DRAFT 2016-2021

CAPITAL IMPROVEMENT PROGRAM

CITY OF BOULDER, COLORADO

2016-2021 Draft Capital Improvement Program

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City of Boulder
2016 –2021 Capital Improvement Program

Mayor ..... Matthew Appelbaum
Mayor Pro Tem ..... Suzanne Jones
Council Members ..... Macon Cowles
George Karakehian
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

Assistant City Manager ..... Mary Ann Weideman

Chief Financial Officer ..... Bob Eichem

Director of Finance ..... Cheryl Pattelli

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

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

Director of Parks and Recreation ..... Yvette Bowden

Fire Chief ..... Michael Calderazzo

Municipal Court Administrator ..... James Cho

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 Human Services ..... Karen Rahn

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

Interim Director of Public Works for Transportation ..... Michael Sweeney*

Police Chief ..... Greg Testa

Director of Communications ..... Patrick Von Keyserling

Director of Open Space and Mountain Parks ..... 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 ..... David Gelderloos*

Fire ..... Frank Young

Information Technology ..... Beth Lemur

Open Space & Mountain Parks ..... Lauren Kilcoyne

Parks & Recreation ..... Jeff Dillon*

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 ..... Gerrit Slatter*

Public Works/Utilities ..... Ken Baird

Public Works/Utilities ..... Bob Harberg

Public Works/Utilities ..... Douglas Sullivan

* Member of the CIP Peer Review Team

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2016 – 2021 CAPITAL IMPROVEMENT PROGRAM
HOW TO USE THIS DOCUMENT

The City of Boulder's 2016-2021 Capital Improvement Program (CIP) contains information on how the city plans to invest available resources into key infrastructure and facilities between 2016 and 2021. 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; links to maps illustrating the location of projects throughout the city; and narratives describing the rationale behind project prioritization.

Document Organization

The 2016-2021 CIP has five main parts:

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

Introduction

The Introduction section provides an overview of the 2016-2021 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 2016-2021 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 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. There are also highlights of the effects of the following on the CIP: the September 2013 Flood, the Community, Culture and Safety project, and the Pavement Management Program. .

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, links to maps that identify the locations of department projects, and project sheets for each of the department's CIP projects.

Appendices

The 2016-2021 CIP contains two appendices. The first appendix contains information on

unfunded capital projects, and the second contains a list of CEAP projects.

Data Limitations

The 2016-2021 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 this table. 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 2016 and for each year between 2016 through 2021. However, on-going programs, because they have typically received funding for many years before 2016, do not have information about allocated funding prior to 2016. 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 2016.

Future Unfunded shows any amount of the *Total Funding Plan* that does not have a funding source. *Funding to Completion* shows any amount outside of the Total Funding Plan that is outside of the six-year CIP window (2016-2021). As historical data for these projects get collected over time, the aforementioned sections will be populated.

Figure 0-1: Sample Capital Funding Plan Table

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Stormwater & Flood Mgt Utility	$3,355,520	$500,000	$550,000	$600,000	$633,000	$660,000	$684,285
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	$6,982,805						

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Capital Planning and 2016 – 2021 CIP Summary

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 382 buildings and structures, 1,800 acres of parkland, 45,498 acres of Open Space and Mountain Parks (OSMP), 305 centerline miles of streets, 159 centerline miles of bike facilities, 79 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.

Chautauqua Reservoir Construction, 1923. 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.

Introduction

The 2016-2021 CIP includes funding for $392.7 million for 157 projects. 109 projects are recommended for funding in 2016, totaling $74.5 million. Proposed 2016-2021 allocations are $31.5 million higher than 2015-2020 allocations ($361.4 million) presented in the 2015-2020 CIP. The recommended 2016 allocations are $4.7 million higher than approved 2015 allocations ($69.8 million). The primary reason for the increase in 2016-2021 is the additional major projects in Utilities and Transportation. These projects are partially funded from increased revenues provided through recent tax initiatives and new Transportation Improvement Program (TIP) federal funding (Transportation), and rate increases (Utilities), and are key investments to maintain existing infrastructure.

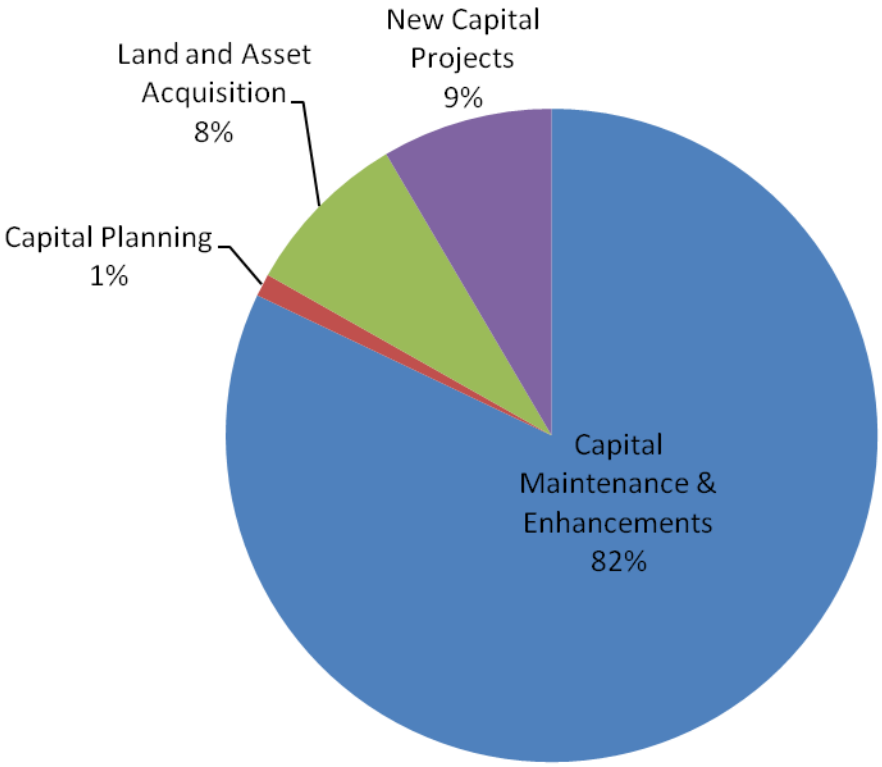
Following the 2013 Flood, assessments in the city's water, wastewater and stormwater/flood management system has informed key capital investments needed to reduce the city's vulnerabilities and improve resilience. During the 2015 budget process, there were extensive discussions related to the Utilities CIP and rates at numerous public meetings, including WRAB and council meetings and the result was support for an accelerated plan of system replacement and enhancements. This is reflected in the 2016 – 2021 CIP. To note, the 2011 Capital Improvement Bond proceeds are not included in these totals because allocations for the bond occurred in 2012, and the Community, Culture and Safety Tax proceeds are not included in these totals because allocations are occurring through budget adjustments.

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, over 82 percent, of its 2016 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: 2016 Projects by Category



CIP Highlights

The city anticipates completing a significant number of Capital Projects in 2015 and 2016. 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 2015 accomplishments and highlights of the 2016-2021 CIP are noted in the department overviews.

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

2015 Accomplishments (see Department Overviews for additional details and highlights)

- Continued flood recovery (see Special Flood Highlight section)
- Completed Main Library renovation
- Acquired new fire response software (anticipated to be operational by the end of 2015)

Introduction

Fire Station #8.

- Completed construction of Fire Station #8 (Wildland Fire Station)
- Completed numerous flood mapping studies and flood mitigation plans
- Commenced Baseline underpass construction (late 2015),
- Commenced North Trail Study Area (NTSA) Planning
- Completed West End Streetscape improvements
- Completed Valmont City Park Concept Planning
- Replaced approximately 22,000 feet of water main and installed 3,000 feet of new water main for flood impacted properties along Old Tale and Baseline
- Assessed condition of wastewater collection system and removed debris

2016 and Beyond Planning and Construction (see Department Overviews for additional details and highlights)

- Betasso Water Treatment Plant Improvements
- Wastewater Treatment Facility nitrogen upgrades
- Replace and implement the Police Records Management System
- Flood mitigation and path improvements along Fourmile Canyon Creek
- Stream bank restoration work on Boulder Creek at Eben Fine Park
- Responsive measures to mitigate Emerald Ash Borer threat
- Enhancements to the North Boulder Recreation Center Pool
- Newly funded Transportation Improvement Program (TIP) Projects:
    - Broadway Reconstruction
    - 30th and Colorado Avenue Underpass
    - Boulder Slough Multi-use Path (30th to 3100 Pearl)
    - 19th Street Improvements (Norwood to Upland)
- Arapahoe Avenue / Boulder Creek Path Underpass Improvements
- New shared parking facility between CAGID/ Trinity Commons
- Realignment of main sanitary sewer interceptor at the Treatment Facility
- Complete OSMP flood-related trail repairs
- Renovation and repair of the Foothills Nature Center (near Wonderland Lake)
- Ongoing network hardware and software replacement
- Construct Carter Lake Pipeline
- South Boulder Creek Flood Mitigation Phase I

West End Streetscape on 9th Street and Pearl Street.

Special Highlight Sections

As in previous years, this document contains a few special highlight sections to provide more detailed information on special initiatives or other areas of focus that warrant additional information to what is provided in the funding summaries and/or department pages. The highlight sections included herein are:

- Capital Improvement Bond – provides an update to spending and progress of projects funded by the 2011 Capital Bond
- 2013 Flood Impact – provides an update to spending, progress, reimbursements and other revenues related to flood recovery efforts from the 2013 Flood
- Community, Culture and Safety Tax – provides an update to spending and planned work on projects funded by the 2014 voter approved Community, Culture and Safety temporary tax, similar to the Capital Improvement Bond highlight, and will continue to be updated until completion of projects
- Transportation Tax Increases – provides additional information on the pavement management program, implemented with funding from the voter approved tax initiatives supporting Transportation.

CAPITAL
Improvement
BOND

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

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 2016-2021 CIP include, continued flood impact and recovery costs, especially in Open Space and Mountain Parks, response to the Emerald Ash Borer threat, funding constraints, construction cost inflation, operational funding, and conversion to new financial software.

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 were either deferred or became no longer relevant (for example work on a single element of a park that then needed more extensive repair and restoration, as a result of the flood). In some cases, funding previously identified for regular CIP projects was used to cover the cost of flood repair and recovery, and new or different funding sources have been or will need to be identified to complete high priority projects, within the needed timeframe, or the timelines have had to or will have to shift. Finally, the information learned from the flood has led to reprioritization of CIP projects. Much of the recovery work has

now been done, with the majority of remaining projects in OSMP. Additional funding provided in Utilities has allowed for an accelerated CIP program to address vulnerabilities in the water, wastewater and stormwater/flood management systems and FEMA reimbursement has begun coming in, helping to replenish reserves and provide funds for previously deferred projects. In the CIP, this is reflected in new projects, changes in timing of projects, and changes in scope of projects. However, there remains some recovery work that will not be FEMA eligible, especially in for OSMP recovery work.

The 2016 – 2021 CIP includes a special flood highlight section, which provides additional information related to the impact of the flood on the CIP. For departments still in the midst of recovery efforts or mitigation work, details specific to their departments are included 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 has gathered information and worked interdepartmentally with Parks & Recreation, the city's Integrated Pest Management team, Open Space and Mountain Parks, Development Review, and other interested divisions, departments and boards to develop an EAB Management Plan to manage the infestation within the city and potentially slow the spread to nearby communities. This plan will be presented to council in September 2015. The CIP includes a multi-year project and funding has been identified to implement the plan.

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 2.2 and 4.5 percent respectively, based on a 5-year rolling average. As yearly variations are common, 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.

Conversion of CIP to Munis

Starting in mid-2014, departments, the Transform Boulder Business Initiative (TBBI) project team staff (working on the replacement of the city's financial and human resource software), and Finance staff worked together to determine how best to use Munis (the city's new Financial Software) as the replacement project database for the CIP. Previously, CIP projects were held in a stand-alone Access database which did not tie to either project management systems or the city's financial system. The goal was to include project information and financial data in the system, to allow for integrated financial and project management, as well as to ultimately provide better information on project expenditures over time.

With the implementation of Munis, all CIP project information and financial data are now stored in Munis and the system is used for project accounting, budget control and project management. Reporting capabilities are continuing to be refined and will evolve as familiarity with the new system increases. Until there is historical data in Munis (starting with 2015 data), the prior years' expenses or full project cost information, will not be available.

Opportunities

Similarly, there are issues that positively impact the city's capital investment performance.

Opportunities identified in the 2016-2021 CIP include additional funding availability; strategic planning for maintenance and unfunded needs; capital investment plans and studies; and an integrated technology analysis.

Funding – New Capital Revenue

In November 2014, Boulder voters approved the Community, Culture and Safety tax, a three-year 0.3 percent sales and use tax increase. Projected revenue from this temporary tax increase is anticipated to yield $27.6 million for thirteen specific projects to improve community spaces, bolster cultural projects and organizations, and enhance safety. Projects to implement the Civic Area Plan will be funded by this tax. The 2016 – 2021 CIP includes a special highlight section, which provides additional information on the purpose and schedule of projects funded from the new tax.

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 2016-2021 CIP includes a special highlight section on the Pavement Management Program implemented with these new dollars for Transportation.

Strategic Planning for 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 2016-2021 CIP includes information on citywide unfunded capital needs, both in department overview sections and in Appendix A to this document.

Moving forward, the intention is to build on the Comprehensive Financial Strategy efforts of the past decade and establish a purposeful and continuous process for capital investment to support the city's vision. Near term steps include commencing a citywide facility and asset assessment and an ongoing process for planning, funding and scheduling necessary maintenance and replacement of capital assets. While some departments have developed detailed inventories, establishing a citywide baseline inventory is the first step of a multi-year process. In conjunction with asset assessment work, the goal is to establish an ongoing strategic approach to capital planning that is integrated with the city's comprehensive plan and long term vision. This is envisioned to include a consistent process for prioritizing capital projects, emerging needs, and asset maintenance, as well as securing ongoing operating funding.

A critical element of the new approach is recognizing the need to understand current assets and future maintenance/replacement needs associated with those, as well as to develop the ability and strategic framework to take advantage of new opportunities, as they arise, for the long-term benefit of the community. For example, the city is actively pursuing the possibility of purchasing the Boulder Community Hospital site that is for sale. While this was not a part of the CIP and was not a known potential acquisition until recently, it is crucial to be able to respond quickly to this highly valuable opportunity.

Capital Investment Plans & Studies

Over the last several years, there have been Master Plan updates in many key areas, such as: Greenways, Fire, Police, Transportation, Parks and Recreation, and Open Space Acquisitions. Numerous assessments are underway or have been completed related to facilities and infrastructure that will directly inform capital planning and investment over the next decade. In some cases there is placeholder funding in the CIP for projects that have yet to be specifically identified but will be forthcoming from these planning efforts.

Transportation corridor scoping studies are proposed for funding in 2015 and 2016 that will guide capital planning along East Arapahoe and 30th & Colorado. Other recent planning efforts include an Aquatics Study, Athletics Study, Urban Forest Strategic Management Plan, Recreation Facility Strategic Plan and the North Trail Study Area Plan that will inform future capital investment.

Major drainageway flood mitigation plans are currently underway for South Boulder Creek, Gregory Creek, Bear Canyon Creek and Boulder Creek. Flood mitigation plans will be initiated for Skunk Creek, King's Gulch and Bluebell Creek; and Upper Goose Creek and Twomile Canyon Creek once the mapping studies have been approved by City Council.

Integrated Planning Effort for New Technology

An emerging city-wide issue is our aging radio infrastructure. FAM has submitted a 2016 budget request for a radio infrastructure analysis and strategic plan development. This strategic plan will impact all users of the city's radio system including Public Safety, Public Works, Open Space and Mountain Parks and others. The scope and final cost of the project will be determined by the results of the study and future projects will be programmed in the next CIP.

Implementation of Subcommunity & Area Plans

North Boulder Subcommunity Plan

The North Boulder Subcommunity Plan (NoBo Plan) was adopted by the city in 1995. City Council accepted the 2014 Action Plan that outlines 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 Fourmile Canyon Creek Flood and Greenways Improvements, Violet Park development in coordination with Greenways, transportation improvements to 19th Street, and the North Trail Study Area Plan.

Improvements at Goose Creek at Boulder Junction.

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 completion of 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. Proposed capital investments in the next six years include construction of a new pocket park at Junction Place and Goose Creek, traffic signal installations, and a multiuse path along the Boulder Slough between 30th and 3100 Pearl.

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, repair and replacement of CAGID parking lots, construction of a shared parking facility at Trinity Commons, and improvements and amenities replacement on the mall and along 15th Street south of Canyon.

Civic Area Plan

Work on the civic area is under way, focusing on site activation, site transformation and major capital project planning. The new Community, Culture, and Safety Tax revenues will fund projects in the Civic Area over the next three years including enhancements to areas north and south of Boulder Creek; playgrounds and nature play along both sides of the creek; new and improved community spaces; lighting, access and signage enhancements; public art; and renovation of the

underpass at the Boulder Creek Path (13th Street).

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: Sustainability Framework

Figure 1-3 illustrates the relationship between the Sustainability Framework, BVCP, PBB, Subcommunity and Area Plans, Master Plans, and the CIP.

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. Additionally, as we move to a more fully on-line environment, changes have been made to enhance the electronic viewing of the CIP. This year, GIS mapping is provided through a link to an interactive site, rather than in static printed map form. With the implementation of Munis, the new financial and human resources Enterprise Resource Planning (ERP) software, CIP project information is now held and managed in an integrated system.

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 (through data entered into Munis), continuing to incorporate graphical enhancements to improve the on-line view of the information and document, continuing to incorporate robust strategic planning in the process (as described above), 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.

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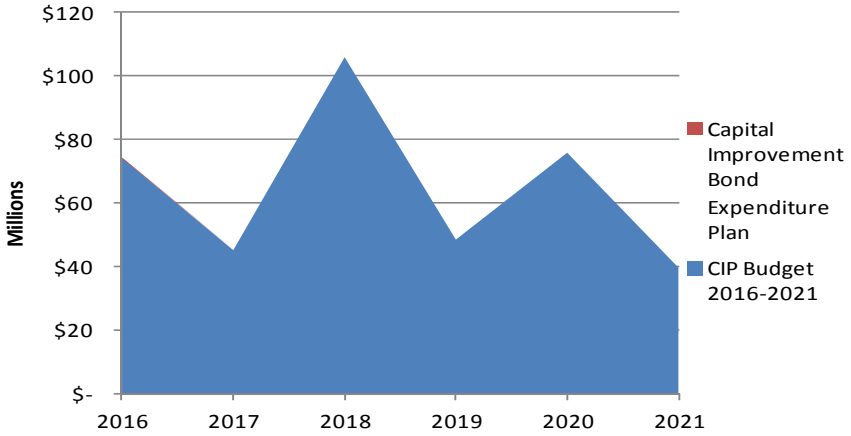
The Funding Summaries section provides full detail of the city's CIP budget needs from 2016 through 2021 by department, project type, and fund. For each of the three funding views, the following information is shown:

- Total project cost
- Planned funding allocation in each year 2016-2021 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 2016-2021. 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 2016 portion of the 2011 Capital Improvement Bond funds. These bonds were sold and funding appropriated in 2012. The blue area is planned allocations of 2016-2021 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 2016-2021 CIP:

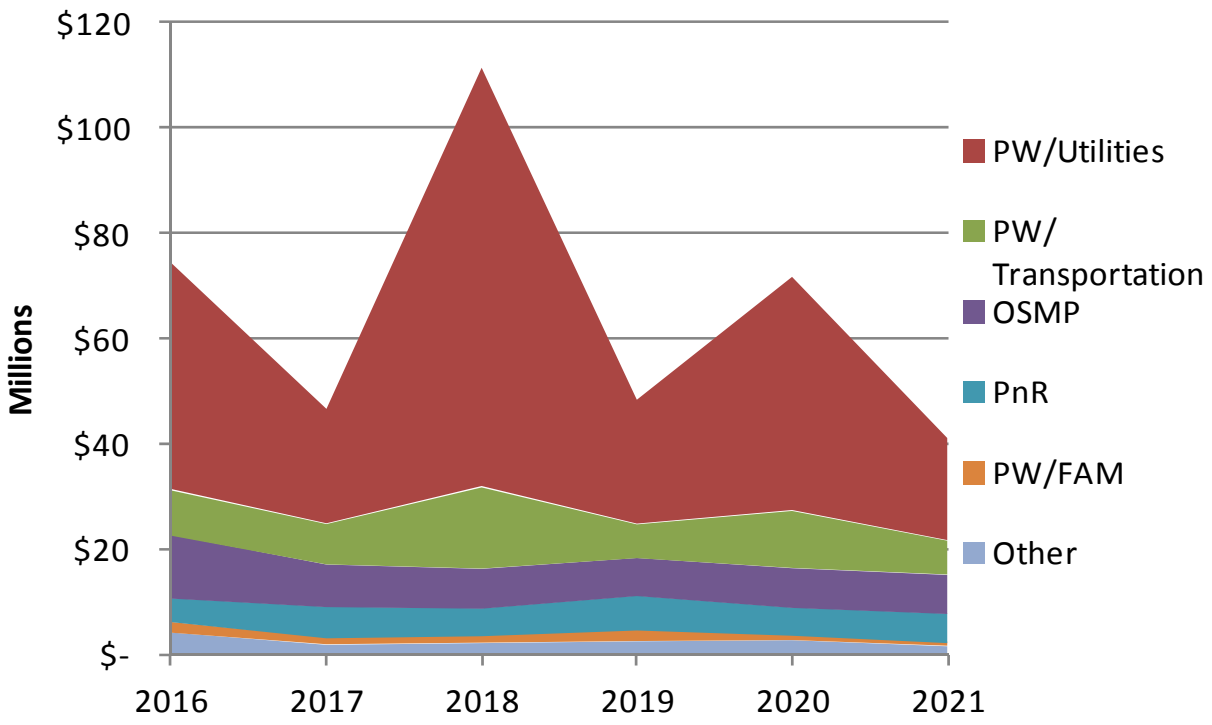
- Downtown / University Hill Management Division and Parking Services (DUHMD/PS
- Fire and Rescue
- Information Technology (IT)
- Open Space and Mountain Parks (OSMP)
- Parks and Recreation
- Police
- Public Works (PW) - Facilities Asset Management (FAM)
- PW-Greenways
- PW-Municipal Airport
- PW—Stormwater 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 2016-2021 CIP. Major renovations to stormwater, water and wastewater facilities are primarily responsible for the large spikes in allocations during 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 2016-2020.

Figure 2-2 displays the share of total 2016-2021 CIP spending on each department.

Figure 2-2: 2016-2021 Funding by Department



Other includes DUHMD/PS, Information Technology, and Police

Table 2-1: 2016-2021 Funding Summary By Department

		Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
DUHMD	Department Total	$ 4,434,765	$ 2,156,565	$ 678,200	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ -
INFORMATION TECHNOLOGY	Department Total	$ 8,310,962	$ 841,220	$ 964,254	$ 1,573,472	$ 1,885,671	$ 2,088,024	$ 958,321	$ -
OPEN SPACE & MOUNTAIN PARKS	Department Total	$ 49,060,930	$ 11,900,930	$ 7,945,000	$ 7,455,000	$ 7,080,000	$ 7,390,000	$ 7,290,000	$ -
PARKS & RECREATION	Department Total	$ 32,872,000	$ 4,458,000	$ 5,920,000	$ 5,217,000	$ 6,500,000	$ 5,277,000	$ 5,500,000	$ -
POLICE	Department Total	$ 950,000	$ 950,000	$ -	$ -	$ -	$ -	$ -	$ -
PW/FACILITIES & ASSET MNGMT	Department Total	$ 9,247,000	$ 2,157,000	$ 1,425,000	$ 1,485,000	$ 2,268,000	$ 1,078,000	$ 834,000	$ -
PW/STORMWATER & FLOOD UTILITY	Department Total	$ 61,417,767	$ 5,209,921	$ 7,119,924	$ 33,256,596	$ 5,028,682	$ 5,673,278	$ 5,129,366	$ -
PW/TRANSPORTATION	Department Total	$ 56,338,000	$ 8,774,500	$ 7,788,500	$ 15,692,500	$ 6,527,500	$ 11,027,500	$ 6,527,500	$ -
PW/WASTEWATER UTILITY	Department Total	$ 57,597,850	$ 4,355,600	$ 5,987,421	$ 5,571,420	$ 7,335,868	$ 27,434,276	$ 6,913,265	$ -
PW/WATER UTILITY	Department Total	$ 112,717,413	$ 33,449,251	$ 8,679,585	$ 40,757,592	$ 11,196,676	$ 11,243,012	$ 7,391,297	$ -
Total		$ 392,946,687	$ 74,252,987	$ 46,507,884	$ 111,408,580	$ 48,222,397	$ 71,611,090	$ 40,943,749	$ -

Table 2-1: 2016-2021 Funding Summary By Department (Cont.)

		Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
DUHMD	Department Total	$ 4,434,765	$ 2,156,565	$ 678,200	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ -
CIP-CAPITAL MAINTENANCE	Subtotal	$ 3,009,000	$ 730,800	$ 678,200	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ -
	Downtown 14th St Prkg Lot	$ 150,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ -
	Downtown Parking Garage	$ 609,000	$ 330,800	$ 278,200	$ -	$ -	$ -	$ -	$ -
	Downtown Parking Garage Major	$ 1,500,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ -
	Downtown Pearl St Mall Amenity	$ 750,000	$ 125,000	$ 125,000	$ 125,000	$ 125,000	$ 125,000	$ 125,000	$ -
CIP-NEW FACILITY/INFRASTRUCTURE	Subtotal	$ 1,425,765	$ 1,425,765	$ -	$ -	$ -	$ -	$ -	$ -
	CAGID Trinity Commons	$ 1,425,765	$ 1,425,765	$ -	$ -	$ -	$ -	$ -	$ -

		Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
INFORMATION TECHNOLOGY	Department Total	$ 8,310,962	$ 841,220	$ 964,254	$ 1,573,472	$ 1,885,671	$ 2,088,024	$ 958,321	$ -
CIP-CAPITAL MAINTENANCE	Subtotal	$ 8,310,962	$ 841,220	$ 964,254	$ 1,573,472	$ 1,885,671	$ 2,088,024	$ 958,321	$ -
	Data Backup and Disaster	$ 122,234	$ -	$ 41,895	$ 80,339	$ -	$ -	$ -	$ -
	Database Hardware Replacement	$ 108,987	$ 10,500	$ -	$ -	$ 31,482	$ 53,604	$ 13,401	$ -
	End User Device Replacement	$ 4,847,207	$ 703,638	$ 702,115	$ 1,174,388	$ 751,182	$ 745,731	$ 770,153	$ -
	Network Hardware Replacement	$ 2,409,400	$ 111,090	$ 219,232	$ 241,423	$ 1,034,092	$ 630,026	$ 173,537	$ -
	Security Administration	$ 49,798	$ 8,117	$ 1,012	$ -	$ 33,058	$ 6,381	$ 1,230	$ -
	Server Hardware Replacement	$ 773,336	$ 7,875	$ -	$ 77,322	$ 35,857	$ 652,282	$ -	$ -

Table 2-1: 2016-2021 Funding Summary By Department (Cont.)

		Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
OPEN SPACE & MOUNTAIN PARKS	Department Total	$ 49,060,930	$ 11,900,930	$ 7,945,000	$ 7,455,000	$ 7,080,000	$ 7,390,000	$ 7,290,000	$ -
CIP-CAPITAL ENHANCEMENT	Subtotal	$ 11,324,600	$ 4,074,600	$ 1,975,000	$ 1,475,000	$ 1,100,000	$ 1,400,000	$ 1,300,000	$ -
	Boulder Crk Above 95th	$ 500,000	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ -
	ETSA - Plan and Implementation	$ 650,000	$ -	$ -	$ 200,000	$ 50,000	$ 200,000	$ 200,000	$ -
	Facility Modifications-Space	$ 900,000	$ 200,000	$ 200,000	$ 200,000	$ 100,000	$ 100,000	$ 100,000	$ -
	Flood Eng. Trails	$ 572,600	$ 572,600	$ -	$ -	$ -	$ -	$ -	$ -
	Goodhue Ditch Fish Passage	$ 300,000	$ -	$ 300,000	$ -	$ -	$ -	$ -	$ -
	NTSA - Plan and Implementation	$ 700,000	$ 100,000	$ 200,000	$ 200,000	$ 100,000	$ 50,000	$ 50,000	$ -
	OSMP Innovations	$ 550,000	$ -	$ 75,000	$ 175,000	$ 100,000	$ 100,000	$ 100,000	$ -
	OSMP Master Plan Update	$ 852,000	$ 252,000	$ 200,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ -
	S.Bldr Crk at E.Bldr Ditch Const	$ 300,000	$ -	$ 300,000	$ -	$ -	$ -	$ -	$ -
	South Boulder Creek Instream	$ 2,000,000	$ 2,000,000	$ -	$ -	$ -	$ -	$ -	$ -
	STSA - Plan and Implementation	$ 300,000	$ -	$ -	$ -	$ -	$ 200,000	$ 100,000	$ -
	Visitor Infrastructure System Wide	$ 2,000,000	$ 100,000	$ 200,000	$ 200,000	$ 500,000	$ 500,000	$ 500,000	$ -
	WTSA Implementation	$ 1,700,000	$ 350,000	$ 500,000	$ 400,000	$ 150,000	$ 150,000	$ 150,000	$ -
CIP-CAPITAL MAINTENANCE	Subtotal	$ 3,036,330	$ 1,626,330	$ 270,000	$ 280,000	$ 280,000	$ 290,000	$ 290,000	$ -
	Agriculture Facilities Projects	$ 720,000	$ 110,000	$ 110,000	$ 120,000	$ 120,000	$ 130,000	$ 130,000	$ -
	Boulder & S Bldr Crk Flood Repair	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ -
	Cultural Resource/Facility Restorat	$ 500,000	$ -	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ -
	Farm Site Improvements	$ 360,000	$ 60,000	$ 60,000	$ 60,000	$ 60,000	$ 60,000	$ 60,000	$ -
	Flood Trails	$ 991,000	$ 991,000	$ -	$ -	$ -	$ -	$ -	$ -
	Foothills Nature Center	$ 205,330	$ 205,330	$ -	$ -	$ -	$ -	$ -	$ -
	Hartnagle House Restoration	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ -
	South Mesa Trailhead Bridge	$ 60,000	$ 60,000	$ -	$ -	$ -	$ -	$ -	$ -
CIP-LAND ACQUISITION	Subtotal	$ 34,200,000	$ 5,700,000	$ 5,700,000	$ 5,700,000	$ 5,700,000	$ 5,700,000	$ 5,700,000	$ -
	Mineral Rights Acquisition	$ 600,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ -
	OSMP Real Estate Acquisition	$ 32,400,000	$ 5,400,000	$ 5,400,000	$ 5,400,000	$ 5,400,000	$ 5,400,000	$ 5,400,000	$ -
	Water Rights Acquisition	$ 1,200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ -
CIP-NEW FACILITY/INFRASTRUCTURE	Subtotal	$ 500,000	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ -
	Boulder Creek Bikepath Extension	$ 500,000	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ -

Table 2-1: 2016-2021 Funding Summary By Department (Cont.)

		Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
PARKS & RECREATION	Department Total	$ 32,872,000	$ 4,458,000	$ 5,920,000	$ 5,217,000	$ 6,500,000	$ 5,277,000	$ 5,500,000	$ -
CIP-CAPITAL ENHANCEMENT	Subtotal	$ 11,500,000	$ 1,750,000	$ 1,850,000	$ 3,100,000	$ 1,600,000	$ 1,600,000	$ 1,600,000	$ -
	Aquatic Facility Enhancements	$ 2,900,000	$ 400,000	$ -	$ 2,000,000	$ -	$ 500,000	$ -	$ -
	Athletic Field Development	$ 4,500,000	$ 500,000	$ 1,000,000	$ 500,000	$ 1,000,000	$ 500,000	$ 1,000,000	$ -
	Lighting Ordinance	$ 500,000	$ 250,000	$ 250,000	$ -	$ -	$ -	$ -	$ -
	Playground and Irrigation Repairs	$ 3,600,000	$ 600,000	$ 600,000	$ 600,000	$ 600,000	$ 600,000	$ 600,000	$ -
CIP-CAPITAL MAINTENANCE	Subtotal	$ 17,048,000	$ 1,558,000	$ 3,620,000	$ 1,393,000	$ 2,900,000	$ 3,677,000	$ 3,900,000	$ -
	ADA Compliance Initiatives	$ 1,100,000	$ 100,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ -
	Aquatics Facility Repairs	$ 1,288,000	$ 238,000	$ -	$ 273,000	$ -	$ 777,000	$ -	$ -
	Boulder Reservoir South	$ 4,500,000	$ -	$ 1,000,000	$ -	$ -	$ 1,500,000	$ 2,000,000	$ -
	Court Repairs and Resurfacing	$ 1,500,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ -
	EAB Response Measures	$ 2,160,000	$ 220,000	$ 220,000	$ 220,000	$ 500,000	$ 500,000	$ 500,000	$ -
	Flatiron Golf Course Repairs	$ 300,000	$ 300,000	$ -	$ -	$ -	$ -	$ -	$ -
	Park Structure Repairs and	$ 1,500,000	$ -	$ 500,000	$ -	$ 500,000	$ -	$ 500,000	$ -
	Parking Lot Repairs	$ 1,500,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ -
	Recreation Facility Repairs	$ 2,000,000	$ -	$ 1,000,000	$ -	$ 1,000,000	$ -	$ -	$ -
	Turf Repairs and Replacement	$ 1,200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ -
CIP-CAPITAL PLANNING	Subtotal	$ 500,000	$ 400,000	$ 100,000	$ -	$ -	$ -	$ -	$ -
	Reservoir/Tom Watson Site Plan	$ 200,000	$ 200,000	$ -	$ -	$ -	$ -	$ -	$ -
	Scott Carpenter/Mapleton Site	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ -
	Urban Forest Management Plan	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ -
	Yard/Maintenance Facility Site	$ 100,000	$ -	$ 100,000	$ -	$ -	$ -	$ -	$ -
CIP-LAND ACQUISITION	Subtotal	$ 1,874,000	$ -	$ -	$ 374,000	$ 1,500,000	$ -	$ -	$ -
	Boulder Junction Rail Plaza	$ 1,874,000	$ -	$ -	$ 374,000	$ 1,500,000	$ -	$ -	$ -
CIP-NEW FACILITY/INFRASTRUCTURE	Subtotal	$ 1,950,000	$ 750,000	$ 350,000	$ 350,000	$ 500,000	$ -	$ -	$ -
	Boulder Junction Pocket Park	$ 1,450,000	$ 750,000	$ 350,000	$ 350,000	$ -	$ -	$ -	$ -
	Violet Park	$ 500,000	$ -	$ -	$ -	$ 500,000	$ -	$ -	$ -

		Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
POLICE	Department Total	$ 950,000	$ 950,000	$ -	$ -	$ -	$ -	$ -	$ -
CIP-CAPITAL MAINTENANCE	Subtotal	$ 950,000	$ 950,000	$ -	$ -	$ -	$ -	$ -	$ -
	Records Management System	$ 950,000	$ 950,000	$ -	$ -	$ -	$ -	$ -	$ -

Table 2-1: 2016-2021 Funding Summary by Department (Cont.)

		Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
PW/FACILITIES & ASSET MNGMT	Department Total	$ 9,247,000	$ 2,157,000	$ 1,425,000	$ 1,485,000	$ 2,268,000	$ 1,078,000	$ 834,000	$ -
CIP-CAPITAL ENHANCEMENT	Subtotal	$ 1,642,000	$ 190,000	$ -	$ 100,000	$ 1,100,000	$ 100,000	$ 152,000	$ -
	East Boulder Community Center	$ 452,000	$ -	$ -	$ 100,000	$ 100,000	$ 100,000	$ 152,000	$ -
	Outdoor Lighting Improvements	$ 190,000	$ 190,000	$ -	$ -	$ -	$ -	$ -	$ -
	Tantra Shop Renovation	$ 300,000	$ -	$ -	$ -	$ 300,000	$ -	$ -	$ -
	West Senior Center Maj Maint &	$ 700,000	$ -	$ -	$ -	$ 700,000	$ -	$ -	$ -
CIP-CAPITAL MAINTENANCE	Subtotal	$ 6,725,000	$ 1,737,000	$ 1,295,000	$ 1,255,000	$ 1,038,000	$ 848,000	$ 552,000	$ -
	Aquatics Facility Repairs	$ 1,366,000	$ 390,000	$ -	$ 723,000	$ -	$ 253,000	$ -	$ -
	EBCC Replace Pool Air Handlers	$ 500,000	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ -
	Fire Stations Major Maintenance	$ 813,000	$ 120,000	$ 126,000	$ 132,000	$ 138,000	$ 145,000	$ 152,000	$ -
	Martin Park Shelter Major Maint	$ 169,000	$ -	$ 169,000	$ -	$ -	$ -	$ -	$ -
	Misc Facility Maintenance Projects	$ 2,545,000	$ 515,000	$ 380,000	$ 400,000	$ 400,000	$ 450,000	$ 400,000	$ -
	North Boulder Park Shelter Rep	$ 120,000	$ -	$ 120,000	$ -	$ -	$ -	$ -	$ -
	Pool Replastering	$ 80,000	$ 80,000	$ -	$ -	$ -	$ -	$ -	$ -
	Recreation Facility Repairs	$ 1,000,000	$ -	$ 500,000	$ -	$ 500,000	$ -	$ -	$ -
	Stazio Tensile Canopy Covering	$ 132,000	$ 132,000	$ -	$ -	$ -	$ -	$ -	$ -
CIP-CAPITAL PLANNING	Subtotal	$ 880,000	$ 230,000	$ 130,000	$ 130,000	$ 130,000	$ 130,000	$ 130,000	$ -
	Facility Assessments	$ 300,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ -
	Misc Space Needs and Analysis	$ 480,000	$ 80,000	$ 80,000	$ 80,000	$ 80,000	$ 80,000	$ 80,000	$ -
	Radio System Analysis	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ -

Table 2-1: 2016-2021 Funding Summary By Department (Cont.)

		Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
PW/STORMWATER & FLOOD UTILITY	Department Total	$ 61,417,767	$ 5,209,921	$ 7,119,924	$ 33,256,596	$ 5,028,682	$ 5,673,278	$ 5,129,366	$ -
CIP-CAPITAL ENHANCEMENT	Subtotal	$ 25,792,750	$ 3,365,021	$ 5,201,224	$ 6,688,096	$ 3,726,682	$ 3,682,578	$ 3,129,149	$ -
	Bear Canyon Creek Flood	$ 500,000	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ -
	Bluebell & King's Gultch	$ 600,000	$ -	$ 100,000	$ 500,000	$ -	$ -	$ -	$ -
	Boulder Creek Flood Mitigation	$ 4,750,000	$ -	$ 2,500,000	$ 2,250,000	$ -	$ -	$ -	$ -
	Fourmile - Upstream of Upland	$ 5,250,000	$ 500,000	$ 500,000	$ 1,000,000	$ 1,500,000	$ 1,250,000	$ 500,000	$ -
	Greenways Program - Flood fund	$ 585,000	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ -
	Greenways Program - Lottery	$ 752,646	$ 125,441	$ 125,441	$ 125,441	$ 125,441	$ 125,441	$ 125,441	$ -
	Gregory Creek Flood Mitigation	$ 500,000	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ -
	Local Drainage Improvements	$ 4,941,298	$ 730,080	$ 759,283	$ 789,655	$ 821,241	$ 854,090	$ 986,949	$ -
	Skunk Creek Flood Mitigation	$ 600,000	$ -	$ 100,000	$ 500,000	$ -	$ -	$ -	$ -
	Stormwater Quality Improvements	$ 1,076,390	$ 162,000	$ 169,000	$ 175,500	$ 182,500	$ 190,000	$ 197,390	$ -
	Twomile Canyon Creek	$ 600,000	$ -	$ 100,000	$ 500,000	$ -	$ -	$ -	$ -
	Upper Goose Creek Drainage	$ 5,637,416	$ 750,000	$ 750,000	$ 750,000	$ 1,000,000	$ 1,165,547	$ 1,221,869	$ -
CIP-CAPITAL MAINTENANCE	Subtotal	$ 5,172,732	$ 594,900	$ 618,700	$ 643,500	$ 669,000	$ 1,330,700	$ 1,315,932	$ -
	Storm Sewer Rehabilitation	$ 2,438,766	$ 270,400	$ 281,200	$ 292,500	$ 304,000	$ 632,700	$ 657,966	$ -
	Transportation Coordination	$ 2,668,966	$ 324,500	$ 337,500	$ 351,000	$ 365,000	$ 633,000	$ 657,966	$ -
	Utility Billing Computer System	$ 65,000	$ -	$ -	$ -	$ -	$ 65,000	$ -	$ -
CIP-LAND ACQUISITION	Subtotal	$ 3,627,285	$ 500,000	$ 550,000	$ 600,000	$ 633,000	$ 660,000	$ 684,285	$ -
	Preflood Property Acquisition	$ 3,627,285	$ 500,000	$ 550,000	$ 600,000	$ 633,000	$ 660,000	$ 684,285	$ -
CIP-NEW FACILITY/INFRASTRUCTURE	Subtotal	$ 26,825,000	$ 750,000	$ 750,000	$ 25,325,000	$ -	$ -	$ -	$ -
	South Boulder Creek Phase I	$ 26,825,000	$ 750,000	$ 750,000	$ 25,325,000	$ -	$ -	$ -	$ -

Table 2-1: 2016-2021 Funding Summary By Department (Cont.)

		Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected
PW/TRANSPORTATION	Department Total	$ 56,338,000	$ 8,774,500	$ 7,788,500	$ 15,692,500	$ 6,527,500	$ 11,027,500	$ 6,527,500
CIP-CAPITAL ENHANCEMENT	Subtotal	$ 13,772,000	$ 3,884,500	$ 1,877,500	$ 6,127,500	$ 627,500	$ 627,500	$ 627,500
	19th St (Norwood to Sumac)	$ 257,000	$ 257,000	$ -	$ -	$ -	$ -	$ -
	Arap Comp St Recon/Bldr Crk	$ 2,500,000	$ 2,500,000	$ -	$ -	$ -	$ -	$ -
	Broadway Recon Violet to 36	$ 7,050,000	$ 500,000	$ 1,250,000	$ 5,300,000	$ -	$ -	$ -
	Greenways Program	$ 585,000	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500
	Misc Development Coordination	$ 300,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000
	Signal Maintenance & Upgrade	$ 200,000	$ -	$ -	$ 200,000	$ -	$ -	$ -
	TIP Local Match TMP	$ 2,880,000	$ 480,000	$ 480,000	$ 480,000	$ 480,000	$ 480,000	$ 480,000
CIP-CAPITAL MAINTENANCE	Subtotal	$ 14,402,000	$ 1,694,000	$ 1,694,000	$ 1,864,000	$ 1,550,000	$ 6,050,000	$ 1,550,000
	Deficient Street Light Pole	$ 893,000	$ 265,000	$ 265,000	$ -	$ 121,000	$ 121,000	$ 121,000
	Major Capital Reconstruction	$ 4,800,000	$ 800,000	$ 800,000	$ 800,000	$ 800,000	$ 800,000	$ 800,000
	Ped Facilities Repair, Replace,	$ 3,774,000	$ 629,000	$ 629,000	$ 629,000	$ 629,000	$ 629,000	$ 629,000
	Rehab Runway & Eastern Taxiway	$ 4,935,000	$ -	$ -	$ 435,000	$ -	$ 4,500,000	$ -
CIP-CAPITAL PLANNING STUDIES	Subtotal	$ 589,000	$ 338,000	$ 100,000	$ 151,000	$ -	$ -	$ -
	Bldr County/City Joint TIP Projects	$ 289,000	$ 138,000	$ -	$ 151,000	$ -	$ -	$ -
	East Arapahoe Transp Corridor	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -
	Trans Corridor 30th & Colorado	$ 200,000	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -
CIP-NEW FACILITY/INFRASTRUCTURE	Subtotal	$ 27,575,000	$ 2,858,000	$ 4,117,000	$ 7,550,000	$ 4,350,000	$ 4,350,000	$ 4,350,000
	28th St - Valmont to Iris (Baseline	$ 860,000	$ 860,000	$ -	$ -	$ -	$ -	$ -
	28th St Valmont to Iris (Baseline)	$ 470,000	$ 470,000	$ -	$ -	$ -	$ -	$ -
	30th St and Colorado Bike/Ped	$ 7,500,000	$ 500,000	$ 1,300,000	$ 5,700,000	$ -	$ -	$ -
	Bikeway Facilities -	$ 1,350,000	$ 225,000	$ 225,000	$ 225,000	$ 225,000	$ 225,000	$ 225,000
	BJ Traffic Signal Bluff St & 30th	$ 228,000	$ -	$ 228,000	$ -	$ -	$ -	$ -
	BJ Traffic Signal Jct & Valmont	$ 304,000	$ -	$ 304,000	$ -	$ -	$ -	$ -
	Boulder Junction - Develop Coord	$ 150,000	$ 75,000	$ 75,000	$ -	$ -	$ -	$ -
	Boulder Slough Multiuse Path 30th	$ 480,000	$ 120,000	$ 360,000	$ -	$ -	$ -	$ -
	Ped Facs Enh Missing Links	$ 750,000	$ 125,000	$ 125,000	$ 125,000	$ 125,000	$ 125,000	$ 125,000
	TIP Local Match/TMP	$ 15,483,000	$ 483,000	$ 1,500,000	$ 1,500,000	$ 4,000,000	$ 4,000,000	$ 4,000,000

Table 2-1: 2016-2021 Funding Summary By Department (Cont.)

		Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
PW/WASTEWATER UTILITY	Department Total	$ 57,597,850	$ 4,355,600	$ 5,987,421	$ 5,571,420	$ 7,335,868	$ 27,434,276	$ 6,913,265	$ -
CIP-CAPITAL ENHANCEMENT	Subtotal	$ 29,118,797	$ 570,000	$ 2,050,397	$ 1,476,915	$ 2,877,582	$ 20,606,179	$ 1,537,724	$ -
	Goose Creek SS Interceptor	$ 3,420,445	$ -	$ -	$ 25,000	$ 647,590	$ 1,346,988	$ 1,400,867	$ -
	Marshall Landfill	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ -
	Wastewater Treatment Facility	$ 150,000	$ 150,000	$ -	$ -	$ -	$ -	$ -	$ -
	WWTF Activated Sludge	$ 175,479	$ -	$ 175,479	$ -	$ -	$ -	$ -	$ -
	WWTF Electrical	$ 1,320,000	$ 120,000	$ 1,200,000	$ -	$ -	$ -	$ -	$ -
	WWTF Instrumentation/Control	$ 2,866,016	$ -	$ 674,918	$ 701,915	$ 729,992	$ 759,191	$ -	$ -
	WWTF Laboratory	$ 50,000	$ 50,000	$ -	$ -	$ -	$ -	$ -	$ -
	WWTF Permit Improvements	$ 21,036,857	$ 150,000	$ -	$ 750,000	$ 1,500,000	$ 18,500,000	$ 136,857	$ -
CIP-CAPITAL MAINTENANCE	Subtotal	$ 28,479,053	$ 3,785,600	$ 3,937,024	$ 4,094,505	$ 4,458,286	$ 6,828,097	$ 5,375,541	$ -
	Condition Assessment Program	$ 5,380,670	$ 811,200	$ 843,648	$ 877,394	$ 912,490	$ 948,989	$ 986,949	$ -
	Sanitary Sewer Manhole	$ 1,829,626	$ 216,320	$ 224,973	$ 233,972	$ 243,331	$ 253,064	$ 657,966	$ -
	Sanitary Sewer Rehabilitation	$ 18,294,276	$ 2,758,080	$ 2,868,403	$ 2,983,139	$ 3,102,465	$ 3,226,563	$ 3,355,626	$ -
	Utility Billing Computer System	$ 65,000	$ -	$ -	$ -	$ -	$ 65,000	$ -	$ -
	WWTF Cogeneration	$ 184,481	$ -	$ -	$ -	$ -	$ 184,481	$ -	$ -
	WWTF Digester Complex	$ 2,200,000	$ -	$ -	$ -	$ 200,000	$ 2,000,000	$ -	$ -
	WWTF Rehabilitation	$ 525,000	$ -	$ -	$ -	$ -	$ 150,000	$ 375,000	$ -

Table 2-1: 2016-2021 Funding Summary By Department (Cont.)

		Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
PW/WATER UTILITY	Department Total	$ 112,717,413	$ 33,449,251	$ 8,679,585	$ 40,757,592	$ 11,196,676	$ 11,243,012	$ 7,391,297	$ -
CIP-CAPITAL ENHANCEMENT	Subtotal	$ 70,618,250	$ 26,610,000	$ 2,511,322	$ 37,964,303	$ 1,668,882	$ 692,685	$ 1,171,058	$ -
	Automated Meter Reading	$ 684,285	$ -	$ -	$ -	$ -	$ -	$ 684,285	$ -
	Barker Dam and Reservoir	$ 115,000	$ 65,000	$ 50,000	$ -	$ -	$ -	$ -	$ -
	Barker Dam Outlet	$ 1,110,551	$ 100,000	$ 175,000	$ -	$ 835,551	$ -	$ -	$ -
	Betasso Water Treatment Facility	$ 25,140,000	$ 25,140,000	$ -	$ -	$ -	$ -	$ -	$ -
	Green Lake 2 Dam	$ 561,773	$ -	$ -	$ -	$ -	$ 75,000	$ 486,773	$ -
	Lakewood Dam	$ 124,707	$ -	$ -	$ 124,707	$ -	$ -	$ -	$ -
	Lakewood Hydroelectric/PRV	$ 430,000	$ 130,000	$ -	$ -	$ 300,000	$ -	$ -	$ -
	NCWCD Conveyance - Carter Lake	$ 40,451,585	$ 850,000	$ 2,036,322	$ 37,565,263	$ -	$ -	$ -	$ -
	Orodell Hydro/PRV Facility	$ 75,000	$ 75,000	$ -	$ -	$ -	$ -	$ -	$ -
	Pearl Street Hydro/PRV Facility	$ 267,664	$ -	$ -	$ 24,333	$ 243,331	$ -	$ -	$ -
	Source Water	$ 400,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ -	$ -	$ -
	Utility Billing Computer System	$ 125,000	$ -	$ -	$ -	$ -	$ 125,000	$ -	$ -
	Water System Security/Quality	$ 540,000	$ 150,000	$ 150,000	$ 150,000	$ 90,000	$ -	$ -	$ -
	Wittemyer Ponds	$ 592,685	$ -	$ -	$ -	$ 100,000	$ 492,685	$ -	$ -
CIP-CAPITAL MAINTENANCE	Subtotal	$ 39,299,163	$ 6,839,251	$ 6,168,263	$ 2,743,289	$ 9,277,794	$ 8,050,327	$ 6,220,239	$ -
	Albion Dam	$ 3,882,997	$ 125,000	$ -	$ 341,636	$ 3,416,361	$ -	$ -	$ -
	Barker Gravity Pipeline Repair	$ 7,003,748	$ 667,416	$ 1,169,859	$ 1,216,653	$ 1,265,319	$ 1,315,932	$ 1,368,569	$ -
	Barker - Kossler Penstock Repair	$ 116,986	$ -	$ 116,986	$ -	$ -	$ -	$ -	$ -
	Betasso Hydroelectric / PRF	$ 860,000	$ -	$ 380,000	$ 480,000	$ -	$ -	$ -	$ -
	Betasso Storage Tank	$ 292,465	$ -	$ 292,465	$ -	$ -	$ -	$ -	$ -
	Boulder Reservoir	$ 168,434	$ 50,000	$ -	$ -	$ -	$ 118,434	$ -	$ -
	Distribution Waterline	$ 18,613,540	$ 3,352,960	$ 3,487,078	$ -	$ 3,771,624	$ 3,922,489	$ 4,079,389	$ -
	Farmer's Ditch	$ 108,160	$ -	$ -	$ -	$ 108,160	$ -	$ -	$ -
	Goose Lake Dam	$ 75,000	$ -	$ -	$ 75,000	$ -	$ -	$ -	$ -
	Island Lake Dam	$ 50,000	$ -	$ -	$ 50,000	$ -	$ -	$ -	$ -
	Kohler Storage Tank Roof	$ 799,875	$ 799,875	$ -	$ -	$ -	$ -	$ -	$ -
	Kossler Dam	$ 75,000	$ 75,000	$ -	$ -	$ -	$ -	$ -	$ -
	Lakewood Pipeline	$ 316,330	$ -	$ -	$ -	$ 316,330	$ -	$ -	$ -
	Reservoir Water Treatment	$ 2,314,000	$ 314,000	$ -	$ -	$ -	$ 2,000,000	$ -	$ -
	Silver Lake Dam	$ 100,000	$ -	$ -	$ 100,000	$ -	$ -	$ -	$ -
	Silver Lake Hydroelectric/PRV	$ 155,000	$ 25,000	$ 50,000	$ 80,000	$ -	$ -	$ -	$ -
	Skyscraper Dam	$ 171,071	$ -	$ -	$ -	$ -	$ -	$ 171,071	$ -
	Source Water Pressure Reducing,	$ 1,294,682	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 343,472	$ 351,210	$ -
	Sunshine Hydroelectric/PRV	$ 271,875	$ -	$ 271,875	$ -	$ -	$ -	$ -	$ -
	Watershed Improvements	$ 180,000	$ 80,000	$ -	$ -	$ -	$ 100,000	$ -	$ -
	Zone 1 Transmission Pipes	$ 500,000	$ -	$ -	$ 250,000	$ -	$ -	$ 250,000	$ -
	Zone 2 Transmission Pipes	$ 500,000	$ -	$ 250,000	$ -	$ -	$ 250,000	$ -	$ -
	Zone 3 Transmission Pipes	$ 1,450,000	$ 1,200,000	$ -	$ -	$ 250,000	$ -	$ -	$ -

Table 2-1: 2016-2021 Funding Summary By Department (Cont.)

		Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
PW/WATER UTILITY (Cont.)	Department Total	$ 112,717,413	$ 33,449,251	$ 8,679,585	$ 40,757,592	$ 11,196,676	$ 11,243,012	$ 7,391,297	$ -
CIP-NEW FACILITY/INFRASTRUCTURE	Subtotal	$ 2,800,000	$ -	$ -	$ 50,000	$ 250,000	$ 2,500,000	$ -	$ -
	Carter Lake Hydroelectric	$ 2,800,000	$ -	$ -	$ 50,000	$ 250,000	$ 2,500,000	$ -	$ -

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.

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: 2016-2021 Funding by Project Type

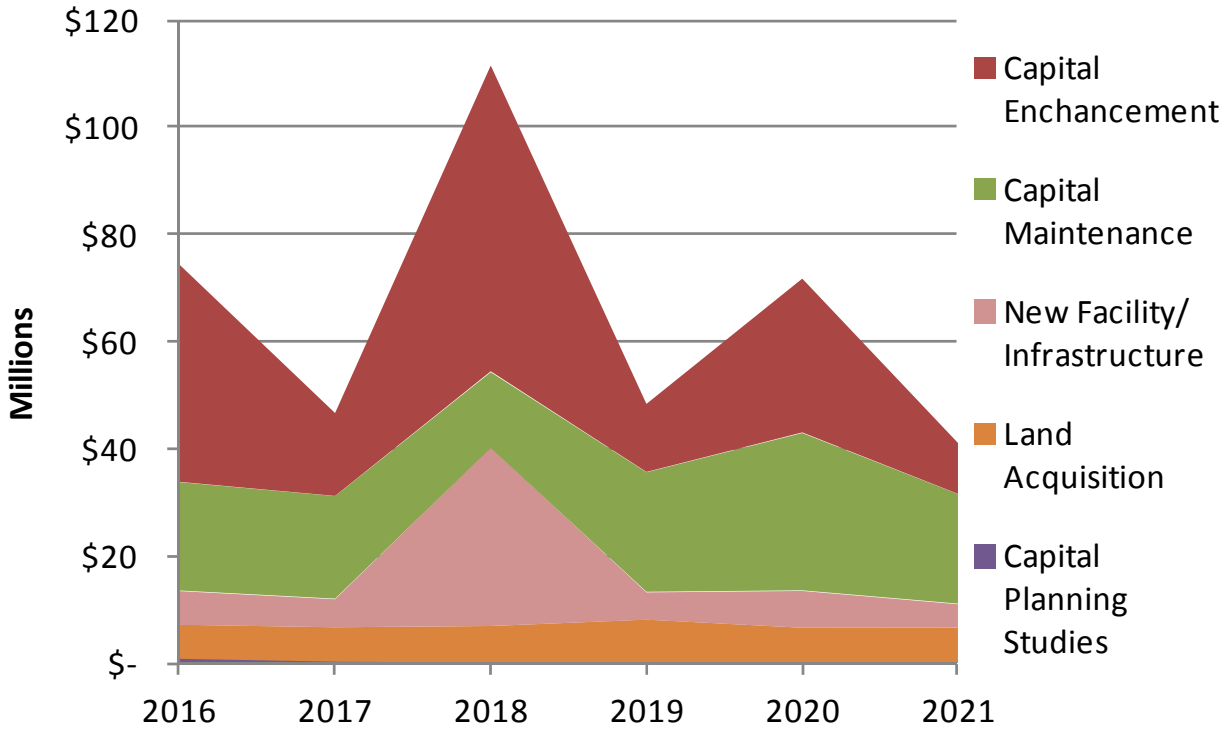


Figure 2-4: 2016-2021 Funding by Project Type Excluding Utilities

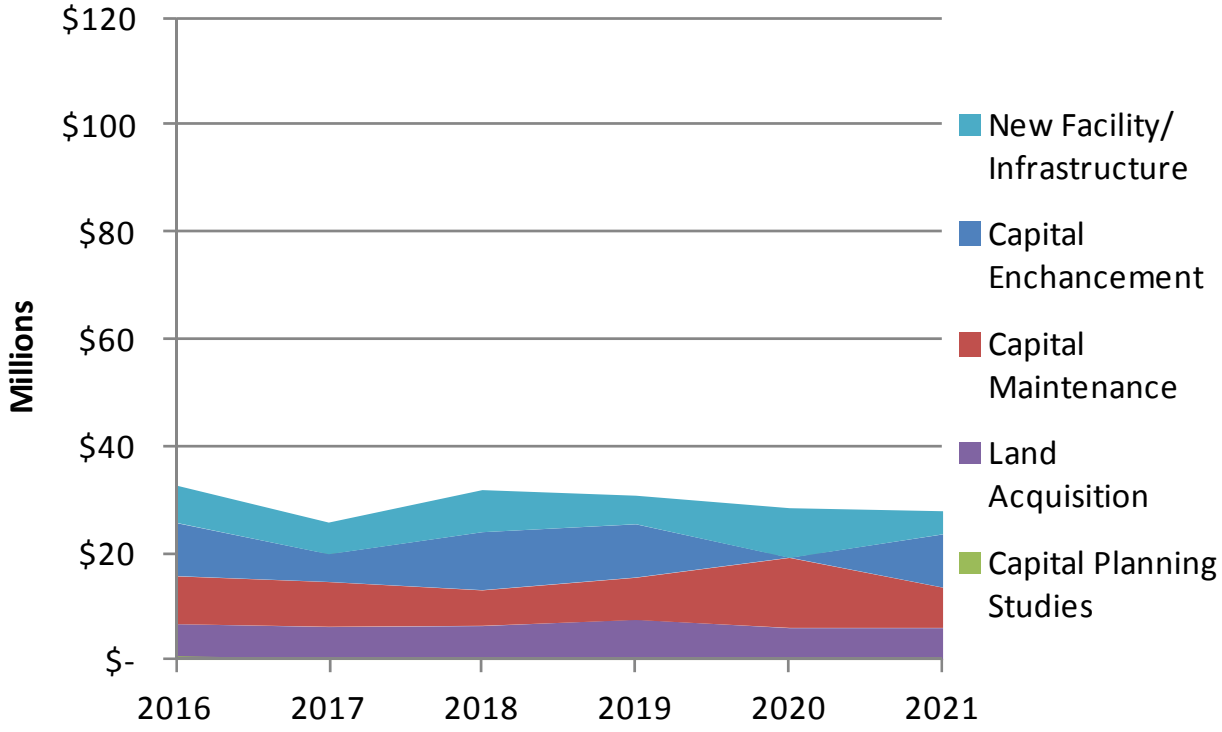


Table 2-2: 2016-2021 Funding Summary By Project Type

Project Type	Project Title	Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
CIP-CAPITAL ENHANCEMENT	Type Total	$ 164,057,397	$ 40,582,121	$ 15,465,443	$ 57,082,814	$ 12,700,646	$ 28,708,942	$ 9,517,431	$ -
CIP-CAPITAL MAINTENANCE	Type Total	$ 126,432,240	$ 20,357,101	$ 19,245,441	$ 14,246,766	$ 22,458,751	$ 29,562,148	$ 20,562,033	$ -
CIP-CAPITAL PLANNING STUDIES	Type Total	$ 1,680,000	$ 830,000	$ 330,000	$ 130,000	$ 130,000	$ 130,000	$ 130,000	$ -
CIP-LAND ACQUISITION	Type Total	$ 39,701,285	$ 6,200,000	$ 6,250,000	$ 6,674,000	$ 7,833,000	$ 6,360,000	$ 6,384,285	$ -
CIP-NEW FACILITY/INFRASTRUCTURE	Type Total	$ 61,075,765	$ 6,283,765	$ 5,217,000	$ 33,275,000	$ 5,100,000	$ 6,850,000	$ 4,350,000	$ -
Total		$ 392,946,687	$ 74,252,987	$ 46,507,884	$ 111,408,580	$ 48,222,397	$ 71,611,090	$ 40,943,749	$ -

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Table 2-2: 2016-2021 Funding Summary By Project Type (Cont.)

Project Type	Project Title	Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
CIP-CAPITAL ENHANCEMENT	Type Total	$ 164,057,397	$ 40,582,121	$ 15,465,443	$ 57,082,814	$ 12,700,646	$ 28,708,942	$ 9,517,431	$ -
	19th St (Norwood to Sumac)	$ 257,000	$ 257,000	$ -	$ -	$ -	$ -	$ -	$ -
	Aquatic Facility Enhancements	$ 2,900,000	$ 400,000	$ -	$ 2,000,000	$ -	$ 500,000	$ -	$ -
	Arap Comp St Recon/Bldr Crk Underpa	$ 2,500,000	$ 2,500,000	$ -	$ -	$ -	$ -	$ -	$ -
	Athletic Field Development	$ 4,500,000	$ 500,000	$ 1,000,000	$ 500,000	$ 1,000,000	$ 500,000	$ 1,000,000	$ -
	Automated Meter Reading	$ 684,285	$ -	$ -	$ -	$ -	$ -	$ 684,285	$ -
	Barker Dam and Reservoir	$ 115,000	$ 65,000	$ 50,000	$ -	$ -	$ -	$ -	$ -
	Barker Dam Outlet	$ 1,110,551	$ 100,000	$ 175,000	$ -	$ 835,551	$ -	$ -	$ -
	Bear Canyon Creek Flood Mitigation	$ 500,000	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ -
	Betasso Water Treatment Facility	$ 25,140,000	$ 25,140,000	$ -	$ -	$ -	$ -	$ -	$ -
	Bldr County/City Joint TIP Projects	$ 289,000	$ 138,000	$ -	$ 151,000	$ -	$ -	$ -	$ -
	Bluebell & King's Gultch	$ 600,000	$ -	$ 100,000	$ 500,000	$ -	$ -	$ -	$ -
	Boulder Creek Flood Mitigation	$ 4,750,000	$ -	$ 2,500,000	$ 2,250,000	$ -	$ -	$ -	$ -
	Boulder Crk Above 95th Restoration	$ 500,000	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ -
	Broadway Recon Violet to 36	$ 7,050,000	$ 500,000	$ 1,250,000	$ 5,300,000	$ -	$ -	$ -	$ -
	East Boulder Community Center Ren	$ 452,000	$ -	$ -	$ 100,000	$ 100,000	$ 100,000	$ 152,000	$ -
	ETSA - Plan and Implementation	$ 650,000	$ -	$ -	$ 200,000	$ 50,000	$ 200,000	$ 200,000	$ -
	Facility Modifications-Space Needs	$ 900,000	$ 200,000	$ 200,000	$ 200,000	$ 100,000	$ 100,000	$ 100,000	$ -
	Flood Eng. Trails	$ 572,600	$ 572,600	$ -	$ -	$ -	$ -	$ -	$ -
	Four Mile - Upland to Violet	$ 5,250,000	$ 500,000	$ 500,000	$ 1,000,000	$ 1,500,000	$ 1,250,000	$ 500,000	$ -
	Goodhue Ditch Fish Passage	$ 300,000	$ -	$ 300,000	$ -	$ -	$ -	$ -	$ -
	Goose Creek SS Interceptor Rehab	$ 3,420,445	$ -	$ -	$ 25,000	$ 647,590	$ 1,346,988	$ 1,400,867	$ -
	Green Lake 2 Dam	$ 561,773	$ -	$ -	$ -	$ -	$ 75,000	$ 486,773	$ -
	Greenways Program - Flood fund	$ 585,000	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ -
	Greenways Program Transportation	$ 585,000	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ -
	Greenways Program - Lottery Fund	$ 752,646	$ 125,441	$ 125,441	$ 125,441	$ 125,441	$ 125,441	$ 125,441	$ -
	Gregory Creek Flood Mitigation	$ 500,000	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ -
	Lakewood Dam	$ 124,707	$ -	$ -	$ 124,707	$ -	$ -	$ -	$ -
	Lakewood Hydroelectric/PRV	$ 430,000	$ 130,000	$ -	$ -	$ 300,000	$ -	$ -	$ -
	Lighting Ordinance Implementation	$ 500,000	$ 250,000	$ 250,000	$ -	$ -	$ -	$ -	$ -
	Local Drainage Improvements	$ 4,941,298	$ 730,080	$ 759,283	$ 789,655	$ 821,241	$ 854,090	$ 986,949	$ -
	Marshall Landfill	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ -
	Misc Development Coordination	$ 300,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ -
	NCWCD Conveyance - Carter Lake	$ 40,451,585	$ 850,000	$ 2,036,322	$ 37,565,263	$ -	$ -	$ -	$ -
	NTSA - Plan and Implementation	$ 700,000	$ 100,000	$ 200,000	$ 200,000	$ 100,000	$ 50,000	$ 50,000	$ -
	Orodell Hydro/PRV Facility	$ 75,000	$ 75,000	$ -	$ -	$ -	$ -	$ -	$ -

Table 2-2: 2016-2021 Funding Summary By Project Type (Cont.)

Project Type	Project Title	Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
CIP-CAPITAL ENHANCEMENT (Cont.)	Type Total	$ 164,057,397	$ 40,582,121	$ 15,465,443	$ 57,082,814	$ 12,700,646	$ 28,708,942	$ 9,517,431	$ -
	OSMP Master Plan Update	$ 852,000	$ 252,000	$ 200,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ -
	Outdoor Lighting Improvements	$ 190,000	$ 190,000	$ -	$ -	$ -	$ -	$ -	$ -
	Pearl Street Hydro/PRV Facility	$ 267,664	$ -	$ -	$ 24,333	$ 243,331	$ -	$ -	$ -
	Outdoor Lighting Improvements	$ 190,000	$ 190,000	$ -	$ -	$ -	$ -	$ -	$ -
	Pearl Street Hydro/PRV Facility	$ 267,664	$ -	$ -	$ 24,333	$ 243,331	$ -	$ -	$ -
	Playground and Irrigation Repairs	$ 3,600,000	$ 600,000	$ 600,000	$ 600,000	$ 600,000	$ 600,000	$ 600,000	$ -
	S.Bldr Crk at E.Bldr Ditch Const	$ 300,000	$ -	$ 300,000	$ -	$ -	$ -	$ -	$ -
	Signal Maintenance & Upgrade	$ 200,000	$ -	$ -	$ 200,000	$ -	$ -	$ -	$ -
	Skunk Creek Flood Mitigation	$ 600,000	$ -	$ 100,000	$ 500,000	$ -	$ -	$ -	$ -
	Source Water Monitoring/Protection	$ 400,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ -	$ -	$ -
	South Boulder Creek Instream Flow	$ 2,000,000	$ 2,000,000	$ -	$ -	$ -	$ -	$ -	$ -
	Stormwater Quality Improvements	$ 1,076,390	$ 162,000	$ 169,000	$ 175,500	$ 182,500	$ 190,000	$ 197,390	$ -
	STSA - Plan and Implementation	$ 300,000	$ -	$ -	$ -	$ -	$ 200,000	$ 100,000	$ -
	Tantra Shop Renovation	$ 300,000	$ -	$ -	$ -	$ 300,000	$ -	$ -	$ -
	TIP Local Match TMP Implementation	$ 2,880,000	$ 480,000	$ 480,000	$ 480,000	$ 480,000	$ 480,000	$ 480,000	$ -
	Twomile Canyon Creek	$ 600,000	$ -	$ 100,000	$ 500,000	$ -	$ -	$ -	$ -
	Upper Goose Creek Drainage	$ 5,637,416	$ 750,000	$ 750,000	$ 750,000	$ 1,000,000	$ 1,165,547	$ 1,221,869	$ -
	Utility Billing Computer System	$ 125,000	$ -	$ -	$ -	$ -	$ 125,000	$ -	$ -
	Visitor Infrastructure System Wide	$ 2,000,000	$ 100,000	$ 200,000	$ 200,000	$ 500,000	$ 500,000	$ 500,000	$ -
	Wastewater Treatment Facility Pumps	$ 150,000	$ 150,000	$ -	$ -	$ -	$ -	$ -	$ -
	Water System Security/Quality Imprv	$ 540,000	$ 150,000	$ 150,000	$ 150,000	$ 90,000	$ -	$ -	$ -
	West Senior Center Maj Maint & Reha	$ 700,000	$ -	$ -	$ -	$ 700,000	$ -	$ -	$ -
	Wittemyer Ponds	$ 592,685	$ -	$ -	$ -	$ 100,000	$ 492,685	$ -	$ -
	WTSA Implementation	$ 1,700,000	$ 350,000	$ 500,000	$ 400,000	$ 150,000	$ 150,000	$ 150,000	$ -
	WWTF Activated Sludge	$ 175,479	$ -	$ 175,479	$ -	$ -	$ -	$ -	$ -
	WWTF Electrical	$ 1,320,000	$ 120,000	$ 1,200,000	$ -	$ -	$ -	$ -	$ -
	WWTF Instrumentation/Control	$ 2,866,016	$ -	$ 674,918	$ 701,915	$ 729,992	$ 759,191	$ -	$ -
	WWTF Laboratory	$ 50,000	$ 50,000	$ -	$ -	$ -	$ -	$ -	$ -
	WWTF Permit Improvements	$ 21,036,857	$ 150,000	$ -	$ 750,000	$ 1,500,000	$ 18,500,000	$ 136,857	$ -

Table 2-2: 2016-2021 Funding Summary By Project Type (Cont.)

Project Type	Project Title	Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
CIP-CAPITAL MAINTENANCE	Type Total	$ 126,432,240	$ 20,357,101	$ 19,245,441	$ 14,246,766	$ 22,458,751	$ 29,562,148	$ 20,562,033	$ -
	ADA Compliance Initiatives	$ 1,100,000	$ 100,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ -
	Agriculture Facilities Projects	$ 720,000	$ 110,000	$ 110,000	$ 120,000	$ 120,000	$ 130,000	$ 130,000	$ -
	Albion Dam	$ 3,882,997	$ 125,000	$ -	$ 341,636	$ 3,416,361	$ -	$ -	$ -
	Aquatics Facility Repairs	$ 1,288,000	$ 238,000	$ -	$ 273,000	$ -	$ 777,000	$ -	$ -
	Aquatics Facility Repairs	$ 1,366,000	$ 390,000	$ -	$ 723,000	$ -	$ 253,000	$ -	$ -
	Barker Gravity Pipeline Repair	$ 7,003,748	$ 667,416	$ 1,169,859	$ 1,216,653	$ 1,265,319	$ 1,315,932	$ 1,368,569	$ -
	Barker-Kossler Penstock Repair	$ 116,986	$ -	$ 116,986	$ -	$ -	$ -	$ -	$ -
	Betasso Hydroelectric / PRF	$ 860,000	$ -	$ 380,000	$ 480,000	$ -	$ -	$ -	$ -
	Betasso Storage Tank Rehabilitation	$ 292,465	$ -	$ 292,465	$ -	$ -	$ -	$ -	$ -
	Boulder & S Bldr Crk Flood Repair	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ -
	Boulder Reservoir	$ 168,434	$ 50,000	$ -	$ -	$ -	$ 118,434	$ -	$ -
	Boulder Reservoir South Improvement	$ 4,500,000	$ -	$ 1,000,000	$ -	$ -	$ 1,500,000	$ 2,000,000	$ -
	Condition Assessment Program	$ 5,380,670	$ 811,200	$ 843,648	$ 877,394	$ 912,490	$ 948,989	$ 986,949	$ -
	Court Repairs and Resurfacing	$ 1,500,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ -
	Cultural Resource/Facility Restorat	$ 500,000	$ -	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ -
	Data Backup and Disaster Recovery	$ 122,234	$ -	$ 41,895	$ 80,339	$ -	$ -	$ -	$ -
	Database Hardware Replacement	$ 108,987	$ 10,500	$ -	$ -	$ 31,482	$ 53,604	$ 13,401	$ -
	Deficient Street Light Pole Replace	$ 893,000	$ 265,000	$ 265,000	$ -	$ 121,000	$ 121,000	$ 121,000	$ -
	Distribution Waterline Replacement	$ 18,613,540	$ 3,352,960	$ 3,487,078	$ -	$ 3,771,624	$ 3,922,489	$ 4,079,389	$ -
	Downtown 14th St Prkg Lot Improve	$ 150,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ -
	Downtown Parking Garage Elevators	$ 609,000	$ 330,800	$ 278,200	$ -	$ -	$ -	$ -	$ -
	Downtown Parking Garage Major	$ 1,500,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ -
	Downtown Pearl St Mall Amenity Repl	$ 750,000	$ 125,000	$ 125,000	$ 125,000	$ 125,000	$ 125,000	$ 125,000	$ -
	EAB Response Measures	$ 2,160,000	$ 220,000	$ 220,000	$ 220,000	$ 500,000	$ 500,000	$ 500,000	$ -
	EBCC Replace Pool Air Handlers	$ 500,000	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ -
	End User Device Replacement	$ 4,847,207	$ 703,638	$ 702,115	$ 1,174,388	$ 751,182	$ 745,731	$ 770,153	$ -
	Farm Site Improvements	$ 360,000	$ 60,000	$ 60,000	$ 60,000	$ 60,000	$ 60,000	$ 60,000	$ -
	Farmer's Ditch	$ 108,160	$ -	$ -	$ -	$ 108,160	$ -	$ -	$ -
	Fire Stations Major Maintenance	$ 813,000	$ 120,000	$ 126,000	$ 132,000	$ 138,000	$ 145,000	$ 152,000	$ -
	Flatiron Golf Course Repairs	$ 300,000	$ 300,000	$ -	$ -	$ -	$ -	$ -	$ -
	Flood Trails	$ 991,000	$ 991,000	$ -	$ -	$ -	$ -	$ -	$ -
	Foothills Nature Center	$ 205,330	$ 205,330	$ -	$ -	$ -	$ -	$ -	$ -
	Goose Lake Dam	$ 75,000	$ -	$ -	$ 75,000	$ -	$ -	$ -	$ -
	Hartnagle House Restoration	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ -
	Island Lake Dam	$ 50,000	$ -	$ -	$ 50,000	$ -	$ -	$ -	$ -
	Kohler Storage Tank Roof	$ 799,875	$ 799,875	$ -	$ -	$ -	$ -	$ -	$ -
	Kossler Dam	$ 75,000	$ 75,000	$ -	$ -	$ -	$ -	$ -	$ -

Table 2-2: 2016-2021 Funding Summary By Project Type (Cont.)

Project Type	Project Title	Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
CIP-CAPITAL MAINTENANCE (Cont.)	Type Total	$ 126,432,240	$ 20,357,101	$ 19,245,441	$ 14,246,766	$ 22,458,751	$ 29,562,148	$ 20,562,033	$ -
	Lakewood Pipeline	$ 316,330	$ -	$ -	$ -	$ 316,330	$ -	$ -	$ -
	Major Capital Reconstruction	$ 4,800,000	$ 800,000	$ 800,000	$ 800,000	$ 800,000	$ 800,000	$ 800,000	$ -
	Martin Park Shelter Major Maint	$ 169,000	$ -	$ 169,000	$ -	$ -	$ -	$ -	$ -
	Misc Facility Maintenance Projects	$ 2,545,000	$ 515,000	$ 380,000	$ 400,000	$ 400,000	$ 450,000	$ 400,000	$ -
	Network Hardware Replacement	$ 2,409,400	$ 111,090	$ 219,232	$ 241,423	$ 1,034,092	$ 630,026	$ 173,537	$ -
	North Boulder Park Shelter Rep	$ 120,000	$ -	$ 120,000	$ -	$ -	$ -	$ -	$ -
	Park Structure Repairs and Replace	$ 1,500,000	$ -	$ 500,000	$ -	$ 500,000	$ -	$ 500,000	$ -
	Parking Lot Repairs	$ 1,500,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ -
	Ped Facilities Repair, Replace, ADA	$ 3,774,000	$ 629,000	$ 629,000	$ 629,000	$ 629,000	$ 629,000	$ 629,000	$ -
	Pool Replastering	$ 80,000	$ 80,000	$ -	$ -	$ -	$ -	$ -	$ -
	Records Management System (RMS)	$ 950,000	$ 950,000	$ -	$ -	$ -	$ -	$ -	$ -
	Recreation Facility Repairs	$ 2,000,000	$ -	$ 1,000,000	$ -	$ 1,000,000	$ -	$ -	$ -
	Recreation Facility Repairs	$ 1,000,000	$ -	$ 500,000	$ -	$ 500,000	$ -	$ -	$ -
	Rehab Runway & Eastern Taxiway	$ 4,935,000	$ -	$ -	$ 435,000	$ -	$ 4,500,000	$ -	$ -
	Reservoir Water Treatment Facility	$ 2,314,000	$ 314,000	$ -	$ -	$ -	$ 2,000,000	$ -	$ -
	Sanitary Sewer Manhole Rehabilitati	$ 1,829,626	$ 216,320	$ 224,973	$ 233,972	$ 243,331	$ 253,064	$ 657,966	$ -
	Sanitary Sewer Rehabilitation	$ 18,294,276	$ 2,758,080	$ 2,868,403	$ 2,983,139	$ 3,102,465	$ 3,226,563	$ 3,355,626	$ -
	Security Administration	$ 49,798	$ 8,117	$ 1,012	$ -	$ 33,058	$ 6,381	$ 1,230	$ -
	Server Hardware Replacement	$ 773,336	$ 7,875	$ -	$ 77,322	$ 35,857	$ 652,282	$ -	$ -
	Silver Lake Dam	$ 100,000	$ -	$ -	$ 100,000	$ -	$ -	$ -	$ -
	Silver Lake Hydroelectric/PRV	$ 155,000	$ 25,000	$ 50,000	$ 80,000	$ -	$ -	$ -	$ -
	Skyscraper Dam	$ 171,071	$ -	$ -	$ -	$ -	$ -	$ 171,071	$ -
	Source Water Pressure Reducing,	$ 1,294,682	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 343,472	$ 351,210	$ -
	South Mesa Trailhead Bridge Replace	$ 60,000	$ 60,000	$ -	$ -	$ -	$ -	$ -	$ -
	Stazio Tensile Canopy Covering Repl	$ 132,000	$ 132,000	$ -	$ -	$ -	$ -	$ -	$ -
	Storm Sewer Rehabilitation	$ 2,438,766	$ 270,400	$ 281,200	$ 292,500	$ 304,000	$ 632,700	$ 657,966	$ -
	Sunshine Hydroelectric/PRV Facility	$ 271,875	$ -	$ 271,875	$ -	$ -	$ -	$ -	$ -
	Transportation Coordination	$ 2,668,966	$ 324,500	$ 337,500	$ 351,000	$ 365,000	$ 633,000	$ 657,966	$ -
	Turf Repairs and Replacement	$ 1,200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ -
	Utility Billing Computer System	$ 130,000	$ -	$ -	$ -	$ -	$ 130,000	$ -	$ -
	Watershed Improvements	$ 180,000	$ 80,000	$ -	$ -	$ -	$ 100,000	$ -	$ -
	WWTF Cogeneration	$ 184,481	$ -	$ -	$ -	$ -	$ 184,481	$ -	$ -
	WWTF Digester Complex	$ 2,200,000	$ -	$ -	$ -	$ 200,000	$ 2,000,000	$ -	$ -
	WWTF Rehabilitation	$ 525,000	$ -	$ -	$ -	$ -	$ 150,000	$ 375,000	$ -
	Zone 1 Transmission Pipes	$ 500,000	$ -	$ -	$ 250,000	$ -	$ -	$ 250,000	$ -
	Zone 2 Transmission Pipes	$ 500,000	$ -	$ 250,000	$ -	$ -	$ 250,000	$ -	$ -
	Zone 3 Transmission Pipes	$ 1,450,000	$ 1,200,000	$ -	$ -	$ 250,000	$ -	$ -	$ -

Table 2-2: 2016-2021 Funding Summary By Project Type (Cont.)

