovation of existing space	$ 1,610,000	$ 48,300	The department has been in the existing space since 1990, with only minor repairs being made. Renovation of the existing space is needed due to the age of the building.
PW-Utilities	Boulder Reservoir Water Treatment Facility - Unfunded	$ 4,651,865	$ 150,000	This project will provide funds for on-going maintenance and rehabilitation of the Boulder Reservoir Water Treatment Facility. Improvements include pre-oxidation, filter valves and actuators, washwater recovery tank expansion, stie pavement, polymer feed system and emergency power.
PW-Utilities	South Boulder Creek Flood Mitigation Phase II	$ 15,000,000	$ 250,000	This project would be the second phase of flood mitigation improvements along South Boulder Creek. The overall project is to mitigate flooding along South Boulder Creek from U.S. 36 to the confluence with Boulder Creek, based on recommendations in the Comprehensive Flood and Stormwater Master Plan. Flood mitigation alternatives have been evaluated and a draft recommendation is currently going through a public review process. Information has been presented in two open houses, twice to the Water Resources Advisory Board (WRAB), and at several stakeholder meetings. The proposed alternative includes construction of a regional flood detention facility located just south of US36, along with downstream capacity improvements. This alternative would eliminate the overtopping of US36 during a 100-year storm event and greatly reduce downstream flood risks. It is anticipated that the project will be designed and constructed in three phases, each approximately $15 million. The recommended first phase would construct the regional flood detention facility at US36. Funding shown in the CIP is for the first phase and is intended as seed money in the hopes of securing outside grants or federal money to complete the selected alternative. Additional phases are, as of yet, unfunded.

Table 16-2: Unfunded Projects — Infrastructure Deficiencies

Department	Project	Total Cost	Est O&M	Description
PW-FAM	Reduce Maintenance Backlog	$ 4,300,000	$ 2,200,000	FAM's current backlog is $7.3M and it's expected to grow to $15M by 2020 under current funding. With an infusion of capital funding and increased annual funding, FAM can maintain the funding goal of maintaining the backlog below $4M, which represens an overall "good" rating of the 135 facilities under FAM's purview.
IT	Network Hardware Upgrades and Enhancements	$ 118,000	$ 14,500	This project reflects the unfunded needs of the Network Hardware system. Over the next several years the following needs are anticipated: 2014 Switch for redundant internet connection ($10,000) 2014/2015 additional Wireless Access Points to continue network build out ($10,000) 2015 Redundant WAP controller ($38,000) 2015 Netscaler Appliance Hardware ($35,000) 2015 Project Planning ($25,000)
IT	Security Infrastructure for ancillary devices	$ 95,004	$ 15,000	This project funds the network and security infrastructure necessary to support a new class of technology equipment. Functions that were previously not computerized are now requesting computer resources, greater than those available as excess capacity on the computer network. We have the need to increase the capacity of the network by 364 ports to support this equipment.
IT	Office Productivity Suite	$ 1,280,000	$ 256,000	The office productivity suite is in need of upgrade and replacement. Some funding exists in the CRF for this purpose, but it is not believed to be sufficient to fund the entire purchase or the continuing on-going costs of the upgraded tools. This project would bring the city's desktop tools current, and implement a plan to stay on more current releases going forward. This project may also include a city-wide collaboration tool.
PW-FAM	Parks Operations Colocation with Public Works	$ 5,200,000	$ 32,000	Relocate the Park Operations and Forestry service area into the Municipal Service Center (city yards) to part of the Valmont City Park, Phase 2. Additional structures, renovations of existing structures, and additional parking would be constructed.
P&R	Pearl Street Mall Improvements	$ 5,852,000	$ (90,200)	Design and development required for revitalization improvements to the Pearl Street Mall to address aging civic space improvements such as: tree, amenity and hard surface paver replacements, new signage and seating amenities and other improvements necessary to maintain a dynamic and engaging public venue and economic attraction for the community.
PW-FAM	City-Wide Energy Efficiency Projects and Programs	$ 2,000,000	$ 200,000	Complete energy efficiency projects and programs including: replacing single pane windows with double pane windows at the Municipal Building, Fire Stations, and other city facilities; installing building automation systems to remotely monitor and control building settings and performance; and fund a contracted service to provide 24/7 monitoring and analysis of a building's energy performance to maintain peak performance of existing systems. These are projects which could not be accomplished as part of the energy performance contracts due to the longer payback periods.

Table 16-2: Unfunded Projects — Infrastructure Deficiencies (Cont.)

Department	Project	Total Cost	Est O&M	Description
P&R	Community Park Enhancements	$ 8,500,000	$ 89,840	Design and development of enhancements to community parks including: Foothills Community Park, Harlow Platts Community Park, and East Boulder Community Park. Each of these Community Parks have planned future phases that include additional amenities and recreation areas not including athletic fields.
P&R	Recreation and Community Center Enhancements	$ 14,000,000	$ -	The Boulder Parks and Recreation Master Plan outlines various improvements and enhancements to all recreation facilities and centers within the three funding priorities. Enhancements to recreation centers allow the department to meet critical goals relative to the community health and wellness and ensure facilities are maintained at an appropriate standard according to the department's asset management program. Proposed projects will provide facility upgrades and operational efficiencies to fitness areas, aquatic areas and sports facilities. Enhancement projects may include: pool renovations, fitness and program area expansions, new concession areas, weight room renovations and increased multi-purpose rooms. Cost of enhancements will range from $500,000 to $14,000,000 and can be phased based upon available funding. Enhancements include: North Boulder Recreation Center (Expansion of weight room and program space, front desk remodel, new recycling facilities); East Boulder Recreation Center (Facility/entry remodel, additional gymnasium, multi-purpose art room and program areas, outdoor covered patio, concessions, expanded leisure pool and weight room, remodel of office/meeting space); South Boulder Recreation Center (Leisure/therapy pool, raised indoor running track, high-tech teen area, concessions area, program, office space and multi-purpose rooms, indoor playground, child care).
P&R	Athletic Field Improvements	$ 16,800,000	$ 61,480	Design and development of new or improved diamond and rectangular athletic fields at existing parks and rec facilities in support of various team sports leagues and multi-use practice field needs. The following projects represent investments to improve athletic fields and associated infrastructure located at various locations throughout the city including Stazio Complex, Plesantview and Foothills Community Park.
P&R	Scott Carpenter Pool and Park Enhancements	$ 7,330,285	$ 28,500	Pending the outcome of the Parks and Recreation Aquatics Feasibility study, this project would provide funding for Scott Carpenter Pool improvements including: ADA compliant restroom facilities and bathhouse, landscape, turf, irrigation & hardscape areas, wetland regulatory compliance, improved outdoor pool plaza areas, upgraded pump house and filtration system, parking lot & access upgrades. Park improvements may include the land acquisition of the existing fire station at the corner of Arapahoe and 30th Street and redesign of the corner parcel to include a refurbished skate park, new park entry signage, landscape and irrigation improvements and the redevelopment of the existing pool to a new use.
DUHMD	University Hill Commercial Area Street Tree Irrigation System	$ 520,000	$ 7,000	The project is to install an irrigation system for all the street trees within the University Hill Commercial Area. The Street Tree Irrigation project would protect and enhance the existing investment of street trees in the commercial district, would in turn support the Economic and Environmental Community Sustainability Goals and create efficiencies in maintenance and operations.

Table 16-2: Unfunded Projects — Infrastructure Deficiencies (Cont.)

Department	Project	Total Cost	Est O&M	Description
Library	Library - Carnegie, Repair Masonry on Historic Structure	$ 275,000	$ -	Complete the masonry repairs identified for the Carnegie Branch Library for Local History, constructed in 1906.
PW-Transportation	Quiet Zone Implementation at Railroad Crossings	$ 5,000,000	$ -	In response to noise concerns expressed by existing Boulder residents as well as new mixed-use, transit-oriented development opportunities adjacent to the existing Burlington Northern Santa Fe (BNSF) railroad corridor, the City of Boulder is currently working with the BNSF Railway Company (BNSF), Colorado Public Utilities Commission (PUC), Federal Railroad Administration (FRA) and other agency partners such as Boulder County and the Colorado Department of Transportation to develop a plan for railroad Quiet Zones. Based on the initial studies, the cost estimate for implementing quiet zones at the 10 railroad crossings within and near the City of Boulder, including several crossings located in Boulder County, is approximately $8 million. These cost estimates are very preliminary, and unable to be refined until additional consultation with BNSF, PUC and FRA.
IT	Video Conferencing Capability	$ 272,850	$ 68,213	This project would fund a pilot and full rollout of Video conferencing technology throughout the city. There is greatly increased demand for this type of capability. This system would add on to the city's existing phone system. (VoIP - Voice over Internet Protocol)
PW-FAM	Repair Municipal Service Center Parking Lots	$ 800,000	$ 123,000	Repair badly deteriorated parking lot and pavement areas at the Municipal Service Center (MSC). A pavement survey conducted in 2010 identified numerous areas in the MSC lot as needing complete replacement or repair. The pavement is over 20 years old and has required numerous potholes filled, but the subbase layers of the pavement require a complete re-build of many areas.
PW-FAM	Repair Public Safety Building Parking Lot	$ 500,000	$ 32,000	Repair badly deteriorated parking lot and pavement areas at the Public Safety Building (PSB). A pavement survey conducted in 2010 identified numerous areas in the PSB lot as needing complete replacement or repair. Some temporary patching work was completed in 2010; however, those patches are not holding due to the need to replace the subbase layers of the pavement.
IT	TBBI Replacement	$ 7,800,000	$ 1,404,000	This is the estimated replacement cost for the software system we are currently installing. Projected replacement between 2028 and 2030.
IT	CRM Replacement	$ 210,000	$ 37,800	This is the replacement cost for the system that went live mid 2013. The project is planned for 2019 - 2022

Table 16-2: Unfunded Projects — Infrastructure Deficiencies (Cont.)

Department	Project	Total Cost	Est O&M	Description
IT	Web Site Refresh	$ 100,000	$ 18,000	This is the replacement cost for the system that went live mid 2013. The project is planned for 2019 - 2022
IT	Enterprise Document Management	$ 1,557,000	$ 280,260	This is the estimated replacement cost for the software system we are currently installing. Projected replacement between 2028 and 2030.
IT	LRP+ replacement	$ 3,900,000	$ 702,000	This is the estimated replacement cost for the software system we are currently installing. Projected replacement between 2028 and 2030.
Library	Main Library Renovation	$ 5,347,900	$ 10,620	Remodeling and refurnishing several areas of the Main Library, including the second floor areas and bridge, relocation of the Arapahoe entrance, addition of 1,000 sq ft. to the second floor, rennovating the basement and north wing, and various HVAC and minor repairs.
P&R	Reservoir Recreation Enhancements	$ 7,500,000	$ (225,000)	Improvements and enhancements to the Boulder Reservoir remain a priority for the department and have been high priority in the Boulder Reservoir Master Plan as well as the Boulder Parks and Recreation Master Plan. The recent Capital Improvement Bond funding allowed for critical upgrades to be implemented and several more priorities still exist. Projects will continue to address infrastructure deficiencies on the South Shore through the design, remodel and/or replacement of existing structures (administrative, marina and maintenance buildings), demolition of existing security bldg, and a new boat and camp equipment storage structure facility. Other improvements may include upgraded ADA compliant playground areas, outdoor performance venue and beach areas, wayfinding and signage replacements, wildlife management (prairie dog) areas, feeder canal trail, West shore trail system, fencing and North shore/Coot Lake improvements. Cost of improvements will range from $250,000 to $7,500,000 depending upon the scope and available funding.
P&R	Play Court Improvements	$ 4,825,000	$ (25,000)	Combination of maintaining and repair of existing play courts and the addition of new facilities to meet current and future demand. Resurface, repair and/or reconstruction of existing and new tennis and basketball courts at specific park locations. Reconstruction of existing courts will include new sub-base material and concrete surface, seal and paint, fencing and netting as required.
P&R	Historic / Cultural Facility Improvements	$ 1,250,000	$ (15,000)	Conservation and preservation of important historical and cultural assets in the community that are managed by the Parks and Recreation Department. Ongoing historic/cultural facility upgrades associated with Chautauqua Park, Harbeck House, Pottery Lab, and the Columbia Cemetery will address ADA compliance needs, improved programming and office, storage and display area as needed for each facility asset.

Table 16-2: Unfunded Projects — Infrastructure Deficiencies (Cont.)

Department	Project	Total Cost	Est O&M	Description
PW-Transportation	14th & Walnut Multimodal Transportation Center	$ 4,100,000	$ 41,000	Complete improvements at Boulder's downtown transit center, including bus operational improvements, pedestrian improvements, building retrofits, improved bicycle access and accommodations. Expand the range of multimodal transportation opportunities, including electric vehicle charging, car share vehicles, a bike station, and a transportation resource center. Increments of funding have been received from CDOT FASTER Funds and there is a portion in CIS Round 1 Funding.
PW-Transportation	Arapahoe Reconstruction	$ 3,000,000	$ 30,000	Reconstruction of Arapahoe, 15th St. to Broadway.

Table 16-3: Unfunded Projects — Placemaking

Department	Project	Total Cost	Description
PW-Transportation	Boulder Junction - Transportation Connections -	$ 12,200,000	This project would include the next phase of the unfunded transportation connections that are a part of the Transit Village Area Plan (TVAP) Transportation Connections Plan. Possible projects could include: Junction Pl Bridge @ Boulder Slough, Junction Pl Roadway (Boulder Slough to 32nd St/Prairie Ave) Boulder Slough Multi-use Path (30th St to 3100 Pearl), Boulder Slough Underpasses at BNSF Railroad and at Pearl Parkway, and Area Multi-use Path Connections.
P&R	Boulder Civic Area Park Improvements	$ 8,700,000	This project will provide enhancements and improvements to park areas within the Boulder's Civic Area as identified within the Civic Area Plan. The Civic Area meets several key themes of the Boulder Parks and Recreation Master Plan and the implementation of the Civic Area Plan allows critical department goals to be met. The projects will range in scale and complexity while consistently meeting the guiding principles and implementation strategies identified through the Civic Area planning process. Most projects will address critical deficiencies by enhancing and replacing current park amenities such as park lighting standards, wayfinding and interpretive opportunities, enhancement of site furnishings, replacement of turf areas and improving site safety and security. More complex projects will include the development of passive recreation areas through paving, landscaping, outdoor art installation and activation areas that accommodate increased programming and events within the park areas.
P&R	Valmont City Park Phase 2 Development	$ 23,580,507	

Table 16-3: Unfunded Projects — Placemaking (Cont.)

Department	Project	Total Cost	Description
PW-Transportation	Multi-use path connections - first tier projects	$ 12,500,000	Complete a number of important pathway connections, including: Confluence area (where Boulder Creek and South Boulder Creek conflow), Wonderland Creek at 28th, Table Mesa park-n-Ride, smaller missing links in the system. The completion of the first and second tier projects would represent significant progress towards completing the city's pathway system.
Human Services	Demolition and Redevelopment of West Senior Center	$ 28,000,000	This project is part of the Civic Area plan implementation. The project is to demolish the existing West Senior Center building, expand the footprint and build up three stories. The current facility is only 15,800 square feet and does not make efficient use of either the lot or interior space. The new building would include a 21st century senior center as envisioned in the civic area plan and include space to co-locate all human services department programs as a one-stop shop for human services. This would enhance customer serviceto the community while adding critical office space on the municipal campus.
PW-FAM	Civic Area Projects - City Service Facilities Only	$ 39,000,000	Based on the implementation strategy for the Civic Area Plan - this could include capital projects towards replacement facilities for New Britain, Park Central, Atrium, 1301 Arapahoe, FAM, and the Municipal Building. Building size ranges from 55,000 to 110,000 sq ft. Could also include parking structures to replace surface parking currently in the High Hazard Zone. Only includes 200 spots for employee and city vehicle parking.
PW-Transportation	Civic Center Plan Transportation Projects Implementation	$ 15,000,000	The Civic Center Planning process is underway and it is anticipated that an outcome of the planning process will be various projects including new and improved transportation connections to provide for transportation options to and through the civic center area. At this time, there is not funding programmed for these improvements. As these projects are still being defined, the scope and cost are unknown so a general place holder is estimated at $15 Million.

Table 16-3: Unfunded Projects — Placemaking (Cont.)

Department	Project	Total Cost	Description
DUHMD	University Hill Commercial Area Pennsylvania Event Street Pilot	$ 500,000	Due to its small size and constrained location, the University Hill commercial district lacks public plazas, parks or similar areas for community gatherings and events. A section of Pennsylvania Avenue is proposed to be redesigned and retrofitted to become a multi-purpose event street that would accommodate festivals, special events and community gatherings. The Pennsylvania Event Street would be a pilot project that could incorporate many shared street concepts but be tailored to facilitate closure and production of events, such as special lighting, infrastructure for tenting and access to electricity, and could be used as a model for other commercial districts. During other times, it would continue to function as a transportation corridor and provide parking but could emphasize biking and pedestrians. The area has been used successfully for numerous special events (Hill 2K, Hill Flea, Snacks and Jazz).
DUHMD	University Hill Pedestrian Scale Corridor Lighting in the Univ Hill High Density Residential Area	$ 5,700,000	The project proposes adding pedestrian scale lighting to primary pedestrian corridors within the hill's high density residential area to increase safety. Potential corridors include: 12th Street – Pleasant to Aurora; College Avenue, Pennsylvania Avenue and Pleasant Street, - 9th to 12th. A thorough study and extensive community input would be required to establish a final design. Pedestrian scale lighting already exists within the boundaries of the commercial district. Cost estimate is $1.8 to $5 million. The costs are dependent on the quality of light fixture and frequency of spacing.

Table 16-3: Unfunded Projects — Placemaking (Cont.)

Department	Project	Total Cost	Description
DUHMD	University Hill Commercial/Residential Gateway Features	$ 500,000	The University Hill commercial district is a small area located between two large neighbors – the main campus of the University of Colorado and the hill residential area. The Hill Gateway project would focus along 12th Street on the three primary pedestrian corridors between the University and the residential neighborhood – College, Pennsylvania and Pleasant. The goal would be for the gateways to alert passersby to the transition between the character of the residential neighborhood and that of the commercial district and the campus. Through thoughtful public art and streetscape design, the project would celebrate the special character of the University Hill neighborhood and communicate the distinct qualities of different components of the hill. The project would be integrated with the Pennsylvania Event Street project.
Housing	Accelearated Housing Capital	$ 15,000,000	Injection of capital funding to implement several affordable housing sites that are waiting for funding.
PW-Transportation	Traveler information system	$ 2,000,000	Provide real-time information for system users to help inform travel choices. Provide in-depth information about system use for analysis and measurements. Includes real-time counters and cameras on multi-use paths and on key arterials which feed an on-line, real-time publicly accessible site. The system will use the data to estimate overall system use and travel delays.
VARIOUS	Access Management and Parking Strategies (AMPS) Enhancements	$ 2,000,000	Provide enhanced facilities for AMPS. The AMPS study started in 2013 and is continues into 2014. The study has identified several capital investment for enhanced transportation, multi-modal incentives, and parking. These include investments into pedestrian and bike ameneties, street scaping, city-edge park and ride/bike, bike stations, electric vehicle charging stations, and opportunities for energy generation pilots in parking garages and surface lots.
PW-Transportation	Multi-use pathway connections - second tier	$ 10,000,000	Significantly increase connectivity in north and south Boulder by building new sections of pathway and new underpasses along the Greenway system. Several projects are included: missing links along the Wonderland and Fourmile greenway systems, new underpasses along Skunk Creek (at Moorhead) and Bear Canyon Creek (at Table Mesa). It would also complete the northern section of a multi-use pathway along 28th Street.

Table 16-3: Unfunded Projects — Placemaking (Cont.)

Department	Project	Total Cost	Description
Housing	Land Bank	$ 20,000,000	Acquire and hold land to facilitate residential development that furthers the city's housing (and other) goals (e.g. 30th and Pearl). Would supplement dedicated affordable housing funding. O&M could be positive if property is leased. If not, the city has minimal carrying costs.
Library	Library-North Boulder Branch	$ 4,161,500	Construction, Furniture, Fixtures and Equipment for a 13,000 sq ft library branch, including an opening day collection, in the North Boulder neighborhood. Annual operating and maintenance and staffing costs are also included. At this time a donated piece of land has been identified for this proposed project.
CMO	Boulder History Museum	$ 4,000,000	Donation to Boulder History Museum for the museum's capital campaign.
PW-Transportation	Transit stop enhancements	$ 1,580,000	Enhance transit stops by improving superstops and high use stops and adding basic amenities at all stops. Provide funding for regular maintenance. Add bike share and car share connections at key locations to facilitate the final mile of travel.
IT	Public Fiber Optic Network	$ 50,000,000	Funds to construct a city-wide fiber optic network to deliver service to city businesses and residents. This would significantly add to the city's existing fiber optic which services only city buildings.
P&R	Park and Recreation Land Acquisitions	$ 8,000,000	New parks and recreation land acquisitions that are required for critical growth areas to accommodate existing and future residential areas and subsequent level of service requirements in the community. Park land acquisition funds are necessary to support the livability and needs of neighborhoods and the overall community. New park land may include; Gunbarrel Area Park (land acquisition and development), and other undefined parks and recreational facility needs.
PW-FAM	New Climate Action Plan Goal	$ 42,000,000	This project would include various initiatives for city operations under the General Fund to meet the city's proposed new goal of 80% reduction in greenhouse gas emissions by 2050, from 1990 levels.

Table 16-3: Unfunded Projects — Placemaking (Cont.)

Department	Project	Total Cost	Description
PW-Transportation	East Arapahoe Planning Implementation - East Campus Connections	$ 15,000,000	There are two planning efforts underway or planned along Arapahoe - east of 28th Street. The first, East Campus Connections Project, is a joint University of Colorado & City of Boulder project, with the primary project goal to integrate connections from CU &
PW-Transportation	Transit Enhancements (Roll-Up of Transit Projects Listed Above)	$ 6,580,000	Multi-faceted approach to upgrading Boulder's Transit System, including enhancing transit super-stops, Launching the ORBIT Route, completing improvements at Boulder's
PW-Transportation	Establish new high frequency transit service on 28th and Folsom	$ 3,000,000	Launch the ORBIT, as identified in the Transportation Master Plan. Buses would run every 10 minutes, as on the SKIP, JUMP and BOUND. Consider including Folsom in the route.
PW-Transportation	Transform northern leg of 204 into high frequency service	$ 380,000	Increase frequencies to 10 minutes mid-day. Consider minor route adjustments to optimize service. The 204 runs on 19th/20th Street from downtown north, and sees heavy use by CU and Boulder High students, as well as others coming downtown.
PW-Transportation	City-Wide Eco Pass	tbd	Provide a city-wide ecopass to all boulder residents as an incentive to increase use of public transportation and achieve the city's alternative transportation goals.

[This page is intentionally blank.]

Appendix C, CEAP PROJECTS

The City of Boulder assesses potential impacts of conceptual project alternatives in order to inform the selection and refinement of a preferred alternative. The evaluation of these alternatives is known as a Community and Environmental Assessment Process or CEAP.

CEAP reviews are prepared when projects are in the site location and facility design phase. The primary purpose of the CEAP is to encourage the consideration of potential social and environmental impacts in planning and decision making and, ultimately, to arrive at actions that achieve the objectives of the project with the fewest impacts. The intent of the CEAP is to make project planning more efficient by considering issues in advance of implementation.

All CEAPs include an analysis of the project and alternatives, including how the project will further implement the BVCP, master plan goals, or subcommunity or area plans. The alternatives are then analyzed through a checklist of impacts to: natural areas or features, riparian areas/floodplains, wetlands, geology & soils, water quality, air quality, resource conservation, cultural/historic resources, visual quality, safety, physiological well-being, urban services, special populations, and the economy.

The Appendix to Title 2 of the Boulder Revised Code instructs that major capital improvement projects should be handled in accordance with the City Plans and Projects Handbook, dated November 2007.

The 2007 Handbook provides that a project should be evaluated through a CEAP if it meets any of the following criteria:

- A project or a potential alternative could have a significant impact on an environmental, social, or cultural resource and the project would benefit from a CEAP;
- The project is anticipated to generate enough neighborhood or community input to require a public hearing or board review;
- There is more than one possible conceptual alternative that will require staff or community input in the selection; or
- The project requires alternatives analysis as part of internal or external permitting and review processes at the local, county (1041), state, or federal level (NEPA).

An internal city CEAP should be performed prior to submitting for a local permit or to the external

agency. Annually, the list of Capital Projects is reviewed by the internal city CEAP review group, and the group discusses projects that may need a CEAP. Projects that require Concept and Site Plan Review do not go through the CEAP and are not reviewed by the CEAP Review Group.

CEAP findings are submitted by departments to their respective advisory board for review as part of CIP project approval. For those departments that do not have an advisory board, the Planning Board is responsible for reviewing CEAP findings as part of project approval. Council has the opportunity to call up projects for their review and approval.

The following capital improvement projects proposed for funding in the 2014-2019 CIP are recommended to complete a Community and Environmental Assessment Process (CEAP).

Open Space & Mountain Parks Department

- Historical Structures and Trails – Stabilization & Restoration * (Page 135)
- Visitor Infrastructure – System Wide * (Page 145)

Parks & Recreation Department

- Violet Park (Page 172, In conjunction with Greenways Fourmile Canyon Creek improvements)

Transportation Division

- 28th Street (Baseline to Iris) (CEAP completed 2001) (Page 186)
- 28th St. Path Improvements: Iris to Yarmouth (Page 187)
- Baseline Underpass: Broadway to 28th (Page 188)

Utilities Division/Greenways

- Barker Dam Hydroelectric & Dam Outlet (Page 238 and 239)
- Fourmile Canyon Creek at Crestview & 19th Street (Completed in 2012, Page 108)
- Fourmile Canyon Creek Upland to Violet (Page 109)
- NCWCD Carter Lake Pipeline & Hydroelectric (Page 248)
- South Boulder Creek Flood Mitigation Improvements (Page 220)
- Upper Goose Creek Drainage Improvements (Page 224)
- Witemeyer Ponds* (Page 264)
- Wonderland Creek – Kalmia to Winding Trail (Page 111, CEAP Completed in 2013)

*As the scope of work is defined the necessity of a CEAP or other public review will be determined.

C I T Y O F B O U L D E R
PLANNING BOARD AGENDA ITEM

MEETING DATE: July 31, 2014

AGENDA TITLE: Public hearing to consider a recommendation to City Council on an ordinance amending Title 9, "Land Use Code," B.R.C. 1981, to add a process for review of Concept Plans by City Council and to relax occupancy limitations for housing for persons 62 years of age and older to implement measures recommended as part of the city's Comprehensive Housing Strategy.

REQUESTING DEPARTMENTS:
David Driskell, Executive Director of Community Planning and Sustainability/Interim Housing Director
Susan Richstone, Deputy Director of Community Planning and Sustainability
Charles Ferro, Land Use Review Manager
Jeffrey Yegian, Manager, Division of Housing
Jay Sugnet, Project Manager, Comprehensive Housing Strategy
Karl Guiler, Senior Planner/Code Amendment Specialist
Hella Pannewig, Assistant City Attorney

OBJECTIVES:
1. Hear Staff presentation
2. Planning Board discussion
3. Recommendations on changes to the code

PURPOSE

The purpose of this item is Planning Board consideration of a recommendation to City Council on the following two proposed code changes identified as "early wins" as part of the city's Comprehensive Housing Strategy:

1. City Council review of Concept Plan applications

2. Senior housing in single-family neighborhoods (proposed change to occupancy limits)

BACKGROUND

The CHS was discussed with Planning Board on May 15, 2014 and the staff memorandum and audio of the discussion can be found here. At its May 15th meeting, the board discussed the foundations work to date, draft project goals, the initial list of tools and potential "early wins." The list of "early wins" presented to the board on May 15th may be found in **Attachment B.** City Council discussed the CHS and potential early wins at a study session on May 27, 2014 and supported moving forward to consider these two proposed "early wins." agreed with the identified approaches at its review of the CHS at a study session on May 27, 2014.

The Comprehensive Housing Strategy (CHS) will be a next generation housing policy framework, combined with an implementation toolkit, that will focus on:

1. Strengthening the city's affordable housing programs for low- and moderate-income households.

2. Expanding housing opportunities for middle-income households.

3. Exploring innovative approaches to providing additional housing and a broader range of housing options, particularly for housing needs not being met by the market.

The strategy will set forth a creative mix of policies, tools and resources to make progress on multiple fronts, in a manner consistent with the Boulder community's priorities, values and overarching sustainability framework.

It is meant to inform and guide Council decisions on which policies and tools to pursue in the short, medium, and long term within the context of the broader housing strategy. The CHS is intended as a "living document" that will guide ongoing work related to housing policies and programs. In other words, adoption of the strategy will not signal the end of the city's housing-focused discussions, but rather inform annual work program priorities aimed at continual monitoring, evaluation and action to strengthen and expand housing opportunities through a variety of tools and coordinated strategic initiatives.

Proposed changes to the Land Use Code are found in the draft ordinance in **Attachment A**. Staff is also moving forward with the density/right-of-way change (discussed by Planning Board on May 1, 2014) and per the board's request, is bringing that item back for a rehearing on Aug. 7, 2014. The proposal to allow density calculations based on gross land area prior to dedications (presented to the board on May 1st and will again be before the board on Aug. 7th) is viewed as an opportunity to remove barriers to investment in area plan areas and to incentivize more housing in targeted areas and encourage smaller unit sizes consistent with the goals of the CHS. The other "early wins" in **Attachment B** are considered more complex and will require more analysis and outreach before coming forward to the Planning Board.

ANALYSIS

City Council review of Concept Plan applications

At the 2014 retreat, City Council indicated a desire to help shape key projects early in the process. Through the CHS process, it was identified that some higher profile development proposals (e.g., ones that could fulfill city goals on providing additional housing) could benefit from City Council comments earlier in the review process. Currently, City Council's role in development approvals includes development approvals tied to Annexations and Site Reviews called up by council. When council is the final reviewing authority and reviews a fully shaped project, it is often years after a project is conceived. Creating an opportunity for council to review a project required to go through a Concept Plan review, will allow for council input early in the process and may help shape the project and help developers design their project to meet approval standards. This may ultimately save time in the overall scope of review of a project. This is important considering the amount of time and cost that goes into development projects before any decisions are made.

Presently, Concept Plans require Planning Board review and comment per section 9-2-13, "Concept Plan Review and Comment," B.R.C. 1981. Applicants and staff find the comments from the board very helpful in

informing the quality and general design of subsequent Site Review applications and the board's input ultimately results in better projects.

In fact, when Concept Plans were originally implemented by the city in 1994, the applications required Planning Board review and the resulting findings were forwarded to City Council for call-up consideration. After concerns were raised about the lengthy review process for Concept Plans, the process was simplified in 1999 and the City Council call-up provision was removed.

While it is not the intent to increase the review time on projects, allowing a mechanism for early comment by council, if council so desires, is viewed as an opportunity to perhaps better inform the design and composition of projects early with hopes of avoiding difficulties that may arise much further into the review process. The goal is to make the development review process more predictable to property owners, developers, neighbors and staff and also enable a forum for high level policy feedback that can inform projects to the extent that they could better meet city goals, policies and standards. Concept Plan is often the review stage where review bodies, staff and the community can comment on a project and influence the mix of housing, what amenities may be provided and inform how a project will appear and how it connects to its surroundings.

Therefore, as one of the identified "early wins," staff is proposing a change to section 9-2-13, "Concept Plan Review and Comment," B.R.C. 1981 that would create a process for City Council involvement earlier in the review process. Like the 1990s code provision, it would allow council to vote on whether or not the council would want to review a particular Concept Plan. However, unlike the previous provision it would not be referred to as a "call up" as this terminology is associated with the review of formal decision.

The proposed changes that create this process are listed below. The changes within the context of the entire section 9-2-13 are found within **Attachment A**.

9-2-13 Concept Plan Review and Comment.

(a) Purpose of Concept Plan Review: The purpose of the concept plan review step is to determine a general development plan for the site, including without limitation, land uses, arrangement of uses, general circulation patterns and characteristics, methods of encouraging use of alternative transportation modes, areas of the site to be preserved from development, general architectural characteristics, any special height and view corridor limitations, environmental preservation and enhancement concepts, and other factors as needed to carry out the objectives of this title, adopted plans, and other city requirements. This step is intended to give the applicant an opportunity to solicit comments from the ~~planning board~~ reviewing authority early in the development process as to whether the concept plan addresses the requirements of the city as set forth in its adopted ordinances, plans, and policies. Comments on a concept plan are not binding, but are meant to inform any subsequent site review application. A concept plan review and comment shall not relieve the applicant of the burden to seek approvals for elements of the plan that require review and approval under the Boulder Revised Code.

(b) Projects Required to Complete Concept Review and Comment: Any applicant for a development that exceeds the "Site Review Required" thresholds set forth in Paragraph 9-2-14(b)(1), B.R.C. 1981, shall complete the concept review process prior to submitting an application for site review.

…….

(f) Review of and Comment on Concept Plans: Upon receipt of an application for a concept plan review, the city manager will review the submitted materials for general compliance with the requirements of this title, and prepare staff comments. The scope of staff comments will differ from application to application, at the discretion

of the manager. Unless withdrawn, a concept plan shall be referred to planning board pursuant to paragraph (1) of this subsection and may be reviewed by city council pursuant to paragraph (2) of this subsection:

(1) Planning Board Review and Comment: The manager will forward the application, any comments received from neighbors and other interested persons, and any staff comments to the planning board. The planning board shall review the concept plan at a public meeting held pursuant to the provisions of Subsection 2-3-1(b), B.R.C. 1981. Planning board members may provide individual comments on the concept plan.

(2) City Council Review and Comment: Following planning board review of a concept plan, the city manager shall forward the application, any comments received from neighbors and other interested persons, any staff comments, and a summary of the planning board discussion to the city council. The city council may within thirty days of the review by the planning board vote at a regularly scheduled meeting to review and comment on the concept plan. If the city council votes to review the concept plan, the city council will review the concept plan at a public meeting within sixty days of said vote.

Senior housing in single-family neighborhoods (proposed to change to occupancy limits)

Consistent with demographic trends across the United States, the number of seniors in the City of Boulder is expected to double between now and 2028 to approximately 30,000. In partial response to this trend, senior advocates have identified a need for a housing model that allows multiple, unrelated seniors to share a single-family home in a single-family neighborhood. The idea is for six older adults to share a large house, companionship, and living costs. A report by AARP (American Association for Retired Persons) discusses the housing preferences of seniors and is found in **Attachment D** for reference. Further, an article about the growing number of seniors can be accessed here.

In response to this growing need, another identified "early win" is altering the occupancy limits in the Land Use Code related to senior citizens to make it possible for active seniors to share housing and resources within single-family homes and other dwelling units. Staff is proposing six occupants to achieve a shared housing situation for seniors in single-family zoning districts.

Staff has received a number of public comments on the matter in support of changing the occupancy limits to allow the shared housing option. Requests have also been received to not have an occupancy limit for seniors at all and to lower the age from 62 to 55 years. These comments can be found in **Attachment C**.

Current limits in the RR (Rural Residential), RE (Residential Estate) and RL (Residential Low) zone districts permit up to three unrelated persons. In addition, group homes, which are generally found in single-family zoning districts, permit a higher occupancy (e.g., eight to ten occupants) than permitted in Section 9-8-5, "Occupancy of Dwelling Units," B.R.C. 1981. The proposed option would be separate from traditional group homes that meet the definition below:

> "*Group home facility" means a facility providing custodial care and treatment in a protective living environment for the handicapped or the aged person. This category of facility includes, without limitation, group homes for persons who are sixty years of age or older, group homes for the developmentally disabled or mentally ill, drug or alcohol abuse or rehabilitation centers, and facilities for persons with acquired immune deficiency syndrome (AIDS) or human immunodeficiency virus (HIV) infection.*

Generally, higher occupancies are permitted for group home uses as there would be less of a need for parking for the occupants, because many are undergoing care and are unable to drive. Further, group

homes are not permitted within 300 feet of one another in order to avoid an institutional setting in a residential context.

Staff finds that permitting six occupants (double the permitted three unrelated persons) is appropriate since it would be closer to possible family sizes in adjacent homes consistent with the character of the area and also since it is not likely that all occupants would own cars. Shared housing, as an affordable housing option, would be an opportunity for cost savings for residents as they could share vehicles and other household expenses.

Staff recognizes that parking would likely be the largest real or perceived impact of this proposed change. A study entitled "Approving Senior Housing: Facts that Matter" prepared by the Senior Housing Council substantiates that seniors own fewer cars (see Chapter 3 of **Attachment E**); especially residents older than 75 years. Further, while the current occupancy rules would become less restrictive for seniors, staff does not expect to see a significant number of requests for shared housing as likely only a small percentage of seniors will opt to live in a shared housing situation and may choose other housing options. Therefore, parking impact to neighborhoods is not viewed as something that will become unmanageable and pervasive.

Relaxing the current occupancy limits for seniors is recommended as an "early win" as it would:

1) Increase the housing options for this growing demographic;

2) Create an additional affordable housing alternative targeted to seniors in the city's single-family neighborhoods;

3) Enable the opportunity for seniors who seek companionship to live together and help one another in a group situation and

Therefore, staff proposes the following additional language to the Land Use Code:

9-8-5 Occupancy of Dwelling Units.

(a) General Occupancy Restrictions: Subject to the provisions of Chapter 10-2, "Property Maintenance Code," B.R.C. 1981, no persons except the following persons shall occupy a dwelling unit:

(1) Members of a family plus one or two roomers. The quarters that the roomers use shall not exceed one-third of the total floor area of the dwelling unit and shall not be a separate dwelling unit;

(2) Up to three persons in P, A, RR, RE, and RL zones;

(3) Up to six persons sixty-two years of age or older in RR, RE and RL zones provided that all requirements of the federal Fair Housing Act, 42 U.S.C. §3601, et seq., as amended, and the Colorado Housing Practices Act, §24-34-501, et seq., C.R.S., as amended, with respect to housing for older persons are complied with;

(~~3~~4) Up to four persons in MU, RM, RMX, RH, BT, BC, BMS, BR, DT, IS, IG, IM, and IMS zones; or

(45) Two persons and any of their children by blood, marriage, guardianship, including foster children, or adoption.

This changed occupancy limit for older persons is a straightforward method to allow a new housing option for seniors. The change would open up the opportunity for seniors to adapt their existing homes that often have unoccupied rooms after children have moved out and the ability to age in place.

The age is set at a minimum of 62 years of age to comply with federal Fair Housing Act requirements. If the age is set below 62 years of age it would trigger a requirement to comply with age verification procedures and policies as prescribed by federal regulations. Setting the age at 62 years of age is recommended as it would not necessitate age verification and could be carried out without having to create additional review procedures and requirements such as conditional use reviews.

Further, setting the occupancy limit at greater than six creates the potential for a number of additional impacts and, if there is interest at considering this in the future, it would be better handled as new conditional use standards, where staff could review for compliance with criteria and assess for impacts. If there was interest in allowing ages lower than 62 years, this, too, could also be handled in a future process. Alternatively, higher occupancies could be handled through the anticipated updates to the Cooperative Housing Units (see link here for subsection (b)) standards in the Land Use Code.

STAFF RECOMMENDATION (MOTION LANGUAGE)

Staff recommends that Planning Board recommend approval to the City Council of an ordinance amending Title 9, "Land Use Code," B.R.C. 1981, to add a process for review of Concept Plans by City Council and to relax occupancy limitations for housing for persons 62 years of age and older to implement measures recommended as part of the city's Comprehensive Housing Strategy.

Approved By:

David Driskell, Executive Director
Department of Community Planning and Sustainability

ATTACHMENTS

A. Draft ordinance
B. CHS "early wins"
C. Public comments
D. "What Is Livable? Community Preferences of Older Adults" prepared by the AARP Public Policy Institute
E. "Approving Senior Housing: Facts that Matter" prepared by the Senior Housing Council

ORDINANCE NO. _____

AN ORDINANCE AMENDING SECTION 9-2-13, CONCEPT PLAN REVIEW AND COMMENT, B.R.C. 1981, SECTION 9-8-5, OCCUPANCY OF DWELLING UNITS, B.R.C. 1981, TO ADD A PROCESS FOR REVIEW OF CONCEPT PLANS BY CITY COUNCIL AND TO RELAX OCCUPANCY LIMITATIONS FOR HOUSING FOR PERSONS 62 YEARS OF AGE AND OLDER TO IMPLEMENT MEASURES RECOMMENDED AS PART THE CITY'S COMPREHENSIVE HOUSING STRATEGY, AND SETTING FORTH RELATED DETAILS.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BOULDER, COLORADO:

Section 1. Section 9-2-13, B.R.C. 1981, is amended to read:

9-2-13 Concept Plan Review and Comment.

(a) Purpose of Concept Plan Review: The purpose of the concept plan review step is to determine a general development plan for the site, including without limitation, land uses, arrangement of uses, general circulation patterns and characteristics, methods of encouraging use of alternative transportation modes, areas of the site to be preserved from development, general architectural characteristics, any special height and view corridor limitations, environmental preservation and enhancement concepts, and other factors as needed to carry out the objectives of this title, adopted plans, and other city requirements. This step is intended to give the applicant an opportunity to solicit comments from the ~~planning board~~reviewing authority early in the development process as to whether the concept plan addresses the requirements of the city as set forth in its adopted ordinances, plans, and policies. Comments on a concept plan are not binding, but are meant to inform any subsequent site review application. A concept plan review and comment shall not relieve the applicant of the burden to seek approvals for elements of the plan that require review and approval under the Boulder Revised Code.

(b) Projects Required to Complete Concept Review and Comment: Any applicant for a development that exceeds the "Site Review Required" thresholds set forth in Paragraph 9-2-14(b)(1), B.R.C. 1981, shall complete the concept review process prior to submitting an application for site review.

(c) Application Requirements: A concept plan should be a preliminary plan for the development of a site of sufficient accuracy to be used for discussing the plan's conformance with adopted

ordinances, plans, and policies of the city. The concept plan provides the public, the city manager, and the planning board opportunity to offer input in the formative stages of the development. An application for a concept plan review and comment may be filed by a person having a demonstrable property interest in land to be included in a site review on a form provided by the manager and shall include the following:

(1) The written consent of the owners of all property to be included in the development;

(2) A context map, drawn to scale, showing the site and an area of not less than 300-foot radius around the site, including streets, zoning, general location of buildings, and parking areas of abutting properties;

(3) A scaled and dimensioned schematic drawing of the site development concept, and an area of not less than 200 feet around the site, showing:

(A) Access points and circulation patterns for all modes of transportation;

(B) Approximate locations of trails, pedestrian and bikeway connections, on-site transit amenities, and parking areas;

(C) Approximate location of major site elements, including buildings, open areas, natural features such as watercourses, wetlands, mature trees, and steep slopes; and

(D) Proposed land uses and approximate location;

(4) Architectural character sketches showing building elevations and materials; and

(5) A written statement that describes, in general, how the proposed development meets this title, city plans and policies, and addresses the following:

(A) Techniques and strategies for environmental impact avoidance, minimization, or mitigation;

(B) Techniques and strategies for practical and economically feasible travel demand management techniques, including without limitation, site design, land use, covenants, transit passes, parking restrictions, information or education materials, or programs that may reduce single-occupant vehicle trip generation to and from the site; and

(C) Proposed land uses, and if it is a development that includes residential housing type, mix, sizes, and anticipated sale prices, the percentage of affordable units to be included; special design characteristics that may be needed to assure affordability.

(d) Public Notice of Application: After receiving an application, the city manager shall provide public notification pursuant to Section 9-4-3, "Public Notice Requirements," B.R.C. 1981.

(e) Additional Information or Processes: Based on the concept plan submission, and to the extent that such requirements can be determined from the information provided by the applicant, the city manager will identify additional information or processes that may be needed prior to or concurrent with site review, such as:

(1) Variances and exceptions to existing standards necessary to achieve the defined objectives for the site, and the process and approving agency for the required changes;

(2) Processes, permits, and approvals that may be needed, including without limitation, wetland permits, floodplain permits, flood map revisions, special large water user or sanitary sewer pretreatment agreements, rezonings, or Boulder Valley Comprehensive Plan changes;

(3) Need for any further environmental studies or impact studies; and

(4) Public infrastructure improvements needed to serve the development, including without limitation, transportation improvements such as streets, alleys, transit stops, and shelters, other alternative mode facilities and connections, and acceleration and deceleration lanes, water, wastewater, and flood control.

(f) Review of and Comment on Concept Plans: Upon receipt of an application for a concept plan review, the city manager will review the submitted materials for general compliance with the requirements of this title, and prepare staff comments. The scope of staff comments will differ from application to application, at the discretion of the manager. Unless withdrawn, a concept plan shall be referred to planning board pursuant to paragraph (1) of this subsection and may be reviewed by city council pursuant to paragraph (2) of this subsection:

(1) Planning Board Review and Comment: The manager will forward the application, any comments received from neighbors and other interested persons, and any staff comments to the planning board. The planning board shall review the concept plan at a public meeting held pursuant to the provisions of Subsection 2-3-1(b), B.R.C. 1981. Planning board members may provide individual comments on the concept plan. ~~A concept plan review and comment shall not relieve the applicant of the burden required to seek approvals for elements of the plan that require review and approval under the Boulder Revised Code.~~

(2) City Council Review and Comment: Following planning board review of a concept plan, the city manager shall forward the application, any comments received from neighbors and other interested persons, any staff comments, and a summary of the planning board discussion to the city council. The city council may within thirty days of the review by the planning board vote at a regularly scheduled meeting to review and comment on the concept plan. If the city council votes to review the concept plan, the city council will review the concept plan at a public meeting within sixty days of said vote.

(g) Guidelines for Review and Comment: The following guidelines will be used to guide the planning board's discussion regarding the site. It is anticipated that issues other than those listed in this section will be identified as part of the concept plan review and comment process. The planning board may consider the following guidelines when providing comments on a concept plan:

(1) Characteristics of the site and surrounding areas, including without limitation, its location, surrounding neighborhoods, development and architecture, any known natural features of the site including without limitation, mature trees, watercourses, hills, depressions, steep slopes, and prominent views to and from the site;

(2) Community policy considerations, including without limitation, the review process and likely conformity of the proposed development with the Boulder Valley Comprehensive Plan and other ordinances, goals, policies, and plans, including without limitation, sub-community and sub-area plans;

(3) Applicable criteria, review procedures, and submission requirements for a site review;

(4) Permits that may need to be obtained and processes that may need to be completed prior to, concurrent with, or subsequent to site review approval;

(5) Opportunities and constraints in relation to the transportation system, including without limitation, access, linkage, signalization, signage, and circulation, existing transportation system capacity problems serving the requirements of the transportation master plan, possible trail links, and the possible need for a traffic or transportation study;

(6) Environmental opportunities and constraints, including without limitation, the identification of wetlands, important view corridors, floodplains, and other natural hazards, wildlife corridors, endangered and protected species and habitats, the need for further biological inventories of the site, and at what point in the process the information will be necessary;

(7) Appropriate ranges of land uses; and

(8) The appropriateness of or necessity for housing.

Section 2. Section 9-8-5, B.R.C. 1981, is amended to read:

9-8-5 Occupancy of Dwelling Units.

(a) General Occupancy Restrictions: Subject to the provisions of Chapter 10-2, "Property Maintenance Code," B.R.C. 1981, no persons except the following persons shall occupy a dwelling unit:

(1) Members of a family plus one or two roomers. The quarters that the roomers use shall not exceed one-third of the total floor area of the dwelling unit and shall not be a separate dwelling unit;

(2) Up to three persons in P, A, RR, RE, and RL zones;

(3) Up to four persons in MU, RM, RMX, RH, BT, BC, BMS, BR, DT, IS, IG, IM, and IMS zones; ~~or~~

(4) Two persons and any of their children by blood, marriage, guardianship, including foster children, or adoption; or

(5) Up to six persons that are all 62 years of age or older in RR, RE, and RL zones provided that all requirements of the federal Fair Housing Act, 42 U.S.C. §3601, et seq., as amended, and the Colorado Housing Practices Act, §24-34-501, et seq., C.R.S., as amended, with respect to housing for older persons are complied with.

(b) Accessory Dwelling Unit, Owner's Accessory Unit, or Limited Accessory Dwelling Unit: The occupancy of an accessory dwelling unit, owner's accessory unit, or limited accessory dwelling unit must meet the requirements of Subsection 9-6-3(a), B.R.C. 1981.

(c) Nonconformity: A dwelling unit that has a legally established occupancy higher than the occupancy level allowed by Subsection (a) of this section may maintain such occupancy of the dwelling unit as a nonconforming use, subject to the following:

(1) The higher occupancy level was established because of a rezoning of the property, an ordinance change affecting the property, or other city approval;

(2) The rules for continuation, restoration, and change of a nonconforming use set forth in Chapter 9-10, "Nonconformance Standards," B.R.C. 1981, and Section 9-2-15, "Use Review," B.R.C. 1981;

(3) Units with an occupancy greater than four unrelated persons shall not exceed a total occupancy of the dwelling unit of one person per bedroom; and

(4) The provisions of Chapter 10-2, "Property Maintenance Code," B.R.C. 1981.

Section 3. This ordinance is necessary to protect the public health, safety, and welfare of the residents of the city, and covers matters of local concern.

Section 4. The city council deems it appropriate that this ordinance be published by title only and orders that copies of this ordinance be made available in the office of the city clerk for public inspection and acquisition.

INTRODUCED, READ ON FIRST READING, AND ORDERED PUBLISHED BY TITLE ONLY this ____ day of _____, 20__.

_____
Mayor

Attest:

_____
City Clerk

READ ON SECOND READING, PASSED, ADOPTED, AND ORDERED PUBLISHED BY TITLE ONLY this _____ day of _____, 20__.

_____
Mayor

Attest:

_____
City Clerk

ATTACHMENT B

Comprehensive Housing Strategy "Early Wins"

A central tenet of the CHS initiative is to embrace the need for ongoing attention and action related to Boulder's affordable housing challenges. To that end, Council requested that staff identify and propose some "early wins" that could help improve conditions even as more significant policy work is undertaken in the coming months and year.

Evaluation criteria used to identify potential early wins included:

1) Meets one or more of the three project focus area subjects:
   a) strengthening the city's affordable housing programs for low- and moderate-income households;
   b) expanding housing opportunities for middle-income households;
   c) exploring innovative approaches to providing additional housing and a broader range of housing options;
2) Generally consistent with existing polices or existing conditions (i.e., it helps improve application of existing policies, rather than represent a significant departure);
3) Can be accommodated in the existing work plan with existing resources (i.e., the scope is fairly narrow, and can be kept so, so that the "win" can be achieved in the near-term); and
4) The specifics of the issue are largely known (i.e., does not require extensive research or data analysis).

Following is a summary of the potential early wins, including a brief description, required resources to accomplish it and estimates on timing. Currently, staff is preparing potential code amendments related to open space and parking and does not have capacity to address all of the following immediately. ***Staff proposes to bundle the first three items for Council consideration in August/September. The final three items will begin immediately after Council action on the first three.***

1. <u>Right-of-way (ROW) and density calculation ordinance</u>

What is it? In areas of the city subject to adopted area plans or transportation network plans, the city has identified new public streets and connections needed to realize more gridded, interconnected neighborhoods where present conditions are more large lot and suburban. These connections are typically obtained through redevelopment of sites through the Site Review process. Under current land use code restrictions, the number of dwelling units allowed is calculated after ROW dedications are subtracted from the land area of sites, which reduces the number of overall units. This scenario in some cases significantly reduces the number of units to the extent that redevelopment becomes less feasible due to multiple dedications, and creates situations in which two community benefits (desired new housing units, and improved connectivity) are placed in competition with each other. The modification will allow calculation of the gross site area prior to dedication in determining the maximum number of units that might be achieved through the Site Review process. Importantly, the Site Review criteria and other regulatory controls that ensure context sensitive outcomes would remain in place (e.g., setbacks, height controls, BVCP land use densities, etc.). This code change would, however, remove an impediment to achieving housing densities in areas of redevelopment.

Where applied? Areas where there are adopted area and transportation network plans.

Required resources? Accomplished within existing city resources.