Project Type	Project Title	Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
CIP-CAPITAL PLANNING STUDIES	Type Total	$ 1,680,000	$ 830,000	$ 330,000	$ 130,000	$ 130,000	$ 130,000	$ 130,000	$ -
	East Arapahoe Transp Corridor Study	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ -
	Facility Assessments	$ 300,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ -
	Misc Space Needs and Analysis	$ 480,000	$ 80,000	$ 80,000	$ 80,000	$ 80,000	$ 80,000	$ 80,000	$ -
	Radio System Analysis	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ -
	Reservoir/Tom Watson Site Plan	$ 200,000	$ 200,000	$ -	$ -	$ -	$ -	$ -	$ -
	Scott Carpenter/Mapleton Site Plan	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ -
	Trans Corridor 30th & Colorado	$ 200,000	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -
	Urban Forest Management Plan	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ -
	Yard/Maintenance Facility Site Plan	$ 100,000	$ -	$ 100,000	$ -	$ -	$ -	$ -	$ -

Project Type	Project Title	Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
CIP-LAND ACQUISITION	Type Total	$ 39,701,285	$ 6,200,000	$ 6,250,000	$ 6,674,000	$ 7,833,000	$ 6,360,000	$ 6,384,285	$ -
	Boulder Junction Rail Plaza	$ 1,874,000	$ -	$ -	$ 374,000	$ 1,500,000	$ -	$ -	$ -
	Mineral Rights Acquisition	$ 600,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ -
	OSMP Real Estate Acquisition	$ 32,400,000	$ 5,400,000	$ 5,400,000	$ 5,400,000	$ 5,400,000	$ 5,400,000	$ 5,400,000	$ -
	Preflood Property Acquisition	$ 3,627,285	$ 500,000	$ 550,000	$ 600,000	$ 633,000	$ 660,000	$ 684,285	$ -
	Water Rights Acquisition	$ 1,200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ -

Table 2-2: 2016-2021 Funding Summary By Project Type (Cont.)

Project Type	Project Title	Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
CIP-NEW FACILITY/INFRASTRUCTURE	Type Total	$ 61,075,765	$ 6,283,765	$ 5,217,000	$ 33,275,000	$ 5,100,000	$ 6,850,000	$ 4,350,000	$ -
	28th St - Valmont to Iris (Baseline	$ 860,000	$ 860,000	$ -	$ -	$ -	$ -	$ -	$ -
	28th St Valmont to Iris (Baseline)	$ 470,000	$ 470,000	$ -	$ -	$ -	$ -	$ -	$ -
	30th St and Colorado Bike/Ped Under	$ 7,500,000	$ 500,000	$ 1,300,000	$ 5,700,000	$ -	$ -	$ -	$ -
	Bikeway Facilities - Enhancements	$ 1,350,000	$ 225,000	$ 225,000	$ 225,000	$ 225,000	$ 225,000	$ 225,000	$ -
	BJ Traffic Signal Bluff St & 30th	$ 228,000	$ -	$ 228,000	$ -	$ -	$ -	$ -	$ -
	BJ Traffic Signal Jct & Valmont	$ 304,000	$ -	$ 304,000	$ -	$ -	$ -	$ -	$ -
	Boulder Creek Bikepath Extension	$ 500,000	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ -
	Boulder Junction - Develop Coord	$ 150,000	$ 75,000	$ 75,000	$ -	$ -	$ -	$ -	$ -
	Boulder Junction Pocket Park	$ 1,450,000	$ 750,000	$ 350,000	$ 350,000	$ -	$ -	$ -	$ -
	Boulder Slough Multiuse Path 30th	$ 480,000	$ 120,000	$ 360,000	$ -	$ -	$ -	$ -	$ -
	CAGID Trinity Commons Construction	$ 1,425,765	$ 1,425,765	$ -	$ -	$ -	$ -	$ -	$ -
	Carter Lake Hydroelectric	$ 2,800,000	$ -	$ -	$ 50,000	$ 250,000	$ 2,500,000	$ -	$ -
	Ped Facs Enh Missing Links Crossing	$ 750,000	$ 125,000	$ 125,000	$ 125,000	$ 125,000	$ 125,000	$ 125,000	$ -
	South Boulder Creek Phase I	$ 26,825,000	$ 750,000	$ 750,000	$ 25,325,000	$ -	$ -	$ -	$ -
	TIP Local Match/TMP Implementation	$ 15,483,000	$ 483,000	$ 1,500,000	$ 1,500,000	$ 4,000,000	$ 4,000,000	$ 4,000,000	$ -
	Violet Park	$ 500,000	$ -	$ -	$ -	$ 500,000	$ -	$ -	$ -

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FUNDING BY FUND

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

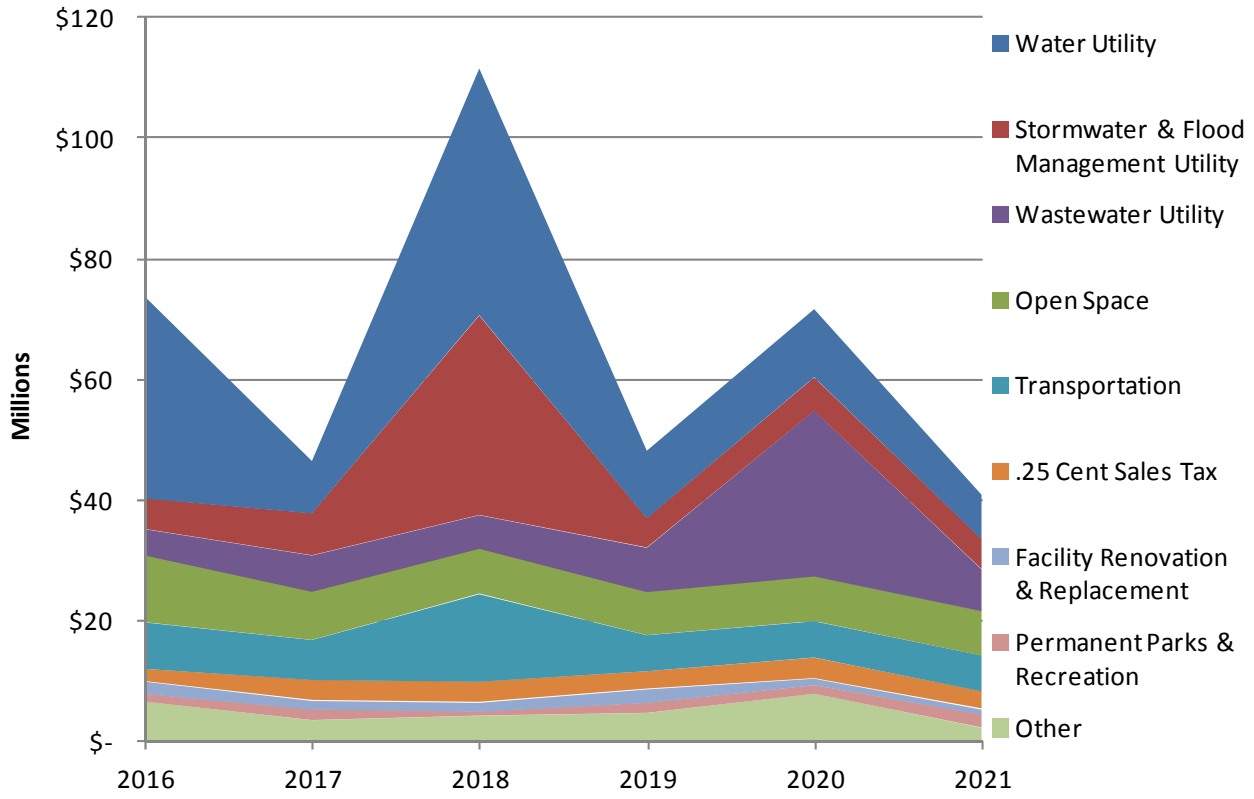
Detailed descriptions of all of the city's funds are available in the introduction section of the Approved 2014 Annual Budget - Volume 1. Many of the funds exist to handle dedicated revenues that can only be used for specific types of capital projects. These restrictions provide consistency in planning 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 2016-2021 CIP.

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

Figure 2-5: 2016-2021 Funding by Fund



Other includes the General Fund, Computer Replacement Fund, Boulder Junction Capital Improvement Fund, Airport Fund, Downtown Commercial District Fund, Lottery Fund, Transportation Development Fund, and Capital Development Fund.

Table 2-3: 2016-2021 Funding Summary by Fund

Fund	Project Title	Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
.25 Cent Sales Tax	Fund Total	$ 18,241,200	$ 2,052,700	$ 3,409,700	$ 3,432,700	$ 2,939,700	$ 3,466,700	$ 2,939,700	$ -
Airport	Fund Total	$ 4,935,000	$ -	$ -	$ 435,000	$ -	$ 4,500,000	$ -	$ -
Bldr Junction Cap Imprvmt	Fund Total	$ 4,006,000	$ 825,000	$ 957,000	$ 724,000	$ 1,500,000	$ -	$ -	$ -
Computer Replacement	Fund Total	$ 8,310,962	$ 841,220	$ 964,254	$ 1,573,472	$ 1,885,671	$ 2,088,024	$ 958,321	$ -
Downtown Commercial District	Fund Total	$ 4,434,765	$ 2,156,565	$ 678,200	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ -
Facility Renovation & Replace	Fund Total	$ 9,147,000	$ 2,057,000	$ 1,425,000	$ 1,485,000	$ 2,268,000	$ 1,078,000	$ 834,000	$ -
General	Fund Total	$ 1,025,000	$ 1,025,000	$ -	$ -	$ -	$ -	$ -	$ -
Lottery	Fund Total	$ 3,275,076	$ 846,371	$ 485,741	$ 485,741	$ 485,741	$ 485,741	$ 485,741	$ -
Open Space	Fund Total	$ 48,205,300	$ 11,045,300	$ 7,945,000	$ 7,455,000	$ 7,080,000	$ 7,390,000	$ 7,290,000	$ -
Permanent Parks & Recreation	Fund Total	$ 9,150,000	$ 1,300,000	$ 1,800,000	$ 700,000	$ 1,700,000	$ 1,450,000	$ 2,200,000	$ -
Stormwater & Flood Mgt Utility	Fund Total	$ 60,665,121	$ 5,084,480	$ 6,994,483	$ 33,131,155	$ 4,903,241	$ 5,547,837	$ 5,003,925	$ -
Transportation	Fund Total	$ 46,878,500	$ 7,707,000	$ 6,651,500	$ 14,527,500	$ 5,997,500	$ 5,997,500	$ 5,997,500	$ -
Transportation Development	Fund Total	$ 3,850,000	$ 1,000,000	$ 530,000	$ 730,000	$ 530,000	$ 530,000	$ 530,000	$ -
Wastewater Utility	Fund Total	$ 57,597,850	$ 4,355,600	$ 5,987,421	$ 5,571,420	$ 7,335,868	$ 27,434,276	$ 6,913,265	$ -
Water Utility	Fund Total	$ 112,724,913	$ 33,456,751	$ 8,679,585	$ 40,757,592	$ 11,196,676	$ 11,243,012	$ 7,391,297	$ -
Total		**$ 392,946,687**	**$ 74,252,987**	**$ 46,507,884**	**$111,408,580**	**$ 48,222,397**	**$ 71,611,090**	**$ 40,943,749**	**$ -**

Table 2-3: 2016-2021 Funding Summary by Fund (Cont.)

Fund	Project Title	Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
.25 Cent Sales Tax		$ 18,241,200	$ 2,052,700	$ 3,409,700	$ 3,432,700	$ 2,939,700	$ 3,466,700	$ 2,939,700	$ -
CIP-CAPITAL ENHANCEMENT	Subtotal	$ 4,838,200	$ 889,700	$ 489,700	$ 2,239,700	$ 239,700	$ 739,700	$ 239,700	$ -
	Aquatic Facility Enhancements	$ 2,900,000	$ 400,000	$ -	$ 2,000,000	$ -	$ 500,000	$ -	$ -
	Lighting Ordinance Implementation	$ 500,000	$ 250,000	$ 250,000	$ -	$ -	$ -	$ -	$ -
	Playground and Irrigation Repairs	$ 1,438,200	$ 239,700	$ 239,700	$ 239,700	$ 239,700	$ 239,700	$ 239,700	$ -
CIP-CAPITAL MAINTENANCE	Subtotal	$ 13,398,000	$ 1,158,000	$ 2,920,000	$ 1,193,000	$ 2,700,000	$ 2,727,000	$ 2,700,000	$ -
	Aquatics Facility Repairs	$ 1,288,000	$ 238,000	$ -	$ 273,000	$ -	$ 777,000	$ -	$ -
	Boulder Reservoir South	$ 2,250,000	$ -	$ 500,000	$ -	$ -	$ 750,000	$ 1,000,000	$ -
	Court Repairs and Resurfacing	$ 1,500,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ -
	EAB Response Measures	$ 2,160,000	$ 220,000	$ 220,000	$ 220,000	$ 500,000	$ 500,000	$ 500,000	$ -
	Park Structure Repairs and Replace	$ 1,500,000	$ -	$ 500,000	$ -	$ 500,000	$ -	$ 500,000	$ -
	Parking Lot Repairs	$ 1,500,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ -
	Recreation Facility Repairs	$ 2,000,000	$ -	$ 1,000,000	$ -	$ 1,000,000	$ -	$ -	$ -
	Turf Repairs and Replacement	$ 1,200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ -
CIP-CAPITAL PLANNING STUDIES	Subtotal	$ 5,000	$ 5,000	$ -	$ -	$ -	$ -	$ -	$ -
	Radio System Analysis	$ 5,000	$ 5,000	$ -	$ -	$ -	$ -	$ -	$ -

Fund	Project Title	Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
Airport		$ 4,935,000	$ -	$ -	$ 435,000	$ -	$ 4,500,000	$ -	$ -
CIP-CAPITAL MAINTENANCE		$ 4,935,000	$ -	$ -	$ 435,000	$ -	$ 4,500,000	$ -	$ -
	Rehab Runway & Eastern Taxiway	$ 4,935,000	$ -	$ -	$ 435,000	$ -	$ 4,500,000	$ -	$ -

Table 2-3: 2016-2021 Funding Summary by Fund (Cont.)

Fund	Project Title	Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
Bldr Junction Cap Imprvmt		$ 4,006,000	$ 825,000	$ 957,000	$ 724,000	$ 1,500,000	$ -	$ -	$ -
CIP-LAND ACQUISITION		$ 1,874,000	$ -	$ -	$ 374,000	$ 1,500,000	$ -	$ -	$ -
	Boulder Junction Rail Plaza	$ 1,874,000	$ -	$ -	$ 374,000	$ 1,500,000	$ -	$ -	$ -
CIP-NEW FACILITY/INFRASTRUCTURE		$ 2,132,000	$ 825,000	$ 957,000	$ 350,000	$ -	$ -	$ -	$ -
	BJ Traffic Signal Bluff St & 30th	$ 228,000	$ -	$ 228,000	$ -	$ -	$ -	$ -	$ -
	BJ Traffic Signal Junction &	$ 304,000	$ -	$ 304,000	$ -	$ -	$ -	$ -	$ -
	Boulder Junction - Develop Coord	$ 150,000	$ 75,000	$ 75,000	$ -	$ -	$ -	$ -	$ -
	Boulder Junction Pocket Park	$ 1,450,000	$ 750,000	$ 350,000	$ 350,000	$ -	$ -	$ -	$ -

Fund	Project Title	Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
Computer Replacement		$ 8,310,962	$ 841,220	$ 964,254	$ 1,573,472	$ 1,885,671	$ 2,088,024	$ 958,321	$ -
CIP-CAPITAL MAINTENANCE		$ 8,310,962	$ 841,220	$ 964,254	$ 1,573,472	$ 1,885,671	$ 2,088,024	$ 958,321	$ -
	Data Backup and Disaster Recovery	$ 122,234	$ -	$ 41,895	$ 80,339	$ -	$ -	$ -	$ -
	Database Hardware Replacement	$ 108,987	$ 10,500	$ -	$ -	$ 31,482	$ 53,604	$ 13,401	$ -
	End User Device Replacement	$ 4,847,207	$ 703,638	$ 702,115	$ 1,174,388	$ 751,182	$ 745,731	$ 770,153	$ -
	Network Hardware Replacement	$ 2,409,400	$ 111,090	$ 219,232	$ 241,423	$ 1,034,092	$ 630,026	$ 173,537	$ -
	Security Administration	$ 49,798	$ 8,117	$ 1,012	$ -	$ 33,058	$ 6,381	$ 1,230	$ -
	Server Hardware Replacement	$ 773,336	$ 7,875	$ -	$ 77,322	$ 35,857	$ 652,282	$ -	$ -

Fund	Project Title	Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
Downtown Commercial District		$ 4,434,765	$ 2,156,565	$ 678,200	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ -
CIP-CAPITAL MAINTENANCE	Subtotal	$ 3,009,000	$ 730,800	$ 678,200	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ -
	Downtown 14th St Prkg Lot Improve	$ 150,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ -
	Downtown Parking Garage Elevators	$ 609,000	$ 330,800	$ 278,200	$ -	$ -	$ -	$ -	$ -
	Downtown Parking Garage Major	$ 1,500,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ -
	Downtown Pearl St Mall Amenity	$ 750,000	$ 125,000	$ 125,000	$ 125,000	$ 125,000	$ 125,000	$ 125,000	$ -
CIP-NEW FACILITY/INFRASTRUCTURE	Subtotal	$ 1,425,765	$ 1,425,765	$ -	$ -	$ -	$ -	$ -	$ -
	CAGID Trinity Commons Construction	$ 1,425,765	$ 1,425,765	$ -	$ -	$ -	$ -	$ -	$ -

Table 2-3: 2016-2021 Funding Summary by Fund (Cont.)

Fund	Project Title	Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
Facility Renovation & Replace		$ 9,147,000	$ 2,057,000	$ 1,425,000	$ 1,485,000	$ 2,268,000	$ 1,078,000	$ 834,000	$ -
CIP-CAPITAL ENHANCEMENT		$ 1,642,000	$ 190,000	$ -	$ 100,000	$ 1,100,000	$ 100,000	$ 152,000	$ -
	East Boulder Community Center Ren	$ 452,000	$ -	$ -	$ 100,000	$ 100,000	$ 100,000	$ 152,000	$ -
	Outdoor Lighting Improvements	$ 190,000	$ 190,000	$ -	$ -	$ -	$ -	$ -	$ -
	Tantra Shop Renovation	$ 300,000	$ -	$ -	$ -	$ 300,000	$ -	$ -	$ -
	West Senior Center Maj Maint &	$ 700,000	$ -	$ -	$ -	$ 700,000	$ -	$ -	$ -
CIP-CAPITAL MAINTENANCE		$ 6,725,000	$ 1,737,000	$ 1,295,000	$ 1,255,000	$ 1,038,000	$ 848,000	$ 552,000	$ -
	Aquatics Facility Repairs	$ 1,366,000	$ 390,000	$ -	$ 723,000	$ -	$ 253,000	$ -	$ -
	EBCC Replace Pool Air Handlers	$ 500,000	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ -
	Fire Stations Major Maintenance	$ 813,000	$ 120,000	$ 126,000	$ 132,000	$ 138,000	$ 145,000	$ 152,000	$ -
	Martin Park Shelter Major Maint	$ 169,000	$ -	$ 169,000	$ -	$ -	$ -	$ -	$ -
	Misc Facility Maintenance Projects	$ 2,545,000	$ 515,000	$ 380,000	$ 400,000	$ 400,000	$ 450,000	$ 400,000	$ -
	North Boulder Park Shelter Rep	$ 120,000	$ -	$ 120,000	$ -	$ -	$ -	$ -	$ -
	Pool Replastering	$ 80,000	$ 80,000	$ -	$ -	$ -	$ -	$ -	$ -
	Recreation Facility Repairs	$ 1,000,000	$ -	$ 500,000	$ -	$ 500,000	$ -	$ -	$ -
	Stazio Tensile Canopy Covering	$ 132,000	$ 132,000	$ -	$ -	$ -	$ -	$ -	$ -
CIP-CAPITAL PLANNING STUDIES		$ 780,000	$ 130,000	$ 130,000	$ 130,000	$ 130,000	$ 130,000	$ 130,000	$ -
	Facility Assessments	$ 300,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ -
	Misc Space Needs and Analysis	$ 480,000	$ 80,000	$ 80,000	$ 80,000	$ 80,000	$ 80,000	$ 80,000	$ -

Fund	Project Title	Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
General		$ 1,025,000	$ 1,025,000	$ -	$ -	$ -	$ -	$ -	$ -
CIP-CAPITAL MAINTENANCE		$ -	$ 950,000	$ -	$ -	$ -	$ -	$ -	$ -
	Records Management System (RMS)	$ -	$ 950,000	$ -	$ -	$ -	$ -	$ -	$ -
CIP-CAPITAL PLANNING STUDIES		$ -	$ 75,000	$ -	$ -	$ -	$ -	$ -	$ -
	Radio System Analysis	$ -	$ 75,000	$ -	$ -	$ -	$ -	$ -	$ -

Fund	Project Title	Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
Lottery		$ 3,275,076	$ 846,371	$ 485,741	$ 485,741	$ 485,741	$ 485,741	$ 485,741	$ -
CIP-CAPITAL ENHANCEMENT		$ 3,069,746	$ 641,041	$ 485,741	$ 485,741	$ 485,741	$ 485,741	$ 485,741	$ -
	Flood Eng. Trails	$ 155,300	$ 155,300	$ -	$ -	$ -	$ -	$ -	$ -
	Greenways Program - Lottery Fund	$ 752,646	$ 125,441	$ 125,441	$ 125,441	$ 125,441	$ 125,441	$ 125,441	$ -
	Playground and Irrigation Repairs	$ 2,161,800	$ 360,300	$ 360,300	$ 360,300	$ 360,300	$ 360,300	$ 360,300	$ -
CIP-CAPITAL MAINTENANCE		$ 205,330	$ 205,330	$ -	$ -	$ -	$ -	$ -	$ -
	Foothills Nature Center	$ 205,330	$ 205,330	$ -	$ -	$ -	$ -	$ -	$ -

Table 2-3: 2016-2021 Funding Summary by Fund (Cont.)

Fund	Project Title	Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
Open Space		$ 48,205,300	$ 11,045,300	$ 7,945,000	$ 7,455,000	$ 7,080,000	$ 7,390,000	$ 7,290,000	$ -
CIP-CAPITAL ENHANCEMENT		$ 11,169,300	$ 3,919,300	$ 1,975,000	$ 1,475,000	$ 1,100,000	$ 1,400,000	$ 1,300,000	$ -
	Boulder Crk Above 95th Restoration	$ 500,000	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ -
	ETSA - Plan and Implementation	$ 650,000	$ -	$ -	$ 200,000	$ 50,000	$ 200,000	$ 200,000	$ -
	Facility Modifications-Space Needs	$ 900,000	$ 200,000	$ 200,000	$ 200,000	$ 100,000	$ 100,000	$ 100,000	$ -
	Flood Eng. Trails	$ 417,300	$ 417,300	$ -	$ -	$ -	$ -	$ -	$ -
	Goodhue Ditch Fish Passage	$ 300,000	$ -	$ 300,000	$ -	$ -	$ -	$ -	$ -
	NTSA - Plan and Implementation	$ 700,000	$ 100,000	$ 200,000	$ 200,000	$ 100,000	$ 50,000	$ 50,000	$ -
	OSMP Innovations	$ 550,000	$ -	$ 75,000	$ 175,000	$ 100,000	$ 100,000	$ 100,000	$ -
	OSMP Master Plan Update	$ 852,000	$ 252,000	$ 200,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ -
	S.Bldr Crk at E.Bldr Ditch Const	$ 300,000	$ -	$ 300,000	$ -	$ -	$ -	$ -	$ -
	South Boulder Creek Instream Flow	$ 2,000,000	$ 2,000,000	$ -	$ -	$ -	$ -	$ -	$ -
	STSA - Plan and Implementation	$ 300,000	$ -	$ -	$ -	$ -	$ 200,000	$ 100,000	$ -
	Visitor Infrastructure System	$ 2,000,000	$ 100,000	$ 200,000	$ 200,000	$ 500,000	$ 500,000	$ 500,000	$ -
	WTSA Implementation	$ 1,700,000	$ 350,000	$ 500,000	$ 400,000	$ 150,000	$ 150,000	$ 150,000	$ -
CIP-CAPITAL MAINTENANCE		$ 2,831,000	$ 1,421,000	$ 270,000	$ 280,000	$ 280,000	$ 290,000	$ 290,000	$ -
	Agriculture Facilities Projects	$ 720,000	$ 110,000	$ 110,000	$ 120,000	$ 120,000	$ 130,000	$ 130,000	$ -
	Boulder & S Bldr Crk Flood Repair	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ -
	Cultural Resource/Facility	$ 500,000	$ -	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ -
	Farm Site Improvements	$ 360,000	$ 60,000	$ 60,000	$ 60,000	$ 60,000	$ 60,000	$ 60,000	$ -
	Flood Trails	$ 991,000	$ 991,000	$ -	$ -	$ -	$ -	$ -	$ -
	Hartnagle House Restoration	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ -
	South Mesa Trailhead Bridge	$ 60,000	$ 60,000	$ -	$ -	$ -	$ -	$ -	$ -
CIP-CAPITAL PLANNING STUDIES		$ 5,000	$ 5,000	$ -	$ -	$ -	$ -	$ -	$ -
	Radio System Analysis	$ 5,000	$ 5,000	$ -	$ -	$ -	$ -	$ -	$ -
CIP-LAND ACQUISITION		$ 34,200,000	$ 5,700,000	$ 5,700,000	$ 5,700,000	$ 5,700,000	$ 5,700,000	$ 5,700,000	$ -
	Mineral Rights Acquisition	$ 600,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ -
	OSMP Real Estate Acquisition	$ 32,400,000	$ 5,400,000	$ 5,400,000	$ 5,400,000	$ 5,400,000	$ 5,400,000	$ 5,400,000	$ -
	Water Rights Acquisition	$ 1,200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ -
CIP-NEW FACILITY/INFRASTRUCTURE		$ 500,000	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ -
	Boulder Creek Bikepath Extension	$ 500,000	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ -

Table 2-3: 2016-2021 Funding Summary by Fund (Cont.)

Fund	Project Title	Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
Permanent Parks & Recreation		$ 9,150,000	$ 1,300,000	$ 1,800,000	$ 700,000	$ 1,700,000	$ 1,450,000	$ 2,200,000	$ -
CIP-CAPITAL ENHANCEMENT		$ 4,500,000	$ 500,000	$ 1,000,000	$ 500,000	$ 1,000,000	$ 500,000	$ 1,000,000	$ -
	Athletic Field Development	$ 4,500,000	$ 500,000	$ 1,000,000	$ 500,000	$ 1,000,000	$ 500,000	$ 1,000,000	$ -
CIP-CAPITAL MAINTENANCE		$ 3,650,000	$ 400,000	$ 700,000	$ 200,000	$ 200,000	$ 950,000	$ 1,200,000	$ -
	ADA Compliance Initiatives	$ 1,100,000	$ 100,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ -
	Boulder Reservoir South	$ 2,250,000	$ -	$ 500,000	$ -	$ -	$ 750,000	$ 1,000,000	$ -
	Flatiron Golf Course Repairs	$ 300,000	$ 300,000	$ -	$ -	$ -	$ -	$ -	$ -
CIP-CAPITAL PLANNING STUDIES		$ 500,000	$ 400,000	$ 100,000	$ -	$ -	$ -	$ -	$ -
	Reservoir/Tom Watson Site Plan	$ 200,000	$ 200,000	$ -	$ -	$ -	$ -	$ -	$ -
	Scott Carpenter/Mapleton Site Plan	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ -
	Urban Forest Management Plan	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ -
	Yard/Maintenance Facility Site	$ 100,000	$ -	$ 100,000	$ -	$ -	$ -	$ -	$ -
CIP-NEW FACILITY/INFRASTRUCTURE		$ 500,000	$ -	$ -	$ -	$ 500,000	$ -	$ -	$ -
	Violet Park	$ 500,000	$ -	$ -	$ -	$ 500,000	$ -	$ -	$ -

Fund	Project Title	Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
Stormwater & Flood Mgt Utility		$ 60,665,121	$ 5,084,480	$ 6,994,483	$ 33,131,155	$ 4,903,241	$ 5,547,837	$ 5,003,925	$ -
CIP-CAPITAL ENHANCEMENT		$ 25,040,104	$ 3,239,580	$ 5,075,783	$ 6,562,655	$ 3,601,241	$ 3,557,137	$ 3,003,708	$ -
	Bear Canyon Creek Flood Mitigation	$ 500,000	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ -
	Bluebell & King's Gultch	$ 600,000	$ -	$ 100,000	$ 500,000	$ -	$ -	$ -	$ -
	Boulder Creek Flood Mitigation	$ 4,750,000	$ -	$ 2,500,000	$ 2,250,000	$ -	$ -	$ -	$ -
	Four Mile - Upland to Violet	$ 5,250,000	$ 500,000	$ 500,000	$ 1,000,000	$ 1,500,000	$ 1,250,000	$ 500,000	$ -
	Greenways Program - Flood fund	$ 585,000	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ -
	Gregory Creek Flood Mitigation	$ 500,000	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ -
	Local Drainage Improvements	$ 4,941,298	$ 730,080	$ 759,283	$ 789,655	$ 821,241	$ 854,090	$ 986,949	$ -
	Skunk Creek Flood Mitigation	$ 600,000	$ -	$ 100,000	$ 500,000	$ -	$ -	$ -	$ -
	Stormwater Quality Improvements	$ 1,076,390	$ 162,000	$ 169,000	$ 175,500	$ 182,500	$ 190,000	$ 197,390	$ -
	Twomile Canyon Creek	$ 600,000	$ -	$ 100,000	$ 500,000	$ -	$ -	$ -	$ -
	Upper Goose Creek Drainage	$ 5,637,416	$ 750,000	$ 750,000	$ 750,000	$ 1,000,000	$ 1,165,547	$ 1,221,869	$ -
CIP-CAPITAL MAINTENANCE		$ 5,172,732	$ 594,900	$ 618,700	$ 643,500	$ 669,000	$ 1,330,700	$ 1,315,932	$ -
	Storm Sewer Rehabilitation	$ 2,438,766	$ 270,400	$ 281,200	$ 292,500	$ 304,000	$ 632,700	$ 657,966	$ -
	Transportation Coordination	$ 2,668,966	$ 324,500	$ 337,500	$ 351,000	$ 365,000	$ 633,000	$ 657,966	$ -
	Utility Billing Computer System	$ 65,000	$ -	$ -	$ -	$ -	$ 65,000	$ -	$ -
CIP-LAND ACQUISITION		$ 3,627,285	$ 500,000	$ 550,000	$ 600,000	$ 633,000	$ 660,000	$ 684,285	$ -
	Preflood Property Acquisition	$ 3,627,285	$ 500,000	$ 550,000	$ 600,000	$ 633,000	$ 660,000	$ 684,285	$ -
CIP-NEW FACILITY/INFRASTRUCTURE		$ 26,825,000	$ 750,000	$ 750,000	$ 25,325,000	$ -	$ -	$ -	$ -
	South Boulder Creek Phase I	$ 26,825,000	$ 750,000	$ 750,000	$ 25,325,000	$ -	$ -	$ -	$ -

Table 2-3: 2016-2021 Funding Summary by Fund (Cont.)

Fund	Project Title	Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
Transportation		$ 46,878,500	$ 7,707,000	$ 6,651,500	$ 14,527,500	$ 5,997,500	$ 5,997,500	$ 5,997,500	$ -
CIP-CAPITAL ENHANCEMENT		$ 10,392,000	$ 3,354,500	$ 1,347,500	$ 5,397,500	$ 97,500	$ 97,500	$ 97,500	$ -
	19th St (Norwood to Sumac)	$ 257,000	$ 257,000	$ -	$ -	$ -	$ -	$ -	$ -
	Arap Comp St Recon/Bldr Crk	$ 2,500,000	$ 2,500,000	$ -	$ -	$ -	$ -	$ -	$ -
	Broadway Recon Violet to 36	$ 7,050,000	$ 500,000	$ 1,250,000	$ 5,300,000	$ -	$ -	$ -	$ -
	Greenways Program Transportation	$ 585,000	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ -
CIP-CAPITAL MAINTENANCE		$ 9,467,000	$ 1,694,000	$ 1,694,000	$ 1,429,000	$ 1,550,000	$ 1,550,000	$ 1,550,000	$ -
	Deficient Street Light Pole	$ 893,000	$ 265,000	$ 265,000	$ -	$ 121,000	$ 121,000	$ 121,000	$ -
	Major Capital Reconstruction	$ 4,800,000	$ 800,000	$ 800,000	$ 800,000	$ 800,000	$ 800,000	$ 800,000	$ -
	Ped Facilities Repair, Replace,	$ 3,774,000	$ 629,000	$ 629,000	$ 629,000	$ 629,000	$ 629,000	$ 629,000	$ -
CIP-CAPITAL PLANNING STUDIES		$ 596,500	$ 345,500	$ 100,000	$ 151,000	$ -	$ -	$ -	$ -
	Bldr County/City Joint TIP	$ 289,000	$ 138,000	$ -	$ 151,000	$ -	$ -	$ -	$ -
	East Arapahoe Transp Corridor	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ -
	Radio System Analysis	$ 7,500	$ 7,500	$ -	$ -	$ -	$ -	$ -	$ -
	Trans Corridor 30th & Colorado	$ 200,000	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -
CIP-NEW FACILITY/INFRASTRUCTURE		$ 26,423,000	$ 2,313,000	$ 3,510,000	$ 7,550,000	$ 4,350,000	$ 4,350,000	$ 4,350,000	$ -
	28th St - Valmont to Iris	$ 860,000	$ 860,000	$ -	$ -	$ -	$ -	$ -	$ -
	30th St and Colorado Bike/Ped	$ 7,500,000	$ 500,000	$ 1,300,000	$ 5,700,000	$ -	$ -	$ -	$ -
	Bikeway Facilities - Enhancements	$ 1,350,000	$ 225,000	$ 225,000	$ 225,000	$ 225,000	$ 225,000	$ 225,000	$ -
	Boulder Slough Multiuse Path 30th	$ 480,000	$ 120,000	$ 360,000	$ -	$ -	$ -	$ -	$ -
	Ped Facs Enh Missing Links	$ 750,000	$ 125,000	$ 125,000	$ 125,000	$ 125,000	$ 125,000	$ 125,000	$ -
	TIP Local Match/TMP Implementation	$ 15,483,000	$ 483,000	$ 1,500,000	$ 1,500,000	$ 4,000,000	$ 4,000,000	$ 4,000,000	$ -

Fund	Project Title	Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
Transportation Development		$ 3,850,000	$ 1,000,000	$ 530,000	$ 730,000	$ 530,000	$ 530,000	$ 530,000	$ -
CIP-CAPITAL ENHANCEMENT		$ 3,380,000	$ 530,000	$ 530,000	$ 730,000	$ 530,000	$ 530,000	$ 530,000	$ -
	Misc Development Coordination	$ 300,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ -
	Signal Maintenance & Upgrade	$ 200,000	$ -	$ -	$ 200,000	$ -	$ -	$ -	$ -
	TIP Local Match TMP Implementation	$ 2,880,000	$ 480,000	$ 480,000	$ 480,000	$ 480,000	$ 480,000	$ 480,000	$ -
CIP-NEW FACILITY/INFRASTRUCTURE		$ 470,000	$ 470,000	$ -	$ -	$ -	$ -	$ -	$ -
	28th St Valmont to Iris (Baseline)	$ 470,000	$ 470,000	$ -	$ -	$ -	$ -	$ -	$ -

Table 2-3: 2016-2021 Funding Summary by Fund (Cont.)

Fund	Project Title	Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
Wastewater Utility		$ 57,597,850	$ 4,355,600	$ 5,987,421	$ 5,571,420	$ 7,335,868	$ 27,434,276	$ 6,913,265	$ -
CIP-CAPITAL ENHANCEMENT		$ 29,118,797	$ 570,000	$ 2,050,397	$ 1,476,915	$ 2,877,582	$ 20,606,179	$ 1,537,724	$ -
	Goose Creek SS Interceptor Rehab	$ 3,420,445	$ -	$ -	$ 25,000	$ 647,590	$ 1,346,988	$ 1,400,867	$ -
	Marshall Landfill	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ -
	Wastewater Treatment Facility	$ 150,000	$ 150,000	$ -	$ -	$ -	$ -	$ -	$ -
	WWTF Activated Sludge	$ 175,479	$ -	$ 175,479	$ -	$ -	$ -	$ -	$ -
	WWTF Electrical	$ 1,320,000	$ 120,000	$ 1,200,000	$ -	$ -	$ -	$ -	$ -
	WWTF Instrumentation/Control	$ 2,866,016	$ -	$ 674,918	$ 701,915	$ 729,992	$ 759,191	$ -	$ -
	WWTF Laboratory	$ 50,000	$ 50,000	$ -	$ -	$ -	$ -	$ -	$ -
	WWTF Permit Improvements	$ 21,036,857	$ 150,000	$ -	$ 750,000	$ 1,500,000	$ 18,500,000	$ 136,857	$ -
CIP-CAPITAL MAINTENANCE		$ 28,479,053	$ 3,785,600	$ 3,937,024	$ 4,094,505	$ 4,458,286	$ 6,828,097	$ 5,375,541	$ -
	Condition Assessment Program	$ 5,380,670	$ 811,200	$ 843,648	$ 877,394	$ 912,490	$ 948,989	$ 986,949	$ -
	Sanitary Sewer Manhole	$ 1,829,626	$ 216,320	$ 224,973	$ 233,972	$ 243,331	$ 253,064	$ 657,966	$ -
	Sanitary Sewer Rehabilitation	$ 18,294,276	$ 2,758,080	$ 2,868,403	$ 2,983,139	$ 3,102,465	$ 3,226,563	$ 3,355,626	$ -
	Utility Billing Computer System	$ 65,000	$ -	$ -	$ -	$ -	$ 65,000	$ -	$ -
	WWTF Cogeneration	$ 184,481	$ -	$ -	$ -	$ -	$ 184,481	$ -	$ -
	WWTF Digester Complex	$ 2,200,000	$ -	$ -	$ -	$ 200,000	$ 2,000,000	$ -	$ -
	WWTF Rehabilitation	$ 525,000	$ -	$ -	$ -	$ -	$ 150,000	$ 375,000	$ -

Table 2-3: 2016-2021 Funding Summary by Fund (Cont.)

Fund	Project Title	Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
Water Utility		$ 112,724,913	$ 33,456,751	$ 8,679,585	$ 40,757,592	$ 11,196,676	$ 11,243,012	$ 7,391,297	$ -
CIP-CAPITAL ENHANCEMENT		$ 70,618,250	$ 26,610,000	$ 2,511,322	$ 37,964,303	$ 1,668,882	$ 692,685	$ 1,171,058	$ -
	Automated Meter Reading	$ 684,285	$ -	$ -	$ -	$ -	$ -	$ 684,285	$ -
	Barker Dam and Reservoir	$ 115,000	$ 65,000	$ 50,000	$ -	$ -	$ -	$ -	$ -
	Barker Dam Outlet	$ 1,110,551	$ 100,000	$ 175,000	$ -	$ 835,551	$ -	$ -	$ -
	Betasso Water Treatment Facility	$ 25,140,000	$ 25,140,000	$ -	$ -	$ -	$ -	$ -	$ -
	Green Lake 2 Dam	$ 561,773	$ -	$ -	$ -	$ -	$ 75,000	$ 486,773	$ -
	Lakewood Dam	$ 124,707	$ -	$ -	$ 124,707	$ -	$ -	$ -	$ -
	Lakewood Hydroelectric/PRV	$ 430,000	$ 130,000	$ -	$ -	$ 300,000	$ -	$ -	$ -
	NCWCD Conveyance - Carter Lake	$ 40,451,585	$ 850,000	$ 2,036,322	$ 37,565,263	$ -	$ -	$ -	$ -
	Orodell Hydro/PRV Facility	$ 75,000	$ 75,000	$ -	$ -	$ -	$ -	$ -	$ -
	Pearl Street Hydro/PRV Facility	$ 267,664	$ -	$ -	$ 24,333	$ 243,331	$ -	$ -	$ -
	Source Water Monitoring/Protection	$ 400,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ -	$ -	$ -
	Utility Billing Computer System	$ 125,000	$ -	$ -	$ -	$ -	$ 125,000	$ -	$ -
	Water System Security/Quality	$ 540,000	$ 150,000	$ 150,000	$ 150,000	$ 90,000	$ -	$ -	$ -
	Wittemyer Ponds	$ 592,685	$ -	$ -	$ -	$ 100,000	$ 492,685	$ -	$ -
CIP-CAPITAL MAINTENANCE		$ 39,299,163	$ 6,839,251	$ 6,168,263	$ 2,743,289	$ 9,277,794	$ 8,050,327	$ 6,220,239	$ -
	Albion Dam	$ 3,882,997	$ 125,000	$ -	$ 341,636	$ 3,416,361	$ -	$ -	$ -
	Barker Gravity Pipeline Repair	$ 7,003,748	$ 667,416	$ 1,169,859	$ 1,216,653	$ 1,265,319	$ 1,315,932	$ 1,368,569	$ -
	Barker-Kossler Penstock Repair	$ 116,986	$ -	$ 116,986	$ -	$ -	$ -	$ -	$ -
	Betasso Hydroelectric / PRF	$ 860,000	$ -	$ 380,000	$ 480,000	$ -	$ -	$ -	$ -
	Betasso Storage Tank	$ 292,465	$ -	$ 292,465	$ -	$ -	$ -	$ -	$ -
	Boulder Reservoir	$ 168,434	$ 50,000	$ -	$ -	$ -	$ 118,434	$ -	$ -
	Distribution Waterline Replacement	$ 18,613,540	$ 3,352,960	$ 3,487,078	$ -	$ 3,771,624	$ 3,922,489	$ 4,079,389	$ -
	Farmer's Ditch	$ 108,160	$ -	$ -	$ -	$ 108,160	$ -	$ -	$ -
	Goose Lake Dam	$ 75,000	$ -	$ -	$ 75,000	$ -	$ -	$ -	$ -
	Island Lake Dam	$ 50,000	$ -	$ -	$ 50,000	$ -	$ -	$ -	$ -
	Kohler Storage Tank Roof	$ 799,875	$ 799,875	$ -	$ -	$ -	$ -	$ -	$ -
	Kossler Dam	$ 75,000	$ 75,000	$ -	$ -	$ -	$ -	$ -	$ -
	Lakewood Pipeline	$ 316,330	$ -	$ -	$ -	$ 316,330	$ -	$ -	$ -
	Reservoir Water Treatment Facility	$ 2,314,000	$ 314,000	$ -	$ -	$ -	$ 2,000,000	$ -	$ -
	Silver Lake Dam	$ 100,000	$ -	$ -	$ 100,000	$ -	$ -	$ -	$ -
	Silver Lake Hydroelectric/PRV	$ 155,000	$ 25,000	$ 50,000	$ 80,000	$ -	$ -	$ -	$ -
	Skyscraper Dam	$ 171,071	$ -	$ -	$ -	$ -	$ -	$ 171,071	$ -
	Source Water Pressure Reducing,	$ 1,294,682	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 343,472	$ 351,210	$ -
	Sunshine Hydroelectric/PRV	$ 271,875	$ -	$ 271,875	$ -	$ -	$ -	$ -	$ -
	Watershed Improvements	$ 180,000	$ 80,000	$ -	$ -	$ -	$ 100,000	$ -	$ -
	Zone 1 Transmission Pipes	$ 500,000	$ -	$ -	$ 250,000	$ -	$ -	$ 250,000	$ -
	Zone 2 Transmission Pipes	$ 500,000	$ -	$ 250,000	$ -	$ -	$ 250,000	$ -	$ -
	Zone 3 Transmission Pipes	$ 1,450,000	$ 1,200,000	$ -	$ -	$ 250,000	$ -	$ -	$ -

Table 2-3: 2016-2021 Funding Summary by Fund (Cont.)

Fund	Project Title	Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
Water Utility (Cont.)		$ 112,724,913	$ 33,456,751	$ 8,679,585	$ 40,757,592	$ 11,196,676	$ 11,243,012	$ 7,391,297	$ -
CIP-CAPITAL PLANNING STUDIES		$ 7,500	$ 7,500	$ -	$ -	$ -	$ -	$ -	$ -
	Radio System Analysis	$ 7,500	$ 7,500	$ -	$ -	$ -	$ -	$ -	$ -
CIP-NEW FACILITY/INFRASTRUCTURE		$ 2,800,000	$ -	$ -	$ 50,000	$ 250,000	$ 2,500,000	$ -	$ -
	Carter Lake Hydroelectric	$ 2,800,000	$ -	$ -	$ 50,000	$ 250,000	$ 2,500,000	$ -	$ -

City of Boulder

SPECIAL HIGHLIGHT ON CAPITAL IMPROVEMENT BOND

2016-2021 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 bond package has a 20-year payback and 85 percent of the total proceeds of $55.11 million (including the bond issuance premium and accumulated interest) are required to be spent by March 22, 2015. One-hundred percent of the total funding is required to be spent by March 22, 2017. As of July 15, 2015, 98 percent of the total funding had been spent. The city met the three-year spending requirement and is working to ensure 100 percent of the total funding is spent by March 22, 2017.

Highlights at a Glance

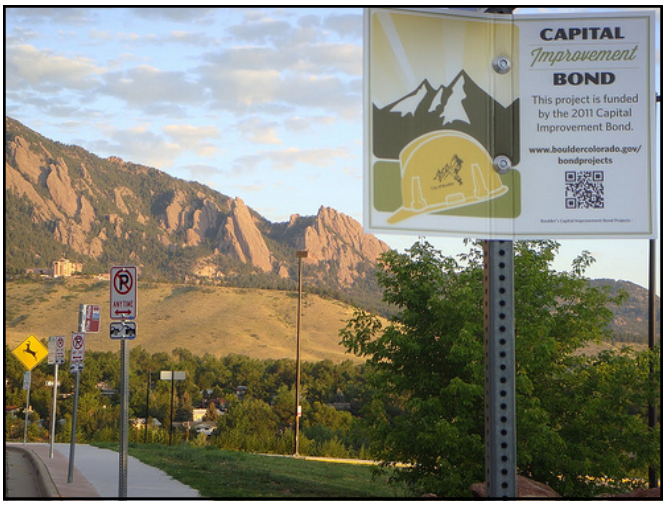
- **26** categories containing a total of **nearly 85** individual projects:
  - **14%** under construction
  - **86%** completed
- **98%** of total funding has been spent or encumbered as of June 30, 2015.

Project Highlights and Status

There are 85 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 2015. Most of the projects have been completed with approximately 14 percent that are under construction. Details related to each project can be found at www.bouldercolorado.gov/bondprojects.

1. Boulder Reservoir Infrastructure Improvements: This project is complete, including improving the entry gate, roadway, parking lot, utility infrastructure, and grounds and landscape. The new Gateway Enhancement project at the main Reservoir entrance at 51st Street is complete and provides 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: This project is complete, including 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. A new raw-water irrigation system has been installed to improve water conservation and efficiency.



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

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. New shelters and a restroom at Harlow Platts Park are scheduled to be complete later in 2015.
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, North Boulder Park, and Crestview 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.
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. A new interactive kiosk for public use on the Pearl Street Mall is also complete. Streetscape improvements on West Pearl Street from 11th to 7th Streets are under construction, with an estimated completion date of summer 2015.
7. Main Library Renovation: Includes extensive renovations that were primarily funded by the Capital Improvement Bond, such as: renovating and relocating the children's area; creating a new, larger Teen Space and a "maker" space; relocating and renovating the fiction, music and movies area; replacing outdated electrical and data distribution systems; repairing clerestory windows; improving Americans with Disability Act accessibility; replacing worn carpeting; providing facilities for café service on the library bridge; and installing additional HVAC (heating, ventilation, and air conditioning) equipment to improve building cooling. The project is complete and throughout the renovation the library remained open to the public.
8. Replace Financial and Human Resources Software: Includes replacing the outdated financial, human resources and payroll systems with an integrated, more modern and comprehensive software solution. The project has several phases and the first phase of implementing the finance system is complete. The remaining phases are expected to be completed later in 2015 and 2016.
9. Major Business Software Replacement: Includes replacing and augmenting major business software, such as website/eGov, records management, and permit systems. The redesign of the city's website is complete, including a web-based Constituent Relationship Management (CRM) system. It is anticipated that the citywide records management and document imaging software will be completed in summer 2015 and the city's permit management system in summer 2017.
10. Facility Electrical, Plumbing, HVAC and Elevator Replacements: Includes infrastructure overdue for 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 2015.

11. Facility Parking Lot Repair: This project is complete, including repairs for some of the city's asphalt parking areas, such as downtown facilities, fire stations, and Spruce Pool.
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 later in 2015.
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, and South Boulder Recreation Center. In addition, by using primarily bond funds, a new building is being completed for ADA-accessible restrooms, along with extensive site and infrastructure improvements at Chautauqua Park, completion date is mid-July 2015.
14. Fire Station #8: Previously referred to as the Wildland Fire Station, this station consolidates the operations of the Boulder Fire-Rescue Department's Wildland Fire personnel into one new 10,500 square-foot facility on the site of the existing Fire Training Center, east of the Boulder Reservoir property. The facility is constructed and provides accommodations for a full-time crew of Wildland Fire Specialists, and storage and maintenance of vehicles and support equipment for the wildland fire management.
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 63rd Street Bridge is complete and the Foothills irrigation system replacement between Colorado and US 36 is complete. All of the traffic signal lighting (red, yellow and green) has been replaced with LED displays. The substandard sign installations have started with completion anticipated later this year.
16. Arterial Road Reconstruction: Arapahoe is the arterial in highest need of reconstruction. The project has been completed and improvements primarily include a reconstruction of the street with concrete as well as storm sewer and other underground utility improvements, sidewalk, bus stop, landscaping and urban design improvements. In addition, an extension of the existing student-drop off area and multi-use path on the south side of Arapahoe Avenue

along the Boulder High School property was also constructed as part of this work.

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 later in 2015.
20. Transportation Transit System Enhancements: Includes two projects, the largest of which is the 14th and Walnut Street Transit Center Improvements, including bus, pedestrian, and bicycle access improvements. The second transit project provides additional money for transit stop improvements throughout the city. Both projects are complete.
21. Transportation New Multi-Use Path Connections: Includes various multi-use path connections throughout the city, such as constructing a multi-use path on 28th Street from Arapahoe to Goose Creek, and constructing a new multi-use path at 22nd Street east of Naropa, from Arapahoe to the Boulder Creek Path. All projects are complete.
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 Arapahoe 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. All projects are complete except the South Boulder Road/Manhattan intersection which will be completed later in 2015.
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. Projects are complete.
25. Police Equipment: Includes upgrading the records management system and adding more in-car video systems to the patrol fleet and personal video systems. Projects are complete.
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 3-1 shows the annual expenditure plan for each project for 2011 through 2015.

Next Steps

Council will continue to be updated on the capital improvement bond progress through memos or heads ups, as appropriate, based on specific milestones.