Estimates on timing: Planning Board approval on May 1; Council 1st reading on May 20; Planning Board reconsideration on August 5; Council 2nd reading on September 2.

Issues: Planning Board expressed a desire to also look at how open space requirements are used to control housing density as part of a future code update effort. This issue has also been identified by staff previously, but is seen as a more substantial work effort.

2. Council call-up of Concept Review applications

What is it? At the 2014 retreat, City Council indicated a desire to help shape key projects early in the process. This would allow City Council to weigh in early on Concept Reviews (after Planning Board review and comment) as a method to inform the design and configuration of large scale, complicated proposals and help property owners gain a higher level of confidence in determining whether their proposals are consistent with city goals and policies. The land use code could be revised to require all Concept Plans to be subject to City Council call up.

Where applied? In the near term, specific projects could include 2100 30th St., the car dealership between Pearl and Walnut, where a Concept Plan has been submitted proposing re-zoning from BR-1 to MU-4 to provide a greater number of residential units; and the Hogan Pancost property near the East Boulder Community Center, for which the owner is expected to submit a new Concept Plan in the coming months. Required resources? Accomplished within existing city resources.

Estimates on timing: Planning Board consideration on August 5; Council 1st reading on August 19; Council 2nd reading on September 2.

Issues: Would potentially increase Council and staff work load and number of applications for City Council to consider, with additional memorandums and presentations to City Council for those proposals that are actually called up.

3. Senior housing in single family neighborhoods

What is it? The number of seniors is expected to double between now and 2028 to approximately 30,000. In partial response to this trend, senior advocates have identified a need for a housing model that allows multiple, unrelated seniors to share a single family home in a single family neighborhood. The idea is for six to eight older adults to share a large house, companionship, and living costs. A concierge service could provide many basic needs, but one model includes a live-in caregiver as one of the six to eight residents.

Where applied? To be determined.

Required resources? May require additional city resources.

Estimates on timing: Planning Board consideration on August 5; Council 1st reading on August 19; Council 2nd reading on September 2.

Issues: Although a process exists currently to raise the occupancy limits for group home facilities, this type of use requires custodial care and treatment in a protective living environment to the handicapped or aged person (60 years or older). Options to allow seniors to share a single-family home include exempting seniors (65 years or older) from occupancy limits or creating conditional use criteria specifically for this

situation. Additional legal and policy analysis is required to ensure compliance with state and federal fair housing laws.

4. 1-to-1 unit replacement ordinance for 100% permanently affordable

What is it? Many affordable housing developments in Boulder were built prior to existing zoning districts. As a result, these developments have more residential dwelling units than the current zoning districts allow. There are an estimated 21 affected projects that are unable to rebuild to the number of units currently existing on the site. In order to retain the total number of units in these developments, nonprofit organizations have been incrementally rehabbing these properties, with funding assistance from the city's Division of Housing in the form of CDBG, HOME and Affordable Housing funds. The incremental approach is often more expensive than demolishing the existing buildings and developing new projects. Boulder Housing Partners owns the majority of affected properties, but Thistle and Boulder Housing Coalition also have properties.

Where applied? The ordinance would apply only to existing affordable properties that are nonconforming.

Required resources? Accomplished within existing city resources.

Estimates on timing: Council consideration in Fall 2014.

Issues: None identified.

5. Targeted fix to ADU/OAU

What is it? The intent of the Accessory Dwelling Unit (ADU)/Owner's Accessory Unit (OAU) ordinance was to enable the cost-effective and efficient use of existing single family homes in Boulder. In particular it was hoped that ADU's would offer supplemental income and possibly services to older residents and to single parent households, allowing them to stay in their homes. The resulting units are small, inherently more affordable due to size, and provide additional housing choice and opportunity within existing single family neighborhoods, though typically only attractive or available to one or two person households.

Where applied? To be determined.

Required resources? Depending on the scale of the project, may require additional city resources.

Estimates on timing: Council consideration in Winter 2014-2015.

Issues: ADUs and OAUs have a long and complicated history in Boulder that will be documented as part of developing the strategy. The existing ordinance has numerous restrictions on the construction of ADUs. An early win would involve repealing one or more of the current restrictions to encourage this housing type. Of the existing barriers, three that could be accomplished within existing resources are removing the concentration restrictions (no more than 10% ADUs in a specified area), removing the parking requirement, and the neighborhood notice requirement. Currently, there are six people on the waiting list to build and ADU/OAU, but are restricted by the concentration restriction. Parking is a common concern, but providing an off-street parking space is a significant barrier considering that the occupancy limits for unrelated people are the same for a home with or without an ADU/OAU. Finally, the requirement for notice creates expectations with neighbors that it is a discretionary review process when it is not. ADU/OAUs are allowed

by right.

6. Targeted fix to Cooperative Housing

What is it? A housing cooperative (or coop) is a community of unrelated people who share a dwelling and operate as a single housekeeping unit. Coop members usually pool resources to purchase food together and jointly pay for other household expenses. Frequent shared group meals and an explicit system facilitating the division of household responsibilities are also common. Coops usually hold regularly scheduled house meetings where decisions affecting the entire household are made, and members are held accountable for their responsibilities to the community. Coops frequently use consensus or other egalitarian decision making processes. Cooperative households typically need to have 10 or more members to function.

Where applied? To be determined.

Required resources? Depending on the scale of the project, may require additional city resources.

Estimates on timing: Council consideration in Winter 2014-2015.

Issues: Currently, Cooperative Housing is a conditional land use and the current ordinance has not produced any coops since its creation. An early win could remove one or more of the requirements in the ordinance. For example, the current ordinance only applies to homeownership cooperatives, requires a minimum of 300 square feet of habitable space per resident, requires that every coop member have an EcoPass, limits occupancy to 6 unrelated residents, requires off-street parking, and may revoke the permit for a noise or weed violation. Another option is to remove one or more of the above restrictions only for cooperative housing that is wholly owned by its residents and/or a non-profit, such as the Boulder Housing Coalition.

THE HIGHLAND GROUP

July 12, 2014

via email to: Jay Sugnet <sugnetj@bouldercolorado.gov>; David Driskell <DriskellD@bouldercolorado.gov>
Karl Guiler <Guilerk@bouldercolorado.gov>; Crystal Launder <LaunderC@bouldercolorado.gov>

Dear Jay, David, Karl, and Crystal:

I'm writing to provide some of my thoughts about changes to zoning rules governing the number of unrelated adults who may share single-family homes. I greatly appreciate that you are examining potential changes to these rules, and that you are starting with consideration of increasing the numbers of older persons who may share homes.

I've been a professional working with and for seniors in Boulder and statewide since I moved to Boulder in 1978, both in the public and private sectors. When I arrived here, I was a young person of 28. Of course, 36 years later, I find I have aged into a 60+ resident of Boulder – someone who intends to remain in Boulder the rest of my life and wants to have a range of affordable, sustainable choices for myself and my age peers. As a result, my comments come both from my professional experience, as well as my personal wishes as a citizen.

First, I do believe it is critically important to increase the variety and flexibility of the housing stock overall in Boulder. Shared housing is only one approach to doing that, but it is an important and zero-cost approach that does not require new development or expenditure of city housing funds to promote affordability. There have already been major household formation shifts occurring over the past 10+ years due to economic conditions, high housing costs, and increased numbers of single-person housholds. Add to that the huge numbers of boomers passing age 60 in Boulder, there is and will increasingly be a mismatch between the sizes and types of households and the housing stock available in our community. The 15,000+ boomers who have aged here in Boulder, as I have, will not all want to or be able to remain by ourselves in our single-family homes. Personally, when my last child leaves home in two years, I will be alone in a 2,840 square foot house, and I see no sense in continuing to live that way.

As you work to restructure rules about shared homes, I want to suggest that you not set a fixed limit on the number of people who may occupy a home, but rather let the number of occupants be flexible and related to the capacity of the home. To ensure there is no negative impact to neighborhhods, certainly, there are already in place and could be additional, reasonable limits on the amount of square footage or bathrooms per person, parking spaces and the number of automobiles. **The other parameter I want to suggest is that you use HUD's official, Fair Housing-defined age 55+ for the age threshold, rather than using the HUD-defined 62+ or an arbitrary age 65+.** The HUD 55+ definition is used by all for-sale new home communities that are age-restricted, for good reason. Many people in their late 50s in Boulder are now empty-nesters, many of them currently single. (I ran a demographic report [attached to this email] and see that *an estimated 30% of owner-occupied households just between ages 55 and 64 in Boulder live alone)*. These households have the same potential benefits to gain from sharing homes as those 65+ would, and, beginning to share housing, transportation and support services costs sooner rather than later preserves that a person's income for savings/retirement, and, eventually, expensive care services toward the end of life. What could possibly be the rationale for requiring people arbitrarily to wait til 65, if home sharing is a good option for them at 56 or 61?

Boulder Steel Yards 3020 Carbon Place Suite 202, Boulder, CO 80301 Telephone 720.565.0966 Fax 720.294.9663 www.thehighlandgroupinc.com

Certainly, home sharing isn't for everyone and only a small minority of Boulder's older residents will choose to share a home for affordability, companionship, and mutual support. We are an independent lot, for sure. In that regard, this zoning change should not constitute a threat of any magnitude. That said, home sharing is a very attractive option for some people, particularly in our baby boomer generation. Unlike our parents' generation, many of us lived in group-type situations when we were in college or in our 20s and are not only comfortable with the concept, but are drawn to it.

In the largest sense, I believe it is important for the city to look at housing as a community issue, as you are doing. It isn't just about the individual needs and preferences of each person. Sustainability for older residents of Boulder requires broad thinking that considers housing in connection with transportation, social, and service needs. There are opportunities to greatly impact sustainability by considering other community and individual costs and needs that are related to where and how people live. Sustainability includes:

1. **Housing and related costs** - The cost of the housing itself, other significant housing-related costs like utilities, insurance, taxes, and maintenance services for smaller and recurring items, as well as major items (appliances, roofing, etc.).

2. **Transportation** becomes increasingly problematic as people age. There is the cost involved in owning a car, combined with declining interest in and ability to drive. The cost involved in one or two residents of a shared home using their personal cars to drive themselves and other residents when needed is a small fraction of the cost required to support specialized door-to-door transportation, such as that provided by Via. And, transportation needs will most certainly increase dramatically in Boulder as many baby boomers begin to pass age 75 in 10 years.

3. **Support and care services -** A number of credible reports document that 80% of the care and supportive services needed by older persons has been provided informally, primarily by spouses and other family, with only 20% of care and support services provided to older persons paid out-of-pocket or by government services or charitable agencies. With demographic trends showing growing numbers of single older person housholds, combined with fewer adult children per boomer household, going forward, fewer family members will be available to provide support services and care to aging residents of Boulder, including transportation, help with grocery shopping, home maintenance, house cleaning, and later, help with personal care tasks. One of the greatest and most financially-valuable benefits of home sharing is exactly this – persons living together who choose to and are able to provide mutual support at no cost.

In closing, I would like to offer any of the resources of our office as you work to construct a good approach to zoning rules for shared housing. We have a vast library of material relative to 55+ housing, including national and Colorado research, housing trend reports and publications, housing/aging data from the US. Census, automobile use data, and subscriptions to several demographics services.

I would be happy to discuss any of the content of this letter, any questions or information needs you may have, and provide other assistance. I will be out of town this coming week, (July 14-17) and can respond after that time.

Sincerely,

Elisabeth Borden
Principal

ssarchitects

July 14, 2014

By email to: David Driskell DriskellD@bouldercolorado.gov>; Karl Guiler Guilerk@bouldercolorado.gov
Boulder Planning Board boulderplanningboard@bouldercolorado.gov

Dear David, Karl and Members of the Planning Board,

I am writing to share my thoughts about the Senior Occupancy standards. These standards are being prepared by Staff for your review as part of the zoning modifications proposed relating to the number of unrelated adults who may share a single-family home. This policy clearly has the potential of being an ***early win*** in your Comprehensive Housing Strategy as the "grey tsunami " approaches. As a 60+ individual, I am very concerned about providing affordable housing options at all levels for our senior population. Cooperative Housing for seniors is an important component of this plan.

As staff prepares these proposed zoning changes I would like to strongly suggest that you use HUD's official Fair Housing-defined age of 55+ for the age threshold rather than an arbitrary age of 65+. It is the standard for the age restricted *for-sale* new home communities. Creating a new and arbitrary standard simply adds to confusion and perhaps could even be deemed discriminatory to the population between 55 -64 years old. I don't anticipate Senior Cooperative housing in Boulder to be a large segment of our seniors housing but feel it is important to provide as many options to seniors as possible.

And finally, must we arbitrarily limit to 6 people occupying a cooperative? In my review of the data, a successful cooperative needs at least 8-10 members for a cooperative to work financially. Artificially limiting it to 6 members doesn't recognize the size of the property and only harms the sustainability and affordability of shared housing.

So when you review rezoning changes to our zoning code, please consider implementing these two important details into the Senior Occupancy proposal to make this zoning change a truly *early win* success.

Thank you for your consideration.

Sincerely,

STEPHEN SPARN ARCHITECTS, PC

Stephen Sparn
Principal Architect

Stephen Sparn Architects, PC 1731 Fifteenth Street, Suite 250 Boulder, Colorado 80302 T: 303/442-4422 // www.sparn.com

Guiler, Karl

From: Ferro, Charles
Sent: Tuesday, July 15, 2014 12:28 PM
To: Guiler, Karl
Subject: FW: Senior Occupancy Limits

Follow Up Flag: Follow up
Flag Status: Flagged

From: Morgan McMillan [mailto:morganrogersmcmillan@gmail.com]
Sent: Tuesday, July 15, 2014 10:37 AM
To: boulderplanningboard
Subject: Senior Occupancy Limits

Hello Planning Board:

Thank you for your careful consideration of the current occupancy limits regarding seniors. I urge you to get rid of the occupancy limits for people 55+ in the City of Boulder.

55 years is the age used by HUD for senior affordable housing - it seems unnecessary to create a different standard for our community. And I wonder what we're afraid of if we get rid of the limits entirely? Raging keggers in a house with 7-8 older adults, as opposed to 6?

In all seriousness, we should encourage affordable co-housing opportunities through lowering barriers and then monitor potential negative impacts on the community - rather than limiting options from the outset. With a rapidly aging population, we need to expand choices for older adults - including re-use of current housing stock. Removing the occupancy limits for 55+ in Boulder is a good strategy to implement.

Thank you for your time and leadership,
Morgan Rogers McMillan
3445 Martin Dr. Boulder 80305

Guiler, Karl

From: Neshama Abraham [neshama@abrahampaiss.com]
Sent: Wednesday, July 16, 2014 4:51 PM
To: Launder, Crystal
Cc: Sugnet, Jay; Guiler, Karl
Subject: Crystal - Boulder pilot shared senior home re new ordinance

Importance: High

Hi Crystal,
Thank you for speaking last week. As City staff writing the updated occupancy ordinance, we wanted to provide you, Jay and Karl with a real-life example of why eliminating the occupancy level in single family zones for senior housing is important to Boulder's future. Since the residents and elected officials of Boulder have made sustainability and affordable housing a very high priority, it makes sense to craft a new occupancy ordinance which supports those overarching City goals.

Occupancy Limit re Boulder pilot
We have spoken with a Boulder senior homeowner who has a 23,500 square ft lot behind her home that she would like to develop as a shared home for a group of seniors. According to the floor area ratio (FAR) calculator on the City website, it would be possible to build up to a 5,800 square foot home on the property. The elder homeowner envisions a single family home which includes a number of "master suites" with room for a bedroom and sitting area plus a private handicapped accessible bathroom, and a couple of smaller bedrooms with a shared bath.

If occupancy limits are created that only allow for six (6) unrelated people to live on that property, then the individual purchase price puts this way out of the range of most seniors. However, if she is allowed to build this home to accommodate 10 bedrooms (eight - 400 sq. ft. suites and two - 300 sq. ft. rooms with shared bath) along with about 1,500 sq. ft. of shared space including kitchen, dining, multi-purpose room and bathroom, then a purchase price of $175,000 - $275,000 per bedroom becomes possible. This enables a critical mass of elders to share a more affordable home where they can age in community and bring in the services they may need as they age.

Anecdotal data among occupants of shared co-operative homes across the U.S. gives 10 as a base number or "floor" for what makes for a successful house community. The six limit you are proposing is too restrictive, both from the perspective of sharing finances and to ensure house tasks are fairly distributed. We'd be happy to provide occupancy research if you'd like more info.

Parking
This specific Boulder property only requires one off street parking space but it would be the owner's intention to provide up to three spaces to accommodate resident parking. We understand that neighbors are often concerned about the amount of parking that may be generated by the construction or renovation of higher occupancy shared homes. We offer several suggestions below that may be able to address parking issues.

1. Allow a maximum of 1-2 on-street parking spaces with additional spaces requiring a parking permit, as is done in other neighborhoods.
2. Provide at least 2 off-street parking spaces for homes in single family zones.
3. Offer car sharing for house residents as a green point credit to encourage a house membership in a car-sharing service and the placement of a shared car easily accessible from the home.

As 18-year residents of the Nomad Cohousing Community, an 11-unit neighborhood on a 1-acre in North

Boulder, we know first hand the benefits of a community-focused lifestyle. Because of our close proximity to one another and the ongoing interactions proximity encourages, residents often share resources such as cars, lawn maintenance equipment and tools. We anticipate that elders living in a home together are likely to share cars which will further lesson the need for parking impact. In addition, the affordable senior house we are describing is intended to be the last home for the elder residents. As the residents age, they will naturally drive less and the need for parking will only diminish over time.

55 and Over

We also wish to encourage the new housing ordinance for senior housing to apply to elders age 55 and above. Age 55 is HUD's standard number for Fair Housing law and age 55 is the basis for the **The Housing for Older Persons Act of 1995**. We suggest the City use HUD's definition of "senior" which will open up the opportunity for shared homes to a larger population of Boulder's older adults who are ready to live with other active seniors and make this affordable senior housing option available to as many people as possible. Plus, lowering the age will make better use of our housing stock as a number of seniors in the 55 to 64 age range we have spoken with wish to pursue this lifestyle.

We hope that our providing you with a real example of a pilot senior shared home that would not be economically feasible under the proposed six- person limit is helpful as you craft the new ordinance. As the population of Boulder ages we are being required to adjust our regulations to meet these needs to create more sustainability and affordability. Eliminating the City occupancy limit for unrelated seniors and applying the HUD definition of seniors are two important steps in the right direction.

Thank you very much for your thoughtful work on the senior housing issue.
Neshama

Neshama Abraham, President & CEO,
Abraham Paiss & Associates, Inc.

ABRAHAM PAISS
& ASSOCIATES
Supporting Sustainable Solutions

Marketing Communications since 1996
1460 Quince Ave. #102 • Boulder, CO USA 80304
303.413.8066 • neshama@abrahampaiss.com

Guiler, Karl

From: Sugnet, Jay
Sent: Tuesday, July 22, 2014 8:52 AM
To: Guiler, Karl
Subject: FW: Home Sharing is going viral....
Attachments: A shorter Definition of Aging in Place.docx

For you report...

From: Ellen Taxman [mailto:ellentaxman@gmail.com]
Sent: Friday, July 18, 2014 12:43 PM
To: Sugnet, Jay
Subject: Re: Home Sharing is going viral....

Your back!!! I hope you had a wonderful and restful vacation.

I would very much appreciate 20-30 min. of your time to go over the AAC's thoughts on increasing the occupancy limit to 6. For the most part, we are on board. We just have a few concerns before we totally sign off on it.
Do you have anytime next week to meet to let me go over a few points with you? I promise it won't take too long.
I also am attaching a definition of Aging in Place/Community that we would like to provide to the City Council members and the Planning Board so that they understand what that term actually means. At the last study session, I heard the council members fumbling around with what they thought it meant and I thought it might be helpful to know what it actually means.

Let me know. I could meet early Wed. morning if that would work for you?
Ellen

On Fri, Jul 18, 2014 at 12:24 PM, Sugnet, Jay <SugnetJ@bouldercolorado.gov> wrote:

Thanks Ellen for sharing.

Jay

Definition of Aging in Place

The term has come to mean more than just the adaptation of an environment to accommodate the changing needs of people as they grow older. This can include physical adaptations to the home that help maintain independence, mobility and a healthy life style, designed to maintain independence, dignity and an enhanced quality of life.

The concept of aging in place has also been broadened to include aging within the community, recognizing the importance of social connections and established individual support systems as well as provided services. Their community provides a supportive and familiar context which helps individuals maintain their emotional and social connections as their needs change and they become more dependent on others.

Thus the individual's home and the wider community both have an interdependent role to play in the concept of successful aging in place.

AAC Housing Subcommittee Recommendations on Increasing Occupancy Limit to 6:

On behalf of the AAC, we would like to recommend that the current occupancy limit of 3-4 unrelated individuals living in a single family housing dwelling, be increased to 6 for elders ages 55 and older to accommodate the following living situations:
Shared Housing

Shared Housing is an newer socially acceptable and desirable living arrangement in which several unrelated individuals or couples choose to cohabitate in a single family house as a means to share resources and live more financially securely and affordably.

Arguments in support this type of living arrangement:

- ✓ Shared housing is one of a number of innovative uses communities across the country are considering to make efficient use of the existing housing stock.
- ✓ Allows for elders to stay in their community.
- ✓ Provides an affordable living option for elders.
- ✓ Creates a supportive environment for elders to age in place/community
- ✓ This living arrangement provides an alternative option to moving into an assisted living facility assuming supportive living arrangements by others are part of the shared living experience.
- ✓ Shared housing helps to address the lack of moderate to middle income housing for the elder population.
- ✓ Uses existing housing stock and resources to house elders.
- ✓ Shared services under "one roof" allows for efficiency and cost savings as well as cuts down on the number of trips to provide services to several households around town.

Other important considerations that need to be addressed:

- ✓ If the code reads 6 unrelated individuals living in a house that has 4 bedrooms, could 4 couples (units) live together?
- ✓ Will you there be restrictions on the sq. ft/bedroom unit/person or couple?
- ✓ Will you put in place special considerations for increasing the number to say 7 or 8 where the housing arrangement allows for live-in help?
- ✓ Will there be some flexibility or loosening of the codes to allow for shared home to be modified in order to make it more accessible?

We would support a higher number than six, but think six is a good starting point for these reasons:
- It would allow for a six bedroom house
- It would allow for a five bedroom house and converted den
- It would allow for a four bedroom house with at least two rooms being shared by two unrelated couples
- It would allow for a three bedroom house with three unrelated couples

AARP Public Policy Institute

What Is Livable? Community Preferences of Older Adults

Rodney Harrell
Jana Lynott
Shannon Guzman
AARP Public Policy Institute

Cheryl Lampkin
AARP Research

Research Report

AARP
Real Possibilities

What Is Livable? Community Preferences of Older Adults

Rodney Harrell

Jana Lynott

Shannon Guzman

AARP Public Policy Institute

Cheryl Lampkin

AARP Research

AARP's Public Policy Institute informs and stimulates public debate on the issues we face as we age. Through research, analysis, and dialogue with the nation's leading experts, PPI promotes development of sound, creative policies to address our common need for economic security, health care, and quality of life.

The views expressed herein are for information, debate, and discussion and do not necessarily represent official policies of AARP.

2014-01
April 2014
©2014, AARP
Reprinting with permission only

AARP Public Policy Institute
601 E Street, NW, Washington, DC 20049
http://www.aarp.org/ppi

Table of Contents

Executive Summary **1**

Key Findings **2**

Introduction **3**

Livability Index Focus Groups and National Survey Results **4**

Overview of Methodology 4

Survey and Interview Highlights 4

Varying Importance of Livability Goals 4

Aging in Place 7

Personal Safety 9

Demographics, Local Actions, and Livability 10

Drivers and Nondrivers 11

Households with People with Disabilities 13

Household Income 14

Housing 15

Proximity 17

Community Cohesiveness and Livability 20

Disincentives or Features with Negative Effects 21

Lessons for Measuring Livability **24**

Conclusion **26**

Appendixes **27**

Appendix A. Preferences 27

Appendix B. Project Design 29

Appendix C. Rankings of Housing Policies, Local Actions, and Population Segments 34

Appendix D. Summary of Livable Communities Index Qualitative Data Collection—In-Depth Interviews 37

Appendix E. Additional Community Preference Survey Data Results 38

List of Boxes

Box 1. Survey Population Segments 5

List of Figures

Figure 1. Have you thought about being able to live in your community as you age? 7
Figure 2. Do you want to live in your current community as you age? 8
Figure 3. Do you plan on moving in the next three years? 8
Figure 4. Do you feel safe in your community? 9
Figure 5. Is your neighborhood pedestrian-friendly? 10
Figure 6. Where do you connect and meet with fellow community members? (Race and Ethnicity) 11
Figure 7. Where do you connect and meet with fellow community members? (General Population) 12
Figure 8. How much does being able to participate in local government's decision-making process influence your decision to move to a community? (Disabilities and Caregivers) 15
Figure 9. What types of homes are available in your community? 16
Figure 10. What community amenities do you want close to home? 17
Figure 11. What is the preferred maximum distance to medical facilities? 19
Figure 12. By gender, who prefers a maximum distance of ¼ mile to local retail? 19
Figure 13. By race and ethnicity, who prefers a maximum distance of ¼ mile to local retail 20
Figure 14. How important is community cohesiveness in making decisions about where to live? 21
Figure 15. What activities would prevent you from moving into a community? 22
Figure 16. Does income impact decisions to move to a community because of perceived neighborhood "nuisances"? 23
Figure A.1. Conceptual Framework 27
Figure E.1. By age, how much does being able to participate in the local government decision-making process influence your decision to move to a community? 38
Figure E.2.a. How much does the reputation of the local government or politics influence your decision to live in a community? (By age) 39
Figure E.2.b. How much does the reputation of the local government or politics influence your decision to live in a community? (By households with people with disabilities) 39

Figure E.3.a. By gender, who prefers a maximum distance of ¼ mile to local retail?....40

Figure E.3.b. By gender, who prefers a maximum distance of ½ mile to local retail?....40

Figure E.4.a. By race and ethnicity, who prefers a maximum distance of ¼ mile to local retail?....41

Figure E.4.b. By race and ethnicity, who prefers a maximum distance of ½ mile to local retail?....41

Figure E.5.a. By age, who prefers a maximum distance of ¼ mile to local retail?....42

Figure E.5.b. By age, who prefers a maximum distance of ½ mile to local retail? 42

Figure E.6.a. Would perceived neighborhood "nuisances" prevent you from moving into a community? (Drivers)....43

Figure E.6.b. Would perceived neighborhood "nuisances" prevent you from moving into a community? (Metro area) 43

List of Tables

Table 1. Ranking of Local Actions—General Public....6

Table 2. Ranking of Local Actions—Drivers and Nondrivers....12

Table 3. Ranking of Local Actions—Households with People with Disabilities and Family Caregivers....14

Table 4. Ranking of Local Actions—Homeowners and Renters....16

Table B.1. Sample Demographics....32

Table C.1. Ranking of Housing Policy Priorities by Income Level....34

Table C.2.a. Ranking of Local Actions—General Public, Plus Race or Ethnicity....34

Table C.2.b. Ranking of Local Actions—General Public, Plus Household Income....35

Table C.2.c. Ranking of Local Actions—Nearby Seekers and Non-Nearby Seekers....36

Executive Summary

What do we mean by the phrase "a livable community for all ages"? To answer that question, the AARP Public Policy Institute (PPI) is preparing a set of livability reports. Initially, PPI has prepared two companion reports: "Is This a Good Place to Live? Measuring Community Quality of Life for All Ages" and "What Is Livable? Community Preferences of Older Adults." The latter, which is this report, explores the meaning of livability and describes lessons learned by PPI as part of its work to measure community livability. The goal of this work is to quantify the degree to which a community has the elements that are necessary to meet individual needs regardless of a person's age, income, physical ability, ethnicity, and other factors.

Several approaches exist for measuring livability, including preference surveys, original data collection, multimethod case studies, Census Bureau studies, and online databases. Each of those methods is useful for investigating some part of community livability, but each methodology faces certain challenges. None can provide all of the data necessary to measure every element of a livable community. Researchers must understand that individuals perceive things different from one another, and blanket assumptions can be dangerous. Additionally, the preferences that people share tell only part of the story. More investigation is needed.

Thus, PPI is developing an AARP-sponsored, web-based index to measure community livability across the United States for people of all ages. Work on that initiative included focus groups and a nationwide community livability survey of more than 4,500 older adults. The focus groups and survey were specifically designed to investigate the diverse needs and wants of the older adult population and to support the development of an index to measure livability as we age. The design increased both the understanding of general preferences for livability and an understanding of how preferences differ within the general population of older adults.

Key Findings

To begin the process of developing this type of index, the staff of the AARP Public Policy Institute (PPI) developed a multipart study to understand preferences of the population ages 50 and over in general, as well as preferences among various subgroups.

- General findings about the population ages 50 and older:
  - Most members of the 50+ population want to age in their homes and communities.
  - The importance of proximity to community elements varies greatly.
  - Household income influences thoughts about the importance of local government spending priorities.
  - Increasing police presence and improving schools are key government services for most of the older adult population, but different groups rank other local actions in widely varying ways.
- Findings for subgroups within the population ages 50 and older:
  - There are modest racial and ethnic differences in priorities, but there are great differences in the places where different groups connect with community members.
  - Personal safety is more of a concern for family caregivers, for people with disabilities, for nondrivers, and for people with lower incomes.
  - Most nondrivers say they live in communities that are already pedestrian-friendly.
  - Specialized transportation and local government decision-making processes are important issues for people with disabilities and for family caregivers.
  - For renters, funding for affordable housing programs is the most important local government investment.

Research findings provided several lessons for developing a livability index:

- Individual definitions of "livability" can include issue areas that may or may not be addressed by public policy.
- People and communities have differing perspectives: one type of community does not fit all.
- Perceptions of a livable community are made when choosing housing, and they may not change as the person ages, unless a major life change forces a new perspective.

From the lessons learned, several implications evolve for an index that aims to measure livability. Those lessons will be applied to the development of AARP's index, and they may be useful for any attempt to measure or understand community livability. This document's companion report, "Is This a Good Place to Live? Measuring Community Quality of Life for All Ages," details lessons for measuring livability.

Introduction

What is a "livable community"? That simple question has a surprisingly complex range of answers. People may look to their communities to fulfill their desire for affordability; choice of a particular type of home or neighborhood; safety; access to schools, jobs, shopping, recreation, and other amenities; and attractiveness. AARP has developed the following definition:

> *A livable community is one that is safe and secure, has affordable and appropriate housing and transportation options, and has supportive community features and services. Once in place, those resources enhance personal independence; allow residents to age in place; and foster residents' engagement in the community's civic, economic, and social life.*[1]

The definition describes communities that support the needs of all residents, regardless of age, physical ability, income, cultural background, race, or other factors. In many ways, it is an aspirational goal of communities to become as "livable" as they can. AARP conducted focus groups and a national survey to investigate individual preferences for community livability with two main goals. The first goal was to understand the general preferences for community livability for people ages 50 and older, and the second was to understand how those preferences differed *within* the diverse population of people ages 50 and older.

[1] "Livable Communities," in *The Policy Book: AARP Public Policies, 2013–2014* (Washington, DC: AARP, 2013).

Livability Index Focus Groups and National Survey Results

Overview of Methodology

To capture preferences accurately and to improve understanding of what a livability index should reflect, the AARP Public Policy Institute (PPI) developed and implemented a multipart study to examine the preferences of the population ages 50 and older, with a focus on the diverse needs of different types of people within that group. The methodology for understanding preferences and needs included three phases:

- The initial phase, conducted in December 2011, was a qualitative study in the form of focus groups.
- Results from the focus group informed a quantitative survey instrument, fielded by GfK (Knowledge Networks) between September 2012 and January 2013. That 20-minute survey was conducted using GfK's KnowledgePanel®, a probability-based web panel designed to be representative of the United States. As part of that effort, PPI surveyed more than 4,500 people ages 50 and older through a series of questions related to their preferred community characteristics. The large sample size enabled PPI to oversample certain underrepresented populations, such as nondrivers, racial and ethnic minority groups, households with people with disabilities (including people with disabilities, people who live with people with disabilities, and family caregivers), and people living in low-income households.[2]
- The final phase of the data collection included 80 in-depth interviews with participants from the quantitative survey.

Survey and Interview Highlights

The surveys and interviews contributed greatly to our understanding of how people ages 50 and older perceived livability. (See box 1 for "Survey Population Segments.") Some livability concerns and preferences are broadly shared, whereas others are more important to particular segments of the population. Key findings are reported next.

Varying Importance of Livability Goals

Survey participants were asked to select 5 out of 10 local actions and to rank them in order of importance. The issues and services listed were displayed randomly and are listed in table 1 in order of preference by the national group.

---

[2] *People with disabilities* is defined as those who use a mobility device to get around or those who receive help with personal care activities. *Family caregivers* is defined as those who help someone who lives in their home with personal care activities (the caregiver may or may not be a relative). Although people with disabilities and family caregivers are distinct groups, they have been combined in our sample. When viewed together, they provide an understanding of the preferences of households that contain people with disabilities. Because the respondents in those categories were grouped together, results should be interpreted as reflecting the wants and needs of the households containing people with a disability, not either group of individuals.

Box 1. Survey Population Segments

Proximity to Amenities

- Nearby seekers*
- Non-nearby seekers**

Household Income

- People in households with incomes
  - Under $30,000
  - $30,000−50,000
  - $50,000−75,000
  - Over $75,000

Gender

- Male
- Female

Age

- 50−64
- 65 and older

Metro Status

- Metro area
- Nonmetro area

Housing Tenure

- Homeowners
- Renters

Driving Status

- Drivers
- Nondrivers

Disability/Family Caregiver

- Households with people with disabilities/family caregivers
- Households without people with disabilities/ family caregivers

Race

- White
- African American
- Hispanic/Latino
- Asian

Source: Data from the unpublished information in "AARP Community Livability Preference Survey," Washington, DC, January 2013.

* People with a preference for nearby amenities.

** People without a preference for nearby amenities.

Table 1. Ranking of Local Actions—General Public

Actions	General Public
Increase police presence.	1
Improve schools.	2
Make streets pedestrian-friendly.	3
Provide transportation services for seniors and people with disabilities.	4
Build or upgrade parks.	5
Implement or increase funding for affordable housing programs.	6
Add more buses, light rail, or subway systems.	7
Implement or increase funding for home modifications for people with disabilities.	8
Invest in or build libraries.	9
Build more stores and shops.	10

Source: Data from the unpublished information in "AARP Community Livability Preference Survey," Washington, DC, January 2013.
Sample: Probability-based 50+ population (*n* = 893).

Overall, survey responses showed that "increase police presence" and "improve schools" ranked number one and number two, respectively—safe communities and good schools may be signals of a generally "good" community. Ensuring that streets are pedestrian-friendly ranked third, and providing specialized transportation ranked fourth.

As the earlier focus groups indicated, some similarities and differences existed among population groups. Appendix C identifies several segments of the population and how they ranked each of the factors.

The population segments in box 1 were applied throughout the survey, thereby allowing investigation of differences in perceptions of livability. Table 1 shows the general public's ranking of the top 10 issues considered most important when seeking livability. (In appendix C, see table C.1 for a ranking of housing policy priorities by income groups, as well as tables C.2.a–C.2.c for rankings of the 10 local actions by various groups.) Some actions were important across the board—for instance, increasing police presence and improving schools were important for almost every group. Even there, differences appeared among groups—both were in the top three for every group except for those making less than $30,000. Among the group with the lowest incomes, the top three priorities were increasing police presence, providing transportation services, and improving programs that would increase affordable housing.

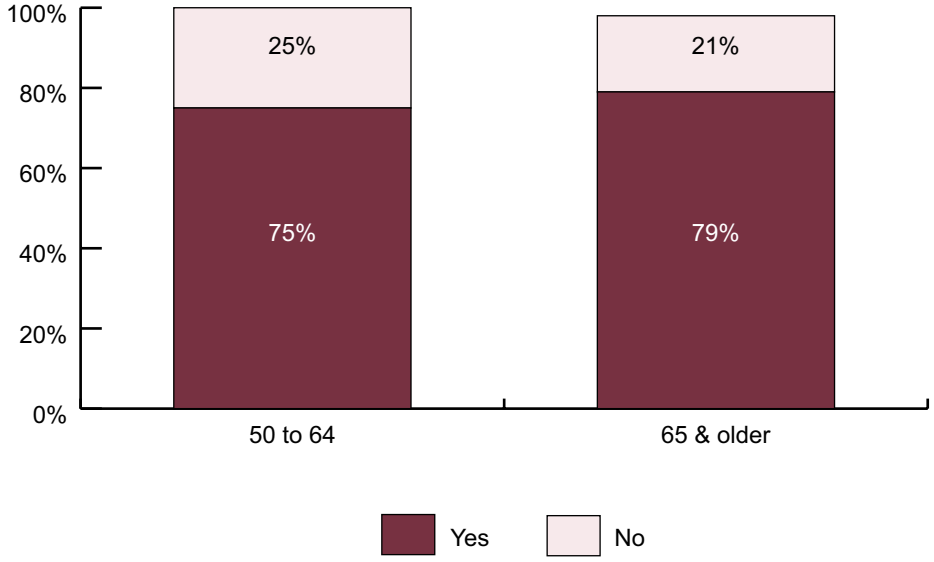
Income was not the only difference. Differences also appeared among racial and ethnic groups (discussed in detail later) and other populations. As an example, nondrivers ranked schools first, but they ranked specialized transportation second, and renters were the only group to put affordable housing first.

When one is forced to choose, differences among groups become clear—not everyone places the same value on the various elements of a livable community.[3] Moreover, the rankings aligned with conclusions from focus groups. People ranked items that affected their lives and their personal perceptions of livability highly, but among groups of similar persons, common preferences emerged. (For additional data about community participation and the influences of local government, see appendix E for figures E.1, E.2.a, and E.2.b.)

Aging in Place

A clear majority of people ages 50 and older say they want to age in place.[4] Adults ages 65 and older (compared with those ages 50 to 64) are more likely to say they want to age in their current home and community (87 percent v. 71 percent). A small proportion of adults ages 50 and older (17 percent) say they plan to move in the next three years. A new finding is that those who plan to move are more likely to be members of minority groups, to have low incomes, to be nondrivers, and to currently live in metropolitan areas. (See figures 1, 2, and 3.)

Figure 1. Have you thought about being able to live in your community as you age?



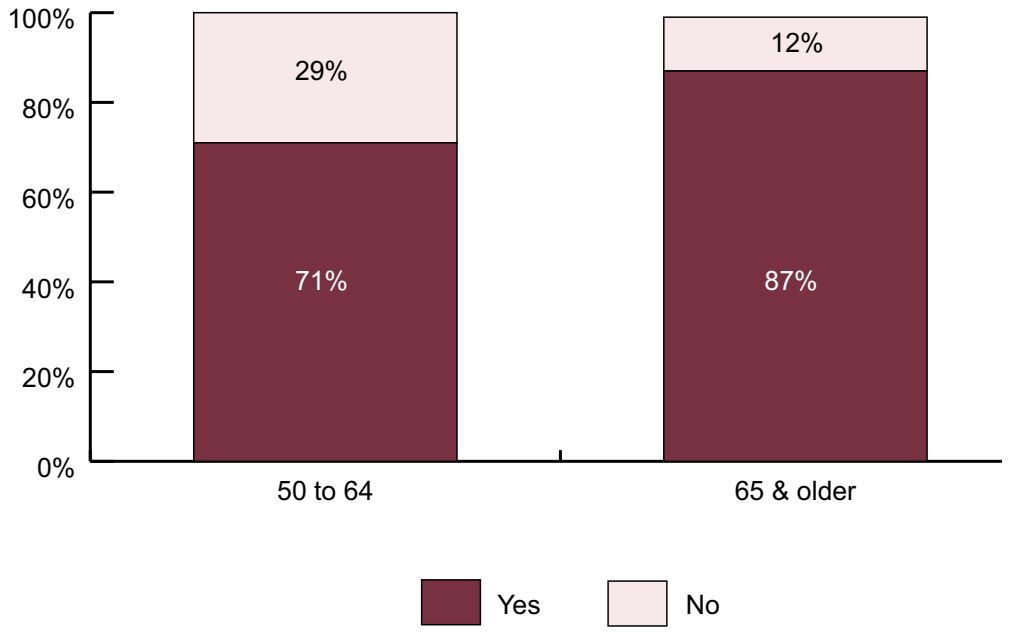
Sample: Probability-based 50+ population (*n* = 893).

Note: Totals may not add to 100% because of rounding or because respondents did not provide an answer.

[3] Although appendix B shows racial and ethnic differences in income, metropolitan location, and other factors, those differences do not appear to explain all of the differences in responses between and among groups.

[4] *Aging in place* refers to "the ability to live in one's home and community safely, independently, and comfortably—regardless of age, income, or ability level." See "Healthy Places Terminology," Centers for Disease Control and Prevention, Atlanta, 2010, http://www.cdc.gov/healthyplaces/terminology.htm.

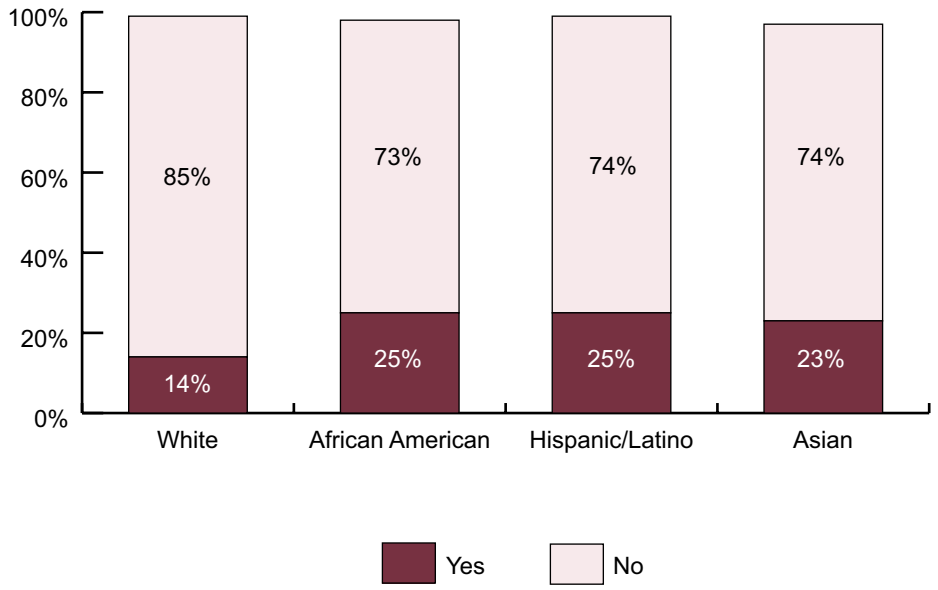
Figure 2. Do you want to live in your current community as you age?



Sample: Probability-based 50+ population (*n* = 893).

Note: Totals may not add to 100% because of rounding or because respondents did not provide an answer.

Figure 3. Do you plan on moving in the next three years?



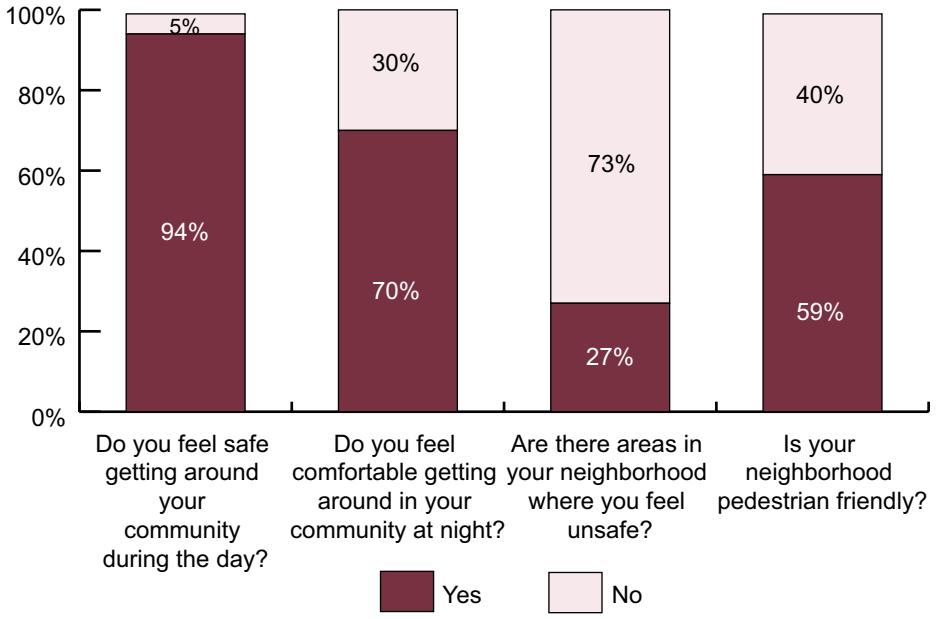
Samples: Probability-based 50+ white (*n* = 692); 50+ African American oversample (*n* = 455); Hispanic/Latino oversample (*n* = 456); Asian oversample (*n* = 452).

Note: Totals may not add to 100% because of rounding or because respondents did not provide an answer.

Personal Safety

Personal safety is of greater concern for family caregivers, people with disabilities, nondrivers, and people with lower incomes. When one measures level of concern about crime in the community, on a scale of 1 to 5—with 1 meaning very concerned about crime and 5 meaning not at all concerned—the average rating is about 3.57. That measure suggests that many are not too concerned about the level of crime in their neighborhood. Similarly, the vast majority of people (94 percent) say they feel safe getting around their community during the day, and 7 in 10 (70 percent) say they feel comfortable getting around their community at night. About one in four (27 percent) say there are areas in their community where they feel unsafe. (See figure 4.) Nondrivers, people with disabilities, and those with lower incomes are more likely to report that their community has areas where they feel unsafe and that they feel unsafe getting around their community during the day or at night.[5] Generally, personal safety is more of a concern for family caregivers and people with disabilities, as well as nondrivers and people with lower incomes who may feel more vulnerable because of the unsafe neighborhoods, physical limitations, or other issues.

Figure 4. Do you feel safe in your community?



Sample: Probability-based 50+ population (*n* = 893).

Note: Totals may not add to 100% because of rounding or because respondents did not provide an answer.

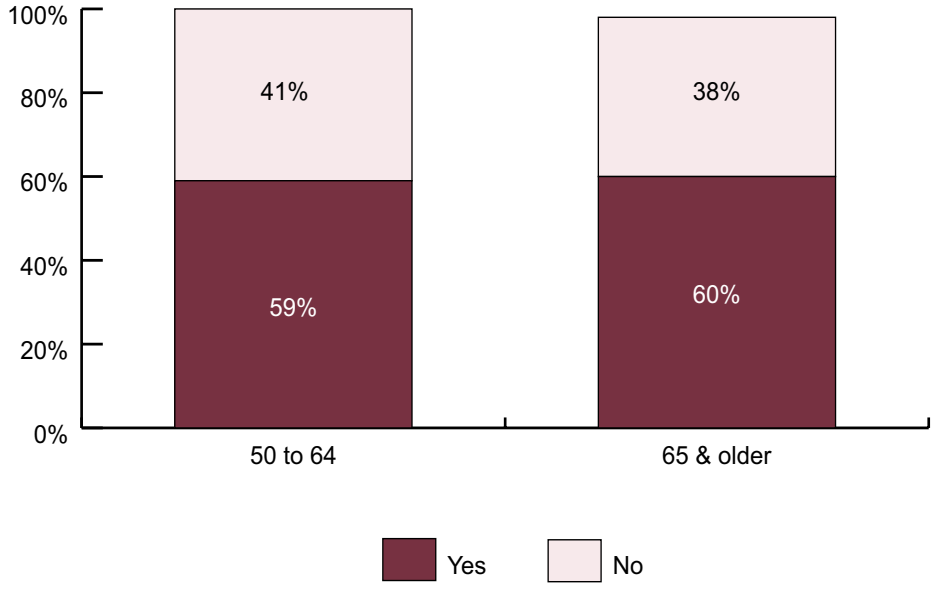
[5] Nondrivers, those in households with people with disabilities (including family members who provide care for them), and those with lower incomes seem to perceive themselves as being more vulnerable. As nondriver status increases with increasing disability or lower incomes, people in those groups may be more dependent on public transportation and walking, thereby eliminating the safe feeling they would have from getting around in their locked personal automobile. They may also be more likely to live in neighborhoods that generally feel less safe than do others.

As mentioned earlier, providing streets that are more pedestrian-friendly is a high priority for many people. (See figure 5.) About 6 in 10 (59 percent) said they currently live in communities that have pedestrian-friendly streets. Interestingly, people who are over 65 were more likely than people 50 to 64 to say they currently live in pedestrian-friendly areas. Similarly, nondrivers and people who live in metropolitan areas were more likely to say they currently live in pedestrian-friendly neighborhoods.

Demographics, Local Actions, and Livability

There are some racial and ethnic differences in local actions, but great differences in the places where various groups connect with community members. As mentioned earlier and shown in table 1, priorities that rose to the top for the general public were (in order of importance) "increase police presence," "improve schools," "ensure pedestrian-friendly streets," "provide transportation services for older adults and people with disabilities," and "build or upgrade parks." There are slight ranking differences based on race or ethnicity (see table C.2.a and its breakdowns by race in appendix C). Although the top two priorities remain the same for all races, respondents differ on the third priority ranking. African American and Latino respondents ranked "implement or increase funding for affordable housing programs" third, whereas Asian respondents ranked "add more buses, light rail, or subway systems" as the third priority. White respondents chose pedestrian-friendly streets. Those findings reflected the opinions that were shared in focus groups and interviews.

Figure 5. Is your neighborhood pedestrian-friendly?



Sample: Probability-based 50+ population (*n* = 893).

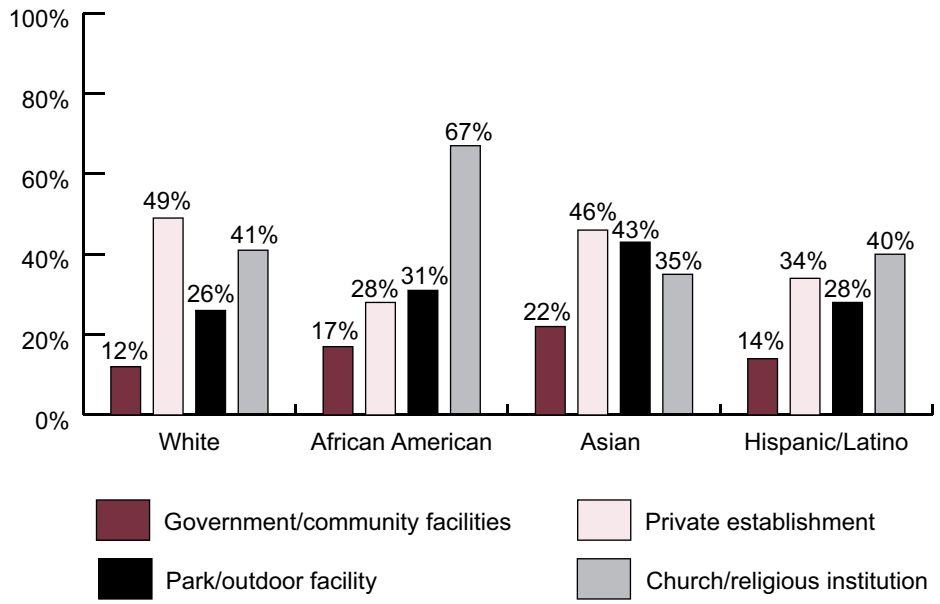
Note: Totals may not add to 100% because of rounding or because respondents did not provide an answer.

Some of the difference in ranking may be tied to income or location—white respondents' incomes were higher than African American or Latino respondents, and they were more likely to live outside metropolitan areas. However, some differences are clearly cultural. People connect with one another differently: about *half* of white respondents (49 percent) connect with fellow community members at private establishments, but *fewer than 3 in 10* African Americans do (28 percent).[6] Two-thirds of African American respondents (67 percent) connect at church—more than any other group.[7] (See figures 6 and 7.)

Drivers and Nondrivers

Most nondrivers say they live in communities that are already pedestrian-friendly. Driver and nondriver survey respondents agree that improving schools should be the first priority; however, they disagree slightly on the order of the next two priorities.[8] (Table 2 shows the top 10 priorities for both drivers and nondrivers.) Although increasing police presence is the second priority for drivers, "providing transportation services for older adults and people with disabilities" ranked second for the nondrivers. That difference is

Figure 6. Where do you connect and meet with fellow community members? (Race and Ethnicity)



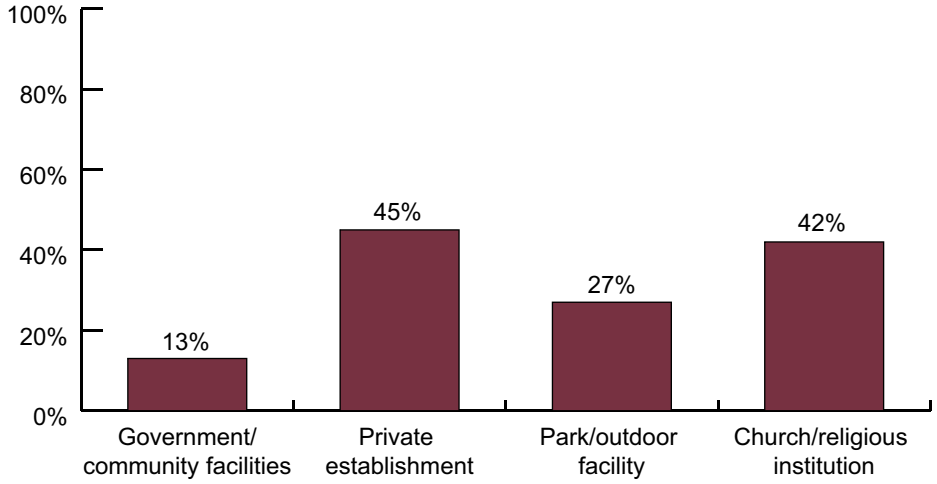
Samples: Probability-based 50+ white (*n* = 692); 50+ African American oversample (*n* = 455); Hispanic/Latino oversample (*n* = 456); Asian oversample (*n* = 452).

6 *Private establishments* includes diners, restaurants, taverns, bars, shopping malls, and other similar places.

7 *Church* includes all religious institutions.

8 That result differs slightly from the general population because of oversampling of nondrivers.

Figure 7. Where do you connect and meet with fellow community members? (General Population)



Sample: Probability-based 50+ population (*n* = 893).

Table 2. Ranking of Local Actions—Drivers and Nondrivers

Actions	General Public	Driver	Nondriver
Increase police presence.	1	2	3
Improve schools.	2	1	1
Make streets pedestrian-friendly.	3	4	6
Provide transportation services for seniors and people with disabilities.	4	3	2
Build or upgrade parks.	5	8	8
Implement or increase funding for affordable housing programs.	6	7	4
Add more buses, light rail, or subway systems.	7	5	5
Implement or increase funding for home modifications for people with disabilities.	8	6	7
Invest in or build libraries.	9	9	9
Build more stores and shops.	10	10	10

Sample: Probability-based 50+ population (*n* = 893).
Full (probability-based and oversample): drivers (*n* = 3,683); nondrivers (*n* = 895).

not surprising. Interestingly, drivers ranked "making streets more pedestrian-friendly" in the top five priorities; however, that priority did not make the top five ranking for nondrivers (ranked sixth for nondrivers). Nondrivers were also more likely than drivers to say they currently live in a pedestrian-friendly neighborhood (67 percent v. 58 percent).[9] That difference may help explain why this policy area did not rank as one of the five most important issues for local governments to tackle, because those who cannot drive (as a result of income, physical ability, or other reasons) are more likely to have chosen a location compatible with getting around on foot. In fact, the nation's preeminent travel survey (the National Household Travel Survey) shows that 23 percent of trips taken by nondrivers ages 50 and older are on foot in contrast to only 9 percent by drivers of the same age group. Older nondrivers are also more likely to live in urban areas where sidewalk networks generally exist.[10]

Instead of more pedestrian-friendly streets, "implementing or increasing funding for affordable housing programs" was in the top five priorities for nondrivers, but not for drivers (ranked 7th for drivers). Similarly, that ranking difference coincides with the higher proportion of nondrivers (48 percent compared with 36 percent drivers) who said housing costs have a negative effect on their quality of life. That response is likely because of lower incomes among nondrivers ages 50 and older.[11]

Households with People with Disabilities

Specialized transportation and local government decision-making processes are important issues for people in households with people with disabilities. Improving schools and increasing police presence were the top two local government priorities for both those in households that have people with disabilities (includes answers from those with disabilities and family caregivers) and those without disabilities (see table 3). *The third priority for those with disabilities was "providing transportation services for older adults and those with disabilities."* *In contrast, that priority ranked 9 out of 10 for participants without disabilities.* Participants without disabilities ranked "make streets more pedestrian-friendly" third, whereas it was ranked fifth for people with disabilities. Adding more buses, light rail, or subway systems was the fifth most important policy priority for participants without disabilities; however, it was ranked seventh for participants with disabilities.

Although the differences between those demographic groups provide some insight on local priorities, the importance of local governance seems to be vital to people with disabilities and those family members who provide care. Participants with disabilities

---

[9] In our interviews, level sidewalks and ramps were two features that garnered the most mentions for helping a user of a mobility device.

[10] The AARP Public Policy Institute's analysis of the "2009 National Household Travel Survey." See also http://www.aarp.org/research/ppi/liv-com2/resources/nhts-AARP-ppi-liv-com/.

[11] The 2012 survey conducted by GfK for AARP shows a significantly higher percentage of older nondrivers (51 percent) having an annual household income of less than $30,000 compared with that of older drivers (22 percent). That variation is further substantiated by evidence from the 2009 National Household Survey. The AARP Public Policy Institute calculated the median household income of older nondrivers (ages 65+) to be $19,000 per year compared with $36,000 for drivers.

Table 3. Ranking of Local Actions—Households with People with Disabilities and Family Caregivers

Actions	General Public	With Disability/ Family Caregiver	Without Disability/ Family Caregiver
Increase police presence.	1	1	2
Improve schools.	2	2	1
Make streets pedestrian-friendly.	3	5	3
Provide transportation services for seniors and people with disabilities.	4	3	4
Build or upgrade parks.	5	8	6
Implement or increase funding for affordable housing programs.	6	6	7
Add more buses, light rail, or subway systems.	7	7	5
Implement or increase funding for home modifications for people with disabilities.	8	4	9
Invest in or build libraries.	9	9	8
Build more stores and shops.	10	10	10

Sample: Probability-based 50+ population (*n* = 893).
Full (probability-based and oversample); people with disabilities/family caregivers (*n* = 2,083), people without disabilities/not family caregivers (*n* = 2,513).

and family caregivers are significantly more likely to say local governance plays a role in their decision to stay in or move to a community. (See figure 8.)[12]

Household Income

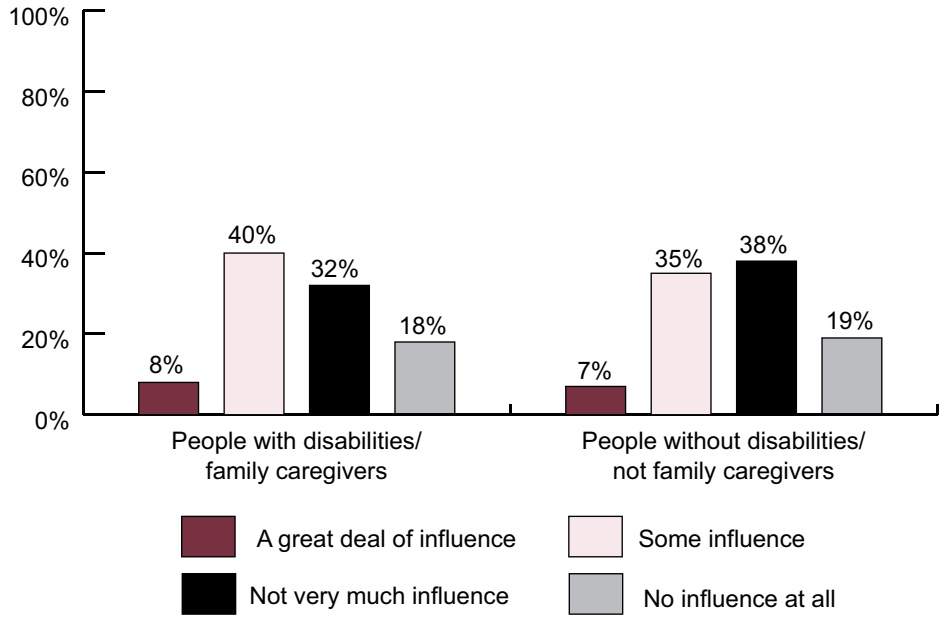
Household income will influence thoughts about the importance of local government spending priorities. Improving schools and increasing police presence were the top two local government priorities for all except the lowest income group ($30,000 or less). For that group, the top two priorities were increasing police presence and providing transportation services for older adults and those with disabilities. For the lowest income group, the policy to improve schools ranked fourth.

A direct correlation exists between household income levels and ranking of policy priorities regarding funding for affordable housing and home modifications. As income levels increase, the ranking for housing-related funding priorities decreases. (In appendix C, see tables C.1 and C.2.c.)

Providing transportation services for older adults and those with disabilities ranked in the top five for all income groups, whereas making streets more pedestrian-friendly ranked in the top five for all except the lowest income group. The highest income group ($75,000+) was the only segment to rank "build or upgrade parks" as one of the top five policy priorities for local governments.

[12] See appendix E for additional figures about local governance and households with people with disabilities and family caregivers.

Figure 8. How much does being able to participate in local government's decision-making process influence your decision to move to a community? (Disabilities and Family Caregivers)



Sample: Full (probability-based and oversample); people with disabiliites/family caregivers (*n* = 2,083); people without disabilities/not family caregivers (*n* = 2,513).

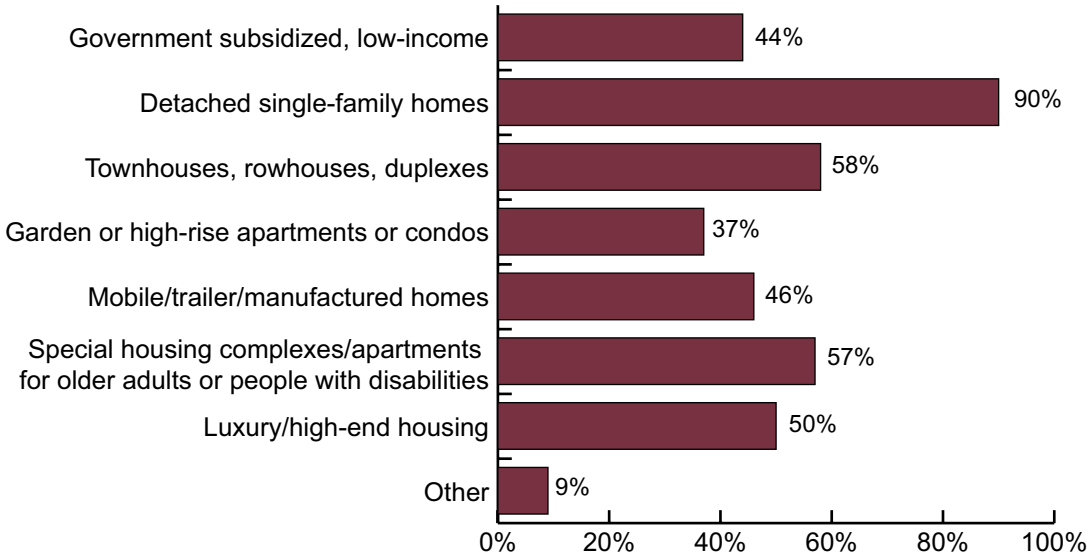
Housing

Participants were asked to indicate whether specific types of housing were available in their community (see figure 9). The vast majority (90 percent) of people said detached single-family homes were available in their community. About 6 in 10 (58 percent) said there were townhomes, a little more than half (57 percent) indicated there was some senior housing, and half (50 percent) said they had high-end luxury homes in their community. Only about 4 in 10 participants said there was low-income housing (44 percent) or manufactured housing (46 percent) in their community. A little more than one-third (37 percent) said there were garden apartments or high-rise apartments in their community. People who live in metropolitan statistical areas (MSAs) were more likely to report they had low-income or high-rise apartments in their community.[13]

For renters, funding for affordable housing programs is the most important local government investment (followed by increasing police presence and improving schools). Homeowners ranked improved schools and increased police presence as top priorities followed by providing transportation services for older adults and people with disabilities. (See table 4 for both homeowners and renters.) Although making streets more pedestrian-friendly was in the top five priorities for homeowners, it was ranked sixth for renters. Conversely, renters ranked adding more transportation services, such as buses

[13] Metropolitan statistical areas are geographical regions that are economically integrated and usually comprise major cities and surrounding urban and suburban counties.

Figure 9. What types of homes are available in your community?



Sample: Probability-based 50+ population (*n* = 893).

Table 4. Ranking of Local Actions—Homeowners and Renters

Actions	General Public	Homeowners	Renters
Increase police presence.	1	2	2
Improve schools.	2	1	3
Make streets pedestrian friendly.	3	4	6
Provide transportation services for seniors and people with disabilities.	4	3	4
Build or upgrade parks.	5	7	9
Implement or increase funding for affordable housing programs.	6	8	1
Add more buses, light rail, or subway systems.	7	6	5
Implement or increase funding for home modifications for people with disabilities.	8	5	7
Invest in or build libraries.	9	9	8
Build more stores and shops.	10	10	10

Sample: Probability-based 50+ population (*n* = 893).

and light rail, in the top five; it was ranked sixth for homeowners. For homeowners, providing funding to assist with home modifications for those with disabilities was a top five priority. That priority was ranked seventh for renters.

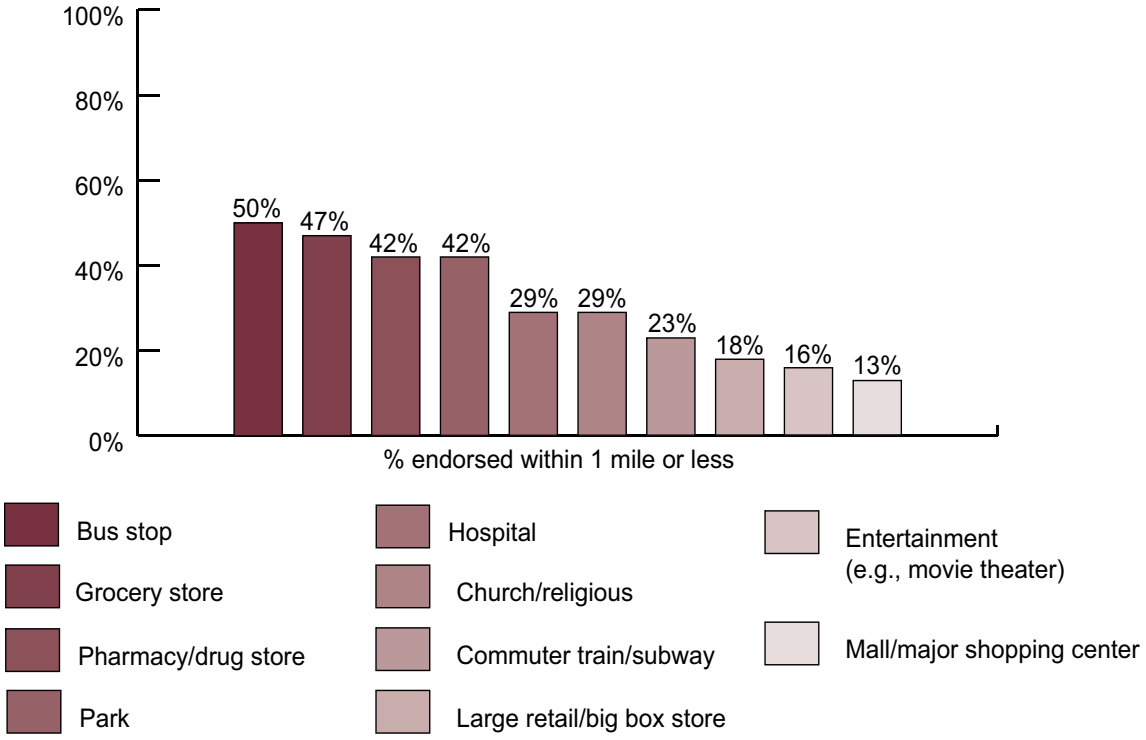
Proximity

To measure participants' interest in having amenities nearby, researchers asked those participants to indicate the maximum distance from their home (¼ mile, ½ mile, 1 mile, 2 miles, 5 miles, 15 miles) that they would prefer to have 16 different amenities (such as grocery store, gas station, church, coffee shop, etc.). Participants considered 10 core amenities (including grocery store, pharmacy, park, hospital, etc.), as well as 6 randomly selected amenities (including bar or pub, dry cleaner, public library, fire station, etc.).

Figure 10 presents the percentage of the general population who indicated they would like to have the listed core amenity within 1 mile of their home. Of those core amenities, bus stops, grocery stores, pharmacies, and parks are highly desirable neighborhood amenities. Between 42 and 50 percent of the general population expressed a desire for those four amenities to be within 1 mile of home. In contrast, fewer than 30 percent of respondents indicated a desire to have the other six core amenities within 1 mile of home.

Those top four-ranked amenities were also reported as the most desired amenities to have within ¼ mile of respondents' homes. In particular, respondents desire bus stops

Figure 10. What community amenities do you want close to home?



Sample: Probability-based 50+ population (*n* = 893).

located within ¼ mile of their home (30 percent). The next most popular amenities at the ¼ mile distance from home were grocery stores (12 percent) and parks (12 percent).

Additionally, survey participants were asked whether they would prefer (a) to drive to nearby amenities or (b) to be able to walk to nearby amenities. A "nearby seeker" variable was computed on the basis of the participant's preference to drive or walk and on the number of amenities he or she said should be within 1 mile of home. Nearby seekers were those with preferences for nearby amenities and included participants who preferred to walk and who indicated a desire to have 8 or more of the top 16 amenities within 1 mile of home.[14]

When looking at local government priority preferences, nearby seekers ranked "adding more transportation options, such as buses and light rail," as the most important priority followed by improving schools and increasing police presence. Non-nearby seekers ranked improving schools and increasing police presence as the first and second priority, respectively. For non-nearby seekers, the third priority was providing transportation services for older adults and those with disabilities followed by making streets more pedestrian-friendly (ranked fourth) and increasing funding for home modifications for people with disabilities (ranked fifth). Similarly, nearby seekers ranked providing transportation services for older adults fourth; however, they ranked increasing affordable housing programs fifth. Making streets more pedestrian-friendly did not rank in the top five priorities (ranked sixth) for nearby seekers. Perhaps, as we suggest with nondrivers, nearby seekers might already have chosen to live in communities that have a sufficient number of pedestrian-friendly streets and therefore find improving them to be of lower importance. (See table C.2.c in appendix C.)

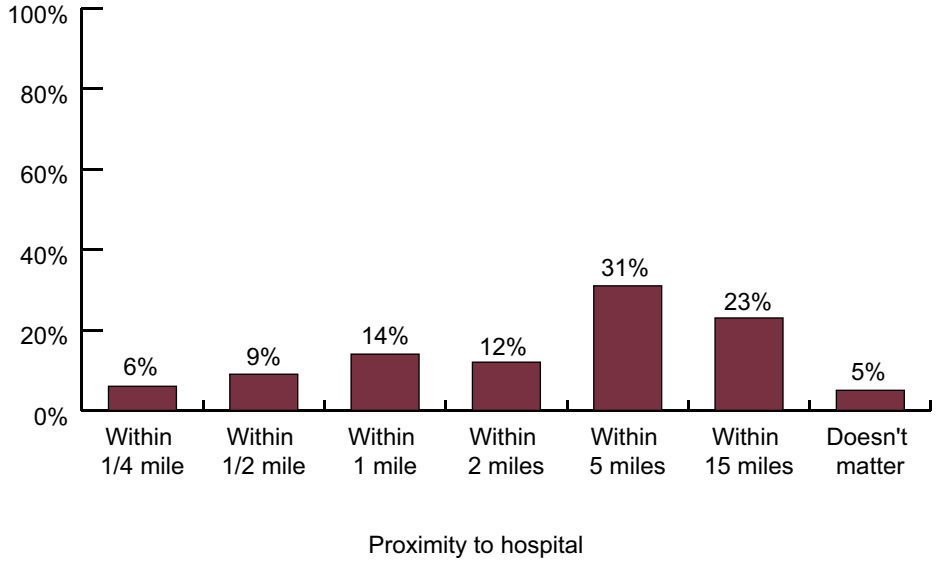
A major challenge with creating a livability index is how to weight the distance from a hospital. As shown in figure 11, access to medical facilities is important, but it is unclear whether access needs to be at a hospital or whether medical services need to be located in one's neighborhood. The proximity measure included location of a hospital in the 10 core amenities measured. About one-quarter said a hospital should be either within 1 mile (14 percent) or 2 miles (12 percent) from home. Another 23 percent said a hospital about 15 miles from home would be ideal. Only 5 percent said it didn't really matter how far a hospital was from home.

In a different set of questions, about half (49 percent) of the respondents said that ideally, it should take 5 to 15 minutes to reach a hospital for a non-life-threatening situation. Some may perceive hospitals to be a nuisance land use, possibly because of the likelihood of ambulance sirens nearby. Similarly, about half (49 percent) said it should take between 5 and 15 minutes to reach an urgent care clinic.

Low-income respondents (less than $30,000 per year) wanted features and services such as grocery stores within a ¼ mile of home more often than did higher-income counterparts. Women were more likely than men to agree with the ¼ mile preference for local retail (see figure 12), people within metropolitan areas were more likely to

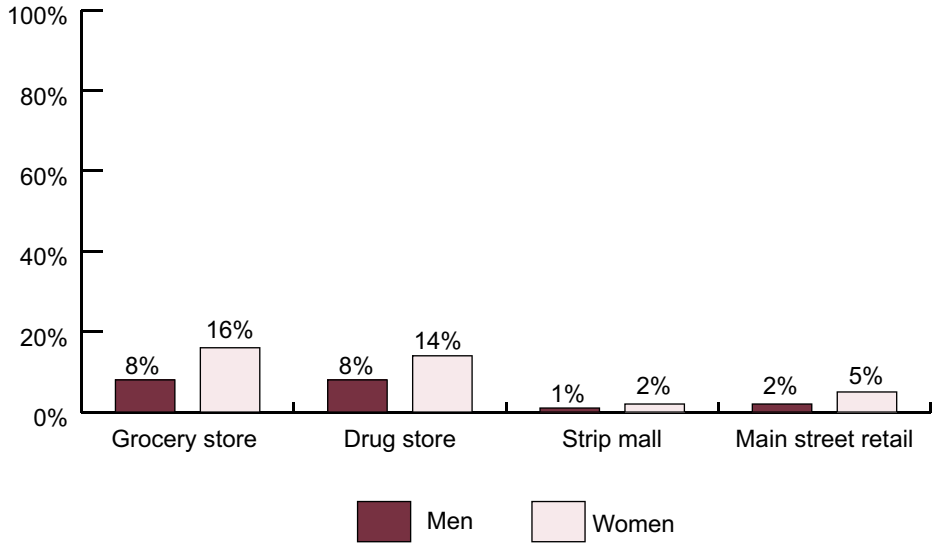
[14] Some might also refer to people with such preferences as "urbanites" or "urban minded." The term "nearby seeker" is used because its definition looks solely at preferences and not at the actual location choices of individuals. That distinction is important as an individual's residential choices may not reflect his or her preferences for a variety of reasons. (See "Mobility Limiters" in appendix A.)

Figure 11. What is the preferred maximum distance to medical facilities?



Sample: Probability-based 50+ population (*n* = 893).
Survey question: What is the maximum distance you would prefer to have the following item from your home?

Figure 12. By gender, who prefers a maximum distance of ¼ mile to local retail?



Sample: Probability-based 50+ population (*n* = 893).
Survey question: What is the maximum distance you would prefer to have the following item from your home?

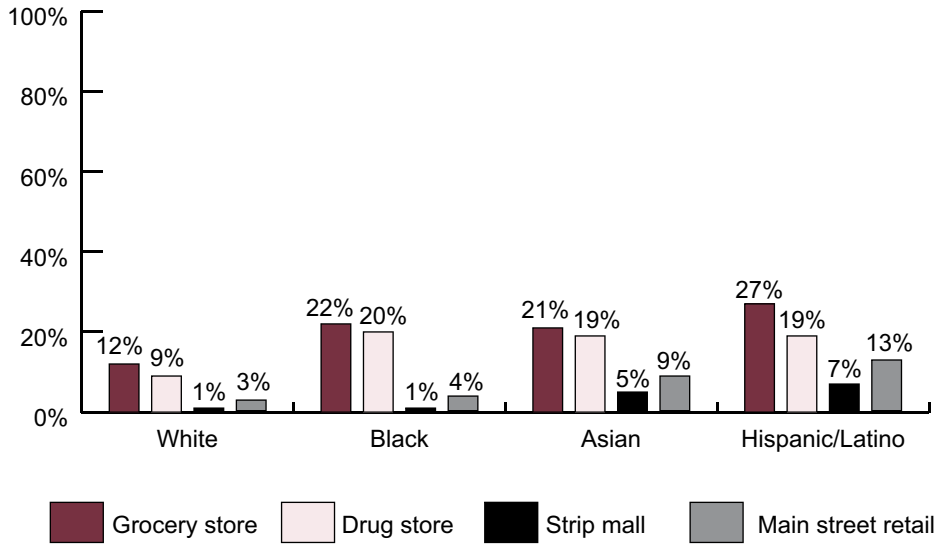
agree than those outside of metro areas, nondrivers were more likely to agree than those who drove, and people who had a disability or were family caregivers agreed as well. Whites were less likely than most other races and ethnicities to agree (see figure 13).[15] Those portions of the population that prefer nearby services overlap to some degree, but the wants and needs clearly differ from preferences of other groups in the community. Situations evolve over a lifetime, and it is important to note that income, driver status, level of physical ability, and other factors can change with age. Although most of the respondents ages 50+ are not currently nondrivers or people with disabilities, many will one day find themselves with a different set of needs.

Community Cohesiveness and Livability

A rather intangible livability measure is community cohesion. To explore the concept of community cohesion, participants were asked about what community pride existed, where community members meet, and what the importance was of being involved in local government decision-making processes (see figure 14).

The majority of people feel there is a great deal (27 percent) of or some (54 percent) community pride and unity among their neighbors. Around 4 in 10 (41 percent) people said being able to participate in the local government decision-making process would have at least some influence on their decision to move to a community. Similarly, 6 in 10 (60 percent) said a local government's reputation or local government's politics would

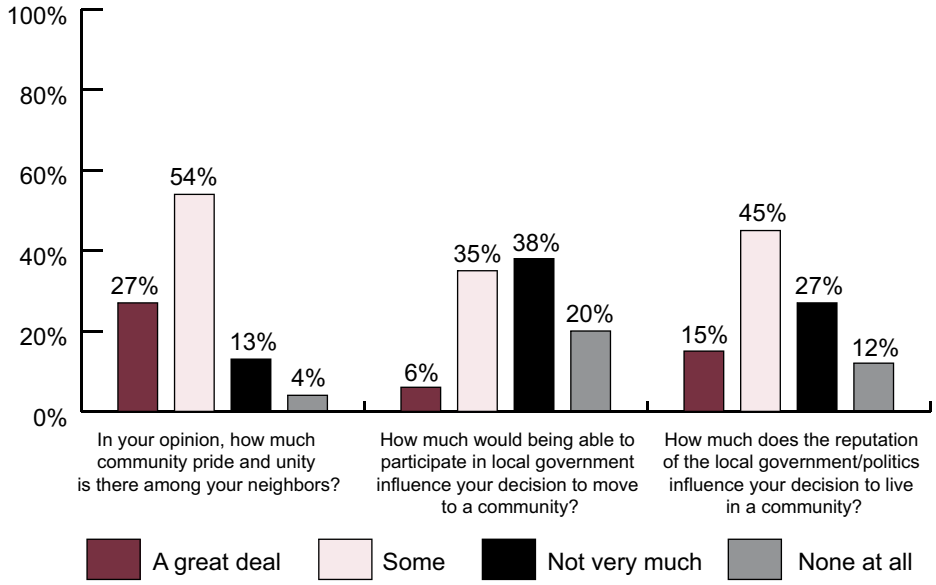
Figure 13. By race and ethnicity, who prefers a maximum distance of ¼ mile to local retail



Samples: Probability-based 50+ white (*n* = 692); 50+ African American oversample (*n* = 455); Hispanic/Latino oversample (*n* = 456); Asian oversample (*n* = 452).
Survey question: What is the maximum distance you would prefer to have the following item from your home?

[15] For a comparison of ¼- and ½-mile radii by gender, race or ethnicity, and age, see appendix E.

Figure 14. How important is community cohesiveness in making decisions about where to live?



Sample: Probability-based 50+ population (*n* = 893).

have a great deal or some influence on their decision to live in a community. However, quantifying the amount of community cohesion in a livability index is difficult.

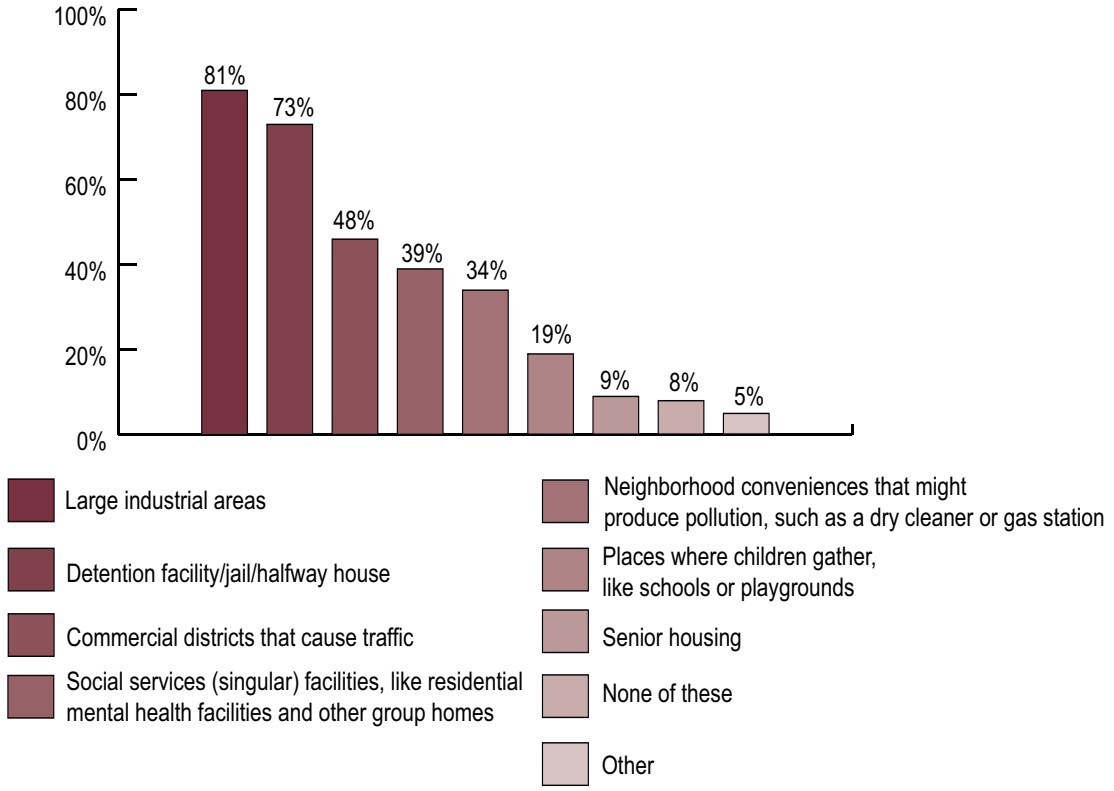
Disincentives or Features with Negative Effects

One important aspect of livability is how individuals feel about amenities, issues, or structures that might prevent them from moving into a community. Survey participants were provided with a list of possible disincentives and asked, "If you were selecting a home in a new community, which of the following, if any, would prevent you from moving to a home in that community?" (For more information, see figure 15.)

Large industrial areas and detention facilities are major disincentives for moving into a community, but reactions to other potential disincentives were more mixed. The majority of respondents indicated that large industrial areas, such as chemical manufacturing, pulp mill, landfill, and so forth (81 percent), and detention-related facilities—such as a detention center, jail, or halfway house (73 percent)—would prevent them from moving into a community. About half (46 percent) said a commercial district that might generate traffic from retail stores, restaurants, and other businesses would be a disincentive for moving into a community. Four in 10 (39 percent) indicated that they are less desirous of a community that has social service facilities, such as a group home or residential mental health facility. When looking at other businesses, only one-third (34 percent) said proximity to neighborhood conveniences that might produce pollution (such as a dry cleaner or gas station) might be a disincentive for moving into a community.

Fewer than one in five (19 percent) said places where children gather (like a school or day-care facility) would be a disincentive, and fewer than 1 in 10 (9 percent) said housing

Figure 15. What activities would prevent you from moving into a community?



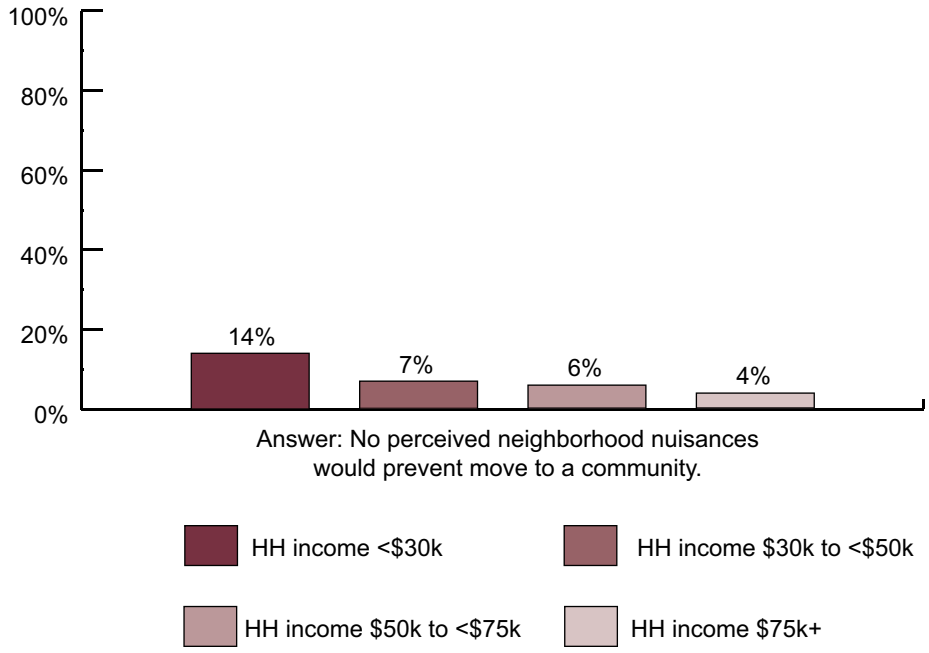
Sample: Probability-based 50+ population (*n* = 893).
Survey question: Which of the following would prevent you from moving to a home in that community?

for older adults (like a retirement community or nursing home) would be a disincentive for moving into a community.

Respondents were also allowed to indicate that none of the items listed would be a disincentive for moving into a community. A higher proportion of lower-income respondents (household income of less than $30,000) compared with respondents with higher incomes indicated that none of the items would prevent them from moving into a community (14 percent compared with between 4 percent and 7 percent for respondents with higher level incomes). (For income comparisons, see figure 16.) Similarly, a higher proportion of nondrivers compared with drivers indicated that none of the items would prevent them from moving into a community (12 percent v. 7 percent), and those in metropolitan areas are more likely to be dissuaded than are those who live in more rural "nonmetropolitan" areas (15 percent of those living outside of metropolitan areas said that none of the listed disincentives would prevent them from moving to a neighborhood, and only 6 percent within metropolitan areas said the same).[16]

[16] See appendix E for figures about drivers and metropolitan areas.

Figure 16. Does income impact decisions to move to a community because of perceived neighborhood "nuisances"?



Note: HH = household.
Sample: Full (probability-based and oversample); household income <$30,000 (*n* = 1,254); household income <$30,000 to <$50,000 (*n* = 997); household income $50,000–$75,000 (*n* = 902); household income $75,000+ (*n* = 1,434).
Survey question: Which of the following would prevent you from moving to a home in that community?

Lessons for Measuring Livability

Several lessons for index development evolved from the research previously described, and many of those reinforced findings from previous research. Our focus groups with Alabamians and residents in the Chicago region and our in-depth interviews with our survey respondents provided insights that elucidate the findings. Each of the lessons (shown next) influenced the design of AARP's ideal livability index.

1. **Individual definitions of livability can include issue areas that may or may not be addressed by public policy.** When asked, "What is a livable community?" respondents offered a range of responses:

   The first thing that I put down was safe or safety—a safe community. A pretty community. You like it. The terrain or the woods or whatever—you consider it beautiful.

   —Alabama rural resident

   You've heard the term "close-knit" community? I put that down—"close-knit." Friendly people. People in a community who care about one another.

   —Chicago resident

   A place that you want to raise your children, places that have recreational facilities for your time off. Good neighborhoods that you feel safe in.

   —Alabama rural resident

   It sounds like a good place. A livable community—it's a place where you raise your kids. Peaceful, nice neighbors—that kind of thing.

   —Birmingham, Alabama, urban/suburban resident

   Preferences for weather, terrain, friendliness of neighbors, and closeness to family cannot be affected by public policy, but safety, access to public transportation, recreational facilities, preservation of open space, and zoning for medical facilities can be.

2. **People and communities have differing perspectives: one type of community does not fit all.** The "important" issues change according to location; income; whether someone with a disability lives in the household; whether the household is urban, suburban, or rural; whether someone drives; and what the racial or ethnic background is of respondents. For example, some of the answers to "What are important community characteristics?" include the following:

   The area I live in, I like it. It's pretty peaceful. We've got a parkway, and it's got just about everything on the parkway that you could get downtown.

   —Birmingham, Alabama, urban/suburban resident

   I think Chicago is a very versatile city. It's a beautiful city. There's a lot to do, a lot to see in it. You can get just about anywhere in it on public transportation or driving on expressways. As far as shopping goes, you can get to just about any store fast. We have several malls in our area that accommodate us.

   —Chicago urban resident

> *They have beautiful schools, great schools. It's nicely racially mixed. The property values are good. I feel very safe in my community. They have many events. I just love living here. It's close to downtown (Chicago) —16 minutes away from downtown. They just got through renovating Marion Street, and it's beautiful with all the lights and cobblestone streets. It's gorgeous. I love it.*
>
> —Chicago suburban resident

> *It's convenient to Birmingham. It's got great recreational facilities. The city does a good job with parks and walking trails. We've got a decent-sized mall. We've got good medical facilities—a lot of doctors for a town this size. The new interstate opening up is going to be a big asset: it took me less than an hour to get to Birmingham, so it has a lot of advantages.*
>
> —Alabama rural resident

Because people find a range of community characteristics to be important, "livable" has many individual definitions.

3. **Perceptions of a livable community are made when choosing housing and may not change as the person ages, unless a major life change forces a new perspective.** Families that make their housing decisions when they have children can find themselves in the same community as they age. If a community has good schools and safe opportunities for children and a home becomes a place of fond memories, that location may seem livable even after the children have moved out and the needs of the older adult begin to change. The cul-de-sac design may have provided safety for the children years ago, but it may now contribute to isolation and limit the ability to get around if one can no longer drive. The respondents who considered the features that help one to age in place were often those who had or had developed some level of physical impairment or had lost the ability to drive (or lived with someone who had faced those challenges). That factor was true for most participants, from younger (closer to 50 years of age) homeowners in the Chicago region to 80-year-olds in Alabama. It was common to put off deciding how aging would affect one's life until some event forced one to think about it.

Conclusion

The lessons cause a challenge for researchers who seek to measure community livability: the preferences of older adults are complex, intertwined, and sometimes conflicting. As Peter Pan never aged, many people never expect to age until they one day find themselves no longer able to do things that they once did. The lessons from this research have several implications for efforts to measure community livability, and they are discussed in detail in the Public Policy Institute report titled "Is This a Good Place to Live? Measuring Community Quality of Life for All Ages."

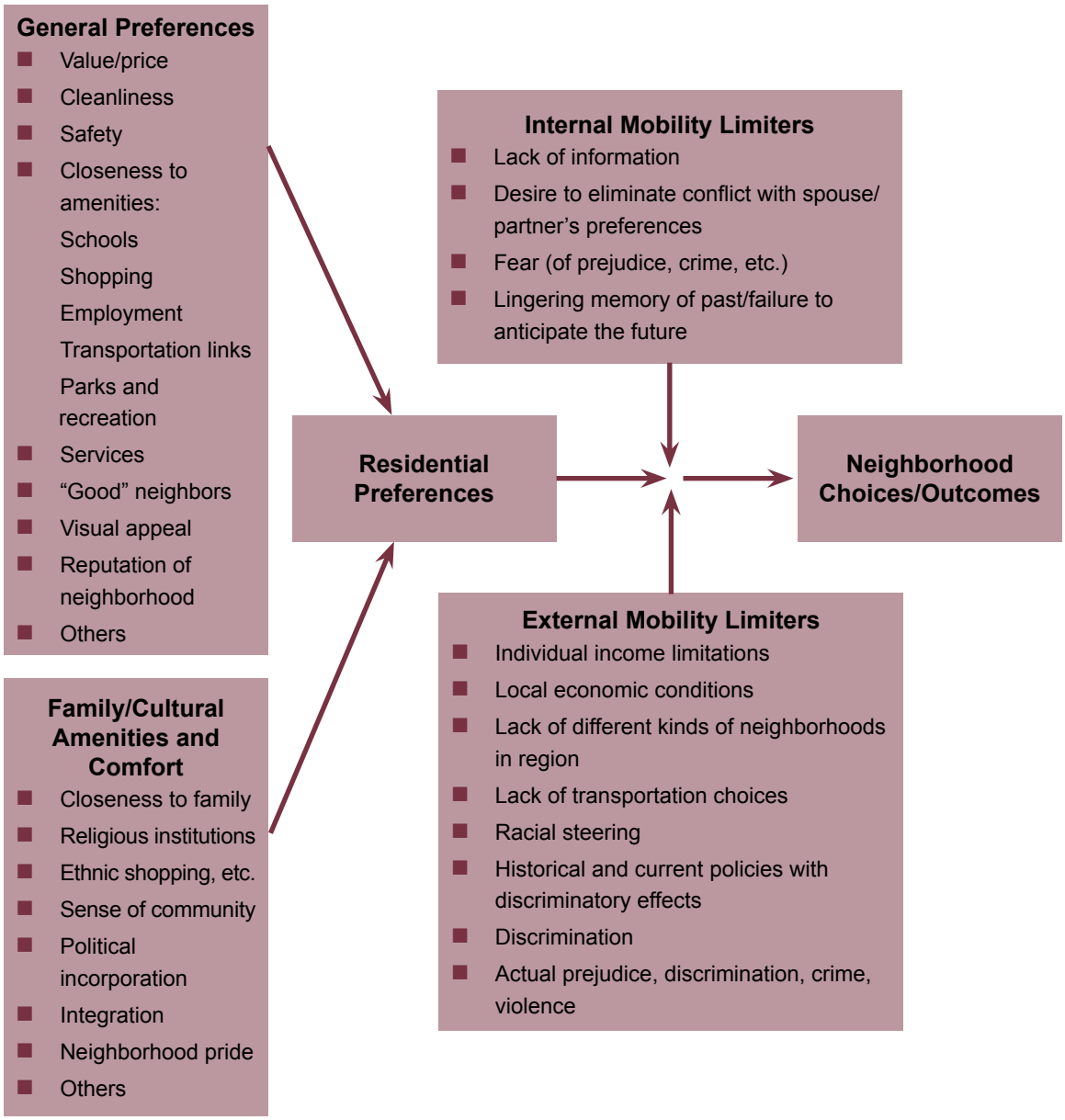
Appendixes

Appendix A. Preferences

Many researchers rely on preferences for their measurements of livability. To properly understand the role and limitations of preferences requires a deeper explanation.

The conceptual framework shown in figure A.1 models residential location decisions. In short, many elements go into stated preferences, and residential mobility limiters prevent those desires from being achieved.

Figure A.1. Conceptual Framework



Residential Mobility Limiters

Although an individual's personal preferences are created by his or her unique combination of the magnitude and direction of preferences, certain limits to mobility interact with preferences in ways that account for the differences between what an individual prefers and where that individual ends up living.

Those residential mobility limiters are grouped into two categories: internal and external. Internal mobility limiters are self-imposed constraints on choice and may affect that individual's perception of a particular neighborhood in ways contrary to that person's best interest. Those internal mobility limiters have the potential to interfere with an individual's own ability to find a neighborhood that meets his or her needs.

External mobility limiters are externally imposed constraints on choice. External mobility limiters also reduce an individual's ability to take advantage of other existing options. For example, the effect of actual discrimination, racial steering, and historical and current policies with discriminatory effects (such as redlining) can prevent someone from moving to a desired neighborhood. Additional external mobility limiters can best be described as regional limitations.

Additional external mobility limiters reduce the number of options, and they include (a) poor local economic conditions that prevent many from having the income necessary to purchase homes, (b) a lack of different kinds of neighborhoods, (c) a lack of transportation options, and (d) other differences that may exist in a particular region at a given point in time, including housing shortages, the effects of natural disasters, and other factors. External mobility limiters can restrict the number of choices or limit the ability to choose from among the available choices. A particular region may fail to benefit potential residents on any or all of those criteria and would thereby limit the ability of potential movers to find desirable neighborhoods.

People's stated preferences are not unassailable, because internal mobility limiters prevent individuals from knowing their "true" preferences. The external mobility limiters are issues that can be addressed by public policies that ensure that people can find what they want.

The framework and explanation are adapted from a framework originally developed for "Understanding Modern Segregation: Suburbanization and the Black Middle Class" by Rodney Harrell (PhD diss., University of Maryland, 2008). See that publication for a more detailed explanation.

Appendix B. Project Design

Methodology

The initial phase of the data collection was conducted in December 2011. That qualitative study, conducted by Turtle Bay Institute, Inc., included four 2-hour discussion groups with individuals ages 50 and older in the Chicago, Illinois, and Birmingham, Alabama, regions. Participants were from urban, suburban, and rural communities, with varying incomes and racial and ethnic backgrounds, as well as drivers, nondrivers, people with disabilities (including mobility limitations), family caregivers, retirees, and full-time and part-time workers.[17] The main objectives of the initial phase were to accomplish the following:

- Explore participants' perceptions of livable communities now and as they age, as well as their definition of a "livable community."
- Elicit participants' definitions of a "livable community" with regard to the physical characteristics, the properties and services, and the options that it would offer (both now and as they age).
- Provide insight into how definitions of a livable community differ by individual according to his or her community location (i.e., metropolitan [urban and suburban] and nonmetropolitan [rural]).

The second phase of the data collection, the quantitative survey, was initially conducted by GfK (Knowledge Networks) from September 2012 through November 2012. Additional data were collected from December 2012 through January 2013 to increase oversamples of people with disabilities or family caregivers, nondrivers, and certain income groups. The total number of participants was 4,596. The 20-minute survey was conducted using a sample from KnowledgePanel®, a probability-based web panel designed to be representative of the United States. The survey included a general population sample of adults ages 50+, with oversamples of African Americans, Asians, Hispanics and Latinos, nondrivers, people with disabilities (or family caregivers), and low-income households.

A poststratification process was used for the general population sample, as well as each individual race and ethnicity sample. The poststratification process was applied to adjust for survey nonresponse as well as noncoverage or undersampling and oversampling resulting from the study-specific sample design. Demographic and geographic distributions for the noninstitutionalized, civilian population ages 18 and older from the most recent US Census Bureau Current Population Survey (CPS) were used as benchmarks in those adjustments.

The final phase of the public opinion data collection was a follow-up 30-minute in-depth interview with randomly selected quantitative survey participants. The 80 in-depth interviews were conducted via telephone in English by Woefel Research, Inc., in November 2012. The main purpose of the follow-up interviews was to give the participants an opportunity to reflect on the livability concepts explored in the quantitative survey.

[17] Focus group demographics: age range 50 to 89; income range < $23,000 to $100,000+.

KnowledgePanel®

In a KnowledgePanel®, sample sources of deviation from an equal probability of selection design are corrected in the application of a base weight. A poststratification process was used to adjust for any survey nonresponse as well as any noncoverage or any undersampling and oversampling resulting from the study-specific sample design. Demographic and geographic distributions for the noninstitutionalized, civilian population ages 18 and older from the most recent CPS were used as benchmarks in the adjustment. The following benchmark distributions were used for the poststratification adjustment: gender, age, race/Hispanic ethnicity, education, household income, census region, metropolitan area, and Internet access.

Estimates

*Probability-Based Sample—50+ General Population (*n *= 893)*

The general 50+ population estimates in this report are from the probability-based sample. That sample was weighted using demographic and geographic distributions from the most recent CPS estimates of the noninstitutionalized, civilian population ages 18 and older. The following benchmark distributions were used for this poststratification adjustment: gender, age, race/Hispanic ethnicity, education, household income, census region, metropolitan area, and Internet access.

Race or Ethnicity 50+ Population Oversample[18]

- African American (n = 455); Hispanic or Latino (n = 456)
- Asian or Pacific Islander (n = 452)

The minority 50+ population estimates in this report are from the 50+ population race/ethnicity oversamples. Each individual race or ethnicity sample (African American, Hispanic or Latino, and Asian) was weighted using demographic and geographic distributions from the most recent CPS estimates of the noninstitutionalized, civilian population ages 18 and older within each race or ethnicity. The following benchmark distributions were used for this poststratification adjustment: gender, age, education, household income, census region, metropolitan area, and Internet access.

Other 50+ Population Oversample

Additional oversamples of various 50+ populations were obtained to enable in-depth analyses of the subpopulations. Estimates in this report for those subpopulations do not include poststratification adjustments. As such, comparisons within each oversampled population group may be made. Readers are cautioned not to draw comparisons across oversampled groups or the general public.

---

[18] The sample sizes presented here are from the targeted race or ethnicity oversamples. The race or ethnicity estimates presented in this report are based on those oversamples. A follow-up data collection was conducted to garner oversamples for additional groups (i.e., low income, nondriver, people with disabilities and family caregivers, etc.). The final full sample counts for the race or ethnicity samples were African American (n = 667), Hispanic or Latino (n = 542), and Asian or Pacific Islander (n = 463).

- Income 50+ population oversample
  - Less than $30,000 (*n* = 1,254)
  - $75,000−$99,999 (*n* = 656)
- Nondriver 50+ population oversample
  - Nondrivers (*n* = 895); includes nondriver with a disability (*n* = 558)
- Education 50+ population oversample
  - Less than high school diploma (*n* = 321)
- People with disabilities or family caregivers 50+ population oversample
  - Self-reported people with a disability: those who use a wheelchair, cane, walker, receive assistance with daily activities such as handling personal care, driving to places, cooking or cleaning because they are unable to do so (*n* = 1,362)
  - Self-reported family caregiver of a person with a disability (not with disability): family caregivers help someone who lives in their home with his or her personal care activities (*n* = 722)

NearbySeeker—Computed Variable

The NearbySeeker computed variable was determined by the respondents' preference to walk to amenities (versus drive) (Q25) and the number of amenities he or she said should be within 1 mile of his or her home (Q17). For the amenities part of the computed variable, we first determined the top amenities identified as ideal to have within 1 mile of home (16 out of 30 tested). A respondent was considered a nearby seeker if he or she indicated a preference for walking to amenities (Q25) and indicated a preference for having half or more of the top ranked amenities within 1 mile of home.

Note that not all respondents were shown all 16 of the top amenities, thus the total number of endorsed amenities to qualify varied by respondent. Estimates in this report for that subpopulation do not include poststratification adjustments. (See table B.1 for the sample demographics.)