In addition, public updates will be announced through press releases, social media and other commemorative events as some of the key projects 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 3-1: 2011-2015 Spend Plan

CAPITAL IMPROVEMENT BOND

	Total Amount	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Projected
Arterial Road Reconstruction	$ 5,280,000	$ -	$ 292,179	$ 1,879,397	$ 2,682,984	$ 425,441
Boulder Reservoir Infrastructure Improvements	3,300,915	-	794,813	1,312,067	1,110,253	83,782
Columbia Cemetery Upgrades and Enhancements	637,000	-	87,280	237,741	151,387	160,592
Downtown Commercial District Improvements	2,935,000	-	79,089	979,599	1,408,417	467,894
Existing Park and Recreation Facility Renovations	4,215,035	-	1,605,009	874,086	956,841	779,099
Facility ADA Compliance	565,000	-	50,425	49,486	106,546	358,543
Facility Electrical, Plumbing, HVAC and Elevator Rep.	1,580,960	-	466,364	1,008,990	64,400	41,206
Facility Outdoor Lighting	71,688	-	8,611	48,196	13,744	1,136
Facility Parking Lot Repair	413,312	-	19,754	271,706	92,836	29,016
Main Library Renovations	3,200,000	-	12,481	289,353	2,202,879	695,288
Major Business Software Replacement	821,600	-	25,000	451,008	249,524	96,068
New Wildland Fire Station	3,077,718	-	20,327	182,000	2,043,872	831,519
Park Shelter Replacements and Improvements	924,965	-	355,535	239,885	41,018	288,527
Police Equipment	253,290	-	71,224	63,668	96,412	21,986
Police Equipment Upgrades and Replacement	1,020,050	-	369,938	451,718	-	198,395
Replace Financial and Human Resources Software	4,318,693	-	259,170	763,326	1,368,989	1,927,208
Replace Substandard Bridges, Structures, Signs & Sys.	4,146,977	-	475,563	1,130,808	1,786,381	754,226
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	5,120	106,234	114,836	73,810	-
Transportation Boulder Junction Improvements	5,813,023	-	855,192	2,083,198	2,594,511	280,123
Transportation Intersection Improvements	500,000	-	13,454	8,205	142,921	335,419
Transportation New Multi Use Path connections	2,000,000	5,229	354,468	235,076	1,353,185	52,042
Transportation Pedestrian Enhancements	850,000	5,658	285,531	304,954	253,857	-
Transportation Transit System Enhancements	608,000	-	127,041	232,653	248,306	-
Total	**$ 54,614,974**	**$ 16,006**	**$ 9,034,496**	**$ 15,950,138**	**$ 21,786,822**	**$ 7,827,512**

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City of Boulder

SPECIAL HIGHLIGHT ON SEPTEMBER 2013 FLOOD

2016-2021 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 were restored by the end of 2013. 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 resilience of the Boulder community.

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

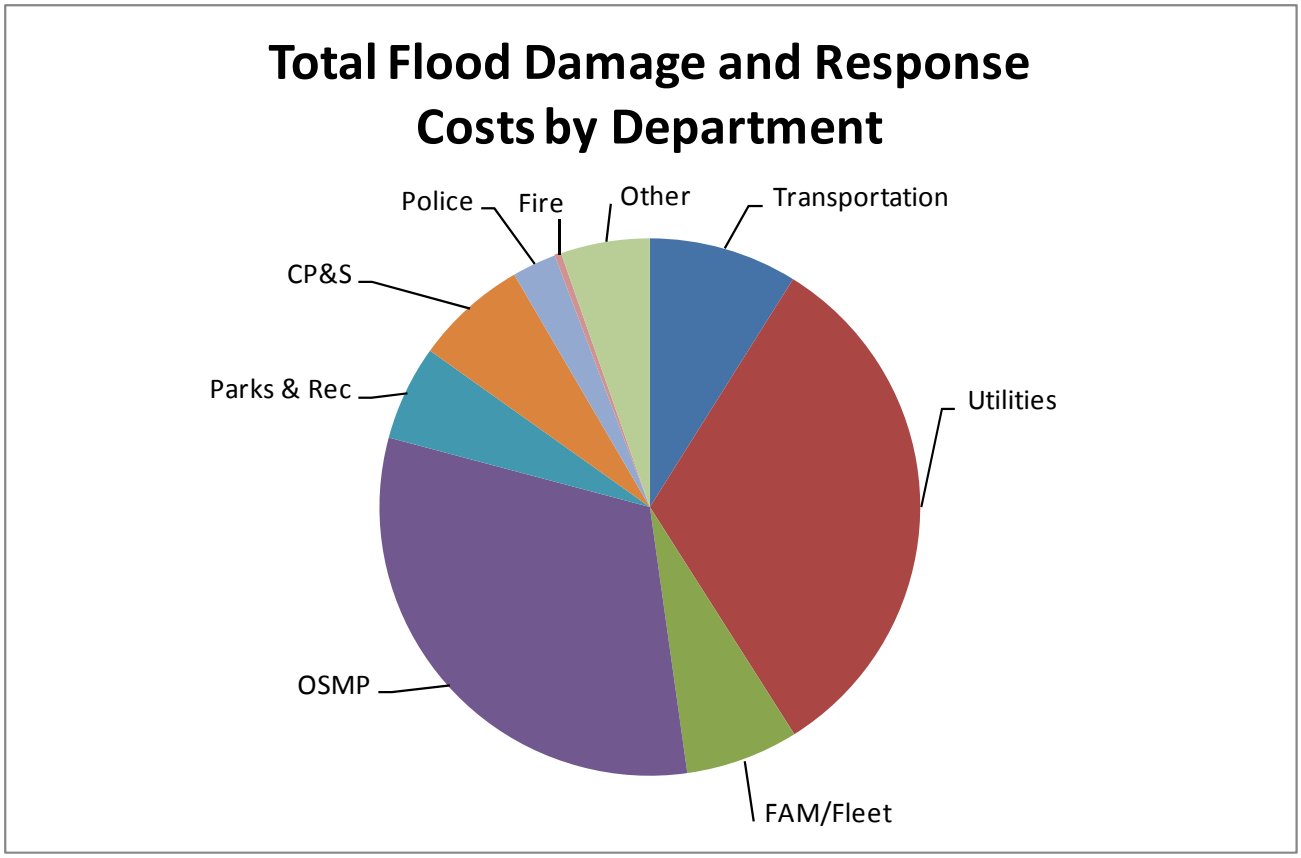
1. Help People Get Assistance
2. Restore and Enhance Our Infrastructure
3. Assist Business Recovery
4. Pursue and Focus Resources to Support Recovery Efforts
5. Learn Together and Plan for the Future

City-wide flood recovery costs are currently estimated at approximately $28 million dollars, although that number may change as repairs occur. This includes damage to more than:

- 50 city buildings/facilities; water, sewer, and stormwater infrastructure;
- 3 treatment facilities;
- 46 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 321 flood related capital projects. As of July 31, 2015, the city is 78 percent complete with flood recovery projects.

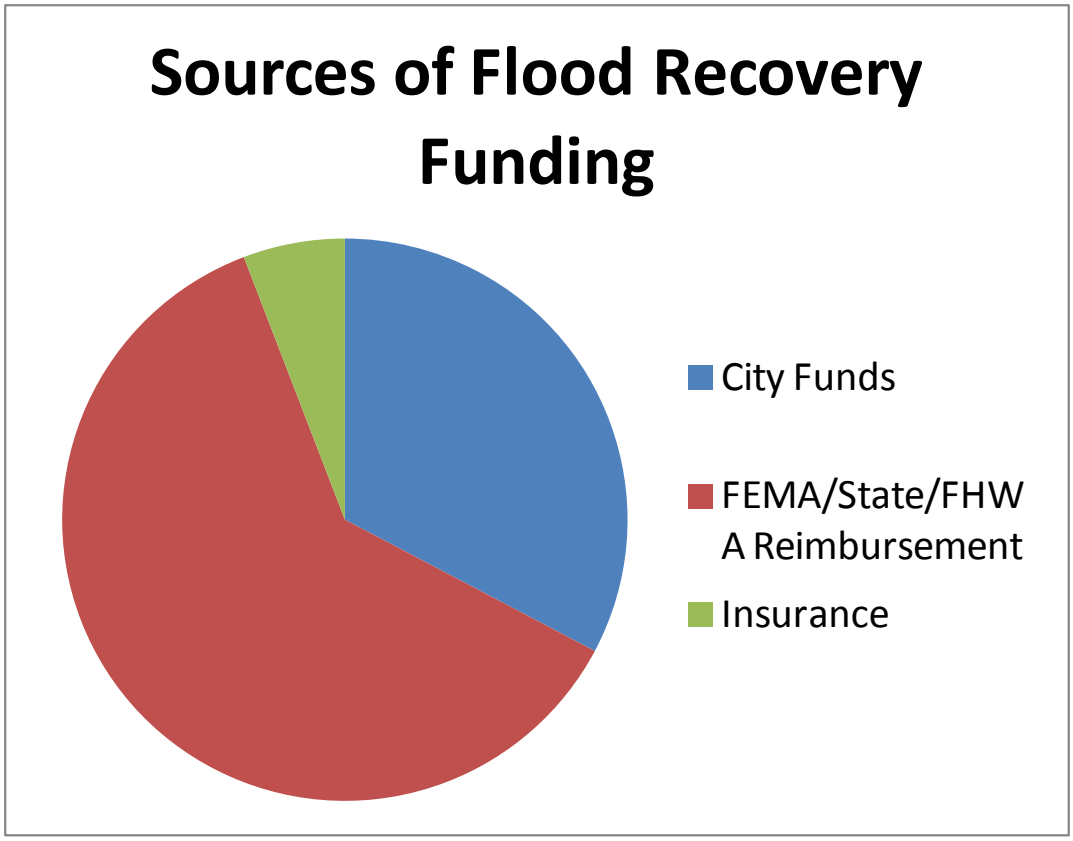
Figure 4-1: Flood Costs by Department



The city is utilizing all available resources in the recovery and reimbursement process including city insurance policies, FEMA assistance, and other federal and State agencies (e.g.: Federal Highway Administration, Housing and Urban Development, 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 the FEMA deadline, which varies by type of project. Currently, all FEMA related work is projected to be complete by September 30, 2017. As of July 1, 2015, the expected federal/state contribution to flood recovery is $17.3 million. To date, the city has received federal and state reimbursements of $5.3 million. The city has also received over $4 million in non-FEMA grant awards to assist the city and its residents with flood recovery and resilience activities.

Figure 4-2: Sources of Funding



Additional detail of the impacts of the flood is described in department overviews, 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.

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City of Boulder

SPECIAL HIGHLIGHT ON COMMUNITY, CULTURE AND SAFETY PROJECT

2016-2021 Capital Improvement Program

Introduction

The Community, Culture and Safety (CCS) project is Boulder's first citywide, large-scale, "pay as you go" capital improvement project funded by a special sales and use tax increase. Implementation of this multi-departmental, multiyear effort is currently underway, and is consistent with 2014 voter approval, City Council support, and steering committee recommendation.

Overview of Community, Culture and Safety Capital Improvement Project

In November 2014, Boulder voters approved the Community, Culture and Safety tax, a three-year 0.3 percent sales and use tax increase. The ballot language projected that the revenue from this temporary tax increase will yield $27.6 million for specific projects to improve community spaces, bolster cultural projects and organizations, and enhance safety.

At the request of City Council, the city manager prepared a recommendation of city projects to be included in a proposed ballot item, as well as potential options for percentage increases in sales and use tax and the number of years that the increase would be effective. The City Council supported the recommendations on Aug. 19, 2014, and Boulder voters subsequently approved the recommendations through Ballot Measure 2A.

The ballot language establishes a sales and use tax increase of 0.3 percent for the period of Jan. 1, 2015 to Dec. 31, 2017, and that all revenues collected be used to fund the capital improvement projects listed below.

- Up to $8.7 million for capital improvements for the Boulder Civic Area (generally bounded by Canyon Boulevard, Arapahoe Avenue, 9th Street and 13th Street) to create a more vibrant and active urban park and civic area, including recreation amenities, community spaces, safety improvements, and connections and access improvements to and through the Civic Area.
- Up to $3.27 million for capital improvements in the University Hill commercial district and high-density residential areas, including lighting, irrigation and to improve public streets.
- Up to $5.13 million for capital improvements to the Boulder Creek Path and its environs, generally between 3rd and 17th streets, including lighting and path improvements to increase

safety.

- Up to $600,000 for public art and to preserve or restore the existing public art collection.
- Up to $3.85 million to improve the Dairy Center for the Arts property.
- Up to $1.5 million for improvements to Chautauqua Park and its environs for access, pedestrian, safety, and lighting improvements.
- Up to $4 million for capital improvements at the Museum of Boulder, provided that the Museum of Boulder has first raised and dedicated an equal amount in compliance with the terms, conditions, and timing approved by the City Council.
- Any remaining funds are to be appropriated by the Boulder City Council to fund Capital Improvement Program (CIP) projects.

The city is implementing 13 projects throughout the community that are funded by the sales and use tax increase. The city entered into funding agreements with the Dairy Center for the Arts in May 2015 and the museum of Boulder in June 2015. The first project, University Hill irrigation and tree improvements, is expected to begin in late summer 2015. The Community, Culture and Safety project website allows the community to track the progress of implementation of the CCS projects.

Project Highlights

Thirteen projects will be implemented with the sales and use tax funds. The individual projects are briefly described on the next two pages, and details related to each project can be found on the CCS website.

Table 5-1: Community, Culture and Safety Project Highlights

University Hill		
Pedestrian Lighting	Existing street lights will be replaced to provide consistent, full-spectrum "white" light in corridors along 11th Street, College Avenue, 12th Street, 13th Street, and 18th Street.	$2 million
Event Street	Creation of a street designed for vehicles, pedestrians, and bicycles, as well as the ability to easily close the portion of Pennsylvania Avenue between the alley to the west and 13th Street to the east for events.	$750,000
Street Trees Improvements	Design and install an irrigation system for the trees along the sidewalk. Replace failing trees and install city-standard tree grates and guards.	$520,000
Civic Area		
Creek at the Core	Enhancements to areas north and south of Boulder Creek, including infrastructure to link the main library and creek, playgrounds and nature play areas along both sides of the creek, and improvements in the area near the Gilbert White Memorial.	$4.42 million
Community Spaces	Improvements include the main library café/courtyard, the north library plaza, the north municipal lawn, the sister cities plaza, and areas adjacent to the Boulder Farmers' Market.	$3.07 million
Connectivity and Access	This includes improvements such as: creating gateways (possibly via art) and related wayfinding; pathway enhancements; signage; and improved lighting across the site.	$1.2 million
Boulder Creek		
Path Lighting	Design and construction of lighting along five segments of the Boulder Creek Path that will provide adequate and appropriate light levels for nighttime visibility and safety by using fully controlled luminaries.	$1.04 million
Path Improvements	Design and construction along four segments of Boulder Creek Path that will add a generally-separated pedestrian path to allow a separation of bicycle and pedestrian traffic along the corridor.	$885,000
Arapahoe Avenue and 13th Street Underpass	Design and construction to renovate the pedestrian and bicycle underpass at the Boulder Creek Path, between Boulder Creek and 13th Street.	$2.5 million
Eben G. Fine Park Stream Bank Restoration	Stream bank stabilization, erosion protection, habitat restoration, and recreation enhancements within Eben G. Fine Park between the northern sidewalk and Boulder Creek.	$700,000

Table 5-1: Community, Culture and Safety Project Highlights (Cont.)

Public Art		
Art Projects	Public art projects for the Civic Area, University Hill, Boulder Junction garage east face, north Boulder, a temporary neighborhood series, and additional art maintenance projects.	$600,000
Chautauqua		
Lighting Phase 1	Install pedestrian lighting between the employee/musician parking area and the Baseline Road bus stop. Lighting controls will ensure that lighting is lowered when pedestrians are not present, while maintaining the lights' visibility with minimal energy.	$250,000
Pedestrian Safety Access and Lighting	Improve access and pedestrian safety along Baseline Road via new sidewalks, realigned parking, enhanced pedestrian crossing treatments, and related safety enhancements like lighting and wayfinding signs.	$1.25 million
Dairy Center		
Theatre Improvements	Add soundproofing, dressing rooms, reconfigure one theater into a black box theater, expand and modernize the building's lobby and façade, and modify an outdoor deck area as a special events space.	$3.85 million
Museum of Boulder		
Museum Improvements	Convert the building into an expanded museum that will accommodate larger displays, Smithsonian-class traveling exhibits, science and technology exhibits, as well as enhanced programming and space for children.	$4 million

Implementation

To ensure that the city meets the spending and timing goals of the ballot measure, the city has collected spending plans for each project and is closely monitoring construction progress. Table 5-2 shows the annual expenditure plan for each project for 2015 through 2018.

Table 5-2: 2015 – 2018 Spend Plan for Community, Culture and Safety Projects

	Project Budget	2015 Project Expenses	2016 Project Expenses	2017 Project Expenses	2018 Project Expenses
Hill Residential Pedestrian Lighting	$2,000,000	$138,000	$1,862,000	–	–
Hill Commercial District Event Street	$750,000	$60,000	$690,000	–	–
Hill Commercial District Irrigation and Street Tree Improvements	$520,000	$520,000	–	–	–
University Hill Total	**$3,270,000**	**$718,000**	**$2,552,000**	**–**	**–**
Civic Area	**$8,700,000**	**$1,631,250**	**$2,689,750**	**$4,379,000**	**–**
Boulder Creek Path Lighting	$1,040,000	$60,320	$347,680	$632,000	–
Boulder Creek Path Improvements	$885,000	$115,000	$230,000	$540,000	–
Boulder Creek Arapahoe Avenue/13th Street Underpass	$2,500,000	$135,000	$210,000	$655,000	$1,500,000
Boulder Creek Eben Fine Park Stream Bank Restoration	$700,000	$340,000	$360,000	–	–
Boulder Creek Total	**$5,125,000**	**$650,320**	**1,147,680**	**$1,827,000**	**$1,500,000**
Public Art	**$600,000**	**$410,000**	**$190,000**	**–**	**–**
Chautauqua Phase 1	$250,000	$200,000	$50,000	–	–
Chautauqua Pedestrian Safety Access and Lighting	$1,250,000	$90,000	$660,000	$500,000	–
Chautauqua Total	**$1,500,000**	**$290,000**	**$710,000**	**$500,000**	–
Dairy Center for the Arts	$3,850,000	$2,300,000	$1,550,000	–	–
Museum of Boulder	$4,000,000	$2,522,000	$1,203,000	$275,000	–
Contingency	$555,000	$175,000	$205,000	$145,000	$30,000
TOTAL	**$27,600,000**	**$8,696,570**	**$10,247,430**	**$7,126,000**	**$1,530,000**

Next Steps

City Council will be updated on the CCS project progress through periodic updates as part of Information Packet items and council Heads Up announcements. Public updates will be announced through press releases, social media and commemorative events as some of the key projects break ground or are completed. Information on projects that have traffic impacts will be provided to the public and media through the www.BoulderConeZones.net map and other outreach materials. Project status updates are available on the CCS website.

Future Capital Improvement Program (CIP) documents will continue to include a section about the CCS projects until they are completed.

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City of Boulder

SPECIAL HIGHLIGHT ON PAVEMENT MANAGEMENT PROGRAM

2016-2021 Capital Improvement Program

Introduction

The City of Boulder's budget priorities for transportation funding are the safety and preservation of the transportation system, including maintaining all streets in a good and safe condition. The Transportation Division has established a Pavement Management Program (PMP) for Boulder's 300-mile street system, which includes inspecting and rating all streets on a three-year interval to maintain awareness of existing conditions and guide where pavement repairs will be made in future years.

Funding

Between 2011 and 2013, Boulder voters approved additional funding for transportation through the Capital Improvement Bond and two sales tax revenue ballot initiatives. Previous funding levels were not adequate to maintain acceptable street pavement conditions.

In 2011, Boulder voters approved a Capital Improvement Bond which provided $12.5 million to fund street resurfacing and reconstruction throughout the city. The Bond fund allowed the city to accelerate street pavement maintenance from 2012 to 2014. In November, 2013, Boulder voters' passed two ballot measures which dedicated additional sales tax revenues for transportation maintenance and operations through 2029. This additional sales tax included approximately $1.6 million annually for street pavement maintenance, and $800,000 per year for major capital construction and maintenance (which address operational and/or functional deficiencies with existing multimodal facilities).

The increased transportation funding levels will help the city continue to maintain and improve street pavement conditions throughout Boulder to meet the goals of the city's PMP. The Transportation Division is committed to using cost effective treatments to prevent street conditions from deteriorating and requiring more costly maintenance.

Pavement Management Program

The Transportation Division developed its PMP via creation of a database of the city's streets with an Overall Condition Index (OCI) rating system.

Overall Conditions Index

The Overall Conditions Index (OCI) is a numerical rating system commonly used by transportation agencies to indicate the general condition of pavement infrastructure. The OCI was developed by the US Army Corps of Engineers and is based on a visual survey of the number and types of distresses in a pavement. OCI ratings range from 0 to 100, with 100 representing the best possible conditions.

Table 6-1: Overall Conditions Index

Pavement Condition Index	Description	Relative Remaining Life	Definition
90 – 100	Excellent	15 to 25 Years	Like new condition – little to no maintenance required
80 – 90	Very Good	12 to 20 Years	Routine maintenance such as patching, crack sealing with surface treatments such as rubber chip seals and micro surfacing
65 – 80	Good	10 to 15 Years	Seal coating required, thin overlay or overlay with more surface preparation
50 – 65	Fair	7 to 12 Years	Thicker overlays required, or a thinner overlay with more surface replacement or base reconstruction possible
30 – 50	Poor	5 to 10 Years	Sections will require very thick overlays, surface replacement, base reconstruction and possible sub grade stabilization
0 – 30	Failed & Very Poor	0 to 5 Years	Failed or high percentage of full reconstruction

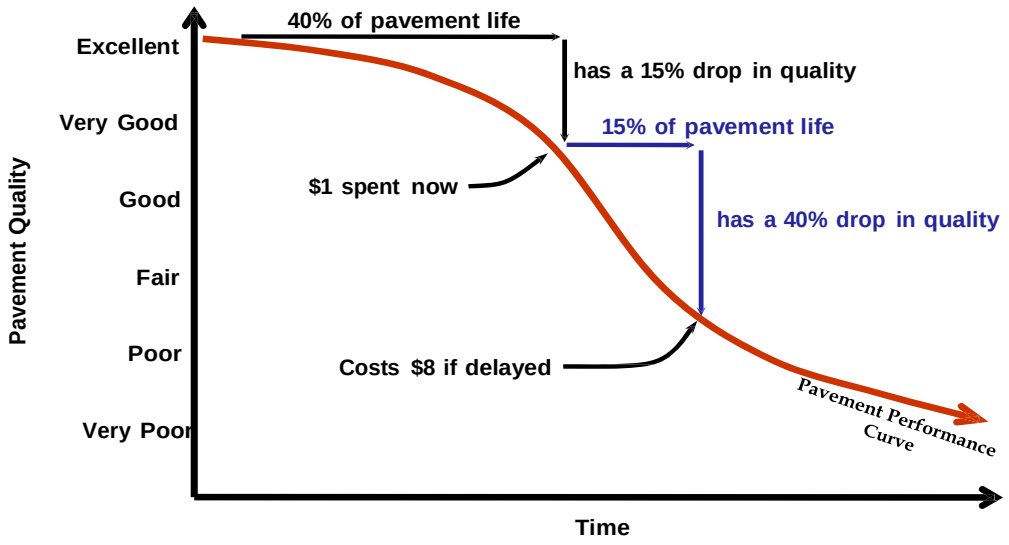
The city's goal is to maintain an average OCI rating of 75 to 80 for all streets in Boulder, which is consistent with other communities in the Denver metro area. The average OCI rating for City of Boulder roadways is currently 76.5.

PMP Strategy

The goal of a PMP is to identify the optimal level of funding, timing, and renewal strategies that will keep the roadway network at or above a "Good" OCI rating. The end result is that the best strategy may be to defer a costly reconstruction on one street in order to complete less expensive treatments on other streets to minimize its deterioration into a more costly type of treatment, such as reconstruction.

Streets that need reconstruction may stay in that state for a longer period of time while other streets are moving down the deterioration curve. An early and inexpensive treatment may prevent streets from getting to the point of needing the next level of costly treatment.

Figure 6-1 – Pavement Deterioration and Life Cycle Costs



As shown in Figure 6-1, streets that are repaired when they are in a good condition will cost less over their lifetime than streets that are allowed to deteriorate to a poor condition. Without an adequate, routine PMP, streets require more frequent reconstruction, thereby costing millions of extra dollars.

Comparative costs for the most typical treatments are shown below.

Table 6-2: Comparative Costs

Treatment Type	Approximate Cost
Crack Seal	$1/yd²
Chip Seal	$4 – $5/yd²
Overlay	$15 – $17/yd²
Reconstruction	$30 – $35/yd²

Existing Conditions

Boulder's street system is classified by road type (local, collector, or arterial) with local streets comprising 71%, collector streets comprising 12%, and arterial streets comprising 17%, of the City's street system.

Currently, roughly half of the City's streets have an OCI rating in Very Good and Excellent ranges, with nearly 80% of the street system rated "Good" or better. A summary of the condition of streets by street classification is provided below.

Table 6-3: Condition of Streets

	Excellent (90 – 100)	Very Good (80 – 90)	Good (65-80)	Fair (50-65)	Very Poor (< 50)
Local %	26%	24%	28%	13%	10%
Collector %	23%	25%	34%	12%	6%
Arterial %	32%	24%	30%	8%	5%

Peer Comparison

A comparison of selected metropolitan regions' OCI ratings by street classification was conducted in March, 2015. However, all cities in this study did not use the same OCI scale for determining ratings. For example, an Excellent OCI rating is 86-100 in Vancouver, British Columbia, and 80 – 100 in Denver, Colorado; similar variations were found for other OCI ratings. Therefore, though Boulder ranked within the top third for arterial and collector pavement with OCI ratings of Good or Excellent, the analysis was not directly equivalent.

Denver

To address this, a normalized comparison of Boulder and Denver OCI ratings by street

classification was undertaken. This exercise found Boulder's weighted average OCI rating exceeded Denver for both Arterials and Collector streets, and was comparable for Local streets.

Table 6-4: Weighted Average OCI Comparison

Weighted Average OCI	Boulder	Denver
Local	75.5	73
Collectors	77	66
Arterials	80	62

PMP Improvements

Approximately 35 miles of streets were resurfaced with asphalt and an additional 22 miles of streets received a chip seal surface treatment from 2012-2014 due to the Capital Improvement Bond funding and the first year of the transportation dedicated sales tax in 2014. As a comparison, approximately 22 miles of streets were resurfaced and 11 miles of streets were chip sealed in the previous 3 year period from 2009-2011. Approximately 8.3 miles of street resurfacing, 7.5 miles of chip seal, and 0.5 miles of street reconstruction are planned for 2015.

Supplementary community benefits of the PMP include installation of curb access ramps that meet Americans with Disabilities Act (ADA) guidelines; greater inter-departmental coordination including coordinating projects with the sidewalk improvement program, and with water and sanitary sewer and street drainage projects; and greater external coordination, such as with Xcel Energy as they conduct gas line replacements.

Conclusions

The additional transportation funding provided by the 2011 Bond and 2013 sales tax ballot initiatives have supported progress towards meeting the City's PMP goals. However, it is still early in the implementation of the PMP and much work remains to be completed. Additionally, there are a large number of potholes, likely exasperated by a hard 2014/2015 winter season, that require repair. Potential future adjustments in funding and practices may be implemented based on results of the next several years.

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City of Boulder

DOWNTOWN/UNIVERSITY HILL MANAGEMENT DIVISION & PARKING SERVICES

2016-2021 Capital Improvement Program

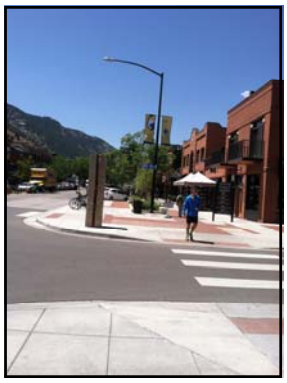
Overview of Department Mission

Downtown and University Hill Management/Parking Services (DUHMD/PS) serves the downtown, University Hill and affected communities by providing quality program, parking, enforcement, maintenance and alternative modes services through the highest level of customer service, efficient management and effective problem solving.

Funding Overview

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) funds – 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.



West End Streetscape at Pearl and 10th Street.

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

The Community, Culture, & Safety Tax supports a number of projects managed by DUHMD and are indicated with an asterisk (*).

Current Focus for Capital Planning and Projects in 2016

- CAGID garage elevator repairs, internal painting and updating and/or replacement of the

garage lot attendant booths

- Downtown amenities repairs and replacement on the Pearl Street Mall and along 15th Street south of Canyon
- The construction phase of University Hill Community, Culture & Safety projects: commercial street tree irrigation, Pennsylvania Event Street and the residential corridor lighting*
- Construction of shared parking facility between CAGID/Trinity Commons of a 54 space CAGID garage.

Highlights

Projects expected to be completed in 2015

- CAGID Garage Major Maintenance: The 2015 projects included epoxy deck coating on the second level at 1400 Walnut garages; elevator modernization at 1400 Walnut; stair replacement at 1100 Walnut and 1400 Walnut; and CAGID parking garage gate access and revenue control equipment and supporting technology replacement in all five downtown garages. A consultant will be hired to develop a CAGID Asset Maintenance Plan to plan for the long term capital improvements
- Downtown/Pearl Street Mall Improvements and Amenities Replacement – In collaboration with the Parks and Recreation Department, many projects were completed in 2015 including selected wooden benches repairs, replacement of the mall planter pots, refurbishment of the mall bollards, 1400 block play area surface replacement, sub grade sinkhole repairs (location of coal chutes), repainting all Pearl Street Mall light poles, replacement and repair of wrought iron loop planter fencing
- West End Streetscape Improvement Project – All work associated with the West End Streetscape project on Pearl from 11th to 8th will be completed by the end of July.
- Community, Culture and Safety Tax projects – Design and community outreach phase will be completed for the hill commercial area event street* on Pennsylvania Avenue and the residential corridor lighting. The street tree irrigation project is anticipated for completion by the end of 2015.

Priority Projects for 2016

- CAGID Garage Major Maintenance:
    - Elevator repair and refurbishment of both elevators at 1100 Spruce garage and the 1500 Pearl St garage

- Interior painting of parking garages and updating/replacement of select parking attendant booths
- Downtown/Pearl Street Mall Improvements and Amenities Replacement:
  - Maintenance and repairs of the pedestrian light fixtures and banner arms
  - Trash can replacement
  - Phase two of the wooden bench slat replacements
  - 15th Street banner pole repairs and replacement
- Community, Culture and Safety Tax projects
  - Construction phase of the hill commercial area event street on Pennsylvania Avenue
  - Hill street tree irrigation and the residential corridor lighting
- Trinity Commons Partnership – Partnership with Trinity Commons and CAGID for the construction of a project that will provide affordable senior housing, a church fellowship hall, and a CAGID parking garage to serve downtown.

Highlights of 2017 – 2021 Projects

- CAGID Garage Major Maintenance – Projects to be covered include major maintenance of the 1000 Walnut drive lane, and continued epoxy coatings and structural concrete repairs. Also to be included will be the planned projects from the 2015 CAGID Asset Maintenance Plan
- Downtown/Pearl Street Mall Improvements and Amenities Replacement – Reserve funds for potential replacement of the pop jet fountain, and shade structure awnings. Ongoing maintenance and replacement of Pearl Street Mall, West Pearl Streetscape and 15th Street Streetscape amenities
- Downtown 14th Street Parking Lots – Reserve funds for repair and replacement of lots
- Community, Culture and Safety Tax projects – Completion of the projects on University Hill and downtown.

Board Action

The Downtown Management Commission (DMC) unanimously approved the following resolution in support of the DUHMD/Parking CIP plan at their July commissioner meeting:

Motion to approve the 2016 recommended expenditures from the Downtown Commercial District Fund.

Guiding Principles and Project Prioritization

CIP Guiding Principles

All proposed projects in the 2016-2021 CIP are consistent with the CIP guiding principles. All projects have sufficient funds for ongoing maintenance and operations. All projects in the proposed CIP maintain and improve 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, the garage elevator and the downtown 14th Street Parking Lot replacement provide essential on-going major maintenance and reinvestment in the five parking facilities and three surface lots.

Prioritization

DUHMD/PS has the responsibility to maintain an adequate parking supply in Downtown Boulder and will build or buy assets as available. The division is also responsible for maintaining 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.

CAGID is responsible for providing parking in the district. Partnering with Trinity church is an opportunity to provide this resource. Funds are currently available in fund balance.

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.

Projects not Previously Identified in the CIP

- Elevator repair and refurbishment of all elevators at 1100 Spruce garage and the 1500 Pearl St garage
- Construction of CAGID garage in conjunction with the Trinity Commons construction.

Operation and Maintenance Impacts

The maintenance and replacement projects described in the DUHMD CIP provide essential on-

going major maintenance and reinvestment in the Pearl Street Mall, five parking facilities and three surface lots and are intended to maintain all assets in current condition. With the maintenance and operation improvements programs in place, assets will avoid deferred maintenance. New operating and maintenance funding will be required to maintain the parking garage at Trinity Commons garage when completed.

Deferred, Eliminated, or Changed Projects

The stair replacement at 1100 Walnut and 1400 Walnut was moved from 2014 to 2015. The primary reason for the delay was design and fabrication complications. There were some code concerns to be dealt with prior to design, then fabrication took longer than expected. The project is currently underway and expected to be complete by the end of July, 2015.

The West Pearl Streetscape Improvement project was originally scheduled for completion in the fall of 2014. However, several factors contributed to its completion in 2015. First, the original scope was expanded to include additional block faces for street tree replacement and installation of an irrigation system. Second, the West Pearl businesses requested the construction be suspended during the 2014 holiday season. With the seasonal winter weather, project construction recommenced in March of 2015.

Unfunded Projects and Emerging Needs

The pedestrian scale lighting in the University Hill commercial district is in need of replacement. Installed approximately 20 years ago, the lights are at the end of their projected lifespan. As poles are damaged, the style is no longer available, and other models must be purchased to replace the lights, leaving an inconsistent appearance. Parts, such as banner arms, globes, etc. are no longer available for purchase and must be fabricated. There is not sufficient replacement funding available to replace all the lights. A major capital investment will be required to replace the system. Options for replacement will be considered during the process of the near-term residential pedestrian scale lighting design to evaluate whether similar lighting fixtures would be appropriate within the commercial district. At this time the scope, timeline and potential costs of the project have not yet been determined, and no funding has been identified for the project.

The recommended development of an alley master plan for the historic university hill commercial districts may result in future recommendations for alley improvements.

Table 7-1: 2016-2021 Funding Summary By Department

		Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
DUHMD	Department Total	$ 4,434,765	$ 2,156,565	$ 678,200	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ -
CIP-CAPITAL MAINTENANCE	Subtotal	$ 3,009,000	$ 730,800	$ 678,200	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ -
	Downtown 14th St Prkg Lot	$ 150,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ -
	Downtown Parking Garage	$ 609,000	$ 330,800	$ 278,200	$ -	$ -	$ -	$ -	$ -
	Downtown Parking Garage Major	$ 1,500,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ -
	Downtown Pearl St Mall Amenity	$ 750,000	$ 125,000	$ 125,000	$ 125,000	$ 125,000	$ 125,000	$ 125,000	$ -
CIP-NEW FACILITY/INFRASTRUCTURE	Subtotal	$ 1,425,765	$ 1,425,765	$ -	$ -	$ -	$ -	$ -	$ -
	CAGID Trinity Commons	$ 1,425,765	$ 1,425,765	$ -	$ -	$ -	$ -	$ -	$ -

Mapping

The mapping for CIP projects is now in a GIS-based electronic map accessed here. All the mapable projects proposed for funding in the 2016-2021 are shown. If the icons are clicked, the project name, project number (referenced on the project sheets), department, funding source, and year with initial funding will be shown. For many projects the initial funding is currently showing as 2015 as projects have funding for planning and design before actual construction however, the construction timing may be in the future. Please consult the project sheets in each department section for project descriptions, phasing and funding information. Projects with funding earmarked for citywide or system improvements are not shown on the map. Ongoing refinement of the GIS-based map will result in greater clarity of project information.

Project Name: CAGID Trinity Commons Construction

Project at a Glance

Project Type:	CIP-NEW FACILITY/INFRASTRUCTUR		
Department:	DUHMD	**Subcommunity:**	CENTRAL BOULDER
Project Number:	620CAGTrin	**BVCP Area:**	AREA I
CEAP Required:	No	**CEAP Status:**	

Project Description

Staff was approacehd by Trinity Church leaders to see if CAGID would be interested in partnering with the church in an expansion of the church property. Trinity Church is proposing to add a fellowship hall, 16 unites of affordable senior housing (with a possible expansion) and a below grade parking garage. CAGID was asked to particiipate in the funding to allow a second level of below grade parking that would be owned and managed by CAGID for downtown parking.
A Memorandum of Understanding (MOU) is in the final stages of draft to allow CAGID and Trinity to proceed. If an agreement is reached, CAGID will provide financing from fund balance to pay for a portion of the developement, to include a below grade 54 space parking garage for use by CAGID for long term parking permits. Total cost is estimated to be $3,125,765 which includes $70,000 for a construction consultant.

Project Phasing

Public Process

The proposal was presented at a public hearing to the Downtown Mangement Commisssion and received support. The prosposal was also presented to City Council and received support.

Interdepartmental and Interagency Collaboration

DUHMD/PS staff is working closely with the CAO on the terms and conditions of the MOU and any subsequent agreements; the primary being a condominium agreement. Staff has also contracted with an outside consultant to oversee construction and related documents.

Change From Past CIP

$1.7 million approved in the 2015 budget for Trinity Commons-no CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Downtown Commercial District	$1,700,000	$1,425,765	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$3,125,765**						

Additional Annual Operating and Maintenance

Additional Annual O&M:	25,650	**Funding Source for O&M:**	

Additional Annual O&M Description:

54 spaces x $475 per space for annual O&M

Project Name: Downtown 14th St Prkg Lot Improve

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	DUHMD	**Subcommunity:**	CENTRAL BOULDER
Project Number:	620CAGFLot	**BVCP Area:**	AREA I
CEAP Required:	No	**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 surfaces 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 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.

Project Phasing

Annual transfer to FAM

Public Process

There is no public process

Interdepartmental and Interagency Collaboration

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

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Downtown Commercial District	$25,000	$25,000	$25,000	$25,000	$25,000	$25,000	$25,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$175,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Operating Costs are currently covered in the Downtown Commercial Dis

Project Name: Downtown Parking Garage Elevators

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	DUHMD	**Subcommunity:**	CENTRAL BOULDER
Project Number:	620CAGELEV	**BVCP Area:**	AREA I
CEAP Required:	No	**CEAP Status:**	

Project Description

There are two elevators in both the 1100 Spruce and the 1500 Pearl public parking garages. All four elevators have not been modernized or had any significant overhaul and repairs since installation. Bids were solicited from the elevator maintenance firm currently under contract; Thyssenkrupp. The refurbishment at 1100 Spruce will be completed in 2016 and in 2017 for 1500 Pearl.
These improvements will be funded with fund balance from the Downtown Commercial District Fund.

Project Phasing

1100 Spruce garage- $330,800
1500 Pearl garage- $278,200

Public Process

No public process

Interdepartmental and Interagency Collaboration

There is no collaboration with other departments on the garage elevator repairs

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Downtown Commercial District	$0	$330,800	$278,200	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$609,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:	$0	**Funding Source for O&M:**	

Additional Annual O&M Description:

No additional O&M required

Project Name: Downtown Parking Garage Major Maint

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	DUHMD	**Subcommunity:**	CENTRAL BOULDER
Project Number:	620CAGMain	**BVCP Area:**	AREA I
CEAP Required:	No	**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 completed in 2015 include:
-Stair replacement at 1100 Walnut and 1400 Walnut. -Elevator refurbishment at 1400 Walnut,

Projects planned for 2016 include:
-Interior painting of all parking garages and updating/replacemnt of the parking lot attendant booths.

Project Phasing

This project is for an ongoing funding program. All $250,000 is spent on rotating projects at the 5 downtown garages each year.

Public Process

No public process

Interdepartmental and Interagency Collaboration

There is no collaboration with other departments on the garage major maintenance

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Downtown Commercial District	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$1,750,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Operating costs are covered in Downtown Commercial District Fund

Project Name: Downtown Pearl St Mall Amenity Repl

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	DUHMD	**Subcommunity:**	CENTRAL BOULDER
Project Number:	620CAGFMAL	**BVCP Area:**	AREA I
CEAP Required:	No	**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 2016-2021, in addiiton to accumulating funds for amenities replacement, other projects will be identified as needed.

2016 projects are projected to include:
o Maintenance and repairs of the pedestrian light fixtures and banner arms; trash can replacement; phase two of the wooden bench slat replacements, and 15th Street banner pole repairs and replacement.
o Continued reserve funding for Pearl Street Mall amenity replacements including the pop jet fountain and 1300 block awnings.

Project Phasing

Annual transfer to FAM

Public Process

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 Improevment 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 exisiting amenity and streetscape improvements on the Pearl St 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 areeas for future streetscape and infratstructure improvements. FAM prepared a detailed replacement schedule spanning 10 years.

Interdepartmental and Interagency Collaboration

DUHMD/PS staff is working with staff from FAM, Transportation and Parks and Recreation to coordinate the downtown capital amenities replacemnt plan.

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Downtown Commercial District	$125,000	$125,000	$125,000	$125,000	$125,000	$125,000	$125,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$875,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Operating costs are covered in the Downtown Commercial and P&R Funds

FACILITIES AND ASSET MANAGEMENT

Overview of Department Mission

The Facilities and Asset Management Division provides leadership and expertise to promote the efficient and effective use of resources and space, and coordinate or directly manage the maintenance and replacement of city facilities and equipment.

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, 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, 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 8-1: Capital Development Fund Balance – 2014 Year-End

Account	DET Balance	Impact Fee Balance
Library	$646,490	$522,613
Municipal Facilities	$411,713	$391,491
HHS	$193,773	$177,040
Police Department	$89,999	$415,114
Fire Department	$80,494	$466,464
Parks and Recreation	N/A	$2,460,912
Total	**$1,422,470**	**$4,433,633**

Note:

The DET balances above reflect the first of five payments that will be made to repay the loan 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. The final loan payment will occur in 2018.

Facility Renovation and Replacement Fund

The Facility Renovation and Replacement Fund (FR&R) accounts for major maintenance (projects >$3,000), 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.

Capital Improvement Bond Fund

Funding from the Capital Improvement Bond (CIB) Fund supported a number of projects managed by FAM. CIB funding is indicated by the following symbol:

Current Focus for Capital Planning and Projects in 2016

The core of FAM's operation is maintaining city facilities so that residents and employees have a safe and pleasant experience in the various facilities. Focus areas for 2016 include:

- Major Maintenance and Repairs of multiple facilities across the city. The facilities include fire stations, aquatic facilities, and recreation centers
- Space Needs Analysis to be able to plan and address current and future office space needs for city operations

- Energy Efficient projects to continue to reduce the Green House Gas (GHG) emissions produced by city operations.

Highlights

Projects Expected to be Completed in 2015

- Main Library Renovation Project: Included CIB funding for children and teen areas and infrastructure repairs for electrical, carpeting, HVAC upgrades and windows
- New Wildland Fire Facility / Station 8: A CIB project, the new station will provide for year-round wildland fire fighting capability

Inside of the Library post renovation.

- Library HVAC Controls Ugrade: Replace obsolete pneumatic controls and improve equipment reliability. Upgrading the controls will allow the HVAC system to be centrally controlled and improve the energy efficiency of the facilities
- 13th Street Plaza: the approved Voluntary Clean-Up Program has been partially completed and a temporary plaza re-constructed. The city is negotiating with the other responsible party for cost reimbursement and remaining clean-up
- Renewable Electric Vehicle Charging Systems: Install electric vehicle chargers for workplace charging connected to an existing solar PV and battery storage system in the downtown civic area.

Priority Projects for 2016

- Upgrade EV Chargers and Battery Storage System: provide more opportunities for electric vehicle workplace charging for city employees to lower GHG emissions from commuting
- Miscellaneous Space and Analysis: New project added to support space needs facility studies in support of approved and updated master plans
- Fire Stations Major Maintenance: New project added to address maintenance needs that have developed over time due to the wear and tear of a buildings that are used 24 hours a day, 365 days per year. The majority of the focus for 2016 will be in fire stations four, five, and six
- Aquatics Facilities Maintenance: New project to address maintenance needs that were identified through the Aquatics Feasibility Plan completed by the Parks and Recreation department. The 2016 focus will be at the North Boulder Recreation Center
- East Boulder Community Center Pool Air Handlers: Replace pool air handlers that are beyond

their useful life.

Highlights of 2017–2021 Projects

- Fire Stations Major Maintenance: continued major repairs and maintenance scheduled at various fire stations. The total budget for fire station maintenance is approximately $693,000
- Recreation Centers Major Maintenance: This project will fund major maintenance and renovations projects at the different recreation facilities. The specific projects will be identified once the Recreation Center Study is completed in the fall of 2015. Approximately $1,000,000 is proposed for funding by FAM
- Martin Park and North Boulder Park, Park Shelter Repairs: Upgrade electrical, plumbing and renew protective coatings
- Miscellaneous Facility Maintenance: Multiple major maintenance projects under $50,000 programmed annually such as roof evaluations, pavement repairs, HVAC upgrades and exterior protective coatings. This average budget is approximately $400,000 a year, with funding in the current CIP period totaling $2,030,000.

Guiding Principles and Project Prioritization

CIP Guiding Principles

The proposed 2016 – 2021 CIP is consistent with the CIP Guiding Principles. The primary focus of this capital investment is to sustain and improve maintenance of existing assets. 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

Projects may also be identified in department master plans or studies, such as the Civic Area Plan, Yards Master Plan, Police Space Study and Fire Response Mapping.

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 reprioritized, especially to address an immediate health and safety need.

Table 8-2: 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."

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

FR&R projects are identified by FAM throughout the year as facilities are serviced and inspected. Even if projects are not previously identified in a Master Plan, when project needs are identified through this process, they are prioritized as noted above.

Projects not Previously Identified in the CIP

- Aquatics Facilities Major Maintenance
- Fire Stations Major Maintenance
- Recreation Centers Major Maintenance
- Miscellaneous Space Needs and Analysis
- Upgrade Electric Vehicle Chargers
- Radio System Analysis

Operation and Maintenance Impacts

Since the proposed FAM 2016-2021 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 still funded to a level at which the backlog continues 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. Ongoing analysis related to replacement funding has begun to address these issues and strategies will continue to be implemented to identify funding mechanisms to reduce the backlog.

Deferred, Eliminated or Changed Projects

- Boulder Museum of Contemporary Arts Floor Replacement: Delayed till January 2016 to lessen the impact on museum operations
- Flood Restoration Projects: Completed flood mitigation projects at eight facilities previously approved by FEMA. Installed emergency back-up generators at two facilities approved for hazard mitigation grants. These projects, delayed due to weather and communications issues with FEMA, will be completed in 2015
- Municipal Building: Rebuild the flood gates. This project, originally scheduled for 2014 completion was delayed due to other high priority 2013 flood projects and is expected to be completed in 2015
- Chautauqua Restroom: This project was funded from the CIB and the FAM CIP budget. It includes site work, utility installations, and complete construction of a free-standing ADA

accessible restroom adjacent to the Chautauqua auditorium. Delayed due to weather conditions and permitting requirements, the project will be completed in 2015.

Unfunded Projects and Emerging Needs

- Parking Lot Repairs: While the CIB provided funding to address the more publicly used parking lots, full replacement funding is needed for the Municipal Service Center and Public Safety Building parking lots
- Energy Efficiencies and Renewables: To achieve the city's new climate action goals, deeper energy efficiency projects and additional renewables may be required for city facilities and operations
- Electric Vehicle Infrastructure: As the city sees wider use of electric vehicles, support of a regional EV charging system may be needed in the transition away from fossil fuels
- Facility Space: The city has outgrown existing office space and is leasing space to accommodate needed offices for existing employees. Space studies will inform how to address current needs and any additional space needs for future years
- With the potential purchase of the Boulder Community Hospital Site, CIP funding may be needed to coordinate an environmental assessment of the site.

Table 8-3: 2016-2021 Funding Summary By Department

		Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
PW/FACILITIES & ASSET MNGMT	Department Total	$ 9,247,000	$ 2,157,000	$ 1,425,000	$ 1,485,000	$ 2,268,000	$ 1,078,000	$ 834,000	$ -
CIP-CAPITAL ENHANCEMENT	Subtotal	$ 1,642,000	$ 190,000	$ -	$ 100,000	$ 1,100,000	$ 100,000	$ 152,000	$ -
	East Boulder Community Center	$ 452,000	$ -	$ -	$ 100,000	$ 100,000	$ 100,000	$ 152,000	$ -
	Outdoor Lighting Improvements	$ 190,000	$ 190,000	$ -	$ -	$ -	$ -	$ -	$ -
	Tantra Shop Renovation	$ 300,000	$ -	$ -	$ -	$ 300,000	$ -	$ -	$ -
	West Senior Center Maj Maint &	$ 700,000	$ -	$ -	$ -	$ 700,000	$ -	$ -	$ -
CIP-CAPITAL MAINTENANCE	Subtotal	$ 6,725,000	$ 1,737,000	$ 1,295,000	$ 1,255,000	$ 1,038,000	$ 848,000	$ 552,000	$ -
	Aquatics Facility Repairs	$ 1,366,000	$ 390,000	$ -	$ 723,000	$ -	$ 253,000	$ -	$ -
	EBCC Replace Pool Air Handlers	$ 500,000	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ -
	Fire Stations Major Maintenance	$ 813,000	$ 120,000	$ 126,000	$ 132,000	$ 138,000	$ 145,000	$ 152,000	$ -
	Martin Park Shelter Major Maint	$ 169,000	$ -	$ 169,000	$ -	$ -	$ -	$ -	$ -
	Misc Facility Maintenance Projects	$ 2,545,000	$ 515,000	$ 380,000	$ 400,000	$ 400,000	$ 450,000	$ 400,000	$ -
	North Boulder Park Shelter Rep	$ 120,000	$ -	$ 120,000	$ -	$ -	$ -	$ -	$ -
	Pool Replastering	$ 80,000	$ 80,000	$ -	$ -	$ -	$ -	$ -	$ -
	Recreation Facility Repairs	$ 1,000,000	$ -	$ 500,000	$ -	$ 500,000	$ -	$ -	$ -
	Stazio Tensile Canopy Covering	$ 132,000	$ 132,000	$ -	$ -	$ -	$ -	$ -	$ -
CIP-CAPITAL PLANNING	Subtotal	$ 880,000	$ 230,000	$ 130,000	$ 130,000	$ 130,000	$ 130,000	$ 130,000	$ -
	Facility Assessments	$ 300,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ -
	Misc Space Needs and Analysis	$ 480,000	$ 80,000	$ 80,000	$ 80,000	$ 80,000	$ 80,000	$ 80,000	$ -
	Radio System Analysis	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ -

Mapping

The mapping for CIP projects is now in a GIS-based electronic map accessed here. All the mapable projects proposed for funding in the 2016-2021 are shown. If the icons are clicked, the project name, project number (referenced on the project sheets), department, funding source, and year with initial funding will be shown. For many projects the initial funding is currently showing as 2015 as projects have funding for planning and design before actual construction however, the construction timing may be in the future. Please consult the project sheets in each department section for project descriptions, phasing and funding information. Projects with funding earmarked for citywide or system improvements are not shown on the map. Ongoing refinement of the GIS-based map will result in greater clarity of project information.

Project Name: Aquatics Facility Repairs

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/FACILITIES & ASSET MNGMT	**Subcommunity:**	SYSTEM-WIDE
Project Number:	3158885715	**BVCP Area:**	AREA I
CEAP Required:	No	**CEAP Status:**	

Project Description

As part of recommendations of the master plan and the recently completed Aquatics Facility Study the department has identified deferred maintenance needs within the existing facilities. 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 the Aquatics Facility Study ongoing maintenance and repairs to recreation facilities have been prioritize starting with the three indoor facilities. Pools are an integral component in providing health and wellness programs as well as generating revenues for the city.

Project Phasing

Planning: $90,000 budgeted in 2016
Construction: $1,350,000.00 budgeted over 3 years

Public Process

Presented to the Parks & Recreation Advisory Board

Interdepartmental and Interagency Collaboration

Projects have been scoped by the Parks and Recreation Department's approved Aquatics Study. See Parks & Rec project 5152186050.

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Facility Renovation & Replace	$0	$390,000	$0	$723,000	$0	$253,000	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$1,366,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: East Boulder Community Center Ren

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/FACILITIES & ASSET MNGMT	**Subcommunity:**	EAST BOULDER
Project Number:	3150558715	**BVCP Area:**	AREA I
CEAP Required:	No	**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

Project Phasing

Planning: $110,000 estimated cost
Construction: $990,000 estimated cost
$400,000 of total project cost is funded over 4 years from 2018-2021
$800,000 of total project cost is unfunded.

Public Process

This project will tie into the Parks and Recreation Master Plan Update

Interdepartmental and Interagency Collaboration

FAM will continue to coordinate with Parks and Recreation and Human Services in indentifying future renovation and replacement needs for the East Boulder Community Canter alson with working with Parks and Recreation on facility and program expansion needs what will be funded outside of FAM's FR&R account

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Facility Renovation & Replace	$0	$0	$0	$100,000	$100,000	$100,000	$152,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$452,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: EBCC Replace Pool Air Handlers

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/FACILITIES & ASSET MNGMT	**Subcommunity:**	EAST BOULDER
Project Number:	3150558815	**BVCP Area:**	AREA I
CEAP Required:	No	**CEAP Status:**	

Project Description

Replace existing pool air handlers that were installed in 1990, are ineffcient, and beyond thir useful life.

Project Phasing

Planning: $50,000 budgeted in 2016
Construction: $450,000 budgeted in 2016

Public Process

None - permits will be applied for

Interdepartmental and Interagency Collaboration

FAM will continue to coordinate with Parks and Recreation in the annual prioritization of HVAC replacement projects and scheduling of facility maintenance during annual shutdown to minimize disruption to the customers.

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Facility Renovation & Replace	$0	$500,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$500,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $2,000

Funding Source for O&M:

Additional Annual O&M Description:

For annual system mainteance

Project Name: Facility Assessments

Project at a Glance

Project Type:	CIP-CAPITAL PLANNING STUDIES		
Department:	PW/FACILITIES & ASSET MNGMT	**Subcommunity:**	SYSTEM-WIDE
Project Number:	3158885115	**BVCP Area:**	AREA I
CEAP Required:	No	**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.

Project Phasing

Total project cost is $300,000.
$50,000 budgeted per year for the span of 6 years.