Table B.1. Sample Demographics

	Total (*n* = 4,596) Percentage of the Sample
Gender	
Female	55
Male	45
Age	
50 to 64	59
65 and older	41
Race/Ethnicity	
African American	15
Asian/Pacific Islander	10
Hispanic/Latino	12
White	60
Marital Status	
Divorced/widowed/separated	27
Married	62
Single	11
Housing Type	
Apartment complex	16
Single-family detached	71
Townhouse/rowhouse/duplex	7
Own/Rent	
Own	77
Rent	21
Household Income	
Under $30,000	27
$30,000 to $49,999	22
$50,000 to $74,999	20
$75,000 or more	31
MSA/Non-MSA	
MSA	81
Non-MSA	13
Education	
Less than high school diploma/equivalent	7
High school graduate (or equivalent)	22
Some college (2-year degree or less)	33
College degree (4-year degree or postgraduate)	38
Employment	
Disabled	13
Employed	36
Retired	42
Unemployed	9

Table B.1. Sample Demographics

	Total (*n* = 4,596) Percentage of the Sample
Disability/Caregiver Status	
With disability	30
Family caregiver	16
Driver Status	
Nondriver (all)	19
Nondriver with disability	12

Note: Percentages may not total 100 because of rounding, nonresponse, or omitted categories. MSA = metropolitan statistical area.

Appendix C. Rankings of Housing Policies, Local Actions, and Population Segments

Respondents were asked to rank the importance of implementing or increasing funding for the programs shown in table C.1.

Table C.1. Ranking of Housing Policy Priorities by Income Level

Income Group	Affordable Housing Programs	Home Modifications for People with Disabilities
Overall	6	8
Less than $30,000	3	5
$30,000 to $49,999	6	5
$50,000 to $74,999	7	6
$75,000 and over	9	8

Sample: Full (probability-based and oversample); household income <$30,000 (*n* = 1,254); household income <$30,000 to <$50,000 (*n* = 997); household income $50,000–$75,000 (*n* = 902); household income $75,000+ (*n* = 1,434).

Tables C.2.a–C.2.c give additional information about rankings by various population segments.

Table C.2.a. Ranking of Local Actions— General Public, Plus Race or Ethnicity

Actions	General Public	White	African-American	Hispanic/Latino	Asian
Increase police presence.	1	2	2	1	1
Improve schools.	2	1	1	2	2
Make streets pedestrian friendly.	3	3	6	5	4
Provide transportation services for seniors and people with disabilities.	4	4	4	4	5
Build or upgrade parks.	5	5	8	7	6
Implement or increase funding for affordable housing programs.	6	7	3	3	9
Add more buses, light rail, or subway systems.	7	6	5	6	3
Implement or increase funding for home modifications for people with disabilities.	8	9	7	8	7
Invest in or build libraries.	9	8	10	9	8
Build more stores and shops.	10	10	9	10	10

Sample: Probability-based 50+ population (*n* = 893) and probability-based 50+ white (*n* = 692); 50+ African American sample (*n* = 455); Hispanic/Latino oversample (*n* = 456); Asian oversample (*n* = 452).

Table C.2.b. Ranking of Local Actions— General Public, Plus Household Income

Actions	General Public	<$30k	$30k to <$50k	$50k to <$75k	$75k+
Increase police presence.	1	1	1	2	2
Improve schools.	2	4	2	1	1
Make streets pedestrian friendly.	3	6	4	4	3
Provide transportation services for seniors and people with disabilities.	4	2	3	3	5
Build or upgrade parks.	5	8	8	8	4
Implement or increase funding for affordable housing programs.	6	3	6	7	9
Add more buses, light rail, or subway systems.	7	7	7	5	6
Implement or increase funding for home modifications for people with disabilities.	8	5	5	6	8
Invest in or build libraries.	9	9	9	9	7
Build more stores and shops.	10	10	10	10	10

Sample: Probability-based 50+ population (*n* = 893) and full (probability-based and oversample); household income <$30,000 (*n* = 1,254); household income <$30,000 to <$50,000 (*n* = 997); household income $50,000–$75,000 (*n* = 902); household income $75,000+ (*n* = 1,434).

Table C.2.c. Ranking of Local Actions— Nearby Seekers and Non-Nearby Seekers

Actions	General Public	Nearby Seekers	Non-Nearby Seekers
Increase police presence.	1	3	2
Improve schools.	2	2	1
Make streets pedestrian friendly.	3	6	4
Provide transportation services for seniors and people with disabilities.	4	4	3
Build or upgrade parks.	5	8	7
Implement or increase funding for affordable housing programs.	6	5	6
Add more buses, light rail, or subway systems.	7	1	8
Implement or increase funding for home modifications for people with disabilities.	8	7	5
Invest in or build libraries.	9	9	9
Build more stores and shops.	10	10	10

Sample: Probability-based 50+ population (*n* = 893).

Appendix D. Summary of Livable Communities Index Qualitative Data Collection—In-Depth Interviews

- 80 participants (chosen from among quantitative survey respondents)
- 30-minute telephone interview
- November 2012

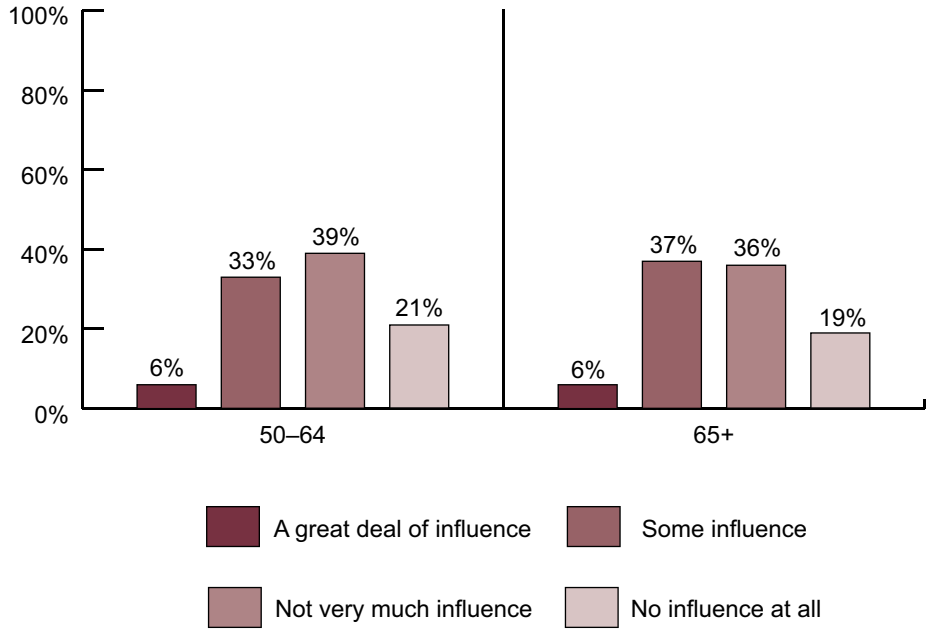
Major purpose: Gather additional data as participants reflect on the livability concepts that are being explored as part of the key findings

- After participants were asked to design the perfect community, their responses were categorized into the following broad areas: transportation, safety, location of services, parks and recreation, neighbors, and housing.
- The respondents mentioned seven main areas where changes would improve the neighborhood. Chief among them was transportation. Additional changes to improve the neighborhood included (a) enhance safety, (b) have better location of services (make them more accessible), (c) involve better upkeep of homes and general upkeep of neighborhood, and (d) increase or add parks and bike trails.
- Level sidewalks and ramps were the two features garnering the most mentions for helping a user of a mobility device. Additional features mentioned included curb cuts and low curbs, buses, accessible doors, specialized transportation, crosswalks, and elevators.
- The majority of respondents who currently drive said they believe they could live comfortably in their community even if they could no longer drive.
- Respondents who currently drive said if they were no longer able to drive and were to stay in their community, they would be concerned about the availability of transportation, the distances to services, and their personal safety.
- Respondents who do not drive mentioned a number of improvements to transportation that could help them get around better. The two most frequently cited improvements were shuttle service for seniors and more regular buses. Other suggestions included running public transportation on time, making bus service closer to the respondent (perhaps by adding more bus stops), making taxis more accessible, and adding bike access.
- Those respondents who said the community had “a lot or some” pride cited two major indicators: the neighbors and the fact that the property is well maintained and the community is clean.
- Respondents who said their community had “not very much” community pride or “none at all” cited primarily the fact that the community does not get together.
- Respondents who said they did not feel safe getting around in their community either by walking or using a mobility device said the main reasons were high crime, poor or no lighting, people loitering, no sidewalks, and poorly maintained sidewalks.

Appendix E. Additional Community Preference Survey Data Results

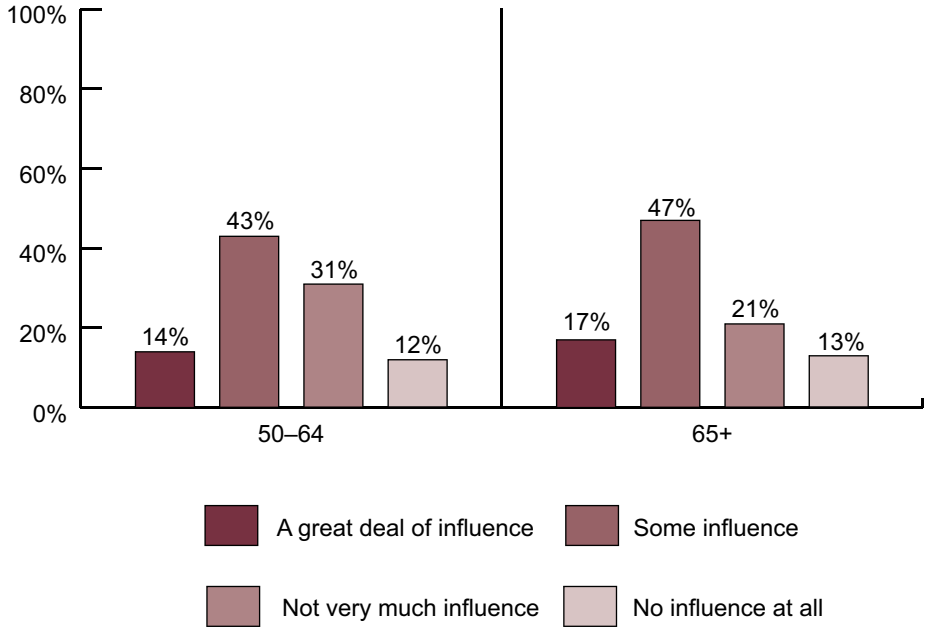
The following figures summarize the results of the qualitative data collection that were not shown in the main text.

Figure E.1. By age, how much does being able to participate in the local government decision-making process influence your decision to move to a community?



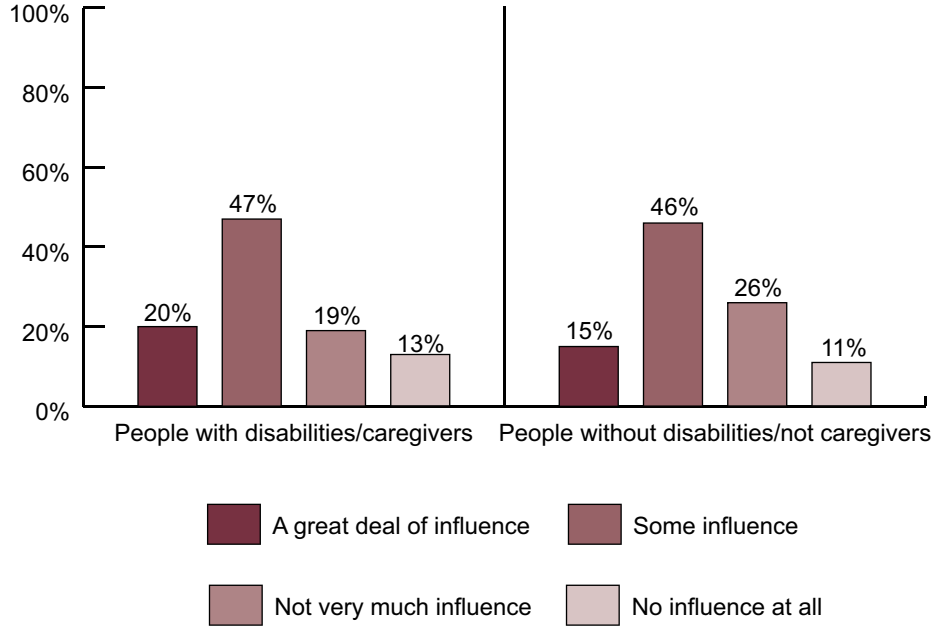
Sample: Probability-based 50+ population (*n* = 893).

Figure E.2.a. How much does the reputation of the local government or politics influence your decision to live in a community? (By age)



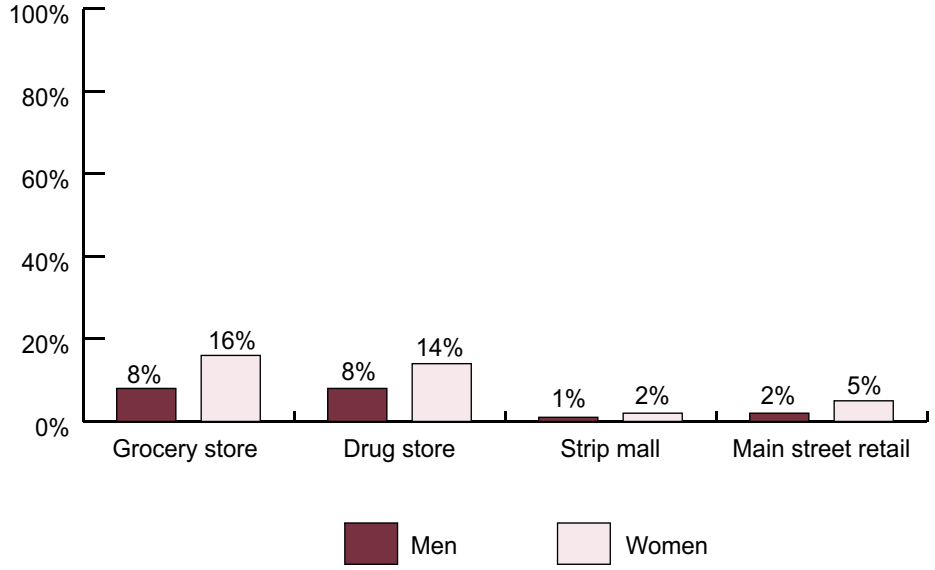
Sample: Probability-based 50+ population (*n* = 893).

Figure E.2.b. How much does the reputation of the local government or politics influence your decision to live in a community? (By households with people with disabilities)



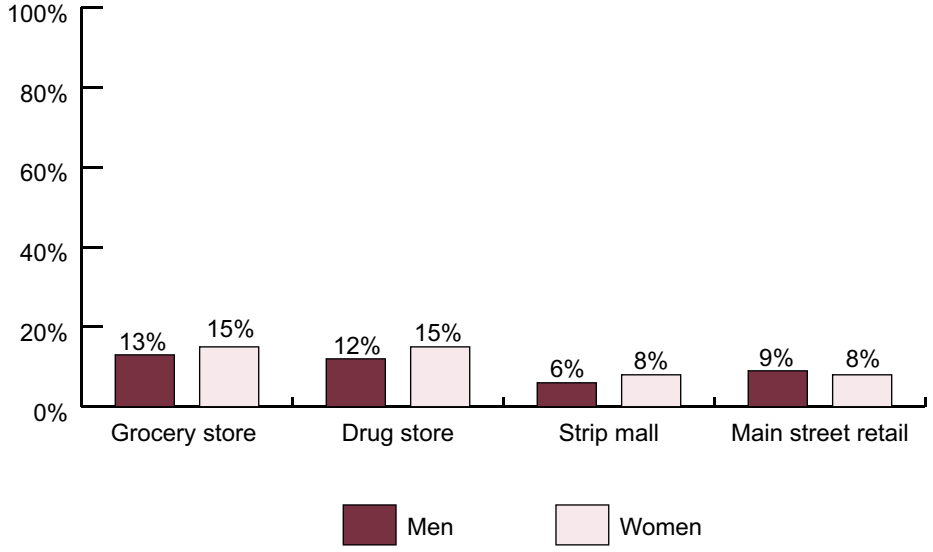
Sample: Full (probability-based and oversample); people in households with persons with disabilities (*n* = 2,083); people without disabilities/not caregivers (*n* = 2,513).

Figure E.3.a. By gender, who prefers a maximum distance of ¼ mile to local retail?



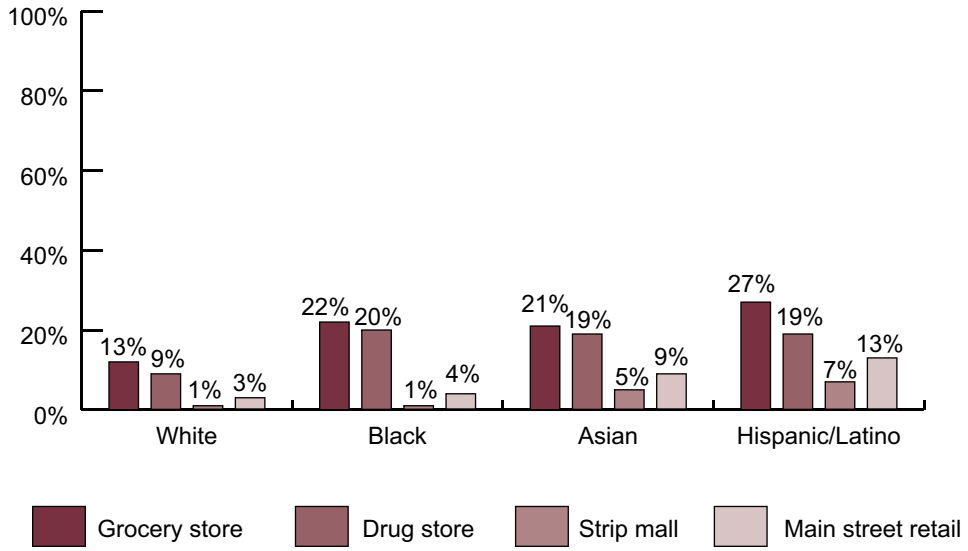
Sample: Probability-based 50+ population (*n* = 893).
Survey question: What is the maximum distance you would prefer to have the following item from your home?

Figure E.3.b. By gender, who prefers a maximum distance of ½ mile to local retail?



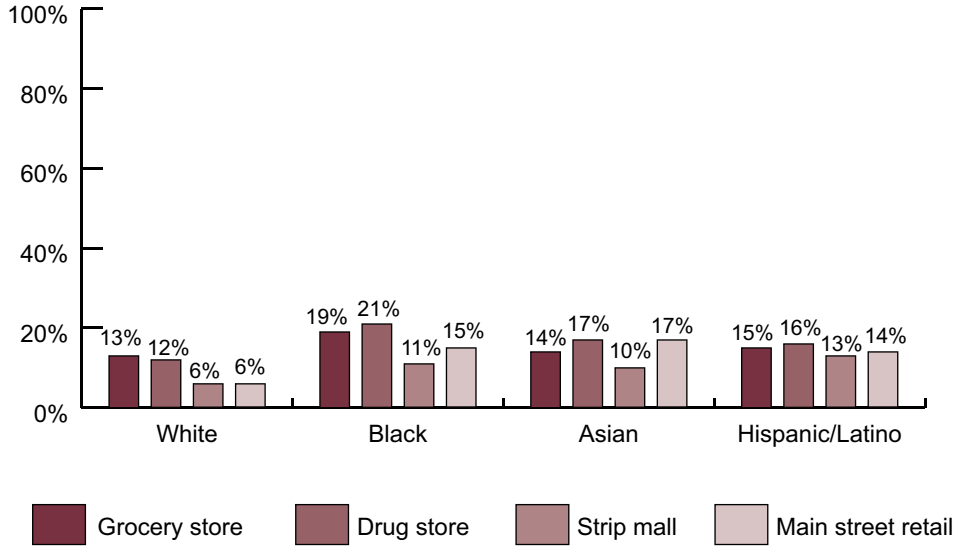
Sample: Probability-based 50+ population (*n* = 893).
Survey question: What is the maximum distance you would prefer to have the following item from your home?

Figure E.4.a. By race and ethnicity, who prefers a maximum distance of ¼ mile to local retail?



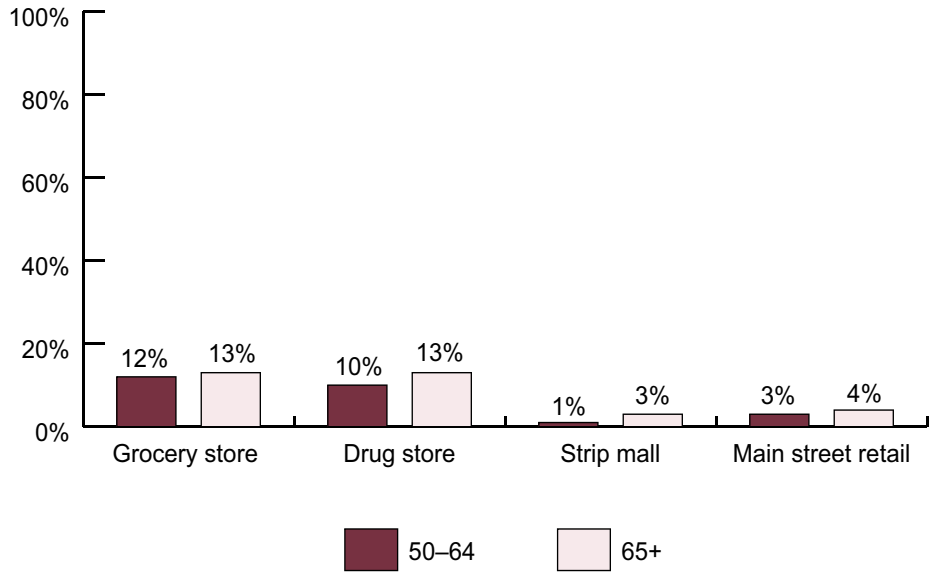
Samples: 50+ probability-based, white (*n* = 692); 50+ African-American oversample (*n* = 455); Hispanic/Latino oversample (*n* = 456); Asian oversample (*n* = 452).
Survey question: What is the maximum distance you would prefer to have the following item from your home?

Figure E.4.b. By race and ethnicity, who prefers a maximum distance of ½ mile to local retail?



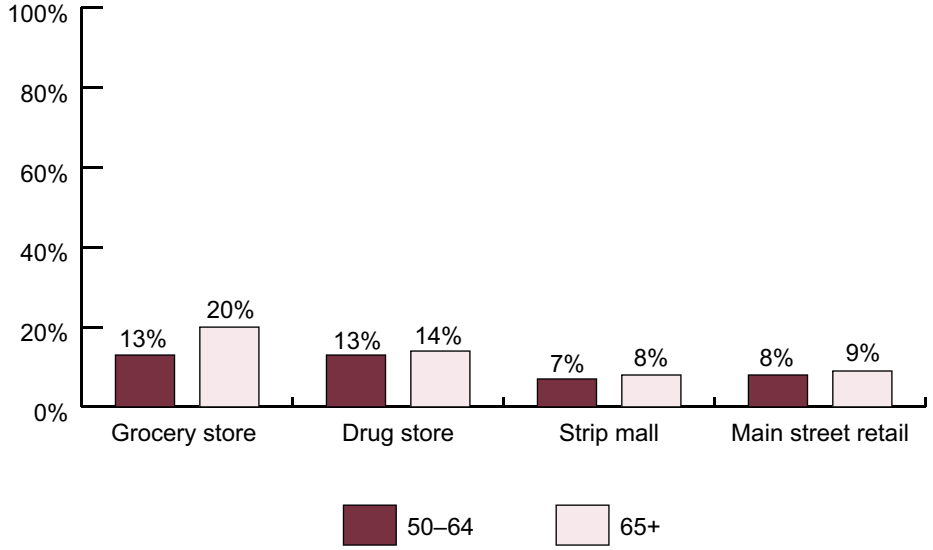
Samples: 50+ probability-based, white (*n* = 692); 50+ African-American oversample (*n* = 455); Hispanic/Latino oversample (*n* = 456); Asian oversample (*n* = 452).
Survey question: What is the maximum distance you would prefer to have the following item from your home?

Figure E.5.a. By age, who prefers a maximum distance of ¼ mile to local retail?



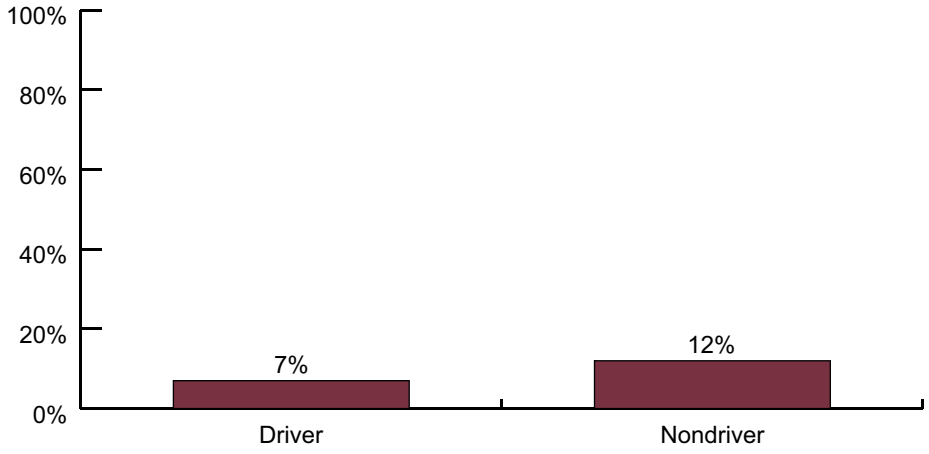
Sample: Probability-based 50+ population (*n* = 893).
Survey question: What is the maximum distance you would prefer to have the following item from your home?

Figure E.5.b. By age, who prefers a maximum distance of ½ mile to local retail?



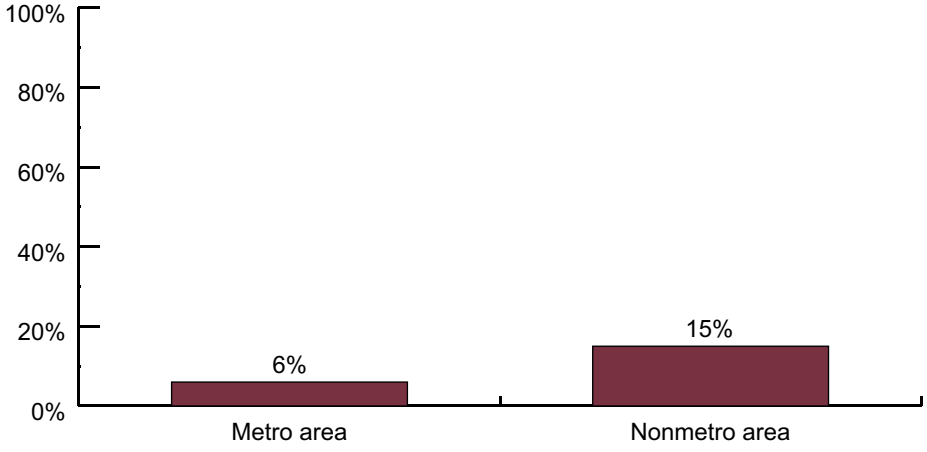
Sample: Probability-based 50+ population (*n* = 893).
Survey question: What is the maximum distance you would prefer to have the following item from your home?

Figure E.6.a. Would perceived neighborhood "nuisances" prevent you from moving into a community? (Drivers)



Sample: Full (probability-based and oversample); drivers (*n* = 3,683), nondrivers (*n* = 895).
Survey question: Which of the following would prevent you from moving to a home in that community?

Figure E.6.b. Would perceived neighborhood "nuisances" prevent you from moving into a community? (Metro area)



Sample: Full (probability-based and oversample); metro (*n* = 3,740); nonmetro (*n* = 604).
Survey question: Which of the following would prevent you from moving to a home in that community?

Public Policy Institute

601 E Street, NW | Washington, DC 20049
202-434-3840 PH | 202-434-6480 F | www.aarp.org/ppi

ATTACHMENT E

APPROVING SENIORS HOUSING

Facts That Matter

Paul Emrath

SENIORS Housing COUNCIL
NATIONAL ASSOCIATION OF HOME BUILDERS

A Service of NAHB

BuilderBooks.com™
National Association of Home Builders
1201 15th Street, NW
Washington, DC 20005-2800
(800) 223-2665
www.builderbooks.com

TABLE OF CONTENTS

Introduction v

Chapter 1 Education Issues. 1

Chapter 2 Planning for Road Improvements 4

Chapter 3 Parking Standards. 9

Chapter 4 Public Safety Services 15

Chapter 5 Water and Sewer Services. 22

Chapter 6 Public Parks and Libraries 26

Chapter 7 Local Economic Benefits: Income, Taxes, and Jobs Generated by a Typical Active Adult Community 30

About the Author

Paul Emrath, Assistant Staff Vice President of Housing Policy Research, NAHB Housing Policy Department, conducted the research on which he based this booklet, *Approving Seniors Housing: Facts That Matter*. The Housing Policy Department provides statistical and economic research to support other, primarily policy-making functions of NAHB—including legislative and regulatory advocacy and activities undertaken by various committees, councils, and state and local builder associations affiliated with NAHB. In addition to seniors housing, Emrath's areas of expertise include multifamily housing and estimating the economic impacts of home building.

Since joining NAHB in 1992, Emrath has developed many of the methods NAHB uses to analyze housing markets and government housing programs, and published articles on a wide variety of housing-related topics in *Seniors Housing News* and elsewhere. His articles "Seniors in the Market for Housing: State Forecasts Through 2006" (*NIC Review, Vol. 6,* November 1998) and "The American Housing Survey: A Valuable New Information Source for Seniors Housing" (*Seniors Housing & Care Journal, Vol. 10 No. 1, 2003*) won National Investment Center awards for original research in the field of seniors housing. Before joining NAHB, he taught economic theory and statistics at the University of Wisconsin-Oshkosh. He has a Ph.D. in Economics from the University of Wisconsin-Milwaukee.

Acknowledgments

I would like to thank the three chairs of the NAHB Research Committee for their support of the studies on which *Approving Seniors Housing: Facts That Matter* is based. These people include Evelyn Howard, Howard & Associates, Bethesda, Maryland; Randy Warner, Market Perspectives, Dallas, Texas; and Margaret Wylde, ProMatura Group, LLC, Oxford, Mississippi.

I'd also like to thank the people who gave me ideas for specific charts and tables that we included in the studies: David Crowe, Senior Staff Vice President of the Federal Regulatory and Housing Policy Area, NAHB Advocacy Group; Bob McNamara, National Association of Realtors, Washington, D.C. Thanks also to Keyvan Izadi, Land Use Planner, NAHB Land Development Department, for his critique and valuable suggestions.

About Seniors Housing Council

The NAHB Seniors Housing Council serves NAHB members who are involved in providing housing for the 50+ populations. *Approving Seniors Housing: Facts That Matter* is another service of the Seniors Housing Council in cooperation with BuilderBooks, and the NAHB Department of Housing Policy.

Reviewers

BuilderBooks thanks the developers and builders who provided responses to questions about this product in the planning stages including Deborah Williams, New Jersey Division, U.S. Home Corporation, Freehold, New Jersey; Ashley Studl, Villas of America, Evanston, Illinois; George T. Mead, Mead & Associates, LLC, Salem Oregon; Allan C. Schweinberg, Centex Destination Properties, Attanibte Springs, Florida, George Turner, Crystal Springs Properties, Inc., Uniontown, Pennsylvania; Bill Slenker, Slenker Land Corporation, Burke Virginia; and Bobby R, Whitten, Land Solutions, Fort Meyers, Florida.

Figure List

Figure 1 Persons Per Household by Age of Household Head v
Figure 2 Direct Spending By Local Governments 1
Figure 3 School-aged children per 100 households by age of household head 2
Figure 4 Voting on the Measure K $450 million School Bond Issue (Riverside County, CA) 3
Figure 5 Public Spending on Roads and Highways 4
Figure 6 How Americans Get to Work 5
Figure 7 Change in Number of Commuters: 1990-2000 6
Figure 8 Average Number of Trips Generated per 100 Housing Units: Morning Rush Hour 7
Figure 9 Average Number of Trips Generated per 100 Housing Units: Evening Rush Hour 8
Figure 10 Vehicles Per Household by Age of Household Head 10
Figure 11 Vehicles Per Household by Cost of the Home Owned or Rented 10
Figure 12 Worksheet for Computing Parking Spaces Needed for a Seniors Housing Community Summary of the Results 13
Figure 13 Local Government Spending on Public Safety 15
Figure 14 Regression Simulations: Fire Deaths Per Million Persons 19
Figure 15 Arrests Per 1,000 Households By Age of Household Head 20
Figure 16 Crimes Per 1,000 Households By Age of Victimized Household Head 20
Figure 17 Providers of Water and Sewer Services 22
Figure 18 Water Use in the U.S. 23
Figure 19 Average Water/Sewer Bills By Age of Household Head 24
Figure 20 Local Governments in the U.S. and Current Spending on Libraries 26
Figure 21 Home Buyer Preferences for Recreational Facilities 27
Figure 22 Adult Population and Library Use 29
Figure 23 NAHB Local Impact Model: Diagram of Phase I 31
Figure 24 NAHB Local Impact Model: Diagram of Phase II 32
Figure 25 NAHB Local Impact Model: Diagram of Phase III 32

Tables List

Table 1 HUD/NAHB Research Center Parking Standards
Table 2 Parking Space Standards for Single Family Units: Recommended Modifications Based on Age of the Household and House Price 9
Table 3 Parking Space Standards for Multifamily Units: Recommended Modifications Based on Age of the Household, Gross Rent, and Number of Bedrooms 11
Table 4 Monthly Ambulance Use in a Hypothetical City 12
Table 5 Regression Results 16
Table 6 Percent of Home Buyers Who Would Seriously Be Influenced to Move into a Community By the Presence of Outdoor Facilities 18
Table 7 Local Impact of Building 100 Homes in a Typical Active Adult Community One-Year Impact (Sum of Phases I and II) 34
Table 8 Local Impact of Building 100 Homes in a Typical Adult Community Ongoing, Annual Impact (Phases III) 35

INTRODUCTION

Developers often face substantial obstacles in obtaining approval for a particular community. As local planning authorities adopt more stringent growth management policies

- Communities are subjected to greater scrutiny during the planning phase.
- Reviews become more time-consuming and costly.
- Developers increasingly bear the burden of proving that their communities will not adversely impact the surrounding communities.

For developers of seniors housing, the burden can be even greater. Many zoning ordinances still do not explicitly recognize seniors housing as an allowable land use, so a special exemption or use permit is required. Developers may also need to contend with infrastructure requirements or impact fees that are unrealistically high, given the nature of the communities. Partly because seniors housing is a relatively new and rapidly evolving segment of the industry, the relevant information is not always readily available.

When assessing the impacts of residential development, local planners often rely on national or regional population averages. The projected number of residents moving into the development, for example, may be based on average household size tables taken from the Census. Some frequently used development standards, such as parking requirements, are based on a consensus reached among one or two dozen experts gathered around a table in Washington D.C. In many cases, these numbers are obtainable at a reasonable cost and provide planners with good working estimates. However, these statistics seldom recognize the special nature of housing intended for seniors, who can differ from people in average households in important ways. The most often used statistics on household size, for instance, usually control for structure type and number of bedrooms, but seldom take the age of the residents into account. Yet statistics show that average household size declines with age after the head of the household reaches, approximately, age 45 (Figure 1).

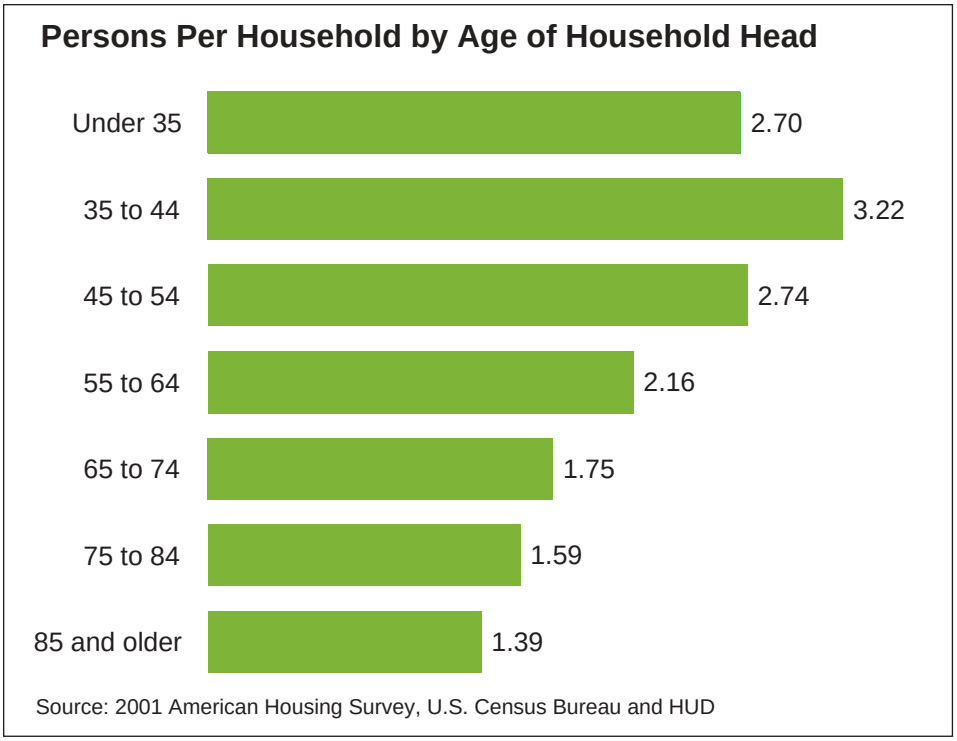


FIGURE 1 PERSONS PER HOUSEHOLD BY AGE OF HOUSEHOLD HEAD

Housing intended for seniors may be either explicitly age-restricted (or "age-qualified," as many industry experts would now prefer to say) or targeted to adults above a certain age threshold through a marketing effort and the amenities designed into the community. In either case, seniors housing comes in a variety of types, with active adult communities at one end of the spectrum and skilled nursing facilities at the other.

The Census Bureau classifies the places where people live as either housing units or group quarters. A housing unit is "a house, apartment, mobile home, or trailer, or group of rooms occupied as separate living quarters, or, if vacant, intended for occupancy as separate living quarters." Group quarters are then defined as all places where people live that that are not housing units.

Skilled nursing facilities are clearly group quarters. Other types of seniors housing are either housing units or are straddling the boundary between housing units and group quarters classifications. A universally recognized scheme for classifying these housing types doesn't exist, but the following terms are in common use in the industry.

Active Adult Communities. Primarily subdivisions of owner-occupied single-family homes.

Seniors Apartments (or Independent Living Facilities). Rental apartments that are age-restricted or otherwise targeted to seniors. Units built under the Low-Income Housing Tax Credit program that are intended for seniors but provide no special services beyond affordable rents would be an example, but this category also includes many market-rate apartments. In addition, multifamily condos have become a significant part of the seniors market. Some people would consider these examples of independent living; others would group them in the active adult category.

Congregate Care Facilities. Rental apartments with a central dining room where tenants usually would be served at least one meal a day. Other "hospitality-type" services, such as shopping and housekeeping, also may be provided.

Assisted Living Facilities. Apartments that offer tenants assistance with activities of daily living, such as bathing and dressing.

Continuing Care Retirement Communities. A combination of independent living and assisted living units that also provide medical services; access to on-site nursing care, if needed, is usually guaranteed by contract.

Many types of seniors housing have evolved fairly recently, and virtually all are in the process of evolving further. In order to grant approval for a seniors housing community without unnecessary delays, local officials need to document some of the ways in which seniors housing differs from other types of housing.

Listed below are summaries of seven chapters that present the results of seven studies designed to help developers successfully navigate the approval process for seniors housing communities. The studies resulted from discussions between NAHB economists and industry members who were encountering specific problems in obtaining approval for seniors housing communities. Each chapter addresses one of these problems and provides charts and statistics that developers can present to local authorities and community associations. The sources used to generate the charts and statistics (primarily data scientifically collected by government statistical agencies) are fully documented.

1. Education Issues. Explains the Fair Housing Law that lets developers age-restrict a property so it will contain no school-aged children. Demonstrates that, even if a seniors housing community is not explicitly age-restricted, it will not contain many children of that age. Presents a case study that shows how residents of an active adult community supported a large school bond issue.

2. Planning for Road Improvements. Shows that seniors housing has fewer people per household using local roads and that they tend to avoid roads during times of peak traffic congestion.

3. Parking Standards. Assuming that an adequate local parking standard exists for residential construction in general, shows how to generate a smaller yet still adequate standard for seniors housing communities. Provides a spreadsheet to perform the calculations for a specific community.

4. Public Safety Services. Addresses the issue of ambulance use, showing that the increase associated with a seniors housing development in many cases will be minimal. Also shows how to put this issue in the context of a local government's total public safety budget: demonstrates the advantages of new construction in terms of the fire protection budget, and the powerful advantages of a community occupied by seniors in terms of the budgets for police protection and correctional facilities.

5. Water and Sewer Services. Shows that seniors use fewer water and sewer services than other households in proportion to the differences in household size.

6. Public Parks and Libraries. Provides information about what types of recreational facilities seniors prefer to use. Shows that they tend to use libraries somewhat less than younger households.

7. Local Economic Benefits. Presents the local income, jobs, and taxes generated by a typical active adult community, and uses the NAHB Local Impact of Home Building Model.

Chapters will be updated as new material becomes available.

If you have questions or need assistance interpreting the material provided in these studies contact Paul Emrath, Assistant Staff Vice President, Housing Policy at (800) 368-5242, extension 8449.

CHAPTER 1: Education Issues

One important way seniors housing differs from traditional housing communities is in its impact on public education—the budget item that is usually the largest local government expenditure. Public education accounts for about 37 percent of all direct spending by local governments

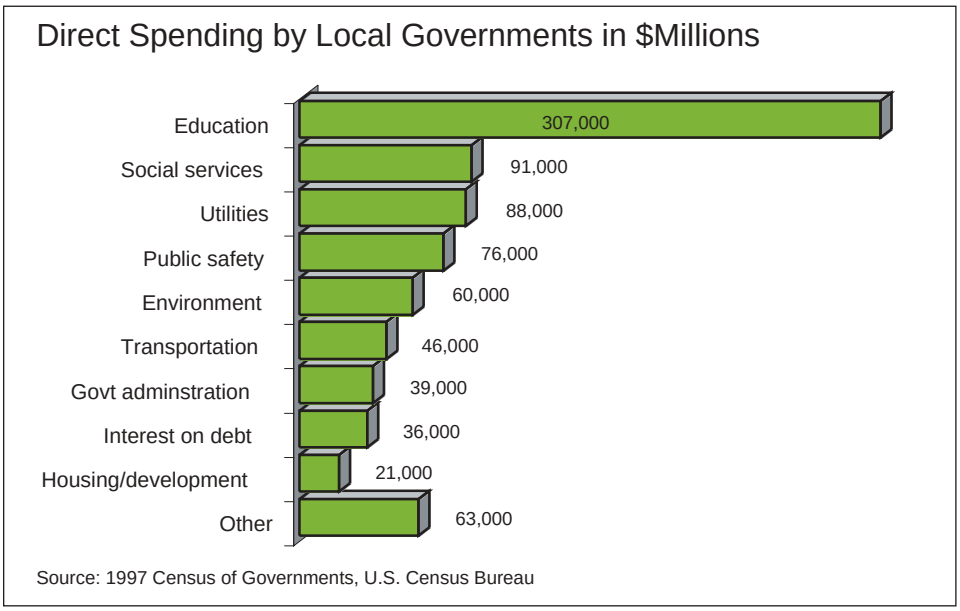


FIGURE 2 DIRECT SPENDING BY LOCAL GOVERNMENTS

DID YOU KNOW THAT THE FAIR HOUSING LAW LETS YOU BUILD COMMUNITIES FOR ADULTS ONLY REGARDLESS OF THEIR SIZE OR THE SERVICES THEY PROVIDE?

Legal Background: You can build for adults only, if you want.

Developers do not necessarily want to age-restrict all communities intended for older customers. If they do want to, however, the current federal laws do not make it particularly difficult. Not everyone understands the statutory changes that have taken place over the years to bring about this situation.

1968 **Fair Housing Act** made it illegal to refuse to sell or rent housing to families simply because they had children

1988 **An Amendment to the Fair Housing Act** allowed housing occupied by people age 55 or older to be legally age-restricted, but only if the property provided significant facilities and services for the elderly.

1995 **Housing for Older Persons Act** relaxed the conditions under which housing could be age-restricted by removing the "significant facilities" requirement, making it possible to build seniors housing communities of virtually any size and with any package of amenities.

The bottom line is that, under current Federal law, a housing community can exclude residents below a certain age if it meets any of the following requirements:

- Demonstrates the intent to house people age 55 or older and has at least one person of that age group in 80 percent of its occupied units.

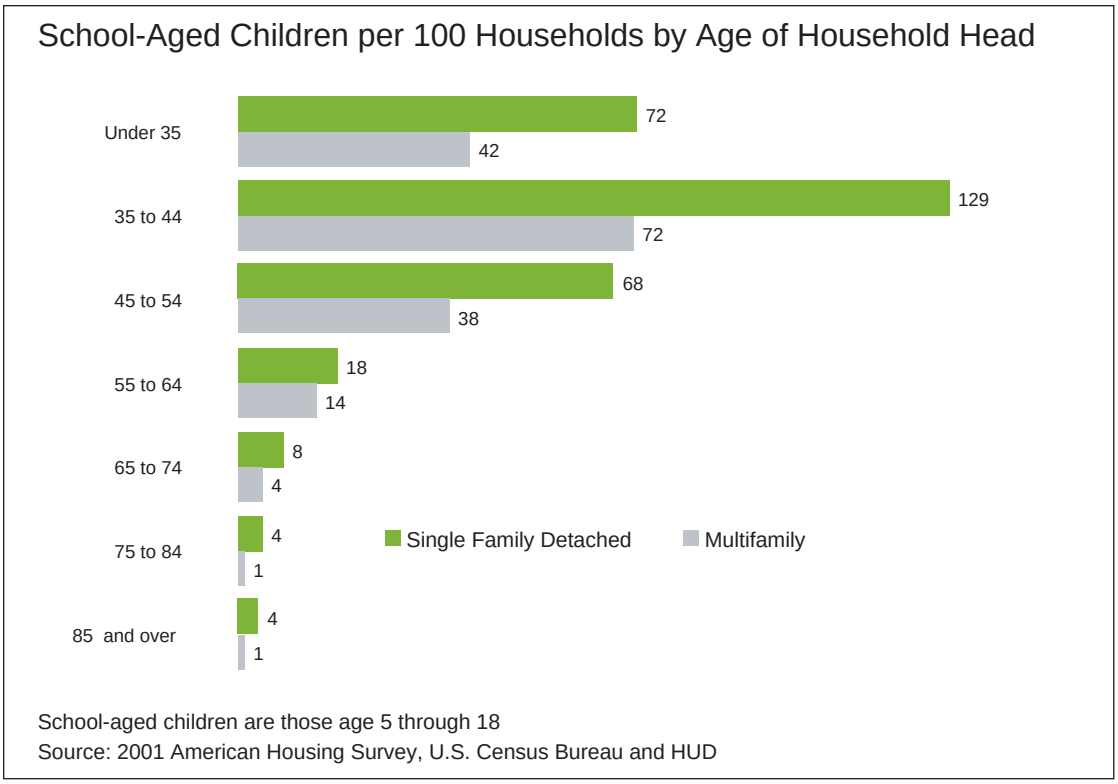
- Is occupied by people who are age 62 or older.
- Is designed for and occupied by elderly people under some federal, state, or local government program.

In practice, these regulations mean that the developer of an age-restricted community

- Does not have to officially register with the federal government (but may have to register with the state in which it is located).
- Needs to maintain records on the age of occupants.
- Needs to keep records, such as advertising materials, that document the intent to house people age 55 and older (unless it's a community only for people above age 62 or one developed using a government program).

In short, the 1995 change in the law made building age-restricted housing easier because the builder no longer has to include special seniors-related facilities in the structure. Obviously, age-restricted housing will contain no school-aged children, and therefore will not increase the demand for public elementary and secondary education.

Even if seniors housing is not age-restricted, the impact on public elementary and secondary schools will be minimal. Sometimes developers do not want to explicitly exclude school-aged children, but do so because that's the only way a local government will grant relief from school impact fees. Those local governments are essentially wasting time and energy on an unnecessary action. If a property's households are headed by adults over age 55, they are unlikely to contain many school-aged children. Figure 3 shows this data for both single-family and multifamily housing based on the 2001 American Housing Survey (AHS).



Households headed by someone 35 to 44 are most likely to have school-aged children.

FIGURE 3 SCHOOL-AGED CHILDREN PER 100 HOUSEHOLDS BY AGE OF HOUSEHOLD HEAD

In 100 typical households, there are 129 school-aged children if the households are headed by someone age 35 to 44. That's seven times the number of school-aged children in otherwise similar households headed by someone age 55 to 64, and more than 15 times the number in households headed by someone age 65 to 74.

Thus, even if it's not explicitly age-restricted, seniors housing will have a negligible impact on local school districts.

Supporting School Bonds: A California Case Study

Because seniors households contain few children, residents in many communities are afraid that seniors perceive themselves as having a small stake in local school systems, and that a seniors housing community will create a voting block that tends to oppose new school bond issues. But that perception isn't true in every case, as Measure K in California demonstrates.

MEASURE K WAS A $450 MILLION BOND ISSUE FOR SCHOOL CONSTRUCTION (THE 4TH LARGEST SCHOOL BOND IN CALIFORNIA HISTORY) THAT WAS ON THE NOVEMBER 2001 BALLOT IN THE DESERT SANDS UNIFIED SCHOOL DISTRICT IN RIVERSIDE COUNTY. IN ORDER TO PASS, THE BOND REQUIRED A 67 PERCENT SUPERMAJORITY OF THE VOTES.

A percentage of voters in the district live in Sun City Palm Desert, a Del Webb age-restricted active adult community. California adds some conditions to the federal laws governing seniors housing. In California every household in an age-restricted community must have at least one member who is age 55 or older, and none of the residents can be under age 45 with certain exceptions (such as a spouse, caregiver, principal means of support, or handicapped child).

According to information obtained from the Riverside County Registrar of Voters through Del Webb's director of public affairs, Measure K passed easily. Overall, the measure gained 12,110 "yes" votes compared to 2,896 "no" votes, so that just over than 80 percent voted in favor of the bond issue and easily surpassed the required two-thirds supermajority.

Rather than hindering passage of the bond issue, the seniors in Sun City Palm Desert showed strong support for it. Residents of Sun City Palm Desert cast 1,170 "yes" votes and only 234 "no" votes. In other words, 83 percent of the voters in the seniors community voted in favor of a $450 million school bond issue—a slightly higher percentage than in the school district overall (Figure 4).

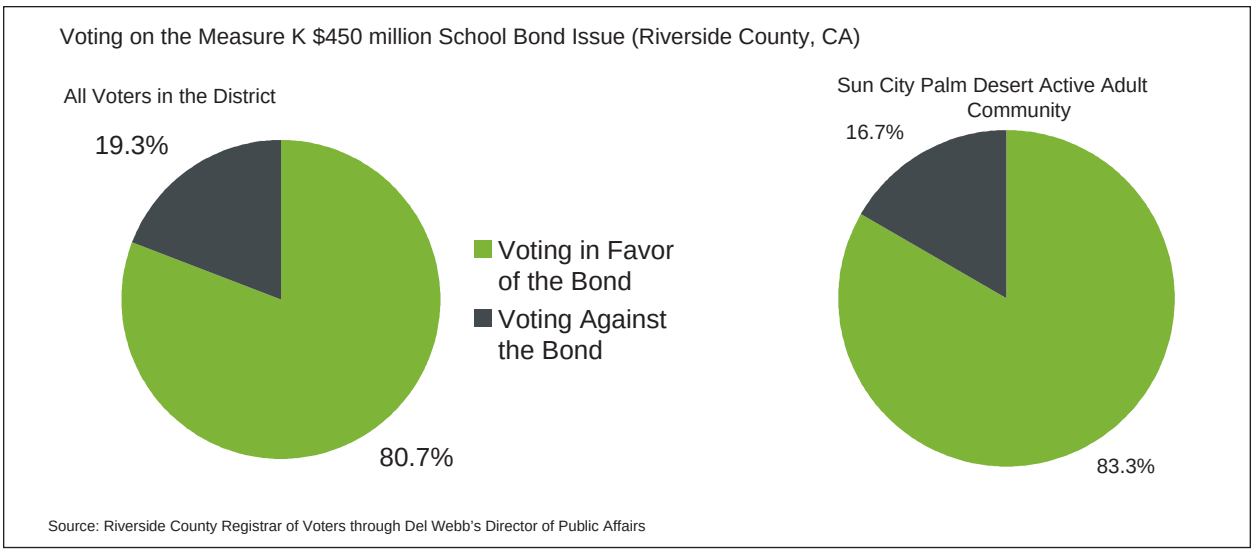


FIGURE 4 VOTING ON THE MEASURE K $450 MILLION SCHOOL BOND ISSUE (RIVERSIDE COUNTY, CA)

This case study is based on the results of one ballot in one school district. As such, it can't be generalized to the entire country. But it does provide one example to counter the assumption that seniors will automatically oppose any school bond issue.

CHAPTER 2: Planning for Road Improvements

TWO OF THE OBVIOUS ADVANTAGES OF SENIORS HOUSING ARE THAT SENIORS HAVE FEWER PEOPLE PER HOUSEHOLD TO GENERATE TRIPS ON LOCAL ROADS, AND SENIORS TEND TO AVOID ROADS DURING TIMES OF PEAK CONGESTION.

Compared to education, transportation is a smaller but still significant item in local government budgets (Figure 2). In the typical case, most of a local transportation budget consists of spending on roads and highways.[1] Although the amount spent on road infrastructure concerns the local jurisdictions that issue building permits, it's likely to be a greater concern for the state governments that fund the lion's share of highway spending (Figure 5).

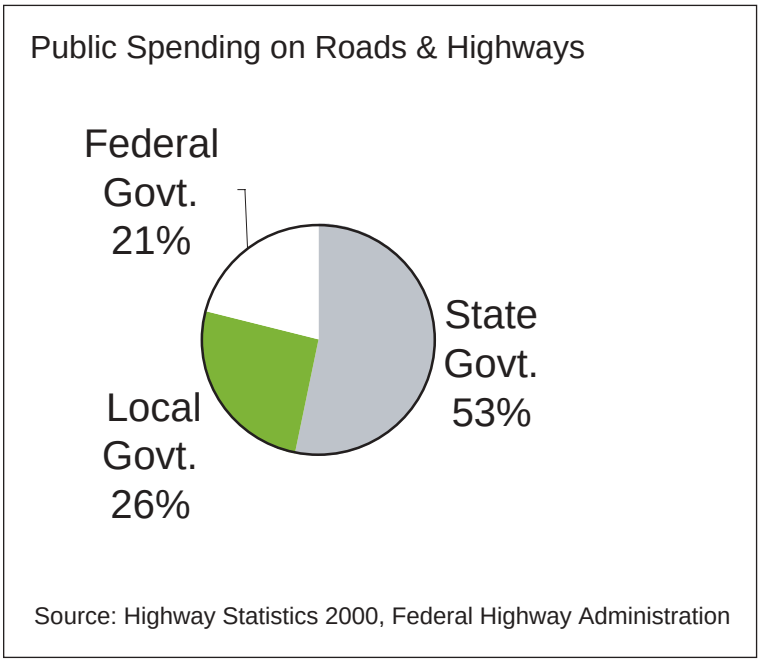


FIGURE 5 PUBLIC SPENDING ON ROADS AND HIGHWAYS

At the local level, concerns are more often related to physical, rather than fiscal, costs. Will new development strain the existing network of local streets? Will it increase congestion and commuting times for residents of existing neighborhoods?

RESIDENTIAL CONSTRUCTION AND TRANSPORTATION INFRASTRUCTURE ARE COMPLEMENTARY. SOUND COMMUNITY DEVELOPMENT REQUIRES THE RIGHT MIX OF THESE TWO ELEMENTS.

Sometimes, new roads precede other construction and allow traffic into previously inaccessible areas. Other times homebuilding takes place first, and the eventual population growth induces road improvements. Some jurisdictions require developers to build roads, dedicate land for that purpose, or pay an impact fee to cover the anticipated cost.

1. Public transit is classified as a "government enterprise," such as an electric utility (financed by charging users and requiring, in most cases, minimal government subsidy), that is usually not included when projecting fiscal costs of development.

Road-building requirements, land dedications, and fees need to be kept within reasonable limits. Current residents in a local jurisdiction have an incentive to charge excessive fees for new communities, especially if they need to make up for years of neglected infrastructure spending.

To guard against that situation, the public sector needs to provide adequate funding for road improvements on an ongoing basis. Alternatives such as growth moratoria are unlikely to be successful.

LOCAL GOVERNMENTS CANNOT CONTROL POPULATION GROWTH. PEOPLE HAVE TO LIVE SOMEWHERE.

Preventing development in one area merely shifts it outside the restricted area. The shift can easily move homes and trip destinations farther apart, leading to longer average commuting distances, more time spent on the road, and increased congestion. Congestion can even rise inside the growth restriction boundaries, as people may drive through the area even though they are prevented from living there.

Strategies for reducing congestion through some combination of increased carpooling, use of public transportation, and telecommuting also are unlikely to meet with widespread success. Driving alone remains the most popular way to get to work—by a wide margin (Figure 6).

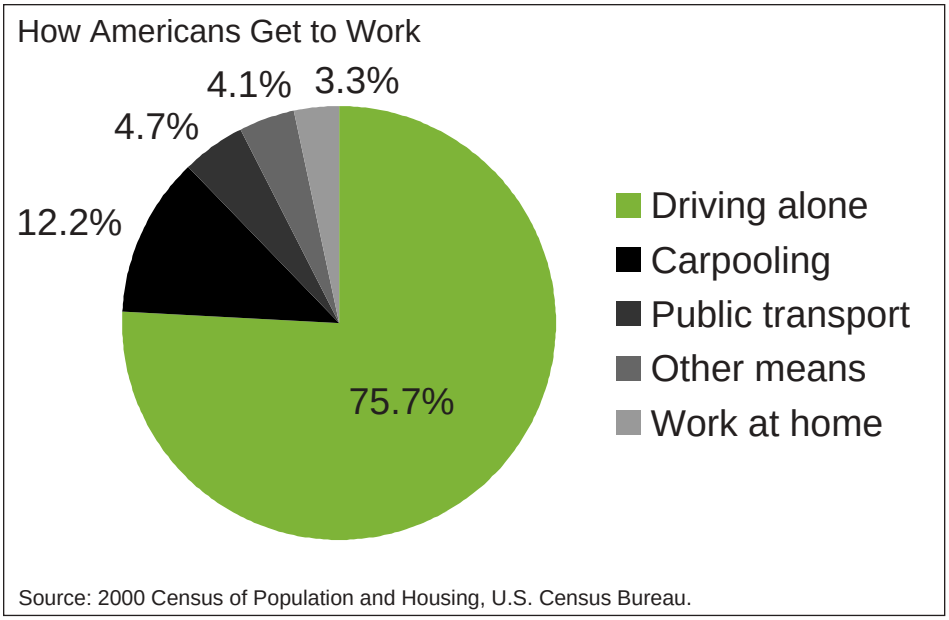


FIGURE 6 HOW AMERICANS GET TO WORK

IS DRIVING A BAD THING? ACCORDING TO RESEARCHERS FROM HARVARD AND TUFTS UNIVERSITIES, "CARS ARE JUST SO MUCH FASTER THAN PUBLIC TRANSPORTATION THAT COMMUTES IN THE OLD DENSE CITIES ARE ALMOST ALWAYS MUCH LONGER," AND "CAR-BASED EDGE CITIES HAVE MUCH MORE RACIAL INTEGRATION THAN THE OLDER PUBLIC TRANSPORTATION CITIES THAN THEY REPLACED."[2]

2. Ed Glaeser and Matthew Kahn, Sprawl and Urban Growth (National Bureau of Economic Research, 2003): http://www.nber.org/papers/w9733

Perhaps more surprisingly, while driving to work is on the rise, other means of getting there are actually losing ground (Figure 7).

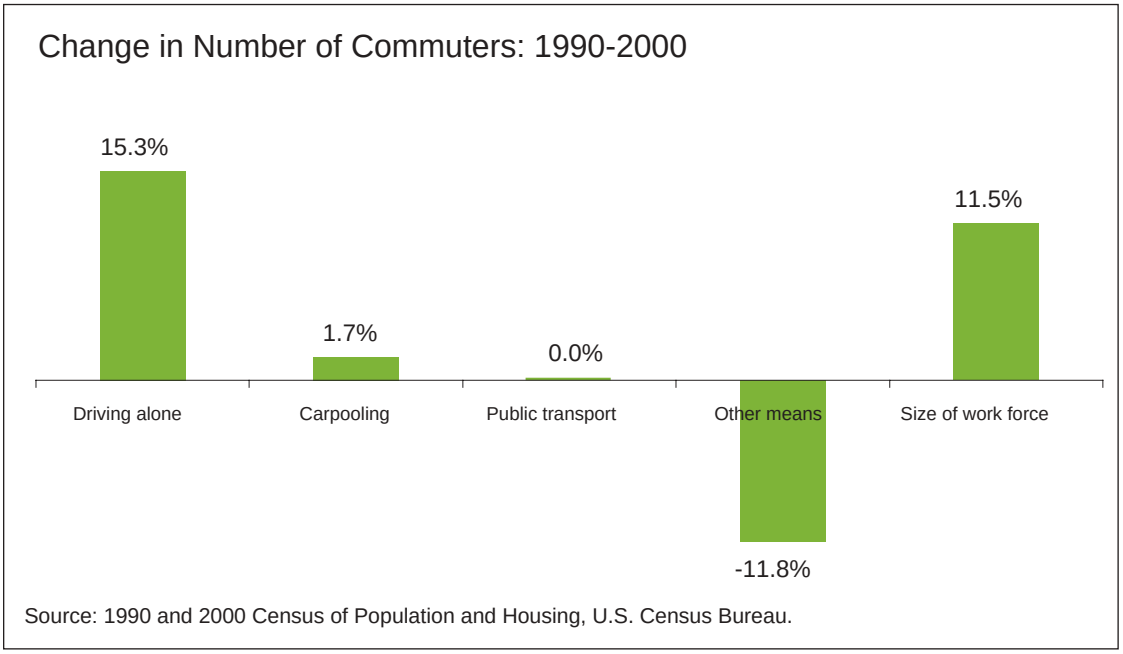


FIGURE 7 CHANGE IN NUMBER OF COMMUTERS: 1990-2000

Driving alone is the only means of getting to work that is increasing more rapidly than the volume of the work force.

The number of people working at home—although they are increasing at a somewhat faster rate than the number driving to work—still accounts for only a small share of the labor force, so it seems unlikely that telecommuting is destined to solve many traffic congestion problems in the short run.

WHILE ROAD INFRASTRUCTURE SHOULD BE ADEQUATE, MAKING IT MORE THAN ADEQUATE ALSO HAS DISADVANTAGES.

Not only do local streets that are wider, paved more deeply, or otherwise made more elaborate than necessary drive up the cost of development, they may in some cases encourage dangerous driving, be environmentally unfriendly, and adversely affect neighborhood aesthetics. Providing the appropriate levels and types of transportation infrastructure therefore requires striking a delicate balance that can be attained only if planners are aware of the differences between seniors housing and other types of residential developments.

FORTUNATELY, THE RELATIVE ADVANTAGES OF SENIORS HOUSING ARE EASY TO DOCUMENT.

The number of persons per household is one of the key variables. After approximately age 45, household size declines as the age of the household head rises (Figure 1), so senior households tend to use roads less frequently simply because they contain fewer people. In a jurisdiction where transportation-related fees or land dedications are based on use-per-person estimates, the requirements for a seniors housing unit will be reduced proportionately, as long as household size is taken appropriately into account.

Household size, of course, doesn't tell the whole story. Because seniors' travel is usually not tied strongly to the

requirements of either a full-time job or a full-day school schedule, seniors can often time their trips to avoid morning and evening rush hours.

The standard reference used by planners, Trip Generation, provides one of the few distinct estimates for seniors housing. This manual, published by the Institute of Transportation Engineers (ITE), specifies that the most important indicators of impact on road congestion are trips generated during "rush" hours, which ITE defines as the hours between 7 a.m. and 9 a.m. and between 4 p.m. and 6 p.m.) when traffic is at its greatest. A trip is defined as a vehicle either entering or leaving the site. The relevant numbers from Trip Generation are summarized in figures 8 and 9. (This manual is published at irregular and somewhat infrequent intervals. The most recent [6th] edition was published in 1997.)

DURING RUSH HOURS, THE DIFFERENCES BETWEEN SENIORS AND OTHER TYPES OF HOUSING ARE ESPECIALLY STRIKING.

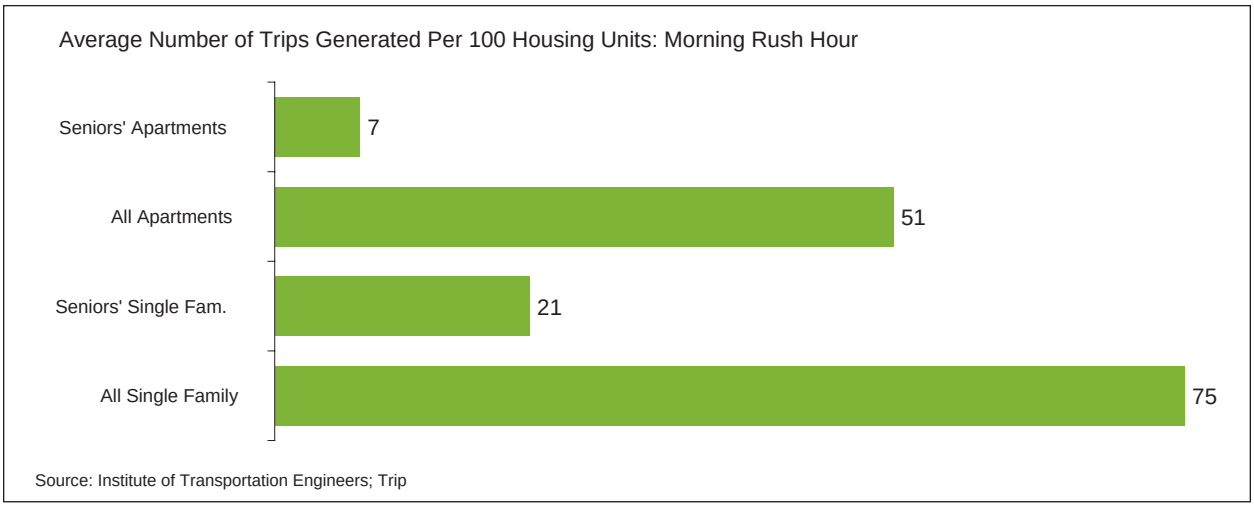


FIGURE 8 AVERAGE NUMBER OF TRIPS GENERATED PER 100 HOUSING UNITS: MORNING RUSH HOUR

During the morning rush hour, 100 seniors housing units generate, on average, only 21 (for single-family) and seven (for multifamily) trips—compared to 75 and 51, respectively, for homes occupied by residents of all ages. During the evening rush hour, the number of trips generated is slightly higher across the board, but the pattern of drastically reduced traffic for homes occupied by seniors is just as evident.

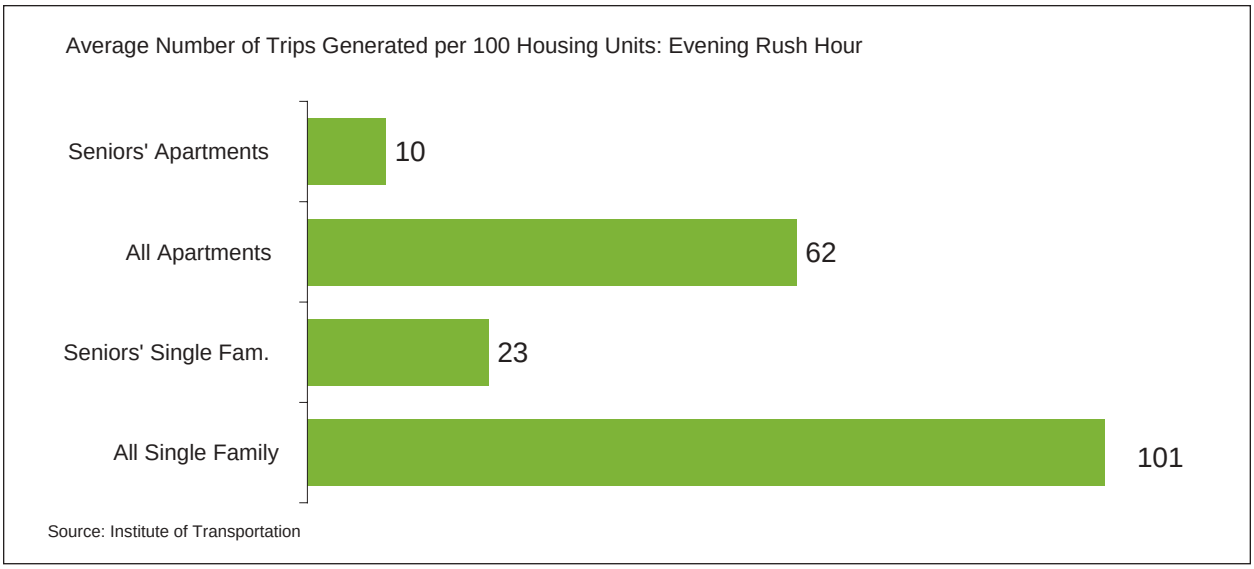


FIGURE 9 AVERAGE NUMBER OF TRIPS GENERATED PER 100 HOUSING UNITS: EVENING RUSH HOUR

The bottom line is that the standard planning reference shows that seniors drive their cars less during the times when road use is closest to capacity. If the homes being built are seniors housing units, local jurisdictions can spend less on road infrastructure and still maintain existing traffic-flow and safety conditions.

CHAPTER 3: Parking Standards

Besides traffic, parking is the other transportation-related item local jurisdictions are likely to consider when reviewing a proposal for a residential development. Here the concern is not fiscal costs so much as simply determining the right number of parking spaces to require in the development. Parking should be sufficient to accommodate residents and visitors, but it should not unnecessarily consume space that could be put to better use.

PARKING STANDARDS ARE TYPICALLY GOVERNED BY LOCAL ORDINANCES. EXCEPTIONS TO ORDINANCES THAT GRANT REDUCTIONS IN THE STANDARDS ARE NOT UNUSUAL. THE QUESTION IS WHAT SORT OF REDUCTIONS ARE REASONABLE AND APPROPRIATE FOR SENIORS HOUSING.

A set of parking standards in common use were developed by the U.S. Department of Housing and Urban Development (HUD) and the NAHB Research Center (see Table 1).[1]

HUD/NAHB Research Center Parking Standards

Type of housing unit	Parking spaces
Single Family Detached	2.0
Multifamily	
3 or more bedrooms	2.0
1 or 2 bedrooms	1.5
Efficiency	1.0

Source: Proposed Model Land Development Standards, 1993.

TABLE 1 HUD/NAHB RESEARCH CENTER PARKING STANDARDS

The standards may be fulfilled by any combination of on-street and off-street parking spaces. They are the result of a consensus reached by a panel of experts, including planners from local governments. The standards should provide at least enough spaces for residents and visitors in the vast majority of cases.

SPACE DEVOTED TO PARKING SHOULD BE CONSERVATIVE. IF IT CAN BE REDUCED, IT FREES UP SPACE THAT CAN BE USED TO ENHANCE THE ECONOMIC OR AESTHETIC VALUE OF THE NEIGHBORHOOD—THROUGH ADDITIONAL LANDSCAPING OR RECREATIONAL FACILITIES.

The text accompanying the HUD/NAHB Research Center standards clearly states that modifications to the standards are appropriate in some cases, and that planners should take factors such as the availability of public transportation into account. No formulas or specific reductions are provided, however.

IF THE NEW DEVELOPMENT WILL BE OCCUPIED BY SENIORS, THAT FACT OBVIOUSLY JUSTIFIES REDUCING THE NUMBER OF PARKING SPACES REQUIRED. ON AVERAGE, SENIORS HAVE FEWER CARS

1. Proposed Model Land Development Standards and Accompanying Model State Legislation, June 1993: http://www.nahbrc.org/tertiaryR.asp?TrackID=&CategoryID=1652&DocumentID=2623

Households headed by seniors contain fewer people (Figure 1) and fewer vehicles in both single family detached and multifamily housing (Figure 10).

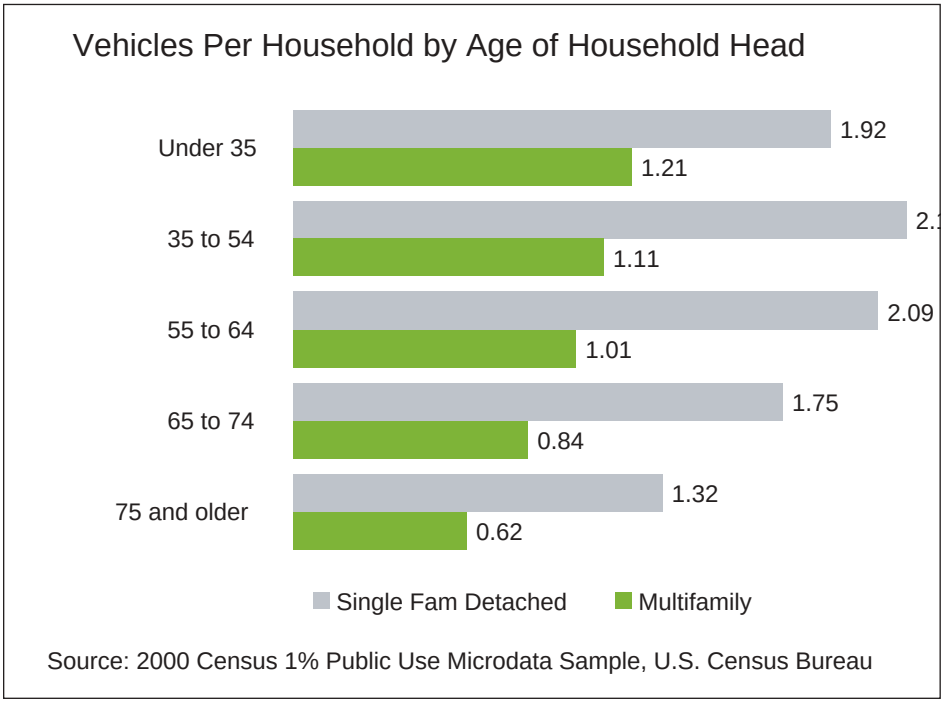


FIGURE 10 VEHICLES PER HOUSEHOLD BY AGE OF HOUSEHOLD HEAD

Similarly, households in less costly housing units (measured by value if the homes are owner-occupied and gross rent if they are renter-occupied) also tend to have fewer vehicles (Figure 11).

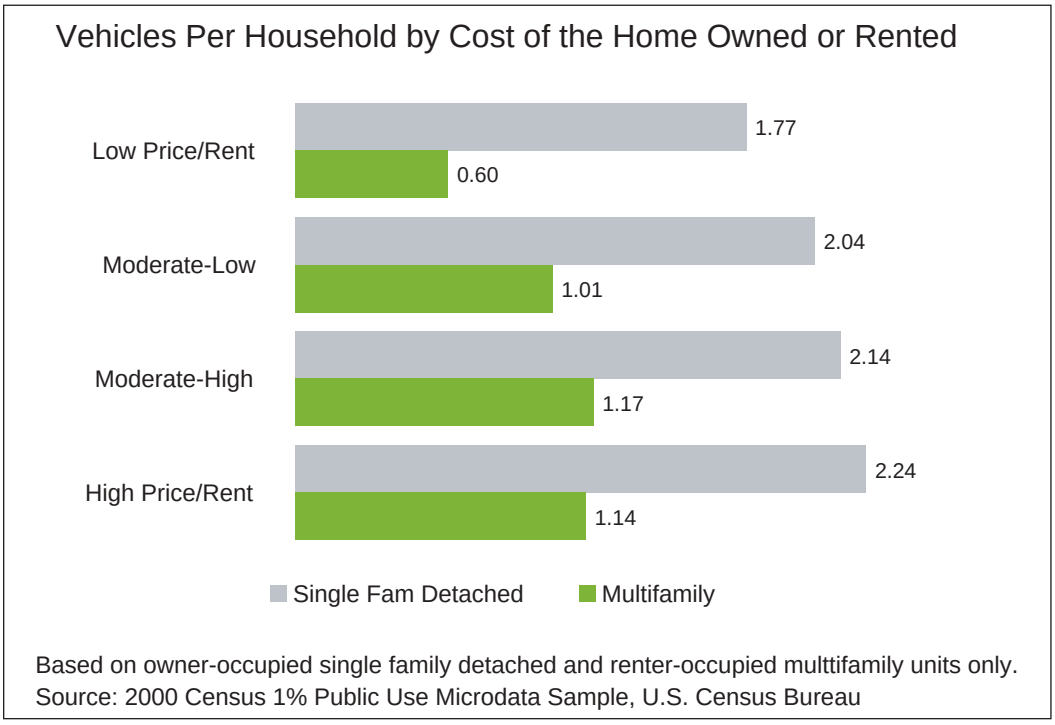


FIGURE 11 VEHICLES PER HOUSEHOLD BY COST OF THE HOME OWNED OR RENTED

DID YOU KNOW THAT HOUSEHOLDS UNDER AGE 35 IN MODERATE-TO-HIGH RENT APARTMENTS HAVE FOUR TIMES AS MANY VEHICLES AS HOUSEHOLDS OVER AGE 75 IN LOW-RENT APARTMENTS?

Housing cost measures (value and gross rent) are defined relative to income levels in the geographic area. Because house prices vary so much across the country, you need a definition of high- and low-cost units relative to a benchmark that varies from place to place. For example a price that seems low in San Francisco may seem quite high to prospective buyers in rural Mississippi. Area Median Family Income (AMI) is used as the local benchmark, primarily because it's available for every county in the United States, is updated every year, and is readily available on one of HUD's websites (http://huduser.org/datasets/il.html).

The evidence suggests that parking standards could be reduced somewhat for particular types of housing units. The question is how to do it in a conservative fashion that will still provide sufficient parking in the vast majority of cases.

Care is required, because averages don't tell the whole story. In other words, seniors may on average have fewer cars and trucks, but a fraction of them still want to hold on to all their vehicles. For this reason, some additional analysis based on properties of the distributions other than averages is used to make sure the parking space reductions recommended are conservative.
Additional statistics and a technical description of the procedure are shown. Additional statistics and a technical description of the procedure are available from Paul Emrath, NAHB Assistant Staff Vice President of Housing Policy Research, 202-266-8499.

The results are used to show how the HUD/NAHB parking standards can be modified for single-family (Table 2) and multifamily (Table 3) housing units.

Parking Space Standards for Single Family Units:
Recommended Modifications Based on Age of the Household and House Price

	Single Family Detached					
		House Price				
	All Single Family Detached	Low Under 2 x AMI	2 to 3 x AMI	3 to 4 x AMI	High 4 x AMI or Higher	Town Houses
A. Initial Parking Space Standard (HUD/NAHB Research Center)						
	2.00	2.00	2.00	2.00	2.00	2.00
B. Modified Parking Space Standard						
Age 55 to 64	2.00	1.95	2.00	2.00	2.00	1.85
Age 65 to 74	1.85	1.65	1.85	1.95	2.00	1.70
Age 75 or older	1.40	1.25	1.40	1.55	1.65	1.40
C. Percentage Reduction from Initial Standard						
Age 55 to 64	0.0%	-2.5%	0.0%	0.0%	0.0%	-7.5%
Age 65 to 74	-7.5%	-17.5%	-7.5%	-2.5%	0.0%	-15.0%
Age 75 or older	-30.0%	-37.5%	-30.0%	-22.5%	-17.5%	-30.0%

House Price categories are expressed as a share of Area Median Family Income (AMI).
Table assumes the initial standard for single family attached units is the same as for detached units.
Based on NAHB tabulations of the 2000 Census of Population and Housing 1% Public Use Microdata Sample, U.S. Census Bureau.

TABLE 2 PARKING SPACE STANDARDS FOR SINGLE FAMILY UNITS: RECOMMENDED MODIFICATIONS BASED ON AGE OF THE HOUSEHOLD AND HOUSE PRICE

Single-Family Versus Multifamily

Single-family. A housing unit with no other unit above or below it, separated from any adjacent unit by an unbroken wall that extends from basement to roof.

Multifamily. Units that share utilities will have pipes or ducts that pierce the wall and be classified as part of a multifamily structure.

Table 2 includes townhouses. Townhouses are not specifically mentioned in the HUD/NAHB standards. The table assumes that the single-family detached standard is used for these (the standard is 2.0 spaces for both a three-bedroom multifamily and single-family detached units). The federal government classifies many townhouses as "single-family attached." To most people, the difference between a single-family attached unit and a multifamily townhouse is subtle to nonexistent.

Parking Space Standards for Multifamily Units: Recommended Modifications Based on Age of the Household, Rent, and Number of Bedrooms

	Gross Rent				Number of Bedrooms		
	Low Under 10% of AMI	10 to 15% of AMI	15 to 20% of AMI	High 20% AMI or Higher	None (Efficiency)	One or Two	Three or More
A. Initial Parking Space Standard (HUD/NAHB Research Center)							
	1.50	1.50	1.50	1.50	1.00	1.50	2.00
B. Modified Parking Space Standard							
Age 55 to 64	1.00	1.35	1.50	1.50	1.00	1.50	2.00
Age 65 to 74	0.90	1.20	1.30	1.40	0.75	1.30	1.85
Age 75 or older	0.80	1.05	1.05	1.00	0.60	1.10	1.70
C. Percentage Reduction from Initial Standard							
Age 55 to 64	-32.5%	-10.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Age 65 to 74	-40.0%	-20.0%	-12.5%	-7.5%	-25.0%	-12.5%	-7.5%
Age 75 or older	-47.5%	-30.0%	-30.0%	-32.5%	-40.0%	-27.5%	-15.0%

Gross Rent categories are expressed as a share of Area Median Family Income (AMI).
Based on NAHB tabulations of the 2000 Census of Population and Housing 1% Public Use Microdata Sample, U.S. Census Bureau.

TABLE 3 PARKING SPACE STANDARDS FOR MULTIFAMILY UNITS: RECOMMENDED MODIFICATIONS BASED ON AGE OF THE HOUSEHOLD, GROSS RENT, AND NUMBER OF BEDROOMS

Table 3 shows results for multifamily units with different numbers of bedrooms and different gross rents. The gross rent cutoffs are based on a percentage of AMI. In an area where AMI is $60,000, gross rents of less than $500 per month ($6,000 per year) fall into the "low" category.
Across the gross-rent categories, the multifamily uses the 1 to 2 bedroom standard, because that covers most new multifamily construction.

In summary, the procedure used to generate the parking standards

- presumes that an initial, adequate set of parking standards is available.
- modifies the standards using data on vehicles owned form the decennial Census
- takes the age of the occupants into account.
- takes into account prices or rents charged for the homes, if that information is available.
- produces a new set of standards for seniors housing, designed to work as well as the initial standards, provided the assumptions about ages of occupants and prices of the units are accurate.

Assisted Living

Some information about parking requirements for assisted living residences has been collected by the American Seniors Housing Association (ASHA). ASHA analysts aggregated parking data from a sample of professionally owned and managed assisted living facilities in nine states. They found that most residents of assisted living facilities do not drive themselves and that the facilities often owned a van or mini-bus to provide transportation for resi-

1. Assisted Living Residences: A Study of Traffic & Parking Implication, 2nd ed. (Washington, D.C.: American Seniors Housing Association, 1998).

dents. Thus, parking is needed primarily for staff, vendors, and visitors. The facilities studied by ASHA generally scheduled staff and vendors to arrive and depart during non-peak driving hours, while visitors tended to arrive and depart at all hours during the day.[1]

These assisted living facilities provided an average of 0.56 parking spaces per unit, and ASHA analysts speculated that fewer than this number might actually be needed, although the data they examined was too fragmentary to support a decisive recommendation.

The lowest number recommended in tables 2 and 3 is 0.60 spaces per unit for efficiency apartments occupied by residents age 75 or older, which approaches the assisted-living average reported by ASHA.

THE TABLES MODIFY THE HUD/NAHB PARKING STANDARDS, AND PROVIDE PERCENTAGE REDUCTIONS THAT CAN BE APPLIED TO STANDARDS SPECIFIED IN LOCAL ORDINANCES

A spreadsheet is available that computes parking requirements for a seniors housing community. In practice, of course, a developer will need to justify assumptions about the expected age of the community's occupants. This justification could be based on past experience with similar communitys.

Figure 12 shows the spreadsheet output for a project X—a hypothetical example with 100 single family detached units and 100 two-bedroom apartments. The example assumes that the HUD/NAHB parking standards would normally apply, but that in this case one-fourth of the residents in each type of unit will be age 55 to 64, one-fourth will be age 75-plus, and the rest will be age 65 to 74. No information about house prices or rents is used.

WORKSHEET FOR COMPUTING PARKING SPACES NEEDED FOR A SENIORS HOUSING COMMUNITY: SUMMARY OF THE RESULTS

Project name	Community X
Location (County and State)	COUNTY Y, STATE Z
Total number of single family detached units in the community	100
Parking spaces needed for single family detached units:	177
Total number of townhouses in the community	0
Parking spaces needed for townhouses:	0
Total number of multifamily apartments in the community	100
Parking spaces needed for multifamily units:	138
TOTAL NUMBER OF HOUSING UNITS:	200
TOTAL PARKING SPACES NEEDED:	315

FIGURE 12 WORKSHEET FOR COMPUTING PARKING SPACES NEEDED FOR A SENIORS HOUSING COMMUNITY: SUMMARY OF THE RESULTS

Because it is a seniors housing community with older residents, communityX requires 315 parking spaces rather than the 350 dictated by the HUD/NAHB Research Center standards.

THE WORKSHEET THAT COMPUTES PARKING REQUIREMENTS FOR SPECIFIC SENIORS HOUSING COMMUNITIES IS AVAILABLE FROM THE NAHB SENIORS HOUSING COUNCIL. TO OBTAIN A COPY BY E-MAIL, CALL 1-800-368-5242, X 8220.

CHAPTER 4: Public Safety Services

Public safety is another broad category of expenses in local government budgets. The Governments Division of the U.S. Census Bureau splits the public safety budget into four components. Police protection is the largest component (Figure 13). Fire protection ranks second, but it is likely to rise to the top of the list when local authorities review proposals to develop seniors housing.

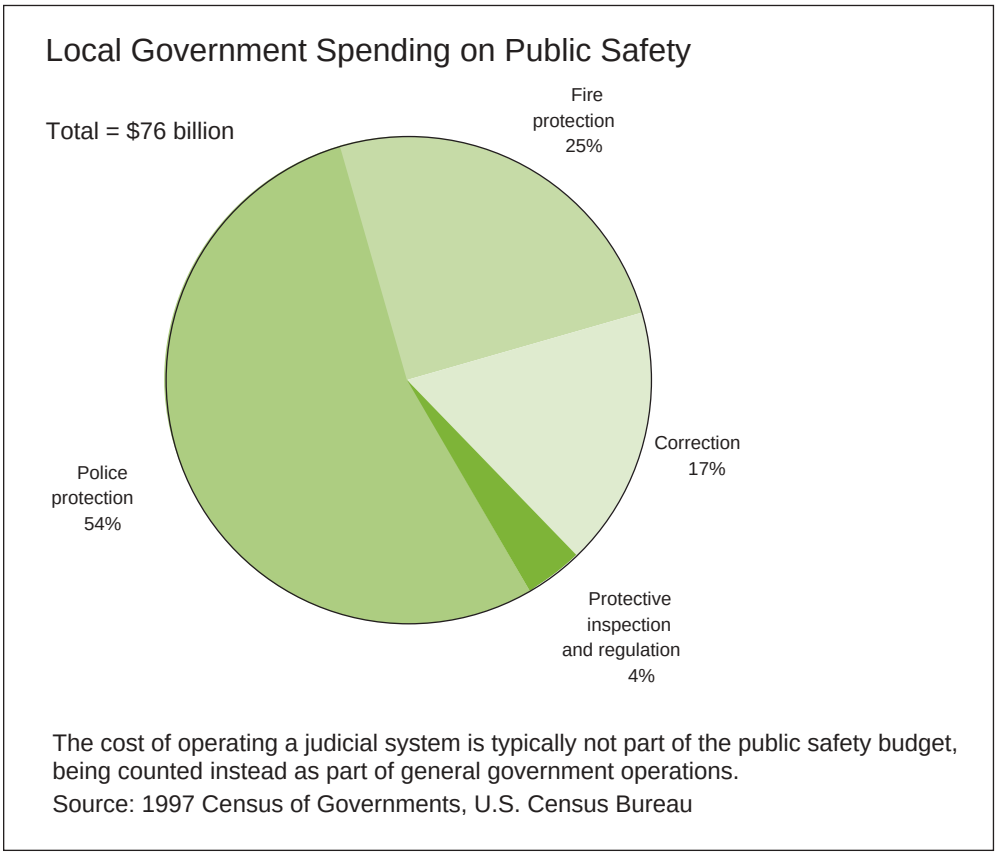


FIGURE 13 LOCAL GOVERNMENT SPENDING ON PUBLIC SAFETY

The reason for this is that, when the public sector provides an ambulance service, it is usually run out of a municipal fire department. The most common concern here is that seniors are more likely than others to use the ambulance service and that the cost of providing the service is therefore greater.

To a certain extent, older citizens do use ambulance services more often. Statistics compiled by the National Center for Health Statistics show that, during a given month, people age 85 or older are about eight-and-half times as likely as people ages 18-34 to be taken to a hospital emergency room by ambulance.[1]

HOWEVER, FROM THE STANDPOINT OF LOCAL FISCAL IMPACTS, YOU NEED TO PLACE SENIORS' AMBULANCE USE IN THE PROPER PERSPECTIVE

1. According to NAHB tabulation of data from the 2000 National Hospital Ambulatory Medical Care Survey: http://www.cdc.gov/nchs/about/major/ahcd/ahcd1.htm

Important facts to know about seniors and ambulance use appear below:

- Seniors households contain fewer people.
- Ambulance use doesn't really increase significantly until people are past the age when they move into active adult communities.
- In a community of 100,000 households, adding 100 or so extra housing units, even if the new residents are of very advanced age, will have minimal impact on total ambulance use.

Figure 1 shows how household size declines with age. That partly compensates for the fact that each person in an older household is somewhat more likely to use local ambulance services.

Table 4 works through a hypothetical example of a city containing 100,000 households with an age distribution and pattern of ambulance use based on U.S. averages.

Monthly Ambulance Use in a Hypothetical City

100,000 Households, Age Distribution, and Ambulance Use Based on U.S. Averages

Age of Household Head	Number of Households	Ambulance Trips		Share of All Trips	Impact of Adding 100 Households	
		Per 1,000 Households	Number of Trips		# Trips	%Increase
18 to 34 years	23,340	9.6	224	18.3%	1.0	0.1%
35 to 44 years	22,470	11.0	248	20.2%	1.1	0.1%
45 to 54 years	20,370	10.3	211	17.2%	1.0	0.1%
55 to 64 years	13,310	10.4	138	11.3%	1.0	0.1%
65 to 74 years	10,100	11.5	117	9.5%	1.2	0.1%
75 to 84 years	8,410	24.3	205	16.7%	2.4	0.2%
85 years and over	2,000	41.1	82	6.7%	4.1	0.3%
All ages	100,000	12.2	1,224	100.0%	1.2	0.1%

Source: NAHB tabulations of data from the 2001 National Hospital Ambulatory Medical Care Survey, U.S. National Center for Health Statistics, and the 2001 American Housing Survey, U.S. Census Bureau and the Department of Housing and Urban Development.

TABLE 4 MONTHLY AMBULANCE USE IN A HYPOTHETICAL CITY

THE NUMBER OF AMBULANCE TRIPS TAKEN BY A HOUSEHOLD DURING A ONE-MONTH PERIOD IS, ON AVERAGE, ROUGHLY THE SAME FOR HOUSEHOLDS WITH RESIDENTS IN ANY AGE BRACKET BELOW AGE 75. SO ADDING A HOUSEHOLD WITH AGES 55-74 TO A COMMUNITY HAS NO GREATER IMPACT ON ITS AMBULANCE SERVICE THAN ADDING A HOUSEHOLD WITH AGES 35-54.

Also, although the ambulance trip rate is highest for households headed by someone over age 85, there are comparatively few of those households in a typical community. Consequently, 85-plus households account for less than 7 percent of the ambulance trips taken per month in the hypothetical city. Adding 100 households with residents older than 85 increases ambulance use by about four ambulance trips per month (a 0.3 percent increase in the hypothetical city of 100,000 households).

LOCAL AUTHORITIES NEED TO JUDGE HOW MUCH FOUR ADDITIONAL TRIPS PER MONTH PER 100 HOUSEHOLDS (AND THAT'S ASSUMING THEY'RE ALL OVER AGE 85) WOULD STRESS THEIR PUBLIC AMBULANCE SERVICES

2. The studies are documented more thoroughly in Elliot Eisenberg, "House Fire Deaths," published in Housing Economics, November 2002, by the NAHB Economics Group.

Ambulance service is only part of local fire protection budgets, and fire protection is on average only one-fourth of local budgets for public safety. Police protection is more than half, and correctional facilities also account for a significant share.

EVEN IF A NEW SENIORS HOUSING COMMUNITY HAS SOME IMPACT ON AMBULANCE USE, IT OFFERS ADVANTAGES THAT ARE LIKELY TO MORE THAN OFFSET THIS IN THE CONTEXT OF THE TOTAL BUDGET FOR PUBLIC SAFETY.

Important points to know about seniors housing and overall public safety—

- Fire deaths tend to be lower in places where the housing stock is newer.
- A strong negative correlation exists between age and virtually any measure of crime. Seniors are less likely to commit crimes or to become the victims of crime.

The costs of fire protection may not be seniors-specific issues, but there is a relationship between fire safety and new construction in general. The belief that newer homes are more fire-safe has become widespread among fire officials and others. Perhaps the strongest reason for this is the way residential building codes have changed since the mid-1970s, requiring the use of more and improved smoke detectors.

Two studies commissioned by homebuilding associations to look into this question provide some supporting evidence.[2]

A study commissioned by the California Building and Industry Association in the 1990s found that the average fatality rate in units that were less than 15-years-old was one-eighth as high as the annual average for California's housing stock and one-tenth as high as the rate for houses more than 15-years-old.

Nearly identical results were obtained in a national study conducted by the NAHB in 1987. That study found that the fatality rate for units that were 5-years-old or less was one-fifth as high as the average fatality rate for all housing units.

Recent research undertaken by NAHB confirms these results. NAHB has performed statistical regression analysis, using data on fire death records combined with data on population and housing characteristics from the 2000 Census, and the results allow us to investigate both the seniors fire safety issue and the new-construction fire safety issues. Results are summarized in Table 5.

3. The Census data provide significant but still somewhat limited information about local areas. A number of Census variables beyond the ones reported in the Table 5 were tried in the regression, but did not help explain reported differences in fire death rates. Nor did the inclusion of these extra variables change the estimated impact of the other explanatory variables in an important way. For more details on the specification of the model contact the NAHB Housing Policy Department (202) 266-8398.

Statistical Results for County Fire Deaths Model

	Regression Coefficient	Absolute t-value*
Constant	29.71	11.64
White percent of population	-10.26	3.87
Median household income (in $10,000)	-2.58	6.47
Percent of the housing stock built after 1994	-17.58	2.45
Adjusted R squared	0.145	

* a commonly used standard is to consider a coefficient statistically significant if the absolute t-value is greater than 2.0.

Source: NAHB analysis of data from the Multiple-Cause-of-Death file, National Center for Health Services, and 2000 Census of Population and Housing SF3 files, U.S. Census Bureau.

TABLE 5 STATISTICAL RESULTS FOR COUNTY FIRE DEATHS MODEL

The regression finds several factors that significantly help explain the incidence of fire deaths in a particular county (although there is a substantial amount of county-to-county variation that the regression model doesn't explain.)[3]

BASICALLY, FIRE DEATHS ARE LESS COMMON WHERE INCOMES ARE HIGHER, WHERE MORE OF THE POPULATION IS WHITE, AND WHERE THE HOUSING STOCK IS OF COMPARATIVELY RECENT VINTAGE.

As an aid to interpretation, the regression results are used to simulate a base case and show what happens to it when the share of new construction increases (Figure 14). In the base case, the regression predicts 10.15 fire-related deaths per million people. If the share of relatively new construction increases from 10 to 20 percent, holding other factors constant, the death rate falls to 9.89 per million. Similar increases in the share of new construction lead to proportional reductions in the fire death rate.

4. See Paul Emrath,, "Crime and Seniors' Housing Preferences," Seniors Housing News, Fall 1998, published by the NAHB Seniors Housing Council.

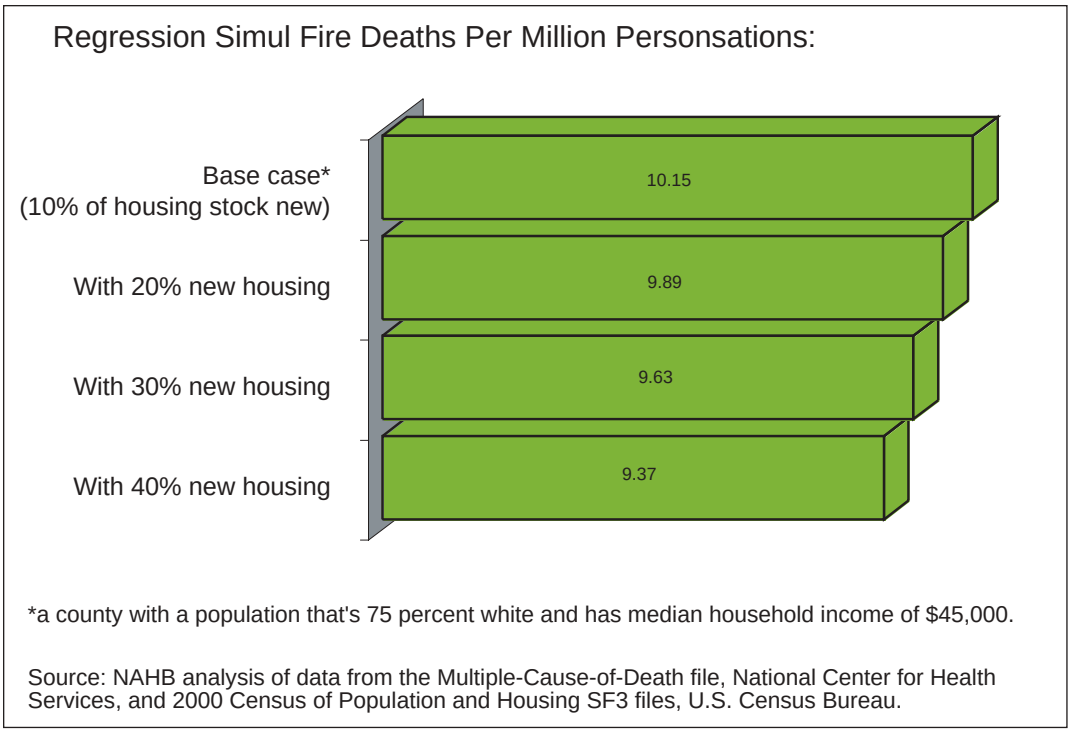


FIGURE 14 REGRESSION SIMULATIONS: FIRE DEATHS PER MILLION PERSONS

The most important statistics to consider in a discussion about seniors housing and the public safety budget are those related to crime.

BY VIRTUALLY ANY MEASURE, OLDER HOUSEHOLDS AND REDUCED CRIME RATES GO HAND IN HAND.

Seniors obviously place less stress on the budget for correctional facilities, because they commit crimes less frequently. Data on arrests compiled by the FBI illustrate that point dramatically (Figure 15).

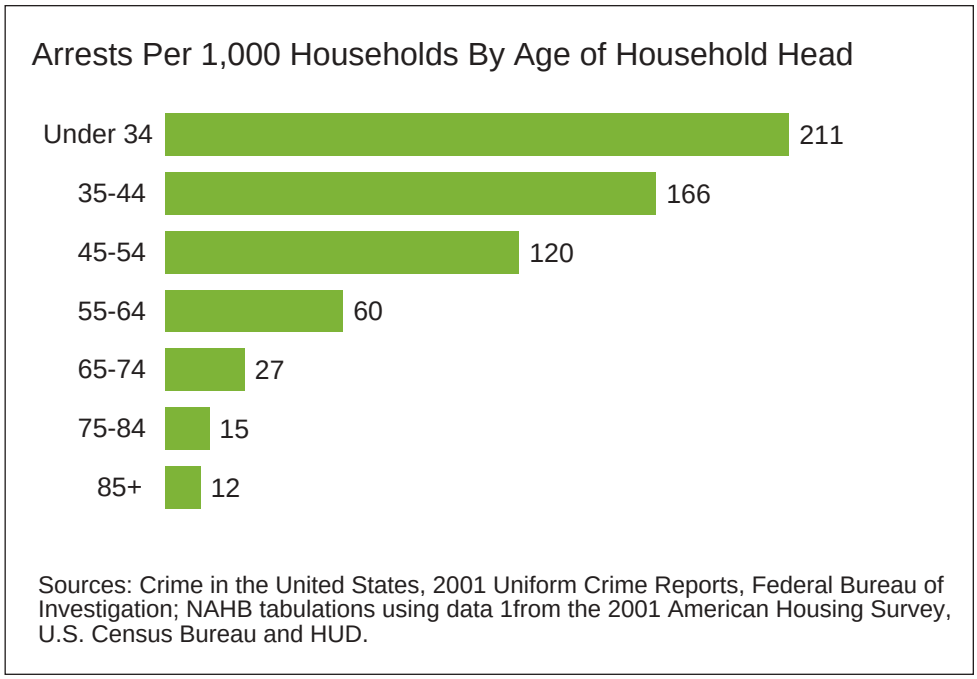


FIGURE 15 ARRESTS PER 1,000 HOUSEHOLDS BY AGE OF HOUSEHOLD HEAD

This probably comes as a surprise to very few people. Knowledge about how seldom older citizens actually become victims of a crime is probably less common, but data from the Bureau of Justice Statistics (BJS) show that a person in a household headed by someone under age 35 is about 16 times more likely than someone in a household where the head is over age 85 to become a victim of a crime (Figure 16).

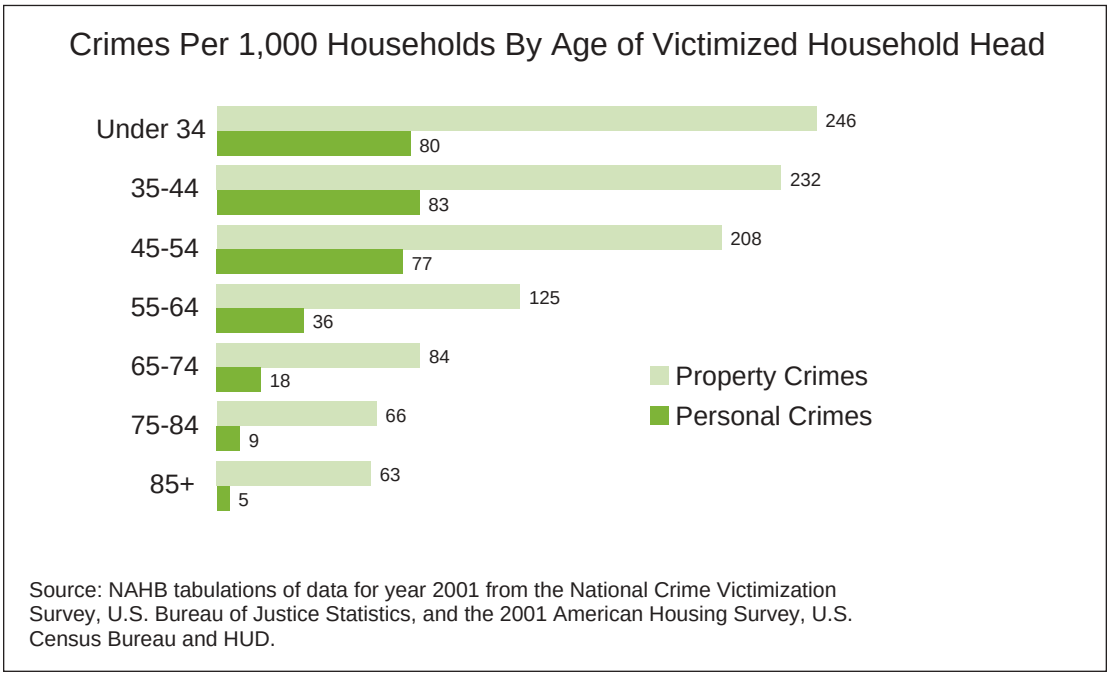


FIGURE 16 CRIMES PER 1,000 HOUSEHOLDS BY AGE OF VICTIMIZED HOUSEHOLD HEAD

The results are almost as strong for property crimes, such as burglary, where the youngest households are victimized about four times as often as the oldest. From the housing industry's perspective, the property crime statistics reported by BJS are particularly significant, because they represent a direct measure of crimes committed against households. Moreover, because the survey collects information from victims and potential victims, it captures information about crimes whether or not they are ever reported to the police.

The reason fewer crimes are committed against property owned or rented by older residents is open to speculation. Seniors have a demonstrable fear of crime and a desire for security.[4] Perhaps they choose places to live largely because of features associated with low crime rates. Or perhaps, after they move in, seniors behave in ways—being home at odd hours or spending time outdoors observing what's going on in the neighborhood—that help deter some types of crime.

Both explanations are likely true to a certain degree. Whether one dominates the other is probably not important to a local jurisdiction evaluating its public safety budget.

A SENIORS HOUSING COMMUNITY WILL TEND TO BE BURGLARIZED LESS OFTEN—EITHER BECAUSE SENIORS ARE THE ONES LIVING IN IT, OR BECAUSE IT'S BUILT WITH THE SECURITY ENHANCING FEATURES IT MUST HAVE TO ATTRACT SENIORS, OR SOME COMBINATION OF THOSE TWO EFFECTS.

In any case, the most important things to keep in mind are simply that seniors do not often commit crimes, and seniors and their homes become the targets of crime less often than other age groups.

In both cases, the differences between seniors and younger households are dramatic. They seem almost certain to outweigh any additional public safety costs associated with above-average use of ambulance services.

CHAPTER 5: Water and Sewer Services

Providing water and, especially, sewer services is most often the responsibility of local governments. In the 2000 survey conducted by Raftelis Financial Consulting, the majority of water utilities were run by city governments (Figure 17).

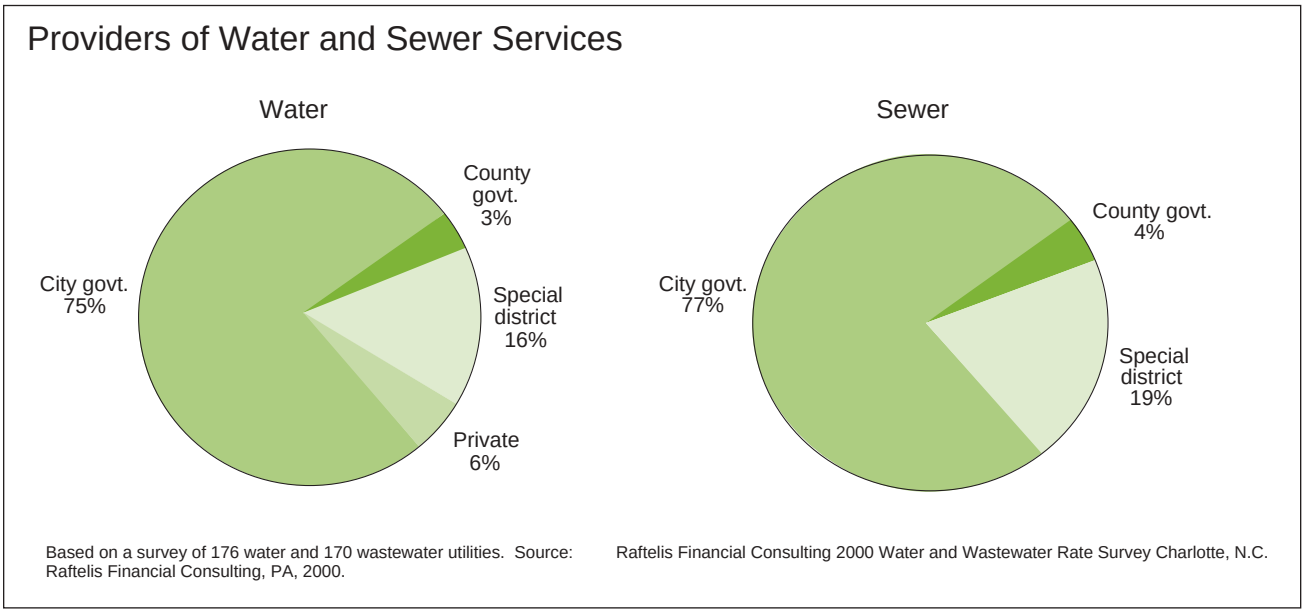


FIGURE 17 PROVIDERS OF WATER AND SEWER SERVICES

ALTOGETHER, HOUSEHOLDS, FARMS, BUSINESSES, AND GOVERNMENTS IN THE UNITED STATES USE 402 BILLION GALLONS OF WATER A DAY. ACCORDING TO THE U.S. DEPARTMENT OF THE INTERIOR'S MOST RECENT ESTIMATES, RESIDENTIAL USE COUNTS FOR ONLY ABOUT 6 PERCENT OF THE TOTAL.

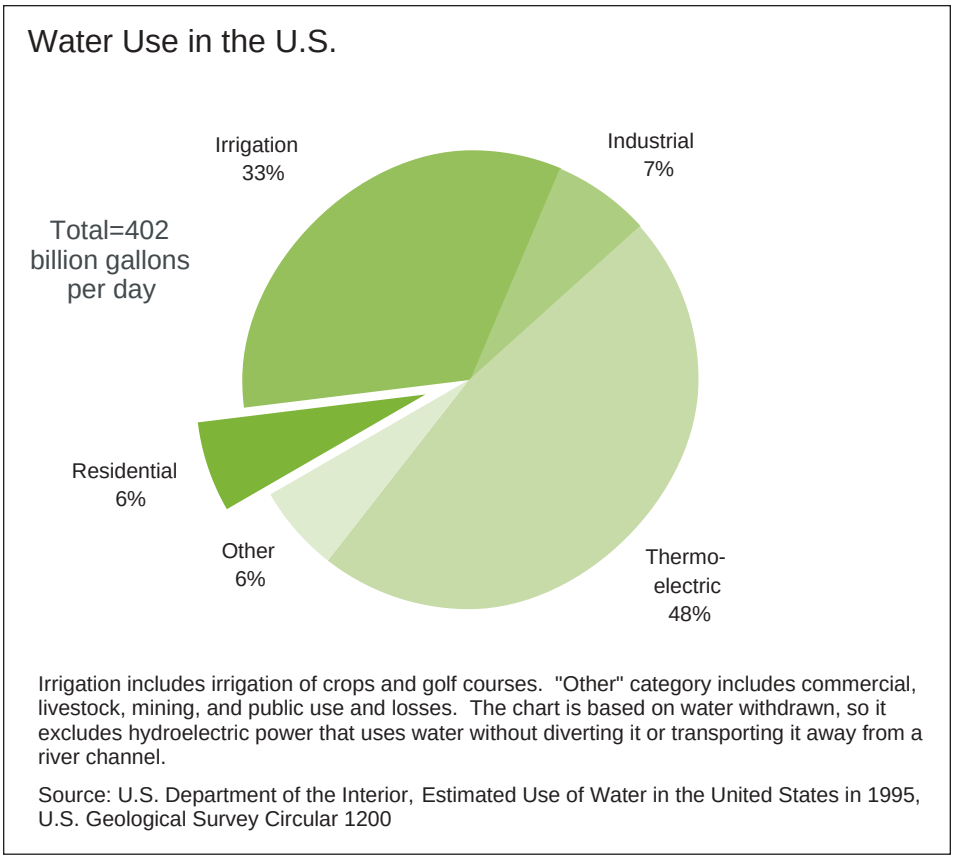


FIGURE 18 WATER USE IN THE U.S.

Most of the water used in the United States is used to irrigate farmland and generate thermoelectric power. Among the 50 states, thermoelectric power and crop irrigation account for at least 48 (and often more than 80) percent of the water withdrawn in every state except Alaska, where mining accounts for an unusually large proportion of the total.

On a per capita basis, residential water use varies considerably across the U.S. It's generally highest in desert states, probably because of climate-related differences in outdoor water use, such as watering lawns and filling swimming pools. Indoors, toilets use more water than any other individual home feature—although other plumbing fixtures, appliances, and even leaks, also account for a substantial share of total indoor consumption. 1

In addition to charging bills based on monthly consumption, local utilities often impose other costs on residential customers, either directly or indirectly, by charging fees for extending the service to new homes, most commonly by collecting a fee from the developer.

WHEN FEES ARE COLLECTED BEFORE CONSTRUCTION BEGINS, INFORMATION ON HOW WATER USE IS LIKELY TO DIFFER AMONG DIFFERENT TYPES OF HOUSING UNITS IS ESPECIALLY IMPORTANT.

Again, household size influences water use.

SENIORS HOUSEHOLDS TEND TO GENERATE LESS DEMAND FOR PUBLIC SERVICES, SUCH AS WATER AND SEWER, SIMPLY BECAUSE THESE HOUSEHOLDS TEND TO CONTAIN FEWER PEOPLE (FIGURE 1).

You can investigate the link between household age and the demand for water and services further. Data on use in physical units (gallons of water per year, for instance) would be ideal for that purpose, but these data do not appear to exist. 2

An alternative is to look at utility payments. Because water and sewer charges are typically based on metered household water use, this amounts to a physical flow multiplied by a price.[3]

Data on utility expenses for individual households are available from the 2001 American Housing Survey (AHS). We looked at both water and sewer bills, over the course of a year, whether they were paid separately or were combined together in a single bill. Wastewater flow is usually not monitored separately, and utilities conventionally assume that it's proportional to water use. In fact, eighty percent of the wastewater utilities in the Raftelis calculate bills for residential customers that way.

AHS data on water and sewer expenses, tabulated for owner-occupied, single-family detached homes, 4 are shown in Figure 19.

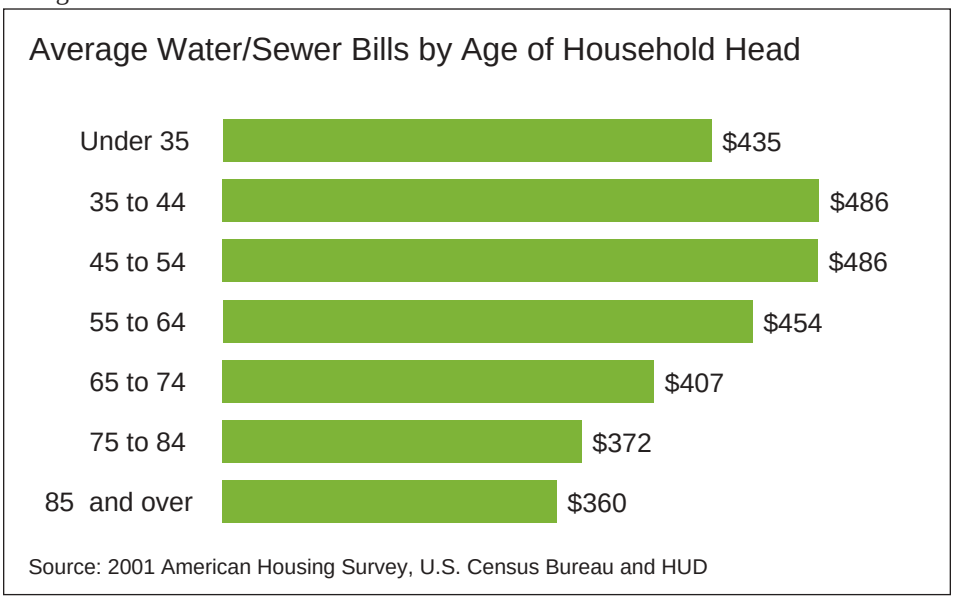


FIGURE 19 AVERAGE WATER/SEWER BILLS BY AGE OF HOUSEHOLD HEAD

As the figure shows, there are clear differences among the age brackets.

HOUSEHOLDS IN THE 35-44 AND 45-54 AGE BRACKETS PAY THE MOST FOR WATER AND SEWER SERVICE. AFTER THAT, THE COST OF THE SERVICE DECLINES CONSISTENTLY AS AGE INCREASES.

So the data are generally consistent with the hypothesis that seniors use fewer water and sewer services than other households, and they mirror the differences in household size. Heads of households age 55 to 64 pay somewhat more than those under age 35 for water and sewer service, but less than households between ages of 35 and 55. After age 65, water and sewer use drops even below the levels for the under-35 households and continues to decline with each successively older age bracket.

THIS FACT SUGGESTS THAT, ON A PER-HOUSING-UNIT BASIS, LOCAL GOVERNMENTS NEED TO SPEND LESS ON WATER AND SEWER INFRASTRUCTURE FOR RESIDENTIAL DEVELOPMENT THAT'S AGE RESTRICTED OR OTHERWISE TARGETED TO SENIORS.

CHAPTER 6: Public Parks and Libraries

Parks and libraries are classified somewhat differently by different levels of government. The federal government groups public libraries with education into a broad "educational services" category.

Individual local governments are less likely to view the world that way. The federal classification scheme would be especially awkward in cases where education is funded by a special school district that is independent enough to qualify as a separate government entity. The 1997 Census of Governments counted nearly 15,000 of these independent school districts across the country. None of them reported having a separate budget for libraries (Figure 20).

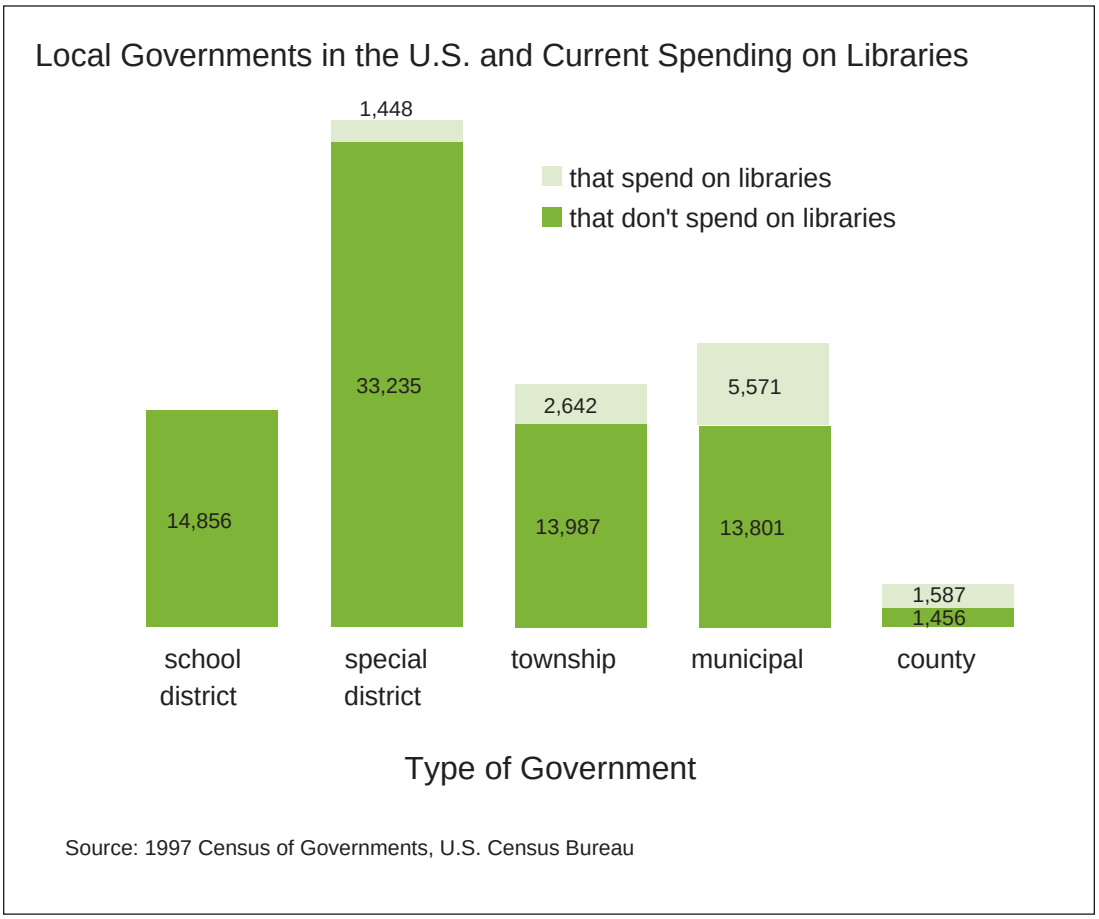


FIGURE 20 LOCAL GOVERNMENTS IN THE U.S. AND CURRENT SPENDING ON LIBRARIES

So the county, municipal, and township governments that have library budgets are more likely to follow a standard local government finance reference[1] that groups libraries with public parks and recreation into a category called "recreation and culture."

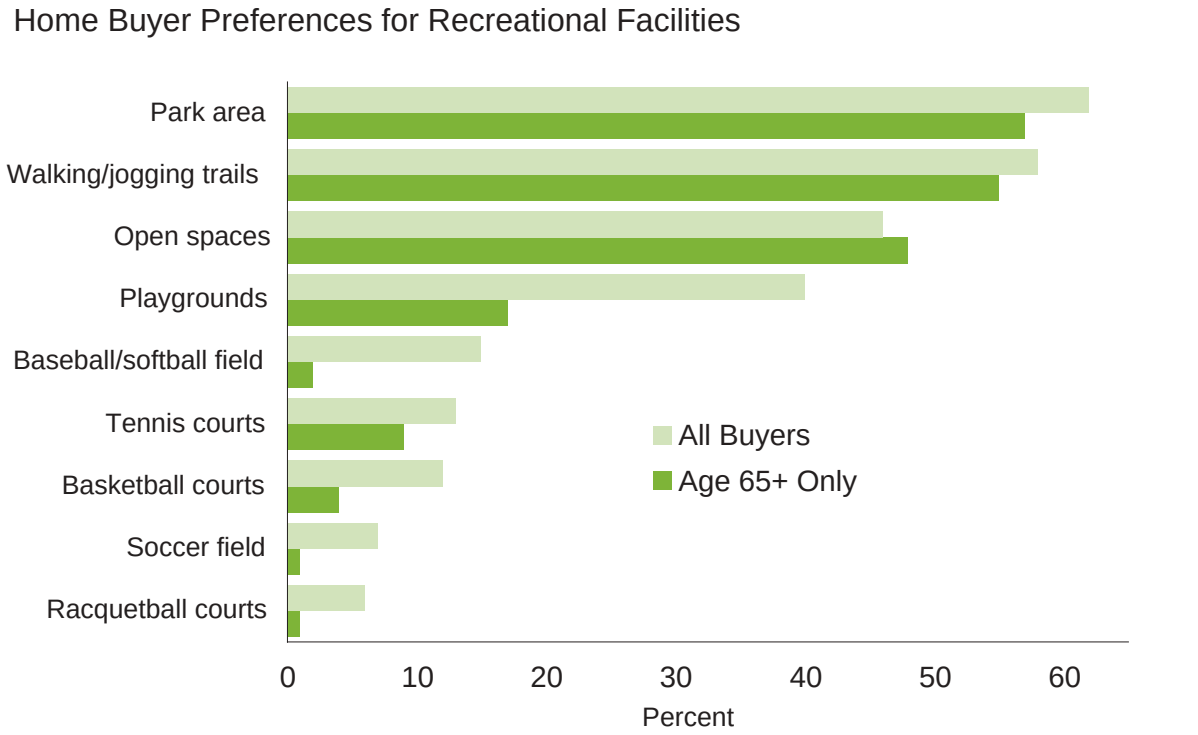
Of the two subcategories, public parks and recreation generally accounts for a larger share of the local government

1. Burchell, Robert, David Listokin, and William Dolphin, The New Practitioner's Guide to Fiscal Impact Analysis, (Add City, N.J.: Rutgers University Center for Urban Policy Research., 1985).

budget. According to the Census of Governments, in the 1996-97 fiscal year, local governments spent $17 billion on parks and recreation, compared to $6 billion on libraries.

Once again, when considering seniors housing and the use of public facilities, household size is an issue. Per housing unit, older households tend to place less stress on public facilities, simply because these households on average contain fewer people (Figure 1).

Beyond the general reduction in demand associated with smaller households, seniors tend to use certain types of recreational facilities less often. NAHB's latest Consumer Preference Survey demonstrated that, although seniors are fairly similar to other home buyers in their preferences for park areas and open spaces, they tend to have reduced preferences for specific facilities such as softball fields. That's hardly surprising, but in some cases quantifying the similarities and differences may prove useful (Figure 20, Table 6).



Percent of survey respondents who say the presence of the facility would signifcantly influence them to move into a community
Source: What 21st Century Home Buyers Want: A Survey of Consumer Preferences , NAHB Economics Group, 2002, published by Home Builder Press.

FIGURE 21 HOME BUYER PREFERENCES FOR RECREATIONAL FACILITIES

1. Results from the survey are published in NAHB Economics Group, What 21st Century Home Buyers Want: A Survey of Customer Preferences (Washington, D.C.: BuilderBooks, 2002). The survey was also augmented with additional responses from seniors to permit more detailed seniors-only tabulations, and these were published in Margaret Wylde's Boomers on the Horizon: Housing Preferences of the 55+ Market, (Washington, D.C.: BuilderBooks, 2002). Both are available at www.BuilderBooks.com.

Percent of Home Buyers Who Would Seriously Be Influenced to Move Into a Community by the Presence of Outdoor Facilities

(By Age of the Household Head)

	TOTAL	LESS THAN 35	35 TO 44	45 TO 54	55 TO 64	65+
Park area	62	63	63	56	56	57
Walking/jogging trails	58	64	58	58	61	55
Open spaces	46	50	44	54	52	48
Playgrounds	40	42	47	30	24	17
Baseball/softball field	15	13	22	11	7	2
Tennis courts	13	16	13	17	7	9
Basketball courts	12	13	17	11	5	4
Soccer field	7	8	12	5	2	1
Racquetball courts	6	6	7	5	1	1

Source: What 21st Century Home Buyers Want: A Survey of Consumer Preferences
NAHB Economics Group, 2002, published by Home Builder Press.

TABLE 6 PERCENT OF HOME BUYERS WHO WOULD SERIOUSLY BE INFLUENCED TO MOVE INTO A COMMUNITY BY THE PRESENCE OF OUTDOOR FACILITIES

ALTHOUGH ACCOUNTING FOR A RELATIVELY SMALL SHARE OF LOCAL GOVERNMENT BUDGETS, PUBLIC LIBRARIES HAVE NEVERTHELESS BECOME A SENIORS-RELATED ISSUE IN SOME PARTS OF THE COUNTRY. THE ISSUE INVOLVES THE SPECULATION THAT SENIORS HOUSING PLACES A DISPROPORTIONATELY HIGH BURDEN ON A COMMUNITY'S LIBRARY FACILITIES.

Given the smaller size of seniors households, and their lack of children, this speculation doesn't seem persuasive at first glance. For evidence one way or the other, you can look at a survey conducted by the Gallup Organization for the American Library Association and compare library use to the total population.

THE GALLUP SURVEY CONTRADICTS THE PROPOSITION THAT SENIORS USE LIBRARIES EXCESSIVELY. ALTHOUGH CENSUS BUREAU ESTIMATES SHOW THAT PERSONS AGE 55 OR OLDER ACCOUNTED FOR 28 PERCENT OF THE ADULT POPULATION IN THE YEAR OF THE SURVEY, THEY ACCOUNTED FOR ONLY 22 PERCENT OF THE ADULT LIBRARY USERS.

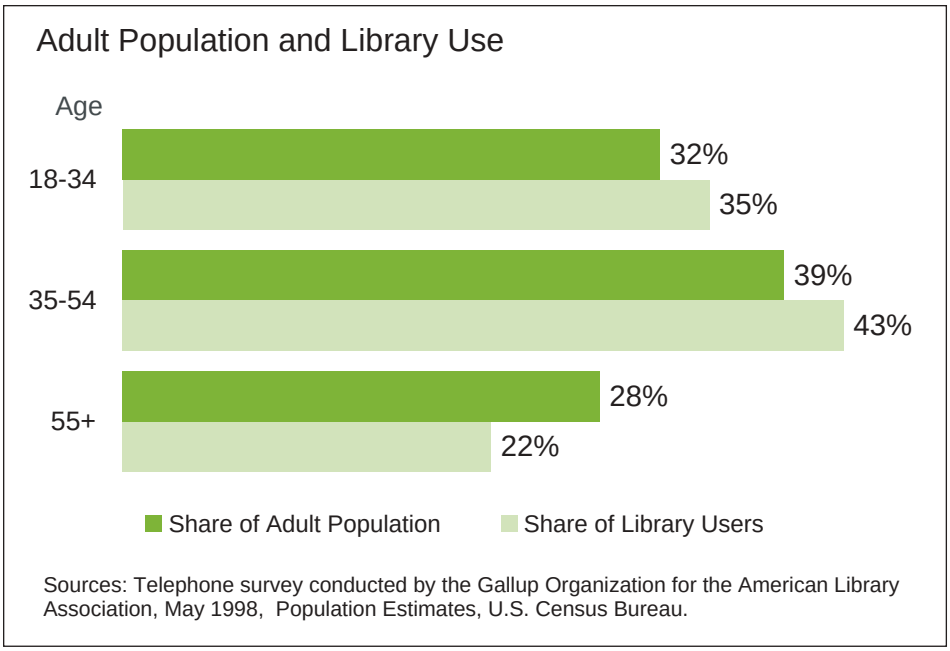


FIGURE 22 ADULT POPULATION AND LIBRARY USE

And this result is based strictly on adults. The Gallup survey didn't include school-aged children, who often have special sections of public libraries set aside for their use, and who are infrequently present in households where the head is over age 54 (Figure 3).

CHAPTER 7: Local Economic Benefits: Income, Taxes, and Jobs Generated by a Typical Active Adult Community

Other sections of this booklet cover seniors housing from the standpoint of fiscal costs borne by local governments. In particular, they show that older households tend to require fewer publicly provided facilities and services, and therefore they result in lower fiscal costs.

BUT THE IMPACTS OF BUILDING SENIORS HOUSING ALSO INCLUDE POSITIVE ECONOMIC BENEFITS FOR THE COMMUNITY IN WHICH IT'S LOCATED--INCLUDING INCOME, JOBS, AND TAX REVENUE FOR LOCAL GOVERNMENTS.

NAHB's Housing Policy Department has developed a model to estimate these local economic benefits for homebuilding in general. The model has been successfully applied to residential construction in more than 250 areas across the country. The sections below describe how the model works and show the results of applying it to a typical active adult housing project.

The NAHB Model

You can divide the economic benefits of residential construction into three phases:

Phase I: Construction. Jobs, wages, and local taxes (including permit, utility connection, and impact fees) generated by the development, construction, and sale of the home. The jobs include on-site and off-site construction work as well as jobs generated in retail and wholesale sales of components, transportation to the site, and the professional services required to build a home and deliver it to the buyer.

Phase II: The Ripple Effect. The wages and profits earned in Phase I are spent on other locally produced goods and services. This spending generates additional income for local residents, which is spent on still more locally produced goods and services, and so on. This continuing recycling of income back into the community is usually called a "multiplier" or "ripple" effect.

Phase III: The Ongoing, Annual Effect. When a home is occupied, the occupants pay taxes, spend money, and otherwise participate in the local economy. This first step in another set of economic ripples causes a permanent increase in the level of economic activity, jobs, wages, and local tax receipts. Phase III doesn't necessarily imply that all new homes are occupied by households moving in from outside the community. A household may move into the new unit from elsewhere in the same local area, while another household moves into the area to occupy the vacated unit, or the local area simply retains older citizens who would otherwise move out of the area because of a lack of suitable housing. In any case, the new housing results in a net gain of a household to the local economy.

PHASES I AND II ARE ONE-TIME IMPACTS THAT OCCUR AS THE RESULT OF CONSTRUCTION ACTIVITY. PHASE III IS AN ONGOING EFFECT THAT CONTINUES TO OCCUR YEAR AFTER YEAR. WHEN ANALYZING THE LOCAL IMPACT OF HOMEBUILDING, YOU NEED TO ACCOUNT FOR ALL THREE.

Estimating all three phases requires a model that captures the essential features of a local economy. You can capture these essential features by selecting certain commodities and industries from the benchmark input-output tables produced by the U.S. Bureau of Economic Analysis. The NAHB model takes a conservative approach -- of the roughly 500 industries and commodities provided in the most detailed versions of the input-output files, the model retains only 56 commodities and 77 industries, on the grounds that only these reflect economic activity that stays within the local area. Visits to the grocery store and barbershop are included in the local model, for example, while most manufacturing activity is not.

Taxes are extracted from the income and other value-added components of the input-output table, using primarily data from the Census of Governments. Wages and salaries are extracted using data on wages per job published by the Bureau of Economic Analysis.

The process of converting construction into income and taxes in Phase I of the model is summarized in Figure 23.

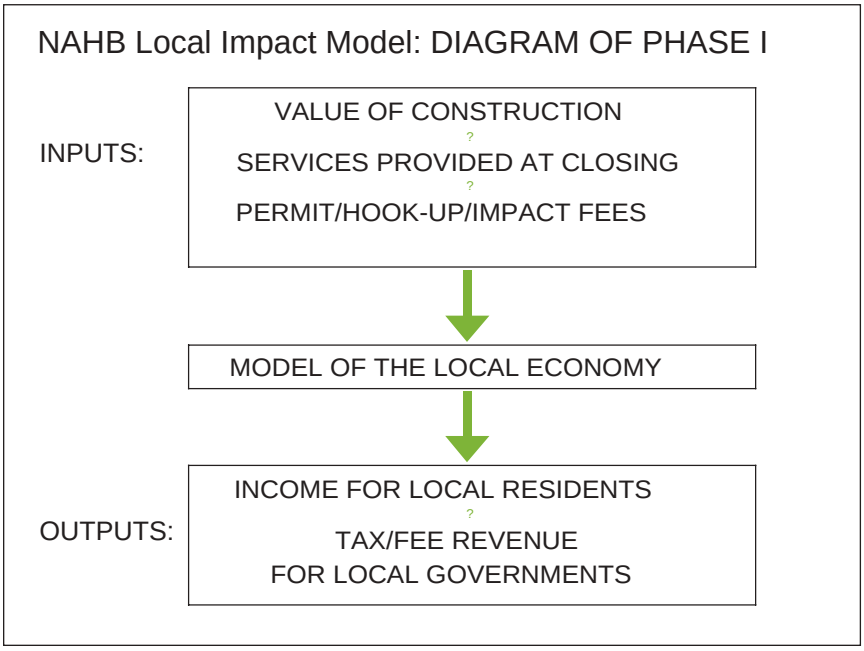


FIGURE 23 NAHB LOCAL IMPACT MODEL: DIAGRAM OF PHASE I

The outputs from Phase I -- local income and tax revenue -- become inputs for Phase II. Phase II begins by estimating how much of the added income households spend on each of the local commodities, using data from the Consumer Expenditure Survey (CES), which is conducted by the U.S. Bureau of Labor Statistics.

In short, the local income generated by construction activity results in more local spending, which then generates additional local income. But a fraction of this income will also be spent locally, which will generate still more local income, lead to yet another round of spending, and so on (Figure 24).

The end result of these successive economic “ripples” can be computed mathematically.

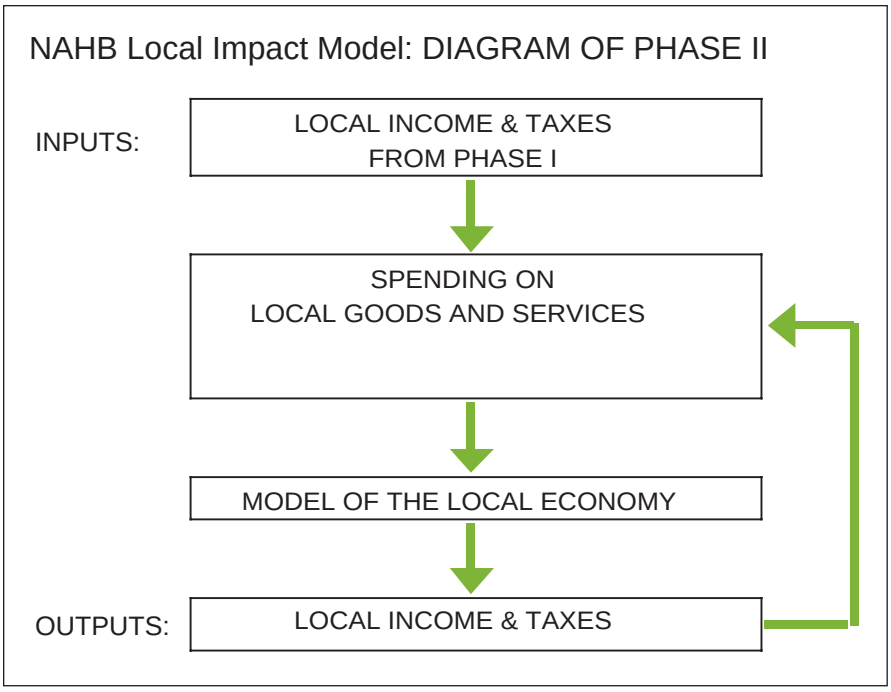


FIGURE 24 NAHB LOCAL IMPACT MODEL: DIAGRAM OF PHASE II

The process of estimating the ongoing impacts that result from the new homes becoming occupied (Phase III of the model) begins with the income of the households moving in. That income can easily be estimated with data from the Census. A fraction of this income is spent on locally produced goods and services. The NAHB model estimates this income and computes a ripple effect. The procedure is similar to the one outlined in Phase II (Figure 25).

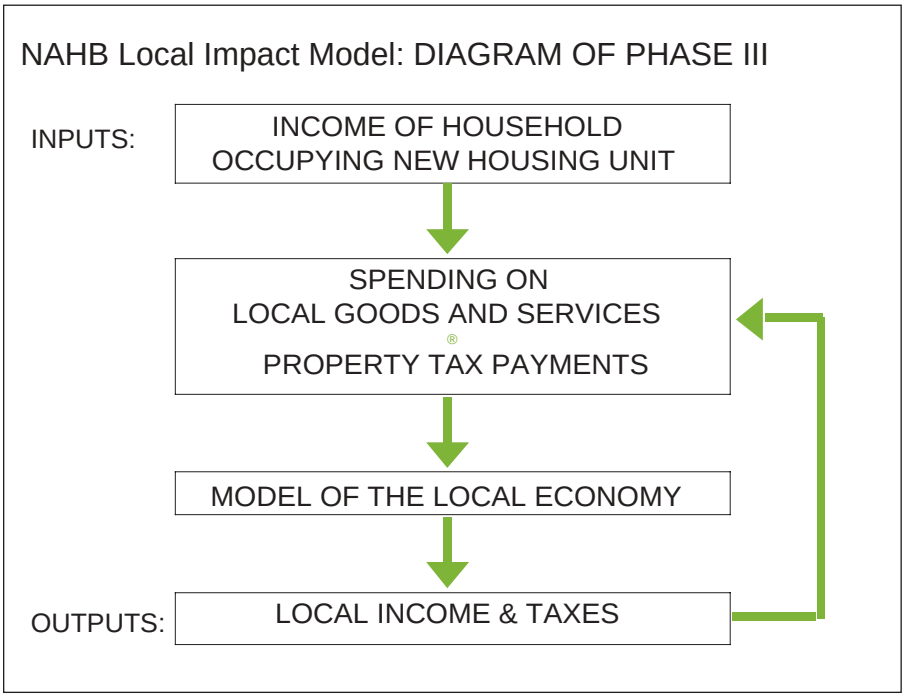


FIGURE 25 NAHB LOCAL IMPACT MODEL: DIAGRAM OF PHASE III

In Phase III the income of the household occupying the new unit is used only as an input.

THE ONGOING BENEFIT OF INCREASED LOCAL INCOME REPORTED BY THE MODEL IS INCOME GENERATED FOR RESIDENTS OF THE COMMUNITY OTHER THAN THE ONES MOVING INTO THE NEW HOMES

Although initially developed and calibrated for a typical metropolitan area using national averages, the NAHB model can be adapted to a specific local area, and a specific project, by replacing the averages with information specific to that project and area:

- Construction value (house price minus raw land value)
- Permit, hook-up, and impact fees
- Property tax payments
- In the case of seniors housing, fees paid for services.

The next section explains how these inputs were generated for a typical active adult project.

A Typical Active Adult Project

Because official construction statistics do not distinguish homes intended for active adults from other types of residential construction, national average statistics (price, size, etc.) for active adult housing do not exist.

In order to obtain information that reflects an active adult project that is typical in some sense, values of the homes and related information were obtained from five different active adult projects. The projects surveyed were of different sizes, built by different developers, and located in different parts of the country (the Southeast, Southwest, and Midwest).

The inputs used include—

- an average active adult house price of $180,000
- an average raw land value of $22,691
- an average of $4,805 in impact, permit, and other fees paid to local governments
- an average property tax payment of $1,980 per year
- Average fee paid by home owners of $108 per month

On average, most of the fee pays for property maintenance and repair, although a substantial share also goes to security and a fitness center. Smaller shares provide social, recreational, and wellness or health-related services. Most of the inputs are average values computed for the five active adult projects. Property tax payments are based on a national average tax rate.

Economic Benefits

Because Phases I and II of the model represent impacts that occur only once, triggered either directly or indirectly by construction activity, they can be added together into a total one-year impact.

Based on the above-mentioned inputs, the estimated local one-year impacts of building 100 single-family homes in a typical active adult project include

- $10 million in local income
- $1 million in taxes and other revenue for local governments
- 216 local jobs

These local impacts represent income and jobs for residents of the local market area, and taxes (and other sources of revenue, including permit fees) for all local jurisdictions within the area. They are also one-year impacts that include both the direct and indirect impact of the construction activity itself, and the impact of local residents who earn money from the construction activity and spend part of it within the local area.

UNLIKE THE ONE-YEAR IMPACTS, THOSE IN PHASE III ARE TRIGGERED BY THE NEW RESIDENTS MOVING IN, SO THEY WILL CONTINUE TO OCCUR, YEAR AFTER YEAR, AS LONG AS THE HOME REMAINS OCCUPIED.

Based on the above-listed inputs, the recurring impacts of building 100 single-family homes in the typical active adult project include

- $3 million in local income
- $504,000 in taxes and other revenue for local governments
- 67 local jobs

To briefly summarize the results, the NAHB model is capable of producing considerable detail, including impacts on income and employment in 16 industries and the local government. These impacts are shown for the typical active adult project in Table 7 (one-year impacts) and Table 8 (ongoing, annual impacts).

Local Impact of Building 100 Homes in a Typical Active Adult Project
One-Year Impact (Sum of Phases I and II)

Industry	Local Income	Local Business Owner's Income	Local Wages and Salaries	Wages & Salaries Per Full-time Job	Number of Local Jobs Supported
Construction	$5,627,000	$1,000,000	$4,628,000	$40,000	116
Manufacturing	$18,000	$1,000	$17,000	#DIV/0!	0
Transportation	$37,000	$3,000	$34,000	$34,000	1
Communications	$118,000	$24,000	$95,000	$95,000	1
Utilities	$60,000	$0	$60,000	$60,000	1
Wholesale and retail trade	$1,272,000	$159,000	$1,113,000	$28,000	40
Finance and insurance	$260,000	$24,000	$236,000	$59,000	4
Real Estate	$241,000	$112,000	$128,000	$32,000	4
Personal & repair services	$122,000	$47,000	$75,000	$25,000	3
Services to dwellings / buildings	$34,000	$12,000	$22,000	$36,000	0
Business & professional services	$674,000	$223,000	$451,000	$45,000	10
Eating and drinking places	$144,000	$25,000	$120,000	$40,000	3
Automobile repair & service	$139,000	$53,000	$87,000	$29,000	3
Entertainment services	$52,000	$13,000	$39,000	$39,000	1
Health, education, & social services	$681,000	$114,000	$567,000	$41,000	14
Local government	$397,000	$0	$397,000	$40,000	10
Other	$135,000	$23,000	$112,000	$37,000	3
Total	$10,012,000	$1,831,000	$8,181,000	$38,000	216

TABLE 7 LOCAL IMPACT OF BUILDING 100 HOMES IN A TYPICAL ACTIVE ADULT COMMUNITY ONE-YEAR IMPACT (SUM OF PHASES I AND II)

Local Impact of Building 100 Homes in a Typical Active Adult Project
Ongoing, Annual Impact (Phases III)

Industry	Local Income	Local Business Owner's Income	Local Wages and Salaries	Wages & Salaries per Full-time Job	Number of Local Jobs Supported
Construction	$224,000	$48,000	$176,000	$40,000	4
Manufacturing	$15,000	$1,000	$14,000	$45,000	0
Transportation	$18,000	$1,000	$17,000	$38,000	0
Communications	$85,000	$17,000	$68,000	$68,000	1
Utilities	$52,000	$0	$52,000	$63,000	1
Wholesale and Retail Trade	$475,000	$63,000	$412,000	$25,000	17
Finance and Insurance	$157,000	$12,000	$145,000	$52,000	3
Real Estate	$115,000	$54,000	$61,000	$38,000	2
Personal & Repair Services	$124,000	$47,000	$77,000	$25,000	3
Services to dwellings / buildings	$23,000	$8,000	$15,000	$36,000	0
Business & Professional Services	$234,000	$74,000	$160,000	$47,000	3
Eating and drinking places	$123,000	$21,000	$102,000	$38,000	3
Automobile Repair & Service	$132,000	$47,000	$85,000	$29,000	3
Entertainment Services	$57,000	$13,000	$43,000	$34,000	1
Health, Education, & Social Services	$872,000	$145,000	$727,000	$40,000	18
Local Government	$200,000	$0	$200,000	$42,000	5
Other	$71,000	$7,000	$64,000	$25,000	3
Total	$2,979,000	$560,000	$2,419,000	$36,000	67

TABLE 8 LOCAL IMPACT OF BUILDING 100 HOMES IN A TYPICAL ACTIVE ADULT COMMUNITY ONGOING, ANNUAL IMPACT (PHASE III)

IN GENERAL, THE LOCAL ECONOMIC BENEFITS OF BUILDING 100 UNITS IN THE TYPICAL ACTIVE ADULT PROJECT ARE SIMILAR TO THE BENEFITS OF BUILDING 100 AVERAGE SINGLE-FAMILY HOMES REGARDLESS OF WHO OCCUPIES THEM. THE MAIN DIFFERENCE IS IN PHASE III, WHERE (COMPARED TO 100 AVERAGE HOMES) 100 ACTIVE ADULT UNITS SUSTAIN TWO FEWER JOBS IN THE LOCAL RETAIL AND WHOLESALE TRADE BUT FIVE MORE IN THE LOCAL HEALTH SERVICES INDUSTRY.

The presentation here is relatively brief and emphasizes only a few key points. More detailed descriptions and results, including separate income and job estimates for Phases I and II of the model, as well as local government revenue in 13 categories of taxes and fees, are available from the NAHB Housing Policy Department (202-266-8398).

IN ADDITION TO RESULTS FOR A TYPICAL PROJECT IN AN AVERAGE CITY, THE LOCAL IMPACT MODEL CAN BE CUSTOMIZED TO AN INDIVIDUAL ACTIVE ADULT PROJECT IN A PARTICULAR CITY. UNDER CERTAIN CONDITIONS, NAHB WILL UNDERTAKE THIS EFFORT AND PRODUCE A CUSTOMIZED REPORT FOR A SPECIFIC ACTIVE ADULT PROJECT.

For more information, contact one of the following:

- David Crowe, Senior Staff Vice President (202-266-8383) dcrowe@nahb.com
- Paul Emrath, Assistant Staff Vice President (202-266-8449) pemrath@nahb.com
- Elliot Eisenberg, Housing Policy Economist (202-266-8398) eeisenberg@nahb.com

C I T Y O F B O U L D E R
PLANNING BOARD AGENDA ITEM

MEETING DATE: July 31, 2014

AGENDA TITLE:
Envision East Arapahoe Update

REQUESTING STAFF:
David Driskell, Executive Director, Community Planning & Sustainability (CP&S)
Susan Richstone, Deputy Director, CP&S
Tracy Winfree, Director of Public Works for Transportation
Lesli Ellis, Comprehensive Planning Manager, CP&S
Kathleen Bracke, GO Boulder Manager, Public Works Transportation
Sam Assefa, Senior Urban Designer, CP&S
Micki Kaplan, Senior Transportation Planner, GO Boulder - Public Works Transportation
Jeff Hirt, Planner II, CP&S
Marcy Cameron, Planner I, CP&S

OBJECTIVE:
Provide an update on the Envision East Arapahoe project to date and receive feedback from Planning Board on the following topics:

1. Elements for the draft vision
2. Indicators to assess scenarios
3. Scenario concepts

The City of Boulder has launched the project with the community to reimagine what East Arapahoe could become while retaining what is presently working. The community-driven plan will address needs of existing and future residents, existing businesses and their employees, and the growing institutions along the corridor. It will position east Boulder to continue its important economic vitality role, while becoming better connected, more transit-oriented, and ultimately walk and bike friendly. Its future will reflect the rich tapestry of cultural history and natural systems. It will rely on successful and proven strategies to transform formerly suburban corridors into transit-oriented, connected, livable places.

In Boulder and throughout the United States, auto-oriented growth patterns are transforming to become more walkable compact development forms, and East Arapahoe is no exception. To facilitate positive patterns of change in appropriate locations, the city will need to put the right policies in place and prioritize and invest in the right infrastructure. An effective plan will require multi-jurisdictional and agency coordination, especially on infrastructure planning, and commitment from the city, county, institutions, transportation and planning agencies, state, developers, private owners, and others. Stakeholders will need to work together to identify innovative solutions and overcome challenges. This plan sets the stage for the coordination and integrated planning.

Example: transformation of a suburban street in Maryland to a boulevard with center-running bus-rapid transit (BRT) (Source: "Shifting Suburbs," ULI/Federal Realty Investment Trust)

Background

Study Area

The project study area consists of East Arapahoe Avenue from Folsom Street to 75th Street and extends a quarter mile wide on the south side and half a mile wide on the north side, incorporating the adjacent industrial areas and enclaves. The corridor is 4.5 miles long, 3,000 acres in size, with approximately 1,900 parcels. Most of the corridor east of 63rd Street is unincorporated Boulder County. The large size and length of the corridor is to encompass local and regional transportation needs identified in the Transportation Master Plan update and regional Northwest Area Mobility Study (NAMS), noted below. However, most of the land use planning, connections improvements, and urban design focus will occur between 30th and 63rd Streets and north of Arapahoe Ave. A study area map and detailed set of base resource maps can be found on the project webpage: www.EnvisionEastArapahoe.com.

Relationship to Boulder's Transportation Master Plan and RTD's Northwest Area Mobility Study (NAMS)

The Envision East Arapahoe corridor planning process is an opportunity to leverage and integrate with the current multimodal transportation planning efforts already occurring. This includes the city's Transportation Master Plan (TMP) update and the Regional Transportation District's (RTD) Northwest Area Mobility Study (NAMS), which includes regional, arterial Bus Rapid Transit (BRT) service shown along East Arapahoe/SH7 connecting Boulder to/from neighboring communities and the larger Denver metropolitan area. Improvements to the East Arapahoe/SH7 arterial BRT system is one of the top tier corridors included in the RTD study along with SH119, US287, South Boulder Road, and others. A link to the study, adopted by the RTD Board of Directors in June 2014, is here. Additionally, principles, concepts and projects from Boulder's TMP update will be used to evaluate and consider connections in the East Arapahoe area to improve walking, biking, and transit (local and regional) along – and across – East Arapahoe Avenue and identify mobility hub locations for more detailed design and planning. These important multimodal improvements are needed to connect people to existing and future commercial, employment, medical/health facilities, neighborhood centers along the corridor, and the emerging areas of the University of Colorado's (CU) East Campus and Boulder Junction, as well as to serve the large number of major employers and trips by non-resident employees.

Relationship to Other Plans and Initiatives

The Envision East Arapahoe project also is an opportunity to coordinate with and test specific ideas arising from other initiatives, including the Comprehensive Housing Strategy (CHS), Access and Management Parking Strategy (AMPS), Climate Commitment, Zero Waste Master Plan, and recommendations from the Economic Sustainability Strategy adopted in October 2013. Broader ideas with citywide applicability and some of the processes being used (e.g., scenarios and indicators) also may be appropriate to consider in the Boulder Valley Comprehensive Plan (BVCP) 2015 Major Update and Resilience strategy. Relating to the plans noted above, this project will enable the city to analyze concepts such as Ecopasses, other access and parking strategies, local energy districts, 15-minute neighborhoods, new land use types, and carbon emissions from different types of land use patterns and buildings.

Project Approach and Goals

For the remainder of 2014, staff will work with the community to produce a **visionary, data-driven plan, and set of actions** to address land use, connections, and urban design. **The plan will demonstrate cross-cutting goals, near-term projects and solutions and longer-term actions.**

Process goals and objectives are located in **Attachment A**

A vision and scenario planning process will identify potential alternative planning directions and weigh choices about policy options, services, infrastructure investments, and feasibility. Scenario planning uses indicators or evaluation criteria as the basis for creating and evaluating choices and will allow the community to collaboratively discuss and adjust future scenarios. Indicators are designed to address a broad spectrum of potential benefits and impacts of future choices and are further described below. The city is working with two consultants: (1) Placeways, a Boulder firm, to assist with scenario building and analysis using CommunityViz, and (2) Fregonese, a Portland Oregon firm, to support visualization.

General Planning Approach and Timeline

A timeline is also located in **Attachment A.** The timeline shows the three major phases of the project. They are:

(1) Inventory *(complete);*
(2) Vision and Scenarios *(May through October)*; and
(3) Action Planning and Implementation *(October through December or early 2015)*.

1—Inventory

Phase 1, is mostly complete and resulted in the scope of work, community engagement plan, initial stakeholder interviews and gatherings, inventory and assessment of baseline conditions, history and trends, issues identification, and identification of opportunities and constraints.

2—Vision and Scenarios

Phase 2, which is currently underway, will entail developing the written and illustrative vision and goals. The project team will work with the community to identify character areas and prepare visual preferences and identify indicators to later evaluate and compare outcomes of scenarios. (As examples, indicators may address factors such as carbon emissions, connectivity, housing mix and affordability, water consumption, parks per capita, impervious surface, redevelopment potential, return on investment, infrastructure costs, transit/multimodal

access and connections, jobs to housing ratio, and other characteristics). Another task will be to develop visualization and design prototypes for different character areas or districts for use in a public workshop.

By early fall, the team will develop three to four scenarios to test possible concepts for land use and urban form, transportation and connectivity, resource use and conservation, urban design, and other considerations and will host a second round of outreach, including a charrette, to co-develop and analyze scenarios with the community.

Phase 2 deliverables include: *Vision and goals; indicators for comparing scenarios; visualization and design prototypes; scenarios and analysis; preferred plan.*

3—Action Plan and Implementation Tools

Phase 3 will entail identifying the strategies to achieve the preferred scenario action plan, including near-term actions (i.e., pilot projects, living laboratory and "easy" code changes). A third round of engagement will occur to finalize the draft plan and strategies and design implementation tools (e.g., guidelines), solidify engagement and partnerships, and identify roles for implementation.

Phase 3 deliverables include: *Draft strategies, near-term actions, design implementation tools, and a synthesized and adopted plan. Note: Scoping for 30th Street and Colorado Boulevard Sustainable Street & Centers (S)S&C design work will also be part of the phase.*

Establishing the Vision

The planning team has begun the discussion with boards and commissions, City Council, and stakeholders about what type of inspired place the East Arapahoe corridor could become. **Attachment C** contains draft vision ideas for discussion that builds on previous discussions with the board and with City Council and the community. Staff is looking for feedback to help refine the vision statement.

☑ *Question 1: Does Planning Board have feedback on the draft Vision Elements in* ***Attachment C****?*

Indicators and Scenarios

Indicators

The project's next step is to develop map-based scenarios illustrating options for land uses, transportation connections, and other ideas. Indicators are used to quantitatively measure the alternative scenarios and determine how well scenarios perform relative to the goals of the project and the values and priorities expressed by the community. Indicators can be used initially for scenario comparison purposes and later for measuring success of a neighborhood, district, or community. To ensure a balance of measures, indicators will be generally organized according to Boulder's Sustainability Framework:

- Safety,
- Healthy Living/Social Connectedness,
- Livability,
- Connectedness,
- Environmental Quality, and

- Economic Vitality.

Staff and consultants are currently analyzing availability of data, and indicators ultimately will be selected based on data availability with the goal of providing a balanced set of measures that reflect community goals and priorities. Scenario planning best practices suggest using a set of no more than about 15-16 "key" quantitative indicators to keep scenario analysis manageable; fewer indicators or indices are better. It is not possible to quantitatively assess every impact or benefit, and some analysis will need to be qualitative. **Attachment D** contains a list of draft indicators for discussion.

☑ *Question 2:*
*Does Planning Board have feedback on the indicators and what to measure in scenarios? (See **Attachment D**)*

Scenario Concepts

Through October, the planning team will be working with the community to develop the map-based scenarios – "what ifs" for different possible futures that might play out in 20 or 30 years based on plans being made today. Scenarios will also be displayed as maps and three-dimensional visualizations of possible futures. Scenarios will be carefully designed to illustrate a range of potential strategies related to land use patterns and density, mix of development, connections, other infrastructure improvements, and neighborhood and district amenities. The initial scenarios will be hypothetical and creative, yet also plausible and internally consistent so they provide meaningful insights. They are not meant as precise forecasts; instead, they will be for education, learning, encouraging meaningful conversations, and supporting informed, collaborative decision-making. "New" ideas will be weighed and compared with a baseline scenario that incorporates existing zoning, street patterns, etc.

"Givens" for Scenarios

Although each scenario will contain a number of unique characteristics, all scenarios will share some "givens" regarding known or expected future conditions. They may include:

1. Regional Bus Rapid Transit on SH7, as adopted by RTD and described in the Northwest Area Mobility Study report. Other multimodal corridor enhancements per TMP's Complete Streets policies and action plan.
2. Existing pedestrian, bicycle and transit connectivity will not be reduced, with a goal of expanding such connectivity.
3. Recycle Row, recycling and reuse district.
4. Boulder Community Health stays and expands medical related offices in Riverbend Office Park.
5. Ball Aerospace continues manufacturing and occupies office space west of 55th Street and north of Arapahoe Avenue.
6. Naropa's Nalanda Campus will remain and expand at 63rd and Arapahoe.
7. CU East Campus will remain and expand; bicycle and pedestrian connections across Boulder Creek will be included in all scenarios.
8. The industrial service district between South Boulder Creek and Naropa will remain.
9. Existing residential neighborhoods remain largely as they are.
10. Open space parcels remain and greeways become better connected.
11. Golf course will be a site for flood mitigation.
12. Approved development projects will be included.

What are other "givens"?

Examples of Other New Ideas to Explore

Other ideas to be considered may include:

Housing

A. Housing in select locations north of Arapahoe Ave. (e.g., at 55th St., storage unit parcels).
B. Mixed use developments in select location north of Arapahoe Ave.
C. 15-minute neighborhood concept identified for certain locations, including infrastructure to support and new types of housing x, as identified through CHS, or services for neighborhoods.
D. A range of densities, including some much higher than currently zoned.

Offices or Mixed Use

A. More office space in business parks north of Boulder Creek to allow for expansion of medical-related offices to support Boulder Community Health.
B. Maintain industrial service uses in the business parks.
C. A range of office densities and types.
D. Live-work and studio spaces.
E. Additional restaurants and retail services.

Infrastructure: Connections, Water/Sewer

A. Identify mobility hub locations to support BRT.
B. Add local street connection from 48th Street to Walnut or Pearl and between 48th and 55th.
C. Improve pedestrian and bicycle connections in area west of 55th and south of the Railroad and improved wayfinding and safety features at intersections.
D. Increase sewer capacity for south of Arapahoe Ave.

Amenities and Other Ideas

A. Add more open space and park land to golf property; redesign golf course with flood mitigation projects to accommodate a smaller, higher quality facility.
B. Explore energy district utilities/energy generation in select locations.
C. Add pocket parks or other amenities.
D. Explore locations for managed, paid parking and consider strategies and concepts developed in Access Management and Parking Strategy (AMPS) project
E. Explore enhanced programs such as expanded Eco Pass or taking an incremental step toward Community Pass.

Attachment E includes a map for reference. This map was used at the community meeting on July 21 to ask questions about what should be included in scenarios.

☑ *Question 3:*
*What other concepts does Planning Board suggest exploring for scenarios? (See map in **Attachment E**.)*

Engagement Process and Feedback

As noted in previous memos, many organizations, both private and public, and individual residents and employees have interest in the area. City and county residents also are interested. Continued communication and engagement will be important to developing a community supported successful plan. A summary of the broad-based and inclusive engagement process is located in **Attachment F**. The summary from stakeholder interviews,

the July 21st workshop, and May council study session also are contained in the attachment.

July 21 workshop at Avalon Event Center

Project Next Steps

Ongoing:	Information on InspireBoulder and project webpage: EnvisionEastArapahoe.com
August:	Meet with Transportation Advisory Board (8/11) and Boulder Design Advisory Board (8/13) Bike tours and walkabouts (locations and timing TBD) Business and neighborhood meetings (by request)
September:	Council agenda item regarding scenarios (date TBD)
October:	Scenarios workshop with Victor Dover (Oct. 9)

ATTACHMENTS

A – Project Goals and 2014 Timeline
B – Updated Existing Conditions Inventory, history white paper, and link to maps
C – Draft Vision Elements
D – Draft Indicators
E – Concept Map
F – Summary of Engagement Process and Feedback: Council feedback, stakeholder interview summary, board meeting summary, and July 21 public meeting summary.

Envision East Arapahoe

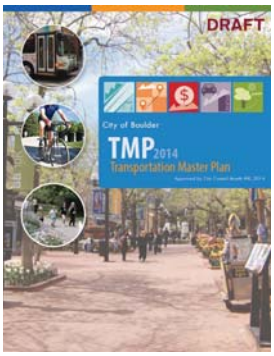
Project Goals

Develop a **community-driven vision plan** to transform the corridor into a place with more **mixed-use, compact, and walkable districts that are better connected** with the rest of the city and the region. Identify specific districts for **placemaking** based on existing conditions, data, analysis, and community engagement. Develop specific, **actionable recommendations,** such as pilot projects to test ideas, follow-up access or infrastructure, Transportation Demand Management (TDM) and connection plans, funding and investment strategies, partnerships, land use/zoning changes, and guidelines for development and design review. To achieve these goals, the city will:

1. **Collaboratively Design a Vision:** Engage the community to design an innovative vision in a forward-thinking manner.

2. **Partner and Coordinate:** Coordinate with stakeholders including large institutions, other government agencies, businesses, and nonprofits to address current issues and recognize and respond to future plans.

3. **Provide Imagery:** Provide information and images to create awareness and excitement for what the corridor can become.



4. **Use Data and Scenarios:** Use scenarios, data, and indicator-based analysis to assist with informed decision making.

5. **Make Engagement Easy:** Engage people in meaningful ways using a mix of tools that make it convenient and easy to participate and capture ideas to create a community-driven plan.

6. **Integrate with Plans:** Integrated with other ongoing plans, such as the Comprehensive Housing Strategy, Transportation Master Plan, Northwest Area Mobility Study, Climate Commitment, and Access Management and Parking Strategy. Evaluate options for new housing, innovative transportation, TDM and parking approaches, and to address Boulder's Climate Commitment and other sustainability goals. Improve and integrate land use, transportation/TDM planning. Inform the scope of work for the upcoming comprehensive plan update.

7. **Collaborate with Leadership:** Collaborate with boards and commissions and the City Council for guidance as the plan evolves.

8. **Model Sustainability:** Make the plan an interdepartmental effort and engage staff within the city organization in order to support integrated planning and to continue to model the Sustainability Framework efforts.

9. **Address Residents' Needs:** Work with residents in neighborhoods south of Arapahoe Avenue to identify improvements for the corridor.

10. **Test Ideas:** Use the project to test approaches that might be used for the Boulder Valley Comprehensive Plan.

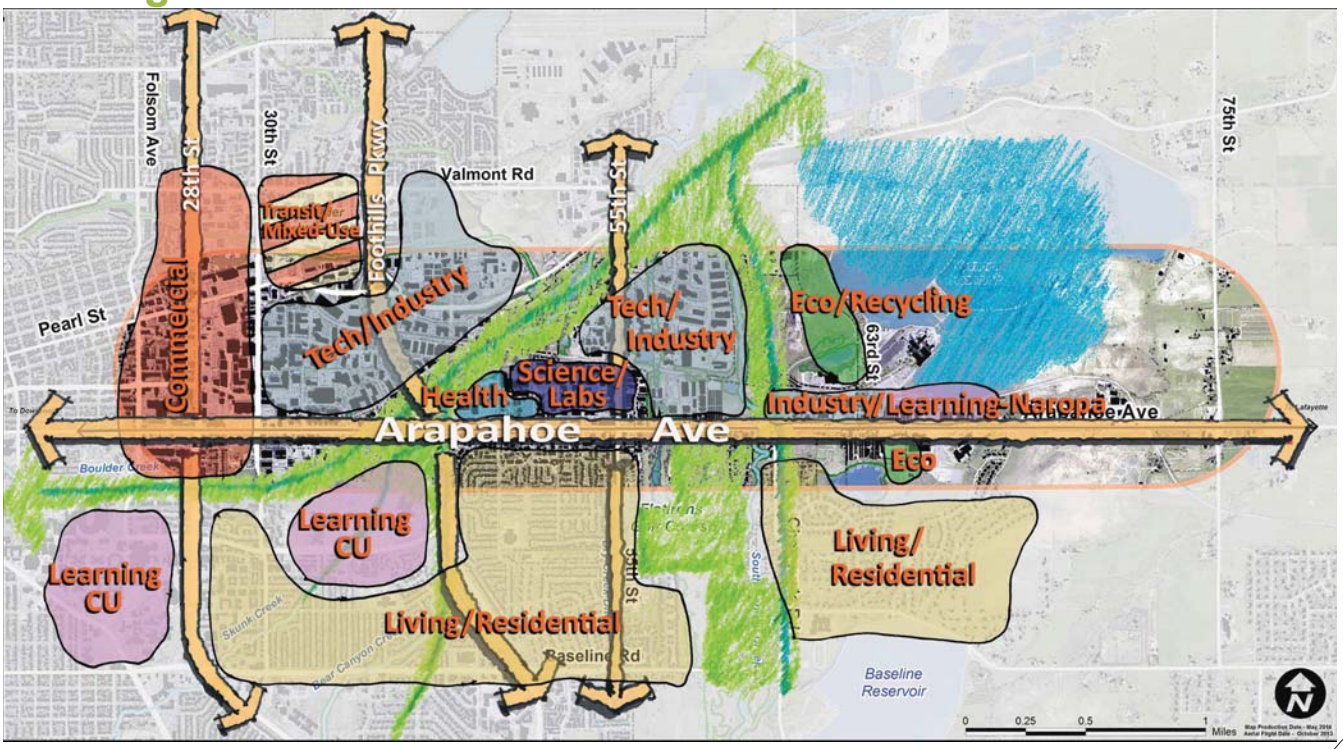
Issues and Opportunities

Envision East Arapahoe

The Envision East Arapahoe plan will include recommendations for some or many of the topics identified below. In 2015, the Boulder Valley Comprehenisve Plan update may continue to address some.

1. **Placemaking:** Identify places along the corridor with potential to be transformed into more healthy, vertical and horizontal mixed-use, compact and connected places.
2. **Floodplain:** Integrate with migitation plans that will address flood risk and maintain biodiversity and greenways for Boulder and South Boulder Creek.
3. **Transportation and Mobility:** Improve multi-modal transportation (i.e., local and regional transit, Bus Rapid Transit (BRT); vehicle, pedestrian and bicycle connections along - and across Arapahoe Avenue; identify and pilot locations for mobility hubs.
4. **Connections:** Create a stronger connection to downtown Boulder, surrounding areas (i.e., CU East Campus to the south and Boulder Junction to the north), and the region. Expand sustainable transportation options for employees and residents with tools such as EcoPass, shared, unbundled, managed and paid (SUMP) parking opportunities, and other Transportation Demand Management (TDM) programs.
5. **Climate and Energy:** Reduce carbon emissions, increase energy efficiency, and reduce operating costs.
6. **Businesses:** Support the employers and businesses north of Arapahoe Avenue.
7. **Assets:** Recognize existing cultural and community assets,.
8. **Housing:** Identify places for workforce housing and healthy, walkable, and complete districts or neighborhoods. Help to alleviate Boulder's in-commuter pressure from non-resident employees.
9. **Coordination:** Coordinate with institutions' expansion plans (e.g., CU East and Naropa). Incorporate CU's new vision for East Campus and connections to Arapahoe Avenue.
10. **Medical-Related Uses:** Address medical-related expansion and amenity needs near Boulder Community Health.
11. **Greening the Area:** Identify potential for pocket parks, urban agriculture, increased tree canopy, reduced heat island effect, cultural amenities, food carts, art, etc. Incorporate low impact development stormwater techniques, improve water conservation, address green infrastructure, district utilities/energy, and potential ecodistrict projects.
12. **Annexation for Industrial Properties:** Address annexation of unincorporated industrial properties.

Existing Land Use Character



Timeline

East Arapahoe Plan and Sustainable Streets and Centers

Envision East Arapahoe

2014 — February, March, April, May, June, July, August, September, October, November, December — 2015

City Council & Boards/ Commisions

- PB 3/20
- BDAB 4/9
- TAB 4/14
- CC 4/15 IP
- CC 5/27 SS
- PB 9/31
- BDAB 8/13
- TAB 8/11
- CC Sept agenda item
- PB 10/?
- TAB/ BDAB 10/?
- CC 10/28 SS
- PB 11/20
- CC hearing

Phases

INVENTORY → VISION AND SCENARIOS → ACTION PLAN

tasks EAST ARAPAHOE PLAN

- Project Goals. Complete Inventory
- Scenario Concepts
- Model building Scenarios, refinements, analysis
- Preferred scenario Draft strate-gies
- Strategies and Draft Plan
- Plan Adoption*

tasks SUSTAINABLE STREETS AND CENTERS: East Arapahoe Corridor

- Existing conditions on corridor
- Character types + Image ideas for scenarios
- ID preferred character types + 3D form/scale for selected locations
- Draft design tools (e.g. guidelines, Title 9 changes
- Apply lessons learned as appropriate

Start 30th Street and Colorado Blvd. SS&C work

Deliverables

- Vision + Scenario Concepts
- Preferred Plan + Strategies
- Design Implementation Tools

*Near-term Actions (e.g. pilot programs, living labs)

Community Engagement & Events

Public Events

- Victor Dover "Streets" Presentation
- Poster at Joint Open House
- Design, Visualization Workshop — Kickoff; Character types; Visualization
- Scenarios Workshop — Scenarios; Districts/ corridors
- Open house — Strategies; Guidelines; Draft plan

Digital

- WEB
- WEB → Inspire Boulder
- WEB → Inspire Boulder
- WEB →

Focused/ Stakeholders

- Stakeholder Interviews
- Technical Interviews
- Stakeholder Interviews
- Technical Review
- Storefronts & business
- Technical Review
- Storefronts & business

Overlapping Project Events

AMPS, NAMS, CHS, TMP, SS&C, ESS

- TMP Outreach 4/14
- CHS/ AMPS 5/12
- Walk
- Bike tours (TBD)
- Walk

UPDATED 07/21/14

Envision East Arapahoe

EXISTING CONDITIONS INVENTORY

Draft – July 21, 2014

This inventory will be updated as new information becomes available and as analysis is conducted for the project.

Table of Contents

Introduction 2
Planning Area and Boundaries 2
Flood Zones and Regulatory Wetlands 3
- Flood Zones 3
- Regulatory Wetlands and Riparian Corridors 3
- Flood Zone Table 4

Utilities 5
Land Use and Zoning 5
- Existing Uses 5
- Planned Land Uses 6
- Zoning and Development Standards 7

Public Safety 7
Transportation 8
- East Arapahoe Avenue 8
- Traffic 8
- Intersections and Level of Service 9
- Connections 9
- Transit 10
- Bicycle and Pedestrian Path System 10

Schools, Parks and Open Space 10
- Open Space 11
- Parks and Recreation 11
- Golf Course 11
- Schools and Colleges 11

Land Ownership 12
Zoning Use Tables ..... Appendix

List of Maps

Map 1: Study Area
Map 2: Boulder Valley Comprehensive Plan (BVCP) Plan Areas and Subcommunities
Map 3: BVCP Future Land Use
Map 4: Flood Zones and Regulatory Wetlands
Map 5: Existing & Proposed Pedestrian and Bike Features
Map 5a: Existing & Proposed Street Features
Map 6: Existing & Proposed Transit
Map 7: Zoning
Map 8: Schools, Parks, and Open Space (OSMP and County)
Map 9: Recent Annexation & Development History
Map 10: Ownership

INTRODUCTION

A clear inventory and understanding of the conditions and resources in the East Arapahoe study area will help support planning and decisions. First, existing resources may constrain future development in the area if they are protected (e.g., wetlands or landmarks), or if they pose health and safety risks (e.g., flood zones). These protections and restrictions mean that not just any vision should become reality. Second, understanding resources may allow for selecting new ideas that complement or showcase the area's assets.

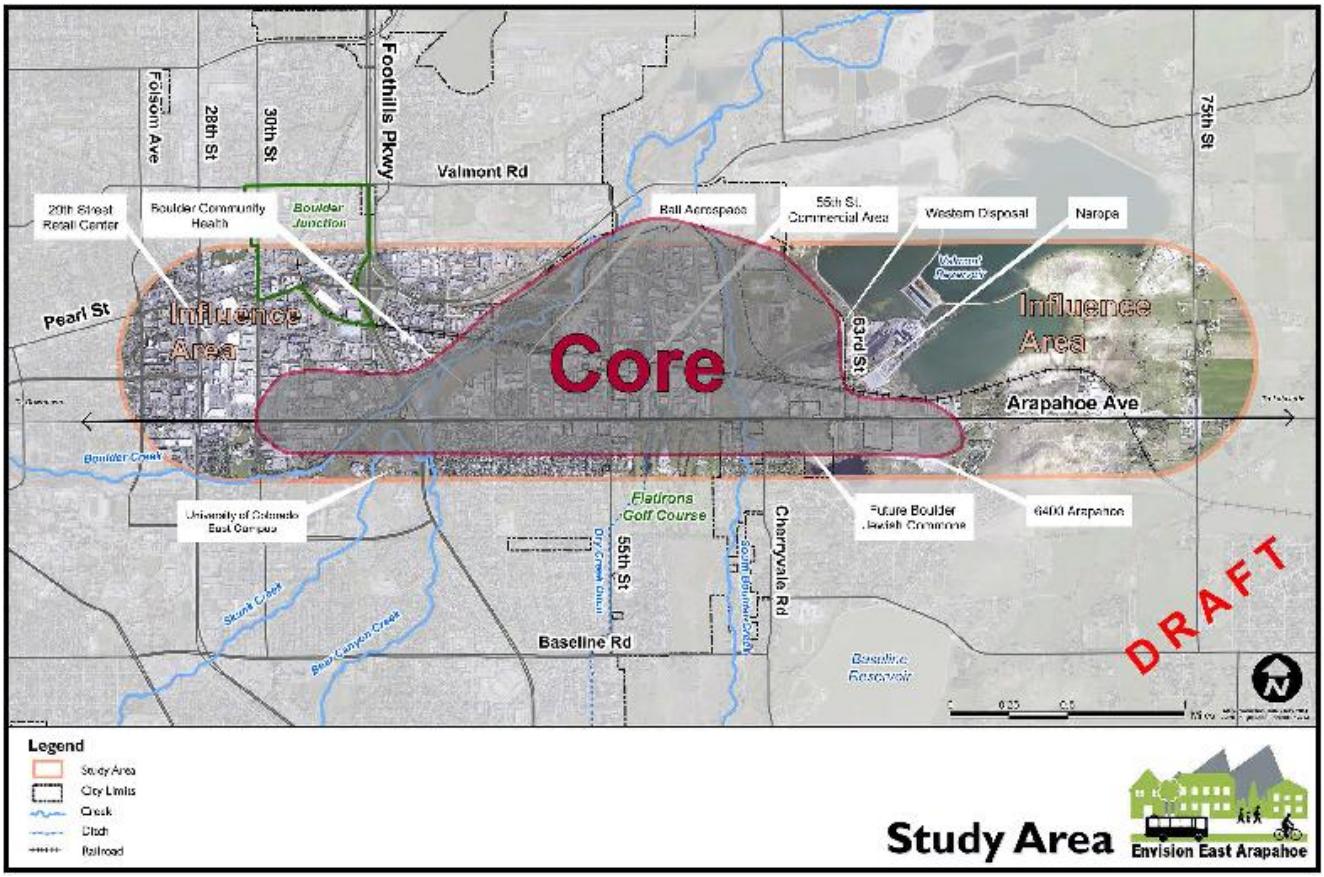
This inventory describes features and restrictions for the following categories:

- Planning Area and Boundaries
- Flood Zones and Riparian Corridors
- Land Use and Zoning
- Public Safety
- Transportation
- Schools, Parks and Open Space
- Land Ownership

PLANNING AREA AND BOUNDARIES

(See **Map 1 and Map 2)**

The project is the length of East Arapahoe Avenue from Folsom Street to 75th Street and quarter mile wide on the south side and three-quarters of a mile wide on the north side, incorporating the adjacent industrial areas and enclaves. The study area is subdivided into a core study area, and an influence area, where the focus will be primarily on transportation connections.



FLOOD ZONES AND REGULATORY WETLANDS

(See **Map 4)**

Flood Zones

Four categories of flood zones exist in the study area. The city's interest in prohibiting development in areas of flood hazard and in protecting the community and ecological values of wetlands limits the degree to which land can be developed for other uses.

Flood zones in the area include:

- The 100-year floodplain;
- The high hazard zone [HHZ]; and
- The conveyance zone.

The city is currently working on floodplain mitigation for South Boulder Creek. A series of proposed flood detention ponds and flood conveyance channels will reduce the size and location of the floodplain and associated conveyance channels. This is specifically relevant to properties north of Arapahoe Avenue and west of the Flatirons Municipal Golf Course. Construction funds of $10,000,000 have been allocated for 2018 in the 2015-2020 Capital Improvement Program for construction of the Arapahoe Avenue Detention pond occupying the north side of the municipal golf course. Approval of FEMA grant funds may further expedite this work.

Regulatory Wetlands and Riparian Corridors

The study area contains the plains riparian system along Boulder Creek, Bear Creek, South Boulder Creek and Dry Creek; wetlands including Sombrero Marsh, as well as agricultural areas and native grasslands further east along the corridor.

Wetlands are natural resources that contribute open space and wildlife habitat to the project area, while simultaneously functioning as filters for urban runoff entering creeks. Section 9-3-9 of the Boulder Revised Code (hereafter B.R.C.) protects streams, wetlands and water bodies above and beyond state and federal regulations. The ordinance details standards and procedures for protection, as well as mitigation requirements when these natural areas are disturbed. In addition to protecting the stream channels, the city regulations also provide a level of protection to buffer areas surrounding the streams. Within the stream and inner buffer areas, buildings and additions are prohibited. Fences, walls and many types of pavement surfacing and trails are prohibited within the streams but allowed within the buffer areas. Vegetation removal and addition of plant materials, as well as stream channel and flood improvements, are subject to review. For more information about stream, wetlands and water body regulations, see B.R.C. **Section 9-3-9**

Flood Zone Designation	Definition/Floodplain Regulation
100-Year Floodplain	Structures within the 100-year floodplain have a one (1) percent chance of being inundated by flood waters in any given year. A floodplain development permit is required for all development activities in the 100- year floodplain. Development within the 100-year floodplain is permitted, subject to the provision of flood protection measures to mitigate the risk of property loss or damage. For non-residential applications, the lowest floor of any new structure or addition must be elevated above the flood protection elevation or be flood proofed to ensure that the structure is watertight with walls substantially impermeable to the passage of flood waters below the protection elevation. New parking lots are not permitted where flood depths would exceed 18 inches.
High Hazard Flood Zone	High hazard flood zones are considered the most significant risk and thus have major development constraints to minimize loss of life and property damage. The Current floodplain regulation prohibits new development in this zone and significantly limits further investment in existing facilities. Under the existing High Hazard Zone (HHZ) ordinance, the city prohibits any “substantial improvement,” to buildings in the HHZ, which discourages significant investment in facilities. "Substantial improvement" means any repair, reconstruction, rehabilitation, addition, or improvement of a structure, the cost of which equals or exceeds fifty percent of the market value of the structure before the "start of construction" of the improvement.
Conveyance Zone	The conveyance flood zone includes areas where new development or grading is expected to impact flood depths elsewhere. New obstructions to flood waters in these areas would need to be offset by increasing flow capacity at other locations. Development of these areas is highly constrained due to the limitations on redirecting flow without significant infrastructure investment and/or structural containment of Boulder Creek.

UTILITIES

Placeholder for statement regarding utilities and sewer backups in the area.

LAND USE AND ZONING

Existing Uses in the area

West of 30th Street.

- Twenty-Ninth Street Mall.
- Regional big-box and grocery stores such as Whole Foods, Home Depot, and Target.
- Recreational uses including Scott Carpenter Park and the East Mapleton Ball Fields.
- The North Boulder Farmers Ditch.
- High-density residential and hotel uses.

30th Street to Foothills Parkway.

- Auto-oriented business along the major roadways.
- High density residential at the Peloton.
- Public facilities such as the Boulder Police Department and the Boulder County Clerk.
- Light-industrial and office uses occupying land zoned for General Industrial.
- The north side of this area has been planned as part of the Boulder Junction project and is important primarily when considering connectivity to the rest of Boulder.

East of Foothills Parkway, north of Boulder Creek.

- Office-park style development (including a single hotel) along East Walnut and Pearl East Circle.
- Industrial land use north of Pearl Parkway, characterized by auto-service businesses and other light-industrial uses, as well as Eco-Cycle's main facility on the east end.

East of Foothills Parkway, between Arapahoe Avenue and Boulder Creek.

- This is the primary area of focus for the project.
- Boulder Community Health and professional office complex across 48th serving as home to third party medical offices.
- Ball Aerospace's primary property off 48th St.; a large, high-tech manufacturing/maintenance facility with recreational facilities (volleyball, community gardening) for employees in the floodplain to the north and along the railroad tracks.
- Light-industrial and office properties east of Ball including breweries, printing press facilities, the Rocky Mountain Theater for Kids, auto services business, and other eclectic business uses.
- CordenPharma, considered a "critical facility" under city code due to the fact that it handles hazardous materials. The property is within the 100-year floodplain and will require flood protection measures for a critical facility.
- More light-industrial land use east of 55th St. and north of the railroad tracks; home to businesses like Avery Brewing (which will soon be moving to Gunbarrel) and the Boulder Dinner Theater. The are characterized by superblocks with internal parking lot circulation patterns and access via the main avenues and loop roads.
- "Recycle Row"; consisting of the Boulder County Resource Center, Western Disposal's main facility, and Eco-Cycle.
- Naropa University's "Nalanda Campus," located at the northwest corner of 63rd and Arapahoe.

- Parks and open space properties.

South of Arapahoe Avenue, between Foothills Parkway and 63rd Street.

- Primarily residential in character.
- Auto-oriented retail uses along Arapahoe.
- Higher density residential complexes are sited along Arapahoe Avenue to the west.
- Residential densities gradually decrease further south from Arapahoe.
- Flatirons Municipal Golf Course, which serves as a recreational facility and a safe flood conveyance corridor and future flood detention pond.
- The newly annexed future Boulder Jewish Commons east of Cherryvale Road

East of 63rd

- Light-industrial properties similar to the others in the study area.
- Many properties are in Area II of the BVCP; meaning they could potentially be annexed to the city at some point.
- Self-storage facilities, auto-service businesses, and a mobile home park.
- Historic Lakeside Service Station on the NE corner of 63rd and Arapahoe (See East Arapahoe History).
- Xcel Energy Valmont Power Station and associated cooling reservoirs north of Arapahoe.
- BVSD's Arapahoe Campus (the district's headquarters, bus staging facility, and alternative technical high school), south of Arapahoe Ave near the east end of Boulder's urban area boundary.
- A small church on the very edge of the city.
- Legion Park, on the northeast end of the study area; a small county open space facility and scenic lookout.

Future Land Uses
(See **Map 3)**

The Boulder Valley Comprehensive Plan's Land Use map designates future land uses for the area. These land uses can be changed through a plan, such as Envision East Arapahoe, or during the next update to the BVCP. Currently the land uses are as follows:

West of 30th Street: Planned as a business center with general business, regional business, and mixed-use business land use designations.

30th Street to Foothills Parkway: Planned for General Business, Light Industrial, Public, and High-density residential land uses.

East of Foothills Parkway, north of Boulder Creek: Planned for Light Industrial and Community Industrial primarily.

East of Foothills Parkway, between Arapahoe Avenue and Boulder Creek: Planned for Light Industrial, General Industrial, Community Industrial, Public, Transitional Business, Community Business and Open Space land uses.

South of Arapahoe Avenue, between Foothills Parkway and 63rd Street: Planned for High, Medium, and Low-density Residential, Community Business and Parks land uses.

East of 63rd: Planned for Light Industrial, Public, and Open Space land uses. Mostly unincorporated.

Zoning and Development Standards
(See **Map 8)**

The Boulder Land Use Code guides the uses, forms, and intensities of newly developed and redeveloped properties through zoning districts and development standards. See appendix for table of allowed uses by zone.
Zoning Districts Found in the **Core Study Area (Approx. 963 Acres):**

- Industrial – General: 276 Acres **28.7%**
- Industrial – Manufacturing: 133 Acres **13.8%**
- Industrial - Service 2: 18 Acres **1.9%**
- Industrial – Service 1: 5 Acres **0.5%**
- Business - Transitional 2: 7 Acres **0.7%**
- Business - Community 1: 11.5 Acres **1.2%**
- Business - Community 2: 1.7 Acres **0.2%**
- Residential - Low 2: 45 Acres **4.7%**
- Residential - Medium 1: 21 Acres **2.2%**
- Residential Estate: 14 Acres **1.5%**
- Residential - Rural 1: 9 Acres **0.9%**
- Residential - High 4: 35 Acres **3.6%**
- Residential - High 5: 2 Acres **0.2%**

Other Zoning Districts Found in the Study Area:

- Business - Community 1
- Business - Community 2
- Business - Regional 1
- Business - Transitional 1
- Business - Transitional 2
- Residential - High 2
- Residential - High 3
- Residential - Low 1
- Residential - Medium 2
- Residential - Mixed 1
- Mixed Use 3
- Industrial – General
- Industrial - Service 1
- Industrial - Service 2

PUBLIC SAFETY

Boulder's main Police Department and Fire Department headquarters is located within the study area at 1805 33rd St. There are two fire stations located in the study area; Boulder Fire Station Three is located at 1585 30th St. and Fire Station Seven is at 1380 55th Ave. Service provision for fire, public safety and Emergency Medical Services (EMS) are addressed through mutual aid agreements in the area.

TRANSPORTATION

East Arapahoe Avenue
(See **Maps 5 and 5a**)

East Arapahoe Avenue is a major arterial with high speeds (45 mph), high traffic volumes, six travel lanes, and is a Colorado Department of Transportation state highway. Arapahoe Avenue has an important function as one of the major access corridors for regional commuting from the east for employees living or working outside Boulder, as well as for local trips by employees and residents in the area. 28th Street, 30th Street, Foothills Parkway, 55th Street, Cherryvale Road, and 63rd Street are major north-south connections that intersect with Arapahoe Avenue within the study area. Pearl Parkway and Valmont Road to the north, and Baseline Road to the south are the alternative contiguous east-west routes to Arapahoe in the area (of these, only Pearl is within the study area boundaries).

A variety of multi-use path networks for pedestrians and bicyclists exist in the study area as well, however these largely follow the local greenways and don't always provide direct connections between destinations.

Boulder's 2014 draft Transportation Master Plan (TMP) has as one of its main goals the citywide implementation of "Complete Streets" that support all modes of transportation, including bicycle and transit. The TMP will be reviewed by City Council on August 5th. In addition, the Regional Transportation District (RTD) has recently conducted the Northwest Area Mobility Study (NAMS), looking at potential Bus Rapid Transit (BRT) routes in the Northwest Metropolitan Area http://www.rtd-fastracks.com/nams_1. Arapahoe/SH 7 was identified by the study as one of the top three potential BRT corridors. One of the main goals of Envision East Arapahoe will be to determine what kind of "Complete Street" the community wishes to see Arapahoe Avenue become. This will include both the design of the BRT running way and stations, bike and pedestrian infrastructure, as well as any other elements of streetscape design.

Bicycle and Pedestrian Path System
(See **Map 5**)

Several of Boulder's multi-use paths run through the East Arapahoe study area and serve as the primary bike routes. The Boulder Creek Greenway runs diagonally from Scott Carpenter Park in the southwest of the study area, through CU's East Campus, and on toward the intersection of Pearl Parkway, 55th Street and Valmont Road in the northeast. It is joined along its route by the Skunk Creek Path, the Bear Creek Path, the Goose Creek Path and the South Boulder Creek Path. The city conducts ongoing monitoring of bicycle counts on various key multi-use paths. 2013 average daily counts of bicycles on the Boulder Creek bicycle path (at Skunk Creek path intersection) ranged from 1,200 to 1,400 per day. On-street bike lanes and designated bike routes also exist on many streets in the area.

Many gaps remain between the various bike lanes, routes, and multi-use paths. Potential future connections are illustrated on the Existing and Proposed Pedestrian/Bike map.

Traffic

Average Daily Traffic Counts (ADT) in 2013 conducted by the city indicate that traffic ranges from 16,500 vehicles per day on the east end of Arapahoe Avenue to 22,500 vehicles per day at the west end. The intersection of Foothills and Arapahoe, one of the busiest intersections in the city, averages 36,200 vehicles per day, and was reconstructed in 2006 to address roadway design issues including safety and the addition of a new multi-use underpass.

In addition, the city conducts annual travel time monitoring in several key corridors in the city. Travel time on the Arapahoe corridor has held steady since 1987, averaging 9 minutes to cross the corridor between 9th and 55th Streets on Arapahoe. If there were no impediments or stops on Arapahoe, (i.e. no traffic lights, etc.), an "unimpeded auto trip" would take 6.24 minutes to travel between 9th and 55th. The relatively unchanged traffic held constant over time is one indicator of the success of the city's transportation management policies and programs.

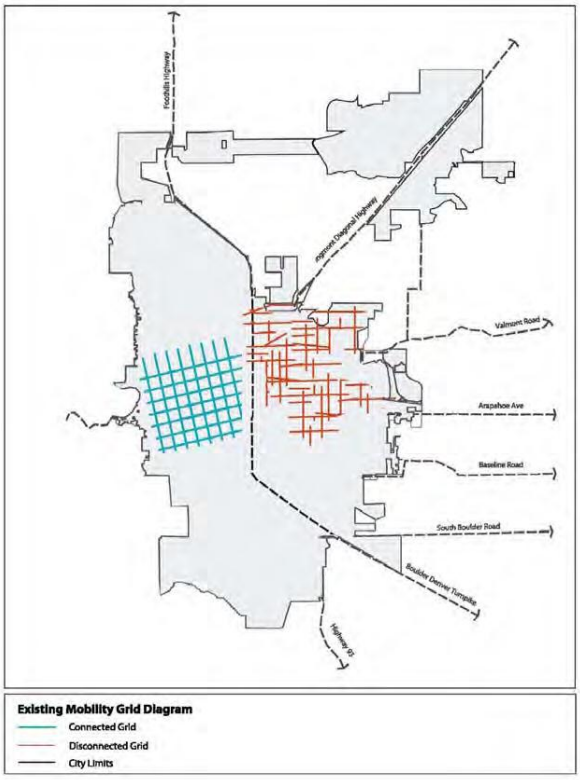
Intersections and Level of Service

Intersection	Count Date	AM Peak Hour		Noon Peak Hour		PM Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
Foothills/Arapahoe	4/28/09	27.8	C	33.6	C	76.2	E
55th/Arapahoe	7/9/08	45.0	D	34.5	C	43.3	D
Cherryvale/Arapahoe	6/20/07	25.6	C	12.2	B	13.3	B

Connections

The Boulder Valley Comprehensive Plan (BVCP) states in section 2 (Built Environment) that "In general, the western historic neighborhoods of the city have a fine-grained, walkable and bikeable street grid, whereas other parts of the city, for example, East Boulder, have larger, more car-oriented super-blocks. Over time, the city seeks to extend a more pedestrian and bike friendly mobility grid to all parts of the community."

The East Arapahoe study area is ground-zero for the type of super-block urban patterns described in the BVCP. A connections plan was developed for the area as part of a previous planning effort, but was never adopted. The goal of increasing connections in the area, however, remains a core element of city planning policy, and is a goal of Envision East Arapahoe. Specific connections will be determined through the community visioning process.



Transit
(See **Map 6)**

Service:
The Arapahoe Avenue corridor is served primarily by "The Jump" bus route, a Community Transit Network route providing high-frequency local and regional transit connecting downtown Boulder with the cities of Lafayette and Louisville. In 2012 there were 1,919 daily boardings on the Jump route. Other RTD local and regional routes operating in the area include: S, HX, J, 206, and 208 routes.

As noted previously, Arapahoe Ave. (SH 7) was identified as part of the Northwest Area Mobility Study (NAMS) as a potential Bus Rapid Transit route.

Facilities:
Bus Stops exist all along Arapahoe Avenue, with the most routes serving the area between 30th and 55th. Three stops in the area service four separate bus routes; westbound at Arapahoe 55th, eastbound at Arapahoe and Marine, and eastbound at Arapahoe and Foothills. All other stops service three or fewer bus routes. There are 113 stops within the study area.

SCHOOLS, PARKS AND OPEN SPACE
(See **Map 8)**

Open Space

The study area contains several properties owned by Open Space and Mountain Parks (OSMP), primarily consisting of the area's many riparian corridors. Most of these riparian corridors have parallel greenway trails; multi-use paths that utilize the natural right-of-way, and link together the various recreational amenities in the area. These include the Boulder Creek Path and South Boulder Creek Path. Some OSMP areas have been set aside specifically to protect natural resources and restrict public access (Cottonwood Grove, Hospital wetlands/riparian area). Protected wetlands on private property typically do not entail public access.

Parks and Recreation

City of Boulder Parks and Recreation (parks and rec.) facilities in and near the study area include the Stazio athletic fields, Scott Carpenter Park and public swimming pool, and Valmont City Park. These facilities are connected by multi-use paths or on-street bike lanes along east-west routes, but are not as well connected to the neighborhoods to the south.

Valmont City Park, located just north of the study area, is currently one of the top planning projects for parks and rec. The community is currently being asked to submit ideas for amenities and services to be provided at Valmont Park, and its design will affect which amenities are available to residents in the study area. In addition, Scott Carpenter Park is an aging facility, and the parks and rec. master plan "Vision" alternative envisions rebuilding or relocating the swimming pool facility. With this in mind, no option is off the table for potential recreational uses of parks land in the study area.

Golf Course

Opened in 1938, this 130 acre property lies on the south side East Arapahoe Avenue and is Boulder's only public 18-hole golf course. The facility has been operated by Boulder Parks and recreation since 1986 and is a recreation destination along with the adjacent special event center. The majority of the site is located in the South Boulder Creek floodway, and the northern edge of the course is planned for future use as a flood control detention pond.

The 60-year old event center is aging and was damaged during the 2013 flood, and there is some desire to see the facility replaced. The parks and rec. master plan does not discuss specific changes to this facility, except to say that facilities of this sort "may serve only a narrow slice of the community and can be the most costly facilities to maintain." Nonetheless, facilities like the golf course are highly visible and can garner community support.

It should be noted that a sizable portion of the golf course site, near the southwest corner of the site by 55th St and Centennial Trail, is elevated above the 100-year floodplain and may provide opportunities for alternative site layouts or other parks uses.

Schools and Colleges

CU East campus lies in the west end of the planning area, just south of Arapahoe Avenue. Boulder Valley School District's Arapahoe campus and district headquarters occupies a significant parcel of land on the south side of Arapahoe in the east end of the planning area. Eisenhower Elementary and Platt Middle School, though outside of the EEA planning area, serve the residential neighborhoods to the south of East Arapahoe. Naropa University owns a property known as the Nalanda Campus on the northwest corner of 63rd and Arapahoe that they intend to develop over the coming years. There are no public schools north of Arapahoe Avenue and east of Foothills Parkway.

Land Ownership

(See **Map 10)**

Important public and institutional landowners in the study area include:

- City of Boulder: 447 Acres – 15.35%
- Xcel Energy: 400 Acres – 13.74%
- University of Colorado: 331 Acres – 3%
- Boulder County: 38 Acres – 1.32%
- Boulder County Recycling: 21 Acres
- Boulder Community Health: 17 Acres
- State of Colorado (not including CU): 5.5 Acres
- Naropa University: 5 Acres
- Western Disposal Inc: .3 Acres

Appendix 1

Zoning District	RR-1, RE	RL-2	RM-1	RH-4, RH-5	BT-2	BC-1, BC-2	IS-1, IS-2	IG	IM
Residential Uses									
Detached Dwelling Units	A	A	A	A	A	A	*	U	U
Duplexes	*	A	A	A	A	A	G	U	U
Attached Dwellings	*	A	A	A	A	A	G	U	U
Townhouses	*	A	A	A	A	A	G	U	U
Live-Work	*	*	*	*	*	*	U	U	U
Cooperative Housing	C	C	C	C	*	*	*	U	U
Efficiency Living Units:									
A. If <20% of Total Units	*	*	*	A	A	A	G	U	U
B. If >20% of Total Units	*	*	*	U	U	U	U	U	U
Accessory Units:									
A. Accessory Dwelling Units	C	C	*	*	*	*	*	*	*
B. Owner's Accessory Unit	C	*	*	*	*	*	*	*	*
C. Limited Accessory Unit	C	*	*	*	*	*	*	*	*
D. Caretaker Dwelling Unit	*	*	*	*	*	*	A	A	A
Group Quarters:									
A. Congregate Care	*	*	A	A	A	A	*	U	U
B. Custodial Care	*	*	U	U	U	U	*	U	U
C. Group Homes	C	C	C	C	C	C	*	*	*
D. Residential Care	*	*	C	C	C	C	*	U	U
E. Fraternities, Sororities, Dorms	*	*	*	A	A	A	*	U	U
F. Boarding Houses	*	*	U	A	A	A	*	U	U
Home Occupation	C	C	C	C	C	C	C	C	C
Transitional Housing	C	C	C	C	C	C	C	C	C

Zoning District	RR-1, RE	RL-2	RM-1	RH-4, RH-5	BT-2	BC-1, BC-2	IS-1, IS-2	IG	IM
Dining and Entertainment									
Breweries/Wineries	*	*	*	*	*	*	C	C	C
Commercial Kitchens	*	*	*	*	*	*	A	A	A
Indoor Amusement	*	*	*	*	*	U	*	*	*
Food Truck on Public ROW	C	*	*	*	*	*	C	C	C
Museums	*	*	*	*	U	A	U	U	U
Small Theater/Rehearsal Space	*	*	*	*	*	U	A	U	A
Temporary Outdoor Entertainment	*	*	*	*	C	C	C	C	C
Lodging Uses:									
Hostels	*	*	*	U	U	A	*	U	U
Bed and Breakfasts	*	*	*	U	*	*	*	*	*
Motels and Hotels	*	*	*	*	U	A	*	*	*
Public and Institutional Uses									
Home Daycare	A	A	A	A	*	*	*	*	*

Zoning District	RR-1, RE	RL-2	RM-1	RH-4, RH-5	BT-2	BC-1, BC-2	IS-1, IS-2	IG	IM
Office, Medical and Financial Uses									
Data Processing Facilities	*	*	*	*	A	A	*	A	A
Financial Institutions	*	*	*	*	U	A	*	*	*
Medical or Dental Clinics	*	U	U	U	A	A	*	*	*
Medical and Dental Labs	*	*	*	*	A	A	U	A	*
Administrative Offices	*	*	*	*	A	A	*	A	A
Professional Offices	*	U	U	U	A	A	*	*	*
Technical Offices; With <5,000 Square Feet of Floor Area	*	U	U	U	A	A	A	A	A
Technical Offices; With >5,000 Square Feet of Floor Area	*	U	U	U	A	A	*	A	A
Offices - Other	*	U	U	U	A	A	*	*	*
Commercial Uses									
Animal Hospital/Veterinary Clinic	*	*	*	*	U	A	A	A	A
Animal Kennel	*	*	*	*	*	U	A	A	A
Broadcasting and Recording Facilities	*	U	U	U	*	A	A	A	A
Business Support Services <10,000 Square Feet	*	*	*	*	*	A	A	U	U
Business Support Services >10,000 Square Feet	*	*	*	*	*	A	U	U	U
Neighborhood Business Center	*	U	U	U	*	*	*	*	*
Personal Service Uses	*	U	U	A	A	A	*	*	*
Retail Uses									
Convenience Retail Sales </=2,000 Square Feet	*	U	U	U	U	A	C	C	C
Convenience Retail Sales > 2,000 Square Feet	*	*	*	U	U	A	C	*	C
Retail Sales </=5,000 Square Feet	*	*	*	*	*	A	*	*	*
Retail Sales >5,000 but </=20,000 Square Feet	*	*	*	*	*	A	*	*	*
Retail Sales >20,000 Square Feet	*	*	*	*	*	U	*	*	*

Zoning District	RR-1, RE	RL-2	RM-1	RH-4, RH-5	BT-2	BC-1, BC-2	IS-1, IS-2	IG	IM
Vehicle-Related Uses									
Automobile Parking Lots, Garages, or Car Pool Lots	U	U	U	U	U	A	A	A	U
Fuel Service Stations or Retail Fuel Sales	*	*	*	*	U	C	C	C	*
Sales and Rental of Vehicles	*	*	*	*	*	U	A	A	*
Sales and Rental of Vehicles within 500 Feet of a Residential Use Module	*	*	*	*	*	U	C	C	*
Service of Vehicles with No Outdoor Storage	*	*	*	*	*	U	A	A	A
Service of Vehicles with Limited Outdoor Storage	*	*	*	*	*	U	A	A	*
Industrial Uses									
Building and Landscaping Contractors	*	*	*	*	*	*	A	A	A
Cleaning and Laundry Plants	*	*	*	*	*	*	A	A	A
Cold Storage Lockers	*	*	*	*	*	*	A	A	A
Computer Design and Development Facilities	*	*	*	*	A	A	A	A	A
Equipment Repair and Rental with Outdoor Storage	*	*	*	*	*	U	A	A	A
Lumber Yards	*	*	*	*	*	*	A	A	*
Manufacturing Uses </=15,000 Square Feet	*	*	*	*	*	*	A	A	A
Manufacturing Uses >15,000 Square Feet	*	*	*	*	*	*	U	A	A
Manufacturing Uses with Potential Off-site Impacts	*	*	*	*	*	*	*	U	U
Outdoor Storage	*	*	*	*	*	*	A	U	A
Outdoor Storage of Merchandise	*	*	*	*	*	*	C	C	C
Printers and Binders	*	*	*	*	*	*	A	A	A
Recycling Centers	*	*	*	*	*	*	U	U	U
Recycling Collection Facilities – Large	*	*	*	*	*	U	U	U	U
Recycling Collection Facilities – Small	*	*	*	*	*	C	C	C	C
Recycling Processing Facilities	*	*	*	*	*	*	U	U	U
Self-service Storage Facilities	*	*	*	*	*	*	A	U	*

Telecommunications Use	*	*	*	*	A	A	A	A	A
Warehouse or Distributions Facilities	*	*	*	*	*	*	A	A	A
Wholesale Business	*	*	*	*	*	*	A	A	A

For Explanation of Table Abbreviations, See B.R.C. **Section 9-6-1**

History of East Arapahoe Ave.

City of Boulder Comprehensive Planning and Sustainability, 2014

The 1874 Wellman Farm House stood at Foothills and Arapahoe until it was demolished in 1968.

The Wellman Farm was later owned by the Van Vleets, a prominent ranching family that bred Arabian horses.

O.T. Jackson's Resort at 55th and Arapahoe offered an outing destination for picnics and dancing.

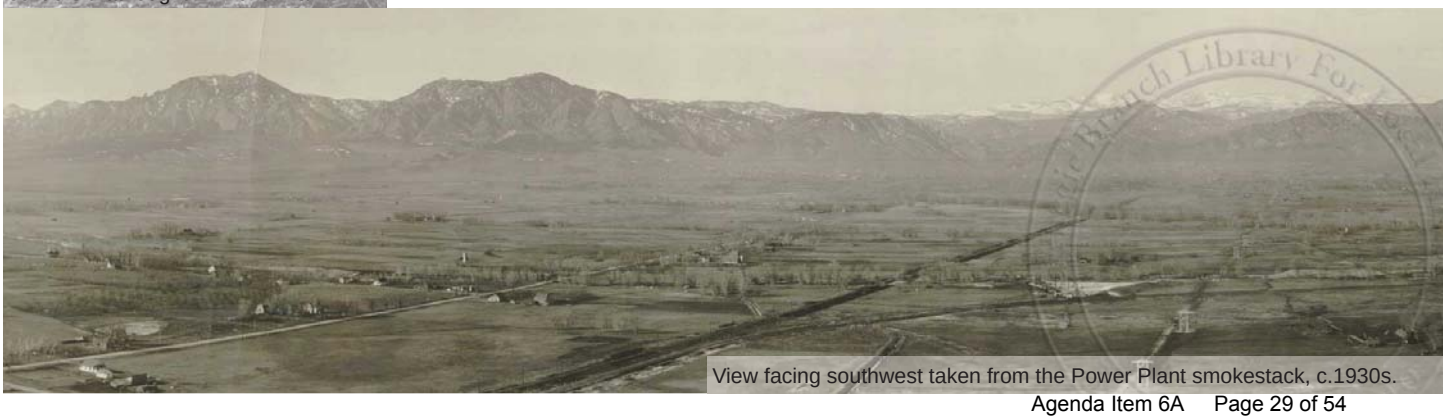
Legion Park, designed by Saco de Boer and built by CCC crews, memorialized soliders that fought in World War I.

Today, East Arapahoe Ave. acts as the main travel corridor between Boulder and communities to the east. Until the Boulder Turnpike opened in 1952, Arapahoe Ave. served as the main route to Denver and was the eastern gateway to the city. The area remained outside of city limits until the 1960s, largely developing in the last forty years. The area boasts a rich history, as the location of the area's first farm, Jackson's Resort, and Ball Aerospace.

Boulder's first farm, located at the northeast intersection of Foothills Parkway and Arapahoe Ave. (currently Boulder Community Health), was homesteaded by brothers Sylvanus, Luther and Henry Wellman in 1859. The brothers left Pennsylvania hoping to profit from the gold strikes out west. Their farmstead included the land from Valmont south to Baseline and from 47th St. to 55th St. The Wellmans grew wheat and vegetables, finding a robust market in the nearby mining camps. The area was considered to be some of the best agricultural land, due to the close proximity to markets, good pasture land, and a consistent source of fresh water to irrigate crops and livestock. The land was later purchased by the Van Vleets, a prominent ranching family who bred Arabian horses and owned much of the land that is now Caribou Ranch in Boulder County. The Van Vleets sold the property in 1963 and moved many of the agricultural buildings to their farm at Cherryvale and S. Boulder Rd. The Wellman's stone house, built in 1874, remained on the property until 1968.

Oliver T. Jackson, an African American entrepreneur, moved to Boulder in 1892 and operated an oyster house, ice cream parlour, and the Stillman Hotel and served as the first manager of the Chautauqua Dining Hall. In 1897, he founded **Jackson's Resort,** a dinner club at 55th and Arapahoe. Jackson's Resort advertised "the very best accommodations for picnics, a 28x28 ft. ballroom with a good floor, and automobile and tallyho parties." After Boulder citizens voted to enact prohibition in 1907, Jackson moved to Weld County and founded Dearfield, an African-American farming community.

Legion Park, located on the north side of Arapahoe, east of 65th St. was previously known as Goodview or Hoover Hill. The park was developed in 1931 to provide "an unparalleled panoramic view" of Boulder County and to memorialize soldiers killed in World War I. In 1931, Boulder County signed a 100-year lease with representatives of Legion Post #10. Landscape architect Saco R. DeBoer designed the memorial, which was built by Civilian Conservation Corps (CCC) crews. In 1976, Boulder County took over management of the park, and the American Legion Post removed the German artillery that had



View facing southwest taken from the Power Plant smokestack, c.1930s.

been located on the site. The park remains a popular vantage point.
Development of the East Arapahoe area began the 1920s with the construction of the **Lakeview Subdivision,** the Valmont Power Plant, and scattered farm houses. Platted in the 1920s, the Lakeview Subdivision was located on the north side of Arapahoe Ave., between Cherryvale and 63rd, south of Hillcrest Lake. The subdivision was comprised of approximately ten wood frame and stone houses, each with a clipped gable roof. The Lakeside Service Station, also part of the subdivision, is located at 63rd St. and Arapahoe Ave., and was designated as a Boulder County landmark in 2004.

The **Boulder Humane Society** owned a large parcel of land on the north side of Arapahoe Ave., on the current site of Ball Aerospace and Technologies Corporation. The organization was founded in 1902 and incorporated in 1932.

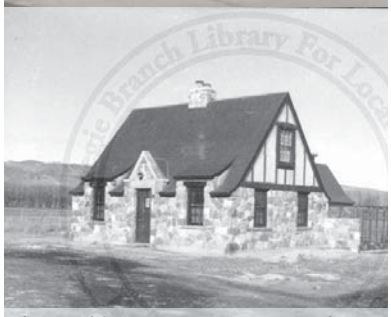
The smokestacks of the **Valmont Power Plant** have been a prominent feature on the landscape of Boulder County for nearly a century. Constructed in 1922, the Public Service Company's power plant heralded in the era of electricity and modernization. Twenty-five years after the plant opened, it was considered to be "one of the finest things to happen to it since the establishment of the University of Colorado, the Boulder Colorado Sanitarium, Mount St. Gertrude Academy and the Chautauqua,"[0] as the plant provided constant employment for the local workforce and generated a substantial amount of tax revenue. The location of the plant near Boulder was chosen by the power company engineers for its proximity to the lake and coal fields in Colorado. The steam plant originally used slack coal, a waste product from the mines. The Hillcrest and Leggett reservoirs were connected in 1943 with the construction of two canals. In the first twenty-five years the plant burned 5,664,500 tons of coal. In 1936, natural gas was installed as a stand by fuel but it was not used as a main source until 1942. The taller of the two smokestacks was built in 1923 and measures 377 feet high and 16 feet in diameter. A second tower, 22 feet in diameter, was added in 1938 and measured 310 feet high.

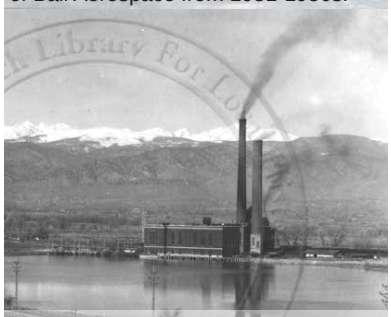
As automobiles became more affordable, Boulder saw a rise in car-oriented tourism. The city's first free auto park opened in 1926, at what is now Eben G. Fine Park. The Daily Camera reported, "It is expected that several thousand motoring tourists will stay one or more nights at the auto camp this summer, and ample accommodations are provided for them to cook, wash, sleep and enjoy their stay." By 1930, in addition to the city's free camps, there were five private "cottage camps," which advertised modern facilities, including kitchens and showers.

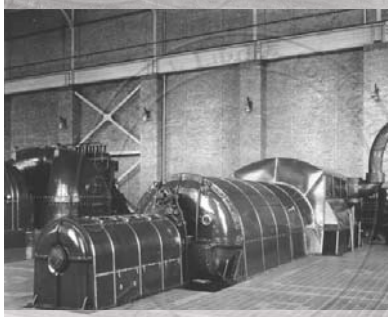
Roxwood Park, located at 55th and Arapahoe, on the former site of Jackson's Resort, opened in 1929. The 10-acre camp included amenities such as a motion picture screen, orthophonic speaker to broadcast radio programs, seven stone fireplaces for cooking, a barbecue pit "large enough to roast a sheep," horseshoe, volleyball and tennis courts, hammocks, and picnic tables. The auto park later operated as the Roxwood Motel until the 1960s. The motel was demolished shortly after,

Automobile-centered development continued through the 1950s with the opening of a new drive-in, **Twinburger.** Ordering through a speaker was a novelty at the time, and according to a contemporary newspaper article, this

The Service Station at 63rd and Arapahoe remains from the 1920 Lakeside Subdivision.


The Boulder County Humane Society was headquartered near the current site of Ball Aerospace from 1931-1950s.


Construction on the Lakeside (Valmont) Power Plant began in 1923.


By 1930, a second row of boilers were installed, increasing the capacity to 45,000 kilowatts.

Roxwood Park, a recreational auto park, opened in 1929 and operated at 55th and Arapahoe until the 1960s.

Ball Brothers Research Park was designed by Hobart Wagener in 1964.

Since its founding, Ball Aerospace has been a leading innovator in science and industry.

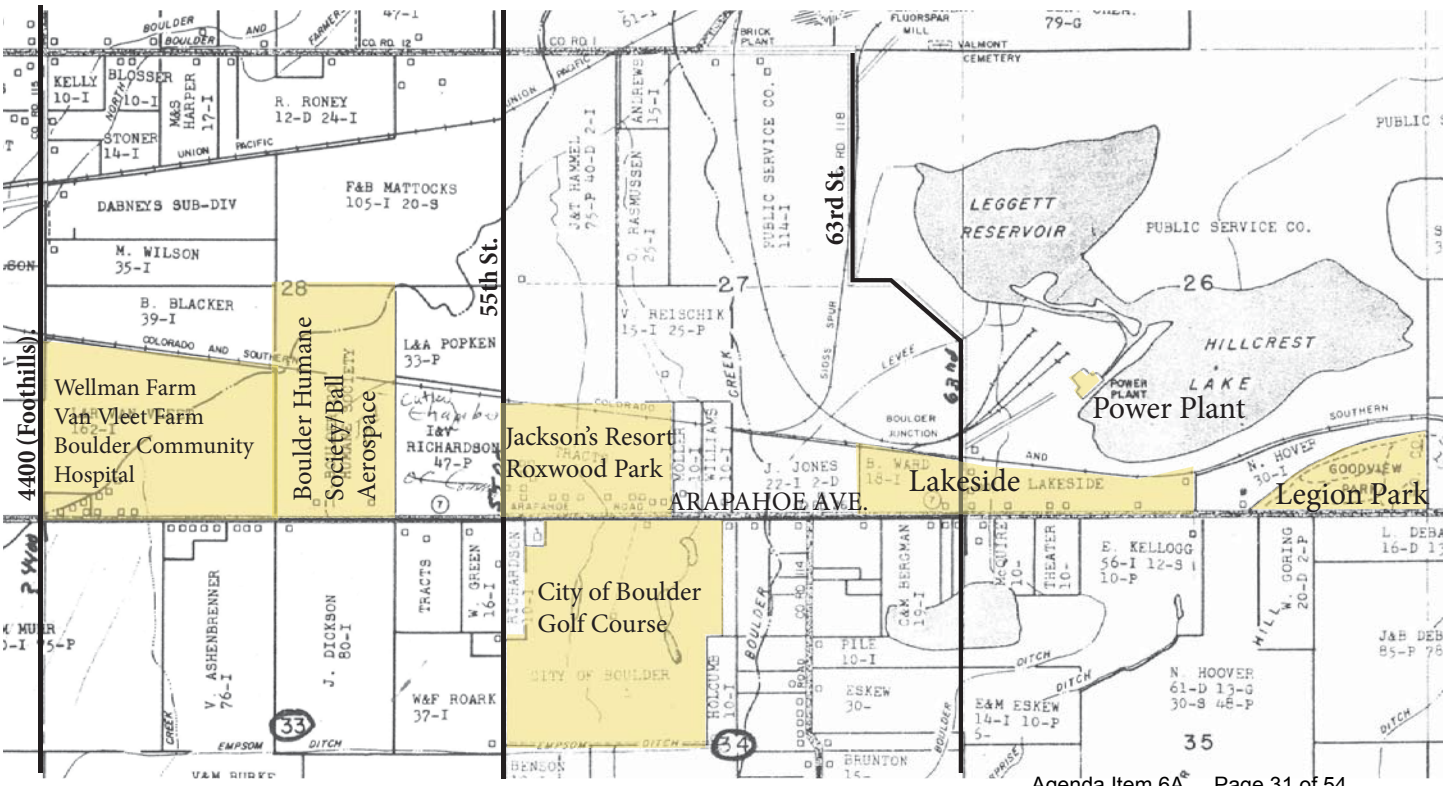
By the 1970s, the area became increasingly industrial.

eliminated the "disagreeable practice of sounding the horn or blinking the car lights to catch the car-hop's attention." The drive-in, or "driveateria," was such a novel concept that Twinburger was featured in the October 1957 issue of Drive-In Magazine.

Boulder's science and manufacturing industries continued to expand in the post-war era. In 1956, a group of scientists from the University of Colorado partnered with Ed Ball to form **Ball Brothers Research Corporation.** The company, formed "the year before the official start of the Space Race" has been a pioneer in the development of spacecraft and contributed greatly to space science and exploration, weather monitoring and surveillance technology.

In 1964, Ball Brothers Research Corporation commissioned local architect Hobart Wagener to design an office tower and butterfly-roofed Control Cell Units. Wagener, a noted local Modernist architect, is most well-known for his designs for the LaBrot House (1957), Boulder Fire Station #2 (1958), Williams Village (1966), and the Midland Savings and Loan (the Atrium, 1969). Many of Wagener's designs feature expressive roof forms, minimal decoration, and rhythmic patterns of fenestration. Ball Brothers, now Ball Aerospace and Technology Corporation, has continued to expand, encompassing approximately 25 acres on the north side of Arapahoe Ave.

The area became increasingly industrial through the 1960s and 1970s, when the first properties began to annex into the city. Manufacturing plants, including **Arapahoe Chemical Company** and **Central Packing Company** (a beef processing plant) operated here through the 1960s. Celestial Seasonings was located on the 1700 block of 55th St. prior to the construction of their current facilities in Gunbarrel. Many of the light industrial buildings in the area were built in the 1970s and housed companies such as **Neodata,** a large database marketing service, and **Inside Communications**, a publishing company of leading sports books, journals and magazines such as VeloNews.



1952 Marden Map

The area began to commercialize in the 1980s with further annexation of parcels into the city. The shopping center south of the intersection of Arapahoe Ave. and Conestoga St. was constructed in 1988.

The largest development of residential units along this portion of Arapahoe Ave. occurred in the 1970s and 1980s, with the construction of single-family dwellings and condominiums on the land that had once been part of the Muhr farm, on the south side of Arapahoe Ave. between Foothills and Range St. This area was annexed into the city in 1991.

The 1990s saw further annexation of parcels into the city, including parcels north of Arapahoe Ave. between 56th and 63rd Streets, currently the site of self-storage units and the **Boulder Municipal Golf Course**. The golf course was designed by William H. Tucker and opened in 1938. In 1986, the City of Boulder Parks and Recreation Department took over operations. In the early 2000s, the land at the northeast corner of Foothills Parkway and Arapahoe Ave. was annexed into the city and construction of the **Boulder Community Foothills Hospital complex (now Boulder Community Health)** began.

Today, the area has the largest concentration of the city's primary employers. Breweries such as Sanitas, Avery and Bru Pub, along with Ozo Coffee and Roundhouse Spirits provide popular gathering spaces. The Avalon Theater and Boulder's Dinner Theater provide a wide variety of cultural and entertainment events throughout the year. The area has retained a mix of light industrial, residential, and commercial uses.

The Boulder Municipal Golf Course opened in 1938.

The area began to commercialize in the 1980s.

Boulder Humane Soceity Building, 2323 55th St., 1972.

Many of the industrial buildings in the area were built with Duffy and Co. prefabricated panels.

SOURCES

Taylor, Carol. "Boulder's Jackson founded Dearfield 100 Years Ago." *Daily Camera.* 29 December 2010.

Advertisement for Jackson's Resort, date unknown. Carnegie Branch for Local History.

"Roads of the Mountains and Plains." Historic Context Report. City of Boulder. 1996

"Valmont Power Plant Began Operating Twenty-five Years Ago." *Daily Camera.* 3 December 1949.

Photographs of the Wellman Farmhouse and Lakeside Service Station courtesy of the Carnegie Branch Library for Local History. All other photographs courtesy of Carnegie Branch Library for Local History/Boulder Historical Society Collection.

View looking west from Legion Hill, c.1915.

Envision East Arapahoe

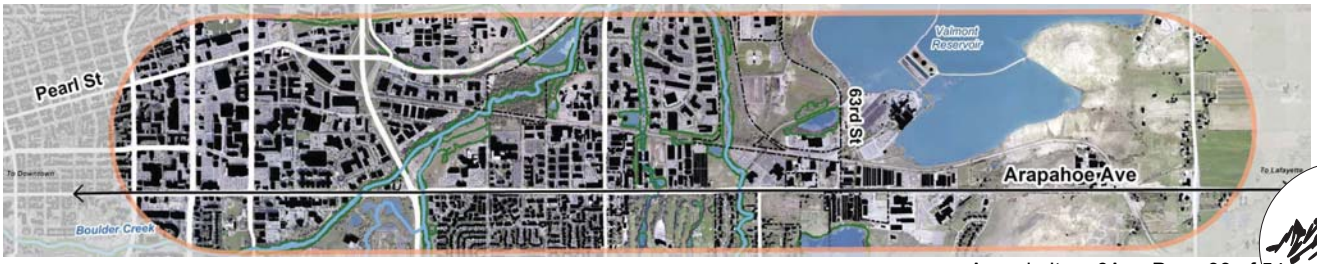
Draft Vision Elements

Please add your ideas to the draft vision.
What's missing? What would you change or remove?

East Arapahoe will be a people-oriented place that is more connected, resilient, and vibrant. It will:

- provide multiple transportation options so that people can move east and west along a street that includes excellent transit service and Bus Rapid Transit (BRT)
- improve connections to north and south of Arapahoe, as well as easily connect to downtown, the west side of Boulder, and eastern towns
- provide safe and welcoming places for pedestrians and bicycles
- include and protect existing neighborhoods while offering new opportunities for housing
- protect biodiversity along riparian corridors and promote nature-friendly design
- offer nearby high quality amenities and facilities for workers and residents such as restaurants, day care centers, nearby parks, open space, and services, within a short walk or ride
- strengthen waste reduction and recycling
- have reliable utilities and services and promote resource conservation and renewable energy
- reflect its agrarian history and existing cultural assets
- attract people to spend time in vibrant districts (e.g., health, bio/science, creative, learning, recreation, and eco/zero-waste)
- support incubator businesses, investment, ingenuity, and vitality
- maintain opportunities for affordable business and service industry space
- offer safe, accessible, and beautiful public spaces and architecture
- be a positive gateway experience to Boulder's eastern edge
- include a number of partners together to achieve the vision
- establish a baseline and use performance metrics to track how the place has improved over time

Your comments



Envision East Arapahoe

What Should We Measure?

The next step of the Envision East Arapahoe project is to develop scenarios showing different options for land uses, patterns, transportation connections and other ideas. Indicators are used to measure the scenarios and determine which options best meet the project goals and other community values. Indicators will be grouped according to Boulder's Sustainability Framework.

Please let us know what you think is important to measure. What is not on the list that should be?

Safe Community

Measures aspects of community safety that may be affected by future development.

- Safe Routes and Crossings
- Cost of Public Safety

Healthy and Socially Thriving Community

Measures healthy living and social connectedness, including:

- Mix of Uses
- Connected to City Destinations
- Close to Nature

Livable Community

Measures dimensions of living and working in the area.

- Housing Capacity / Number of Dwelling Units
- Affordable Housing
- Jobs Nearby

Accessible and Connected Community

Measures how easy it is to get around the area and connect to other parts of town and the region.

- Easy Walking and Bicycling
- Good Transit Access
- Fewer Car Trips
- Parking

Environmentally Sustainable Community

Measures how development patterns and design might affect the environment.

- Lower GHG Emissions
- More Parks and Open Space
- Avoiding Flood Zones and Wetlands

Economically Vital Community

Measures jobs and revenue, and how those compare with the expected costs of providing city services to new development.

- Jobs
- Cost of City Services
- Tax Revenue

Post your thoughts here!

EnvisionEastArapahoe.com

CITY OF BOULDER

Envision East Arapahoe

Please Add Ideas For East Arapahoe!

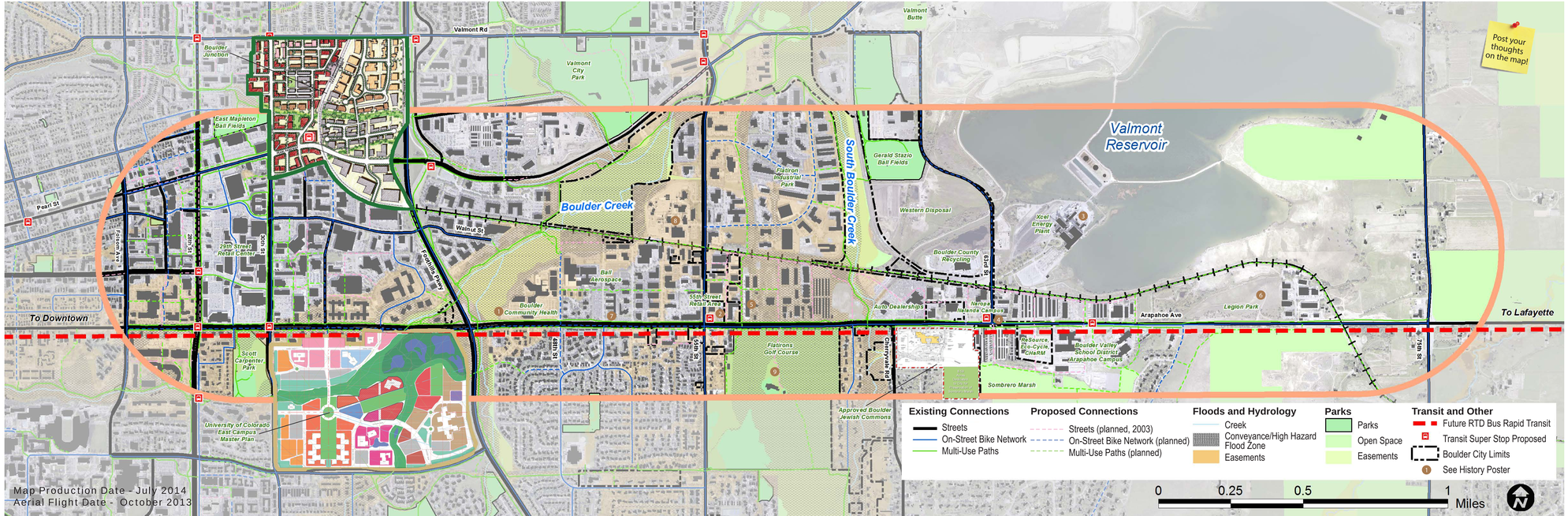
What Big Ideas will make East Arapahoe a great place in 2035, and where do they apply?
What connections between destinations need to be made in the area?

Transporation Examples

High Quality Transit

Enhanced Bicycle Infrastructure

Car Share and Bike Share



Map Production Date - July 2014
Aerial Flight Date - October 2013

Urban Environment Examples

Building Placement

Before

After

Before

After

Mix of Uses

Public Spaces

ATTACHMENT F: COMMUNITY ENGAGEMENT PROCESS AND SUMMARY

Through July 21, 2014

Engagement Process

The project encompasses a large and varied area of the City of Boulder with many segmented and complex stakeholders. Communication and engagement is critical to the success of a plan. Therefore, engagement for Envision East Arapahoe will be broad-based, inclusive, transparent, and accessible for all. Parts of the outreach may revolve around day-time events and online/social media techniques building from networks of specific businesses, institutions, employees, and residents in the area. Engagement will include:

- **Stakeholder interviews** Staff will interview businesses, institutions, local and regional agency partners, and neighborhood representatives (May and June 2014).
- **Idea Inspiration about Retrofitting Suburban Corridors** – The Victor Dover presentation on streetscapes in March helped inspire thought and ideas for the future. Staff will identify other possible speakers for July and later.
- **Workshops** - A co-design/visualization workshop, a scenario building workshop with Victor Dover, and an open house will allow the community to roll up sleeves and shape the vision.
- **Boards and Commissions** – Staff will seek guidance at periodic advisory board meetings (i.e., Planning Board, Transportation Advisory Board, and Design Advisory Board, and others depending on issues). Planning Board provides plan approval.
- **City Council** – Staff will seek periodic direction and plan approval from council.
- **Inspire Boulder and web-based** engagement will occur at major milestones when workshops occur.
- **Storefront / Dine-in** – The planning team go to people to collect input (e.g., Ozo coffee)
- **Bicycle or Walk Tours –** Walk audits are resuming and may be planned for the area for employees and the public.
- **Student Studios and Youth** - Work with students at the CU College of Environmental Design and younger Growing Up Boulder students and youth as appropriate.
- **Technical Committee** – Given Arapahoe is a state highway, staff will work with a small team of agencies to get additional input as needed (e.g., CDOT, RTD, Boulder County, CU, BVSD, etc.).

- **Employer-Based Meetings with Employees**. Some of the larger employers have offered to allow the planning team to host meetings, insert information in newsletters, and/or conduct surveys of employees to get input for the plan.

Summary of Input from Boards and Commissions

Transportation Advisory Board, April 2014

- The board was unanimous in its support to go for a "bold" vision around infrastructure, BRT, collaboration, etc.
- The E. Arapahoe area needs a character change.
- Please focus on CU East Campus to Boulder Junction connection thru Arapahoe (as one of the focus areas).
- There is strong support for access districts and parking strategies (unbundle parking, etc).
- TAB supports planning for BRT and transit that comes out of the TMP Update.
- One TAB member pointed out that he supports considering a "balanced" approach to the corridor—balancing regional and local needs (i.e., that both are important).
- TAB seemed to think the timeline is aggressive and ambitious to complete a vision by Dec 2014. But happy we're trying to streamline and try new approach of Area Plan "Lite."
- TAB is interested in another future joint board meeting later in the year. TAB wants to support Planning Board in any way they can. Let the TAB know how best they can help. Very much interested in teaming up and helping politically.

Boulder Design Advisory Board, April 2014

Project issues/opportunities and constraints

- The project should tackle addressing the single family homes to the south since single family homes along an arterial are problematic. If we are to make significant public investment along a major corridor, single family homes are not appropriate along that corridor.
- Use 1/4 mile rather than 3/4 mile radius to define walkable distance for planning the area.
- Focus more on a 5 or 10 min neighborhood rather than a 20 min neighborhood for planning the area as most don't walk to destinations that are 20 min away.
- It's good that the planning area covers over a 3 mile corridor.

Project Approach

- There is a very good start with the SS&C project Phase I that should be carried through this project.
- SS&C should not stop at the edge of the ROW rather it should also be a similar comprehensive analysis.
- 3D visualization and "before/After" analysis will be very useful.
- Use a visual preference survey as a way to illustrate what is possible and desirable.
- When developing a vision for this area, coordinate with BDAB's work on guidelines so we can develop a vision for the kind of architecture that is appropriate for the area.
- Use interactive scenario analysis, similar to DRCOG's 20 year interactive scenario, to

calibrate what different approaches mean from infrastructure cost, VMT, bus frequency, C02 emissions, etc., perspectives.
- Include Fate brewery as an example of a transformative business with regional draw that is appropriate for the area.
- Use bike helmet-cam to capture the existing bike trail to help understand the area better
- Find an actual boulevard in the city to take people on a walking tour to help imagine the possibilities.

Planning Board, March 2014

The Planning Board reviewed draft materials on March 20, 2014 and suggested the following ideas in response to questions in the memo presented for the discussion item.

The scope of work and timeline for 2014:

- The approach generally makes sense.
- It makes sense to make the study area asymmetrical with focus to the north. Also consider the two major riparian corridors and their influence on the study area. It might be more of a triangle than strictly a linear corridor.
- Include some sort of site review tools as part of the outcomes. May need two (or more) sets of guidelines – one more street-facing (along Arapahoe) and one for the interior properties and around riparian areas.
- Early code changes might be part of "early wins".
- Board members will send additional stakeholder contacts.

Project issues/opportunities and constraints

- Identify what cultural heritage is there and opportunities to identify the authenticity of the area and tie to the history of Boulder.
- Very little of the development is reflective of the riparian corridors; that's a missed opportunity.
- Improving the connections and bicycle network is a priority outcome. Make the area more permeable for bicycles.
- Tired buildings are also an opportunity.
- Avoid sterile street improvements; make sure north and south are not further divided with any RTD improvements. Urban design and landscape are really important to the quality of the street.
- Work with property owners to identify good opportunity projects and stimulate positive change.

Approach and ideas for developing the project vision

- The 3D visualization and visual preference approach will be helpful in crafting the vision.
- The stronger the vision, the more likely it will happen.
- Be clear about the role of Bus Rapid Transit (BRT) along the corridor. A corridor with it (or without) will be very different in nature. Encourage BRT as a catalyst.

Joint Board Feedback – December 2013

The Planning Board, Transportation Advisory Board, and the Boulder Design Advisory Board met together to review the first phase of the SS&C Inventory and the approach to the East

Arapahoe Project. The proposed combined scope of work, timeline, and visioning approach reflects input received.

Summary of Stakeholder Input to Date

Through July 21, 2014, the planning team has met with the following individuals and organizations:

Contact	Organization	Date
Jeff Wingert and Bill Reynolds	W.W. Reynolds, property owners	7/7/14
Paul Heffron and Crystal Gray	Studio Arts Boulder Board	6/30/14
Ann Bouche	Consultant and Peloton Resident	6/9/14
Barry Schacht, Schacht Spindle	Property owners: Fisher Kia, Mike Cooley, Barry Schacht, Jewish Community Commons, Naropa, others between 55th and 63rd.	6/1/14
CU team (David, Bill, Tom, David, Steve)	University of Colorado	5/22/14
Guy Fromme and others	Ball Aerospace	5/16/14
John Tayer	Boulder Chamber	5/14/14
Sue Prant	Community Cycles	5/14/14
Glen Segrue	BVSD	5/14/14
Jared D'Arcey	Resource, 6400 Arapahoe	5/12/14
Ron Secrist and Kai Abelkis	Boulder Community Health	5/12/14
John Reynolds	Property Owner, Developer	5/9/14
Christian Robillard and Martha, Employee relations	EVOL Burritos	5/5/14
Frank Bruno	Western Disposal	5/5/14
Betsey Marten and Stuart Grogan	Boulder Housing Partners	5/5/14
David Averill	CDOT Transit	5/1/14
Nataly Erving and Bill Van Meter	RTD	5/1/14
Jared Hall, Denise Grimm, Abby Shannon	Boulder County Transportation and Planning	5/1/14, 5/8/14
Todd Kilburn, Aaron, Tom Haste	Naropa (East Campus)	5/1/14
Steven Walsh	Consultant, interested party	4/8/14

The planning team continues to reach out to other businesses and organizations in the area (e.g., Premier Members Credit Union, Small Business Bureau, Boulder Dinner Theater and Avalon, office parks) as well as residents (e.g., East Foothills Neighborhood Association and others south of Arapahoe Ave.) and is responding to requests to meet with organizations (e.g., Peloton).

Summary of General Input from Stakeholders

Process

- Collaborate with large companies.
- Major institutions in the corridor are excited about the project and willing to collaborate with the city (e.g., Boulder Community Health, Naropa, Western Disposal)

- Other agencies and jurisdictions would like to participate in ad hoc technical group to hear updates and provide input (e.g., Boulder Valley School District, Colorado Department of Transportation (CDOT), Regional Transportation District (RTD))
- Businesses have a diverse workforce (e.g., service workers, health care experts, scientists and technical professionals), ranging in incomes, ethnicities, and educational background. Most commute in from Longmont and Layfayette and other parts of the region. Some, such as Western Disposal, have 70% non-English speaking populations. We can reach out to employees at their staff meetings or company newsletters to ask their opinions and ideas, survey, and or provide information.
- Engage neighborhoods on south side as much as possible.
- Work with county, especially to communicate information to and hear from county residents.
- Talk with nonprofit dance group at Avalon.
- Need to include the Old Tale Road representatives in this process, as they tend to support keeping things more rural.

General Ideas

- Arapahoe is a super highway – not conducive to walking or bicycling and unpleasant for waiting for the bus. Consider repurposing of travel lanes for transit.
- Including Bus Rapid Transit on Arapahoe Avenue is a great opportunity.
- Area overall has a funky, gritty industrial quality with multiple little districts. Its strength is as an incubator part of town for start ups. New companies should compliment.
- It needs connections to improve walking and biking and new infrastructure.
- Protect biodiversity and green space.
- Provide more housing for workers. New housing should fit the context, possibly smaller village style; permeable new developments.
- Future rail station is a long term opportunity.
- Check on timeline for decommissioning Valmont plant and possible opportunity, but be cautious about environmental contamination.
- Be innovative, since this area is a bit out of town. It shouldn't have the same "beige" look and feel of all other parts of town.
- Boulder Housing Partners (BHP) expressed a need to look at housing opportunities for hard-to-place populations in the area.
- Resource would like to expand its operations by building a warehouse on city property to the east.
- Floodplain is getting mitigated and has been remapped.
- Floodplain mitigation will affect golf course; golf may be an opportunity site.
- Explore opportunities for arts/artist space uses along the corridor, possibly on Western site or as part of the Valmont Butte area.
- Preserve historic sites (maybe as part of arts-related uses).
- Sewer capacity issues need to be part of the conversation.

Property owners between South Boulder Creek and 63rd and south of the Railroad have expressed concerns about the draft connections shown on the 2003 Plan (that was not adopted).

- Too much mini storage in the area – can't zoning restrict it and require a nicer product?
- What about the golf course for housing?
- The area will define itself.
- As employers, its hard to attract service workers because they can't or don't live in Boulder. Most employees in this area don't live in Boulder.
- This area is a very important gateway into the city from the east.
- Arapahoe Road construction was a significant burden to the area businesses.
- Need improved connection to east – Cherryvale to 63rd .
- This plan should be more flexible to meet evolving needs over time.

Specific projects and transportation topics

- Connections north and south across Arapahoe Avenue are difficult for pedestrians and bicycles. It doesn't feel safe or inviting.
- The sidewalks and multi-use paths are discontinuous and circuitous. Arapahoe corridor is spotty and hit-or-miss for pedestrians and bicycles. Would be great to provide improved connections. Lack of night time lighting for pedestrians and bicycles makes the area not feel safe.
- Need better wayfinding to better integrate current systems (greenways, paths, sideways, and on-street system) for pedestrians and bicycles (London example provided).
- RTD transit schedule doesn't work for workers with varying schedules and who travel in from surrounding communities.
- Consider developing an Access Management Plan with CDOT
- Businesses had flood damage.
- BRT definition is changing at the federal level. Continue monitoring this process.
- Cultural facilities (e.g., Rocky Mountain Theater for kids, and the dinner theater)
- Taxi example – affordable housing capture possibility.
- Pilot mobility hub concepts from the TMP Update.
- Provide better connections to CU East, including breaking up the super block with 33rd Street connection and providing pedestrian access across ponds. CU East campus current thinking is to develop it more like the main campus (compact and including classrooms, research, and graduate housing), ultimately with 4 million square feet. Marine Street connection could become a mini frontage road to allow access.
- Naropa will maximize 63rd and Arapahoe Nalanda campus. Move functions to main and out east with more campus type of feel and amenities including some food services.
- Boulder Community Health (BCH) is expanding – about 600 administrative workers will move from N. Broadway to this campus in October, contributing to a total of about 1,150 employees at the Foothills Campus. BCH has purchased buildings in Riverbend Business park for medical related offices. Workers lament losing food options and would like more places to eat near the hospital.

- BCH has looked at connecting streets, but probably won't move forward in the short term. Others have expressed interest in exploring connections from 48th to Walnut or Pearl Streets to provide better access to/from the hospital area.
- Ball has the manufacturing facility but also leases 16 buildings west of 55th Street. There is concern about cut-through traffic from 55th to Arapahoe south of the railroad and pedestrian access and safety between buildings and to get to services.
- Resource would like to expand its operations by building a warehouse on city property to the east.
- BCH is concerned about potential bike/car conflict at the Arapahoe & 48th St. as more traffic increases due to the move to Foothills. Similarly, concerned about potential traffic backup at this intersection due to cars trying to make u-turns at 48th heading west bound.
- BCH is concerned about potential bike/car conflict at the Arapahoe & 48th St. as more traffic increases due to the move to Foothills. Similarly, concerned about potential traffic backup at this intersection due to cars trying to make u-turns at 48th heading west bound.
- Resident school population has dropped, but schools along the commuter routes have maintained their student population, mainly from students from outside Boulder using transit or non-resident employees commuting in and dropping off children at the schools..
- Improvement project for businesses have been stuck in pipeline.
- Need transportation connections before housing (including well planned bike infrastructure).
- Could be a location for hard-to-place housing and services (e.g., day services, etc.)
- The new right-turn lane from Arapahoe to 6400 Arapahoe (Resource & Eco-Cycle) due to bus-only lane has been a challenging adjustment.

Envision East Arapahoe

Workshop Summary

Date: Monday, July 21 at Avalon Events Center, 5 -7 p.m.

Attendance: 47 people

Meeting Objectives:

1. Raise awareness about the project and area told through text, maps, and graphics
2. Learn about and provide comments regarding existing conditions and issues
3. Generate ideas for what should remain and what the area could become
4. Get feedback on how the city should measure future scenarios using indicators
5. Provide information on upcoming events and ways for the public to engage

Open House Stations:

1. **What to Expect: Project Overview**
   Informational posters about the project, study area, existing conditions maps, summary of issues – overview of project goals, schedule, and ways to get and stay involved.
2. **Past to Present and Future Potential**
   Story about the history of the area and opportunity to add "headlines" about the future.
3. **What are your Big Ideas?**
   A large map where participants can add ideas about new and improved opportunities and connections and what the area could become, shown through images. Participants will also be able to add to the "Draft Vision".
4. **What Should be Measured?**
   What should be assessed? What indicators are useful?

Comment Response Summary

Meeting participants were given the opportunity to provide comments on a map of East Arapahoe, as well as a comment box and other feedback opportunities at each station. Several themes emerged from the comments.

Transportation

- Many voiced support for enhanced and protected bicycle lane infrastructure, especially along Arapahoe Ave. as well as bicycle parking.
- Many comments regarded improving bus stations and associated shelters. Safety features, such a striped, designated crosswalks and adequate lighting at bus stops, are also desired.
- "Four travel lanes on Arapahoe" appeared in several places – either to reduce or widen the street, depending on the location. (i.e., increase capacity to 4 lanes on the east end vs. "road diet" reducing Arapahoe from 6 to 4 travel lanes on the west end).
- People provided positive comments regarding the idea of Bus Rapid Transit (BRT). Some responses specifically endorsed the idea of a dedicated or protected bus lane.

- People expressed support for additional connections of all kinds, including many suggestions for specific links on both multi-use connections and streets. Direct bicycle connections between destinations that don't require meandering are desirable.
- However, several landowners voiced concerns about specific street connections adversely affecting their properties.

Land Use

- People provided mixed comments about urban form and density. Comments were both in favor and opposed to mixed-use and residential in the area.
- The golf course and Xcel energy plant were the subject of multiple comments and big ideas.
- 55th and Arapahoe received a high concentration of land-use comments. There is desire for additional restaurant and lunch options for the high concentration of professionals..
- People voice interest in additional restaurant and bar options along the entire corridor. Locals expressed desire for more local services like a small Lucky's sized market.
- Affordable Housing and workforce housing is important to the community.
- Support for the arts is also important.
- Specific stakeholders such as Eco-Cycle, ReSource and Naropa left comments encouraging general support for their institutions in all planning decisions.

Sewer and Floodplain Issues

- Several people expressed concerns and comments about sewer backups and capacity near 55th and Arapahoe in the wake of the September 2013 floods.
- People expressed concerns about development being allowed in at-risk flood zones, and a lack of certainty pertaining to the flood zone.
- Floodplain mitigation may affect the flood potential of nearby properties.

Meeting Written Comments

Meeting participants provided the following written comments:

General Comments

- Need to make small parcels buildable to improve affordability
- Charge for all parking land, other TDM.
- Arapahoe's 3rd lane converted to separated multi-use path with plenty of green to make it welcoming.
- "Dutch-style" separate bike, pedestrian paths. GOOD intersection design!

Ideas Map Comments The following comments are documented based on where they were placed on the map; comments are not necessarily location specific unless clearly stated.

West of 30th Street

Transportation

- Covered bus stops as much as possible; real time bus info.
- Striped pedestrian crossings at all bus stops.
- EcoPasses for everyone.
- BRT in middle of Arapahoe; higher pilot density above 55' limit.

Land Use

- Allow module business (i.e., food court).

30th Street to Foothills Parkway

Transportation

- Light-rail loop up and down Arapahoe.
- Bus then bike shelter at Boulder Junction.
- Require existing businesses to improve bike parking.
- Signal engineering – Shorter cycles – pedestrian/bike lead intervals – crossing distance.
- Road Diet!!! Arapahoe: 4 Lanes Maximum.
- Increase stop spacing on Jump.
- BRT along 157 [Foothills Parkway].
- Skip frequencies for Jump.
- Tolling to cross 30th Street.
- Create art walk – i.e. design bike/pedestrian lane or path with pavement in-lays, creative surfacing.

Connections

- Connect 33rd St. north of Walnut to Boulder Junction.
- Put the crossing at 33rd St.. Too difficult to turn left onto Colorado on bike.
- Clarify connections in Boulder Junction area.
- Need more N-S Connectivity [30th and Walnut area].
- Underpass of railroad in this area [RR and 35th St.].
- Cross parcel access – walls, grade differential is a problem for pedestrian connections.

Land Use

- This area potential mixed-use flex zoning [North of Arapahoe, Between 30th and Foothills].
- Central Park [note placed on CU East Campus].
- Housing incentives for those who work nearby.

East of Foothills Parkway, north of Boulder Creek

- Light the Boulder Creek Path.
- Amend height restrictions in East Boulder.

55th and Arapahoe Ave.

Transportation

- Bike path on BNSF.
- Fix hostile pedestrian and bike environment between 30th and 55th St.

Land Use

- Provide more restaurant options for thousands of workers in area.
- Holiday neighborhood east on corner of 55th and Arapahoe [NE Corner].
- Mixed use here [55th and Arapahoe]. Form-based code? Beauty.
- Services (restaurants, grocery etc.).
- Encourage people to cook meals at home.
- Provide retail services to residential south of Arapahoe.
- Somewhere need grocery stores/"Lucky's"; bigger than 7-11 smaller than King Soopers ("++++ agree").
- More commercial eateries?
- Walkable center at 55th and Arapahoe with grocery store
- Require pedestrian Access to businesses ("I 2nd").

Sewer Issues

- Are you aware of the sewage chokepoint that is rated Tier 1 by the utility dept. at 55th and Arapahoe? It is called "Goose Creek 5" and has a HIGH risk of sanitary sewer overflow. Yuck!
- The city has a study in 2007-09 time that scored Arapahoe and 55th sewer line too small. It backed up in 9/13 as predicted. Replacement keeps getting delayed. It needs to be

accelerated, not delayed. What about growth in this area? Will the new pipes be placed with that in mind?

East of Foothills Parkways, between Arapahoe Avenue and Boulder Creek

Transportation

- Bus: perceived safety especially at night after dances. Transients around. ("Agreed" X3).
- Would like to see usual improvements.
- Better bus stop and shelter.
- Bike/pedestrian improvements.
- Paid parking.
- The curb cuts are really bumpy and need to be smoothed out. On a bike or with a stroller it is really a bummer. Also, drivers do not understand/expect cyclists in this area and many times I've almost gotten hit [55th and Valmont area].
- Dedicated lane for BRT; Make area more pedestrian and bicycle friendly… it's impossible to bike on Arapahoe, especially going east.
- Reduce car lanes – dedicated bike and pedestrian paths (separate from cars).

Connections

- Schacht Spindle co. and Mirrycle Corp. want to keep character of gardens proposed at the company's site.
- Significant concern about proposed connection street E-W At 6101 Ben Pl. Move connection south off of this property.
- Continue bike/pedestrian path East along Arapahoe. Path ends and pedestrians are forced to walk in bike path with on-coming traffic. Especially dangerous in winter with snow.
- Evaluate left hand turn arrow into Boulder Community Hospital (BCH)/Ball.
- 48th St. connection to Walnut – Rear entrance to BCH.
- Need E-W connectivity for bike facility on north side [of Arapahoe near Golf Course].
- Link path to 63rd St. especially with new development [near S. Boulder Creek, RR tracks, Western Disposal, B. County Recycling].
- Minimize driveway crossings of paths. Combine driveways into 1 street or crossing. Revised map crossings [Range-Conestoga Streets area].

Land Use

- Allow Naropa greater density and support cultural venue and arts.

- Allow for higher density and height along corridor.
- Late night restaurant or bar at NE Arapahoe and 63rd.
- Support Naropa.
- Form based code and more allowable uses (flex).
- Keep service industrial.
- What is status of this site? Waterview?
- [Across Arapahoe from Old Tale Road] Absolutely NOT a place for high density housing – residential or apartments.
- Tighter industrial zoning=smaller lot size. Allow retail, housing.
- Density is a GOOD thing! I think people are often afraid of "high density," but even townhomes/brownstones would be huge. Single family houses should not be built here.
- Grocery store in area.
- No to high density residential. And no to big block apartments.
- Consider mixed-use zoning by hospital and in corridor.
- Add high density residential.
- More high-density affordable housing and workforce housing; all mixed use.

Flood Related Land Use

- Floodplain development issues
- Much of this area is in the flood plain. It ought not to be developed.
- (Old Tale Road) When you remove some places from the flood plain, you put the rest of us solidly in the water.
- Need more certainty on what will happen with floodplain.

South of Arapahoe Avenue, between Foothills Parkways and 63rd Street

Transportation

- 2 traffic lanes, protected bike lane and sidewalks along all of Arapahoe would be great!
- I had to run across Arapahoe St. after getting off the bus at 62nd No crosswalk.
- Changes to Cherryvale seem to be working ok – traffic calming.
- Dedicated bike and pedestrian path [on Arapahoe].

Connections

- Need to fix paths along Arapahoe – it ends right before Cherryvale (needed east).
- No bike path through Old Tale Road backyards.
- Connect path across foothills ("I 2nd").
- Improve Foothills bike overpass.

Land Use

- Keep very low density residential.
- Urban agriculture, promote history of agriculture in the area; not at expense of increased housing, employment.
- Consider housing and mixed use on golf course.
- More high-density affordable housing and workforce housing; all mixed use [repeated comment].
- Less high density!!!!! Preserve the rural feel of this special area.
- Community gardens?
- Make affordable housing.
- Do not put residential in the flood plain, and think about how it will adversely affect current homes *(flood related).*
- Remove occupancy restrictions ("I 2nd").
- Remove golf course, replace with lake or reservoir with high-density mixed-use housing.

East of 63rd Street

Transportation

- Don't like what they did at 75th. [note left at intersection with Arapahoe].
- Keep the noise and light impact at the forefront. Change bus-only lane to allow right turn into Eco-Cycle and ReSource. Very challenging for our customers.
- Bike path on BNSF corridor ("I 2nd").

Connections

- Need path from recycling to Valmont Butte.
- Continuous corridor of protected cycle-tracks ("Yes Please!") or "Greenways."
- Better bike access into town from Folsom – at least sharrows on Arapahoe and better wayfinding through Goss-Grove.
- Connections and signage between multi-use paths, sidewalks, bus stops. Connections for multi-use by walkers/bikers.

Land Use

- Bury overhead power lines and reduce scale of street lighting.
- Make historic service station a visitor center.
- Could this be accessible open space [East of Valmont Res. Adjacent 75th St.].
- Raise height limits at key intersections – 30th, 33rd, Foothills, 55th? 63rd.
- Bolster Eco-Cycle and soup-up ReSource.

- Add more restaurants along corridor ("Yes!").
- Limit number of restaurants, retail – too much impact on neighborhoods.
- More breweries and destination land uses.
- Police annex – more civic uses (library, city offices, farmers market) – Organized green space/trail system – Biophillic buildings and public space – redevelop strip malls along Arapahoe – Some pedestrian-only streets, close to old town in Fort Collins – Children activities, outreach with youth, child-friendly development.

Xcel Energy Plant/Cooling Reservoirs Use Ideas

- Condemn power plant/lakes. Keep gas turbines. Fill lakes for development/open spaces. Housing okay. Shopping food here.
- What happens to this site? [Xcel plant]
- Recreational access to reservoirs?
- Keep this lake [Hillcrest] for recreation (fill others in to save water).

Comments on Indicators: What Should We Measure?

Safe Community

- Emergency room/urgent care access
- Safety for transit stops @ night

Healthy and Socially Thriving Community

- Impacts on sewer
- Adequate infrastructure for growth. For example: the sewer infrastructure is not adequate to present needs. Is this area to grow?
- Don't forget the underground sewage pipes are small and were installed decades ago <u>before</u> growth!

Livable Community

- Beautiful community – Architecture – Scenic views – Landscape – Sound levels -form-based code?
- Pavement % vs. Greenspace %
- Noise and "lightnoise" in existing neighborhoods along the corridors paths. Please consider the "rural feel" of East Arapahoe – that is why we live there.

- Overall satisfaction with area is a place-based "happiness" score. Start with a baseline year and see how people's perception of the area is over the ages and connecting to area (resident, employee, etc.)
- Is there such a thing as GENERAL FEEL INDEX? Is there a way to measure the "general feel" of various land uses? Eg. Bike path along Boulder Creek=9, Power plant=1, Car dealership=3, Used car lot=1, Arts center=7, Beautiful park=7-8

Accessible and Connected Community

- Reliability of service
- Crossing/stripe/auto light for bus; Crossing/crosswalks
- Better bike paths
- Crosswalks for bus stop locations
- Navigating and wayfinding
- Bus stops with shelter at all stops; paths from bus to businesses; crosswalks
- Walkability score
- Connections between multi-use paths and sidewalks and bus stops; signage/wayfinding to help show distance
- Jump to have skip-like frequency! More restaurants to serve additional housing; better bike access to downtown – including from county into city limits
- Measure percentage of employees along corridor who choose to walk, bike, bus to work. Or do the same for lunch.
- How welcoming are walk/bike paths?
- Walk/bike access to Boulder Creek Trail
- We have no nearby place for groceries. Essential for a 15 min neighborhood.
- Impact on existing residential property owners, especially access
- In-commuters to corridor for employment

Environmentally Sustainable Community

- Transit frequencies; reduced auto traffic entering city via E. Arapahoe; bicycle counts/volumes; VMT from Folsom to 75th; Transit mode share; # of driveways on Arapahoe

Economically Vital Community

- Local services for residents – small restaurants – cleaners
- Estimated transportation costs per household – would help assess success of transit/bike/ped strategies to help reduce costs

Other

- Measure using current metrics – When the "Plan" needs to be used, perhaps in 20 years, the "Plan" needs to be considered in the then current context. What works today may or may not be appropriate in 5, 10, or 20 years. The "Plan" is a guideline, NOT a rule.

Additional Comments

Land Use Considerations

- More high density residential, but not if it looks like the Peloton.
- Avoid cookie-cutter development (Peloton, 29th St.). Form-based code. Diverse architecture. Landscape elements/encourage diversity.
- Allow lots of flexibility of development to property owners. Especially w/r multiple uses on single parcel.
- Consider the arts and have flexibility in zoning for arts and non profits.
- Infrastructure for growth – it's underground where you can't see it. The sewers, for example, are not adequate for present needs. Is this area to grow?

Local Services

- Is this area zoned for the needs of a medium-sized grocery store? Bigger than 7-11? We have no place selling food at present.
- More restaurants, coffee shops, grocery stores – Fate is great, Ozo is great!... "I 2nd this."

Connections

- On-street bike lanes along as much of Arapahoe as possible – creek path is lovely but not fast. Could be downtown in like 10 min from 55th Street with bike lane on street…. "I 2nd this."
- Bike paths: Don't build them squiggly, build straight. Much more safe.
- Eliminate 3 new speed bumps on Cherryvale between Arapahoe and Baseline. Already 30 mph limit. Bumps impede free flow of traffic.
- Local bus service that serves the Avalon Ballroom late enough at night so that dancers can go home after the events. I.e. 10:30 pm, 11:30 pm etc.

Other

- Bury the power lines

- Consider posters at existing bus stops, businesses, intersections, elsewhere that ask people what they'd like to see happen there – could have QR code and other info linking to InspireBoulder.
- The plan should be a guideline, not a *rule.*
- Above all else, please build into the plan some clear ability to, in the future, allow for current (at the time) events and conditions to be incorporated and considered. What is appropriate today may not be appropriate in 20 years.

History Poster Comments (What Should the Future be?)

- BRT!
- Mixed-use development
- Walkable, bikeable mixed-use districts
- This area is in the flood plain. This issue must be addressed before you consider development.

Comment Form Comments

*What do you think are the **top issues** for the Envision East Arapahoe project to address?*

- Walkability; making the area more attractive – less industrial. Address how traffic times – rush hour – challenge to turn left out of Eco-cycle, ReSource.
- Connectivity. Increase mix use (housing). Floodplain. To decrease distance driven
- Transit connectivity (regional) and frequency. Density. Thank you for caring about E. Arapahoe! It needs our help!
- Poor streetscape, industrial land uses along Arapahoe lack of identity and character.

*The **Draft Vision Elements** handout identifies directions for the project. Ideas are based on input from stakeholders, staff, boards and commissions, and City Council. Do you have comments to help craft a final vision?*

- Support statements.
- Need to address heavy car traffic going east during PM rush hour.

*How can the city best **engage you and others** and keep you informed about the project and upcoming events?*

- Open houses, emails, on-line surveys.
- Email, web updates/City of Boulder Facebook updates.

- Send notices out earlier – just received last Thursday. Email/send flyer and I will post @ Peloton.
- Do something fun. Go to the citizens instead of them coming to you.

*Do you recommend other ideas to make the **proposed planning process** lead to successful outcomes?*

- Interviews/question/intercepts with walkers/bus riders on corridor to get perspective directly from users.
- Continued stakeholder meetings w/ large employers, HOAs.
- High-density, mixed-use housing, job and offices. Most of all a place that has character. NO big box stores/car dealerships. Special district that allows more than 3 stories.

*What **walk or bicycle tours** (locations, times of day, etc.) would most interest you?*

- Area around 63rd and Arapahoe (Eco-Cycle + ReSource); Weekdays, lunch time (11am-1pm).
- Greenways – connections and wayfinding; Area around 55th and Arapahoe; Other (Folsom to 33rd); Weekdays, afternoon/evening (4-7) depends on week.
- Greenways – connections and wayfinding; Area around BCH, 48th St.; Area around 55th and Arapahoe; Sundays; Weekdays, afternoon/evening.
- Greenways – connections and wayfinding; Saturdays; Sundays.

How did you hear about the July 21 event?

- Email announcement (x2)
- Website