Public Process

None.

Interdepartmental and Interagency Collaboration

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

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Facility Renovation & Replace	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$350,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $0

Funding Source for O&M:

Additional Annual O&M Description:

No additional O&M anticipated with this assessment

Project Name: Fire Stations Major Maintenance

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/FACILITIES & ASSET MNGMT	**Subcommunity:**	SYSTEM-WIDE
Project Number:	3158885515	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	

Project Description

The 24/7 occupancy of a fire station and its status as an essential facility, requires a higher level of maintenance. This annual CIP project will be distributed among the eight Boulder Fire Stations to maintain finishes to industry standards, upgrade kitchen and dining areas and add bay heating. Work on Fire Stations 3 and 4 will be limited due to potential future replacement

Project Phasing

Planning: $12,000 budgeted in 2016
Construction: $108,000 budgeted in 2016

Public Process

Building permits will be submitted for as required

Interdepartmental and Interagency Collaboration

Projects have been coordinated with the Fire and Rescue Department

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Facility Renovation & Replace	$0	$120,000	$126,000	$132,000	$138,000	$145,000	$152,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$813,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Martin Park Shelter Major Maint

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/FACILITIES & ASSET MNGMT	**Subcommunity:**	SOUTH BOULDER
Project Number:	3150340215	**BVCP Area:**	AREA I
CEAP Required:	No	**CEAP Status:**	

Project Description

This project upgrades the plumbing 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.

Project Phasing

Planning: $16,000 budgeted in 2017
Construction: $153,000 budgeted in 2017

Public Process

None. Project design will be reviewed during the normal permitting process

Interdepartmental and Interagency Collaboration

This project will be coordinated with the Parks and Recreation Department. The P&R Round 1, Capial 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 flatework. FR&R funding not available currently to accomplish with 2013/2014 CIS porject.

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Facility Renovation & Replace	$0	$0	$169,000	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$169,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:	$0	**Funding Source for O&M:**	

Additional Annual O&M Description:

Project Name: Misc Facility Maintenance Projects

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/FACILITIES & ASSET MNGMT	**Subcommunity:**	SYSTEM-WIDE
Project Number:	3155904615	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	

Project Description

2015 Facility Maintenance Projects.
$370,000 funded in 2015.

Project Phasing

Public Process

Any project associated with these funds withh 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.

Interdepartmental and Interagency Collaboration

This project will be coordinated with the affected departments to reduce occupant and customer impacts.

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Facility Renovation & Replace	$305,842	$515,000	$380,000	$400,000	$400,000	$450,000	$400,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$2,850,842**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $0

Funding Source for O&M:

Additional Annual O&M Description:

No additional operational costs will result from completing these rep

Project Name: Misc Space Needs and Analysis

Project at a Glance

Project Type:	CIP-CAPITAL PLANNING STUDIES		
Department:	PW/FACILITIES & ASSET MNGMT	**Subcommunity:**	SYSTEM-WIDE
Project Number:	3158883614	**BVCP Area:**	AREA I
CEAP Required:	No	**CEAP Status:**	

Project Description

To support facility space needs analysis of General Fund departemtn after their master plan

Project Phasing

Total project cost: $480,000.
$80,000 budgeted each year over the span of 6 years

Public Process

none

Interdepartmental and Interagency Collaboration

Work closely with deaprtment to identify space beeds associated with facility needs identified in their master plan updates.

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Facility Renovation & Replace	$39,128	$80,000	$80,000	$80,000	$80,000	$80,000	$80,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$519,128**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: North Boulder Park Shelter Rep

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/FACILITIES & ASSET MNGMT	**Subcommunity:**	CENTRAL BOULDER
Project Number:	3150330215	**BVCP Area:**	AREA I
CEAP Required:	No	**CEAP Status:**	

Project Description

This project upgrades the plumbing systems and fixtures and renews interior and exterior surface finishes of the facility built in 1969. Minor concrete work totaling $19,000 was last done in 2007. Electrical code upgrades will also be accomplished as required with major renovation projects.

Project Phasing

Planning: $12,000 budgeted in 2017
Construction: $108,000 budgeted in 2017

Public Process

None. Project design will be reviewed during the normal permitting process.

Interdepartmental and Interagency Collaboration

This project will be coordinated with the Parks and Recreation Department. The P&R Round 1, Capital Investment Strategy project improved the shelter's exterior to included 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

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Facility Renovation & Replace	$0	$0	$120,000	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$120,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $0

Funding Source for O&M:

Additional Annual O&M Description:

No additional operating costs are anticipated

Project Name: Outdoor Lighting Improvements

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/FACILITIES & ASSET MNGMT	**Subcommunity:**	SYSTEM-WIDE
Project Number:	3158883315	**BVCP Area:**	AREA I
CEAP Required:	No	**CEAP Status:**	

Project Description

Replace outdoor lighting fixtured to comply with Boulder Revised Code 9-9-16, Outdoor Lighting ordinance. Lights must conform not later then 15 years adter July 15, 2003. Projects will occur as lighting technologies, such as light emitting diodes, LED's, 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 seperate 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.

Project Phasing

Planning: $10,000 budgeted in 2015
Construction: $190,000 budgeted in 2016

Public Process

Any project associated with these funds will be taken through the appropriate public process and reviewed as paert of the conceptual design, if needed.

Interdepartmental and Interagency Collaboration

Work will be coordinated with affected departments in fixture selection and ensuring outdoor lighting compliance of selected fixtures.

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Facility Renovation & Replace	$10,000	$190,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$200,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: ($10,000)

Funding Source for O&M:

Additional Annual O&M Description:

Est. annual energy savings by replacing w/ energy efficient lighting

Project Name: Pool Replastering

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/FACILITIES & ASSET MNGMT	**Subcommunity:**	MULTIPLE SUBCOMMUNITIES
Project Number:	3158885215	**BVCP Area:**	AREA I
CEAP Required:	No	**CEAP Status:**	

Project Description

Repalster one of the recreational pools which will be determined at a future date. This 2016 project follows Parks and Recreation replastering pools projects in 2013, 2014 and 2015.
Funding from other than General Fund FR&R:
Fund 118, Major Maintenance, P&R-managed by FAM

Project Phasing

Planning: $1,000 budgeted in 2016
Construction: $79,000 budgeted in 2016

Public Process

This project locations will be dependent on decision yet to be made on the Aquatics Facility Study and the parks and Recreation pool replaster projects.

Interdepartmental and Interagency Collaboration

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

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Facility Renovation & Replace	$0	$80,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$80,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $0

Funding Source for O&M:

Additional Annual O&M Description:

No additional operational costs will result from completing this proj

Project Name: Radio System Analysis

Project at a Glance

Project Type:	CIP-CAPITAL PLANNING STUDIES		
Department:	PW/FACILITIES & ASSET MNGMT	**Subcommunity:**	SYSTEM-WIDE
Project Number:	3158886015	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	

Project Description

Fund the cost of consultant(s) to update the citywide inventory of the existing radio system infrastructure, and provide a strategic plan for replacements and upgrades needed to have reliable radio communication throughout the city, now and into the future. The total project cost will be split 75% to the General Fund and 25% of the cost covered by Utilities, Transportation, Open Space & Mountain Parks and Parks & Recreation.

Project Phasing

Planning: $75,000 budgeted
Planning (other): $25,000 budgeted
Total budget: $100,000

Public Process

None

Interdepartmental and Interagency Collaboration

Partner with the following departments:
Police, Fire, Open Space & Mountain Parks, Parks & Recreation, Utilities and Transportation.

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
.25 Cent Sales Tax	$0	$5,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
General	$0	$75,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Open Space	$0	$5,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Transportation	$0	$7,500	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Water Utility	$0	$7,500	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$5,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Recreation Facility Repairs

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/FACILITIES & ASSET MNGMT	**Subcommunity:**	SYSTEM-WIDE
Project Number:	3158885615	**BVCP Area:**	AREA I
CEAP Required:	No	**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 management. To continue supporting these key themes, the department will be providing repairs, renovations and upgrades to recreation centers. In 2016, the department will complete a strategic plan for all recreation centers that illustrates implementation 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.

Project Phasing

Planning: $50,000 budgeted in 2017
Construction: $450,000 budgeted in 2017

Public Process

none

Interdepartmental and Interagency Collaboration

Projects will be scoped and better defined after the approval of the Recreation Center Study. See Parks & Recreation project 5152186150.

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Facility Renovation & Replace	$0	$0	$500,000	$0	$500,000	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$1,000,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Stazio Tensile Canopy Covering Repl

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/FACILITIES & ASSET MNGMT	**Subcommunity:**	EAST BOULDER
Project Number:	3150590815	**BVCP Area:**	AREA I
CEAP Required:	No	**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. Preventative maintenance was performed on the structure. This 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.

Project Phasing

Planning: $6,000 budgeted in 2016
Construction: $ 126,000 budgeted in 2016

Public Process

None. Project design will be reviewd during the normal permitting process.

Interdepartmental and Interagency Collaboration

FAM will continue to coordinate with Parks and Recreation in assessing ther tensile canopy annually to continue to lengthen its service life

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Facility Renovation & Replace	$0	$132,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$132,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $0

Funding Source for O&M:

Additional Annual O&M Description:

No additional operational costs are anticipated from completing this

Project Name: Tantra Shop Renovation

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/FACILITIES & ASSET MNGMT	**Subcommunity:**	SOUTH BOULDER
Project Number:	3150400415	**BVCP Area:**	AREA I
CEAP Required:	No	**CEAP Status:**	

Project Description

Renovate the Tantra Park Shop for continuing use for Park Operations maintenance staff. The 3,000 square foor 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

Project Phasing

Planning: $30,000 budgeted in 2019
Construction: $270,000 budgeted in 2019

Public Process

Future of Tantra property will be part of the Park and Recreation Master Plan

Interdepartmental and Interagency Collaboration

FAM will continue to coordinate with Parks and Recreation in identifying future renovatgion and replacement needs for the Tantra Park Shop

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Facility Renovation & Replace	$0	$0	$0	$0	$300,000	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$300,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: West Senior Center Maj Maint & Reha

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/FACILITIES & ASSET MNGMT	**Subcommunity:**	CENTRAL BOULDER
Project Number:	3150254715	**BVCP Area:**	AREA I
CEAP Required:	No	**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.

Project Phasing

Planning: $70,000 budgeted in 2019
Construction: $630,000 budgeted in 2019

Public Process

Project design will be reviews=ed during the normal permitting process and the master plan portions affecting this project will be approved by City Council

Interdepartmental and Interagency Collaboration

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 the 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

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Facility Renovation & Replace	$0	$0	$0	$0	$700,000	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$700,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:	$0	**Funding Source for O&M:**	

Additional Annual O&M Description:

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City of Boulder

FIRE AND RESCUE

2016-2021 Capital Improvement Program

Overview of Department Mission

The Boulder Fire-Rescue Department provides emergency response to fires, medical emergencies, disasters, rescues and hazardous materials releases in Boulder. Our 118 firefighters, engineers, station officers, chief officers, wildland division personnel, community risk reduction personnel and management staff work together to prevent emergencies from happening and to mitigate them when they do.

Funding Overview

The Fire 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) .

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, or
- Use of existing operating funding to build a capital fund or pool of money available for capital projects.

Funding from the Capital Improvement Bond (CIB) Fund supported projects managed by Fire-Rescue. CIB funding is indicated by the following symbol:

Current Focus for Capital Planning and Projects in 2016

As a part of the overall capital funding strategic work, capital needs for the Fire Department are being evaluated, including capital improvements over the next several years that would allow for

multiple Light Response Vehicles and potentially provide a more community services model of facility for delivery of human services, parks and recreation facilities and programming, and public safety services. There are no specific CIP projects identified at this time.

Highlights

Projects Expected to be Completed in 2015

Fire Station 8, the new wildland fire station, was completed in June of 2015. This CIB project was coordinated with Facilities and Asset Management (FAM) to provide a dedicated facility for year-round wildland firefighting capability.

The department has requested proposals for a replacement station alerting system anticipated to be operational by the end of 2015. The new technology will allow for simultaneous dispatch of multiple stations and automated information flow to reduce emergency response times. This project was not identified in a previous CIP but was identified and presented to City Council at a study session in early 2015. Funding was identified from the General Fund to facilitate this safety improvement.

Priority Projects for 2016

None

Highlights of 2017 - 2021 Projects

None

Guiding Principles and Project Prioritization

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 Department maintain and improve public safety. Proper fire station location improves accessibility to services provided to the community by the Fire 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' positions on the list reflect the degree to which each station does not fulfill the department's needs for effective, efficient and safe fire station design.

In the fall of 2014, the City of Boulder hired Trestle Strategy Group to conduct a space needs assessment of Fire Station 3, based on recommendations of the 2012 master plan update which identified Station 3 as the highest priority. The master plan update also recommended an evaluation of the location, size and design of all our fire stations for effectiveness. Station replacement prioritization is based on preliminary analysis of our stations' age, size and location.

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 of at least 15 years:

- Fire Training Center (FTC) Phase 2: driving area and storage building
- FTC Phase 3: additional classroom, office and conference room space.

Projects Not Previously identified in the CIP

As noted above, the replacement of the system wide fire alerting system had not previously been included in a CIP. Due to the potential life-saving impact of increased response time with an upgraded system and with one-time General Fund dollars identified, this was added to the 2015 CIP.

Operation and Maintenance Impacts

The primary Fire Department emerging need is to relocate and/or renovate 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.

On-going operation and maintenance projections for fire station replacements are listed below.

Deferred, Eliminated, or Changed Projects

None

Unfunded Projects and Emerging Needs

Unfunded projects as presented to City Council at the April 14, 2015 study session:

- 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 a fire engine, ladder truck, LRV/Ambulance, Dive Team and crews plus a battalion chief. The administration building needs to be 7,500 square feet and the storage building 10,000 square feet
    - Fire will continue to coordinate with Parks and Recreation to evaluate the practicality of, and financial issues related to, relocating Station 3 and Fire Administration to the Mapleton ball fields site
    - Estimated costs are: Buildings $11,412,500, Land up to $8,600,000, on-going $459,000
- Replace Fire Station 4 north of the current location of 4100 Darley Avenue.
    - Constructed in 1967 with 2,000 square feet this station is too small and needs to be 6,514 square feet to house one fire engine and crew.
    - Estimated costs are: Building $2,442,750, Land up to $2,000,000, on-going $165,000
- Remodel 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 6,514 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 costs are estimated at: One-time $1,154,625, On-going $165,000
- Remodel Fire Station 2 at the current location of 2225 Baseline Road.
    - Constructed in 1959 with 4,752 square feet this station is too small and needs to be

15,000 to house one fire engine, one type 6 wildland engine and one LRV/Ambulance and crews.

    - Estimated costs are: Building $3,842,000, Land up to $3,500,000, on-going $229,500
- Remodel Fire Station 5 at the current location of 4365 19th Street.
    - Constructed in 1992with 3,622 square feet this station is too small and needs to be 6,514 to house one fire engine and crew.
    - Estimated costs are: Building $1,084,500, on-going $229,500
- Remodel Fire Station 1 at 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 one fire engine, one ladder truck and crews plus a battalion chief.
    - Estimated costs are: Building $3,397,125, on-going $128,800
- Remodel Fire Station 7 at the current location of 1380 55th Street.
    - Constructed in 2000 with 5,081 square feet this station is too small and needs to be 8,006 square feet to house one fire engine, the Hazardous Materials Team and crew.
    - Estimated costs are: Building $1,096,875, on-going $42,000.
- Fire Training Center Phase 2 - Driving area and storage building
    - Construct a concrete driver training area totaling approximately 200,000 square 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.
    - Estimated costs are: Concrete $2,500,000, Building $2,250,000, 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.
    - Estimated costs are: One-time $1,500,000, on-going $56,000.

Table 9-1: Unfunded Projects

Description		One-Time		On-Going
	Building	Land	Equipment	
Station 3/ Admin/ Storage	$11,412,500	$ 8,600,000	$ 0	$ 459,000
Station 4	$ 2,442,750	$ 2,000,000	$ 0	$ 165,000
Station 6	$ 1,154,625	$ 0	$ 0	$ 165,000
Station 2	$ 3,842,000	$ 3,500,000	$ 0	$ 229,500
Station 5	$ 1,084,500	$ 0	$ 0	$ 229,500
Station 1	$ 3,397,125	$ 0	$ 0	$ 128,800
Station 7	$ 1,096,875	$ 0	$ 0	$ 42,000
FTC Phase 2	$ 4,750,000	$ 0	$ 0	$ 60,000
FTC Phase 3	$ 1,500,000	$ 0	$ 0	$ 56,000
TOTAL	$30,680,375	$14,100,000	$ 0	$1,534,800

Mapping

The mapping for CIP projects is now in a GIS-based electronic map accessed here. All the mapable projects proposed for funding in the 2016-2021 are shown. If the icons are clicked, the project name, project number (referenced on the project sheets), department, funding source, and year with initial funding will be shown. For many projects the initial funding is currently showing as 2015 as projects have funding for planning and design before actual construction however, the construction timing may be in the future. Please consult the project sheets in each department section for project descriptions, phasing and funding information. Projects with funding earmarked for citywide or system improvements are not shown on the map. Ongoing refinement of the GIS-based map will result in greater clarity of project information.

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Overview of Department Mission

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 2016 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 2016 is as follows:

- Transportation $ 97,500
- Flood Utility $ 97,500
- Lottery Fund $125,441

Historically the Lottery contribution to the Greenways Program has been $150,000 per year. As a result of a projected reduction of the city's allocation of Lottery funds, starting in 2015, the Lottery contribution to Greenways 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). Should the city's allocation of Lottery funds exceed the projected amount, a budget adjustment will be made to reflect the increase.

Current Focus for Capital Planning and Projects in 2016

The focus of the 2016-2021 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. For more information about the timing and details of these projects, please see the Utilities—Stormwater/Flood Overview section. In addition to the projects along Fourmile Canyon Creek and Wonderland Creek, possible habitat restoration projects during the next few years include:

- Confluence of Bear Creek and Boulder Creek at Foothills Community Hospital
- Dry Creek habitat improvements through Flatirons Golf Course
- Goose Creek, railroad to 47th Street tree plantings
- Fish Passage enhancement projects in association with Fishing is Fun grants
- South Boulder Creek minimum stream flow
- Removal of Russian Olive trees east of 75th Street along Boulder Creek.

Work on Boulder Creek at the Fish Observatory.

Board Action

The Greenways Advisory Committee met on May 26, 2015 and recommended approval 5-0 of the 2016-2021 Greenways Program CIP to Planning Board and City Council.

Guiding Principles and Project Prioritization

CIP Guiding Principles

Greenways projects address many of the 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 flood mitigation 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.

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 experienced a major flood in September 2013 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. As a result of updated mapping and the September 2013 flood, flood mitigation plans were initiated for Gregory Creek, Bear Canyon Creek and Boulder Creek to identify economically feasible improvement projects. Flood mitigation plans will be initiated in 2016 for Upper Goose Creek and Twomile Canyon Creek, and Skunk, King's Gulch and Bluebell Creeks after completion of flood mapping updates on these drainageways. Results from these flood mitigation plans will inform future capital improvements. Continued evaluation of potential improvement may result in additional changes to the Flood Utility and Greenways CIP in upcoming years.

Projects Not Previously Included in the CIP

None

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, Eliminated, or Changed Projects

None

Unfunded Projects and Emerging Needs

Since the Greenways Program is opportunistic, taking advantage of projects that are funded through other departments, there are no unfunded needs.

City of Boulder

INFORMATION TECHNOLOGY

2016-2021 Capital Improvement Program

Overview of Department Mission

The mission of the Information Technology (IT) Department is to create an environment of seamless integration between people and technology. Our services include long-range technology planning; citywide hardware/software procurement; support for employee workstations, servers, and databases; disaster recovery and business continuity; systems security; fiber optic network infrastructure; business analysis; custom application development; and support for numerous mission critical applications such as payroll, web technologies, and public safety.

Funding Overview

Beginning in 2010 the City has appropriated approximately $350k per year from the General Fund to an 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. To date the majority of this funding has been primarily dedicated to supplement the critical, bond-funded finance, human resources and payroll system replacement project.

The City of Boulder website.

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. These systems represent the critical IT capital infrastructure upon which all the major IT CIP projects and existing city computer applications fundamentally depend.

Funding from the Capital Improvement Bond (CIB) Fund supported a number of other software replacement projects managed by IT. CIB funding is indicated by the following symbol:

Current Focus for Capital Planning and Projects in 2016

- Majority of capital bond funded projects will be completed
- The Server Replacement project started in 2015 will be completed
- Several big projects will be started in 2016, but will not be completed until 2017 or 2018. They include:
  - New permits, licensing and land records system implementation (2015 – 2017)
  - Asset and maintenance management software improvements (2016–2017)
  - Incremental central telephone system hardware and software upgrades (2016–2019)

Highlights

Projects Expected to be Completed in 2015

- 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. (Funded by bond proceeds and departmental reserves).

Priority Projects for 2016

- Server Hardware Replacement: The city's virtual server hardware, software and storage systems are scheduled to begin 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). The project will be started in 2015, but not complete until 2016.
- 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 early in 2016. (Funded by bond proceeds and IT CIP)

- 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 began in early-2015. The new system is estimated to reach live operation by the first quarter of 2017. (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 2017-2021 Projects

- Ongoing implementation of document management implementation program (2015-2017)
- New permits, licensing and land records system implementation (2017)
- Asset and maintenance management software improvements (2016-2017)
- Incremental capital maintenance replacements of network hardware, end user devices and database server hardware
- Incremental central telephone system hardware and software upgrades (2016-2019)
- Majority of city's Network hardware will be replaced beginning in 2019 with project completion in 2020.

Guiding Principles and Project Prioitization

Proposed projects in the 2016-2021 CIP are consistent with the CIP guiding principles focusing on maintaining and enhancing the supporting city-wide business systems over the long term.

Prioritization

A major update to the IT Strategic Plan is currently underway covering the period from 2016 to 2019 that will inform future capital needs and priorities.

Projects Not in Master Plans

None.

Projects Not Previously Included in the CIP

None

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, Eliminated, or Changed Projects

None

Unfunded Projects and Emerging Needs

Though critical, short-term technology investment needs have been 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.

Information Technology

A focus of the pending major update to the IT Strategic Plan (2016-2019) 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 11-1: 2016-2021 Funding Summary By Department

		Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
INFORMATION TECHNOLOGY	Department Total	$ 8,310,962	$ 841,220	$ 964,254	$ 1,573,472	$ 1,885,671	$ 2,088,024	$ 958,321	$ -
CIP-CAPITAL MAINTENANCE	Subtotal	$ 8,310,962	$ 841,220	$ 964,254	$ 1,573,472	$ 1,885,671	$ 2,088,024	$ 958,321	$ -
	Data Backup and Disaster	$ 122,234	$ -	$ 41,895	$ 80,339	$ -	$ -	$ -	$ -
	Database Hardware Replacement	$ 108,987	$ 10,500	$ -	$ -	$ 31,482	$ 53,604	$ 13,401	$ -
	End User Device Replacement	$ 4,847,207	$ 703,638	$ 702,115	$ 1,174,388	$ 751,182	$ 745,731	$ 770,153	$ -
	Network Hardware Replacement	$ 2,409,400	$ 111,090	$ 219,232	$ 241,423	$ 1,034,092	$ 630,026	$ 173,537	$ -
	Security Administration	$ 49,798	$ 8,117	$ 1,012	$ -	$ 33,058	$ 6,381	$ 1,230	$ -
	Server Hardware Replacement	$ 773,336	$ 7,875	$ -	$ 77,322	$ 35,857	$ 652,282	$ -	$ -

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Project Name: Data Backup and Disaster Recovery

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	INFORMATION TECHNOLOGY	**Subcommunity:**	SYSTEM-WIDE
Project Number:	1901901520	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**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.

Project Phasing

This is an ongoing program.

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Updated to reflect latest estimates for timing and cost

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Computer Replacement	$0	$0	$41,895	$80,339	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$122,234**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Database Hardware Replacement

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	INFORMATION TECHNOLOGY	**Subcommunity:**	SYSTEM-WIDE
Project Number:	1901901530	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	

Project Description

This is an ongoing program. Hardware and related software necessary to provide and support the computing infrastructure that delivers critical database services. Project includes maintenance and end of life equipment replacement.

Project Phasing

This is an ongoing program.

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Updated to reflect latest estimates for timing and cost

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Computer Replacement	$45,900	$10,500	$0	$0	$31,482	$53,604	$13,401
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$154,887**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: End User Device Replacement

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	INFORMATION TECHNOLOGY	**Subcommunity:**	SYSTEM-WIDE
Project Number:	1901901505	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	

Project Description

Funding for replacement of PCs

Project Phasing

Acquisition: $ for all years
For purchase of Hardware with useful life of 3 - 5 years.

Public Process

Interdepartmental and Interagency Collaboration

City-wide Enterprise service supporting all city departments.

Change From Past CIP

Adjusted to reflect planned replacement timing of assets

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Computer Replacement	$1,001,790	$703,638	$702,115	$1,174,388	$751,182	$745,731	$770,153
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$5,848,997**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Network Hardware Replacement

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	INFORMATION TECHNOLOGY	**Subcommunity:**	SYSTEM-WIDE
Project Number:	1901901511	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**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.

Project Phasing

This is an ongoing program.

Public Process

Interdepartmental and Interagency Collaboration

City-wide enterprise project supporting all city departments.

Change From Past CIP

Updated to reflect most current information available on replacement

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Computer Replacement	$171,750	$111,090	$219,232	$241,423	$1,034,092	$630,026	$173,537
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$2,581,150**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Security Administration

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	INFORMATION TECHNOLOGY	**Subcommunity:**	SYSTEM-WIDE
Project Number:	1901901517	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	N/A	**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. 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.

Project Phasing

This is an ongoing program.

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Updated to reflect latest timing and cost information

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Computer Replacement	$64,823	$8,117	$1,012	$0	$33,058	$6,381	$1,230
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$114,621**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Server Hardware Replacement

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	INFORMATION TECHNOLOGY	**Subcommunity:**	SYSTEM-WIDE
Project Number:	1901901515	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**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 data storage resources, internal/external web systems, and electronic document management repositories. Project includes maintenance and end of life equipment replacement.

Project Phasing

This is an ongoing program.

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Updated to reflect latest informaiton on cost and timing

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Computer Replacement	$508,880	$7,875	$0	$77,322	$35,857	$652,282	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$1,282,216**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

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City of Boulder

OPEN SPACE AND MOUNTAIN PARKS

2016-2021 Capital Improvement Program

Overview of Department Mission

The City of Boulder's Open Space and Mountain Parks Department (OSMP) preserves and protects the natural environment and land resources that characterize Boulder. We foster appreciation and use that sustain the natural values of the land for current and future generations. In 1986, Boulder residents approved a charter that requires OSMP to acquire, maintain, preserve, retain and use open space land for the following purposes:

- Preservation or restoration of natural areas characterized by or including terrain, geologic formations, flora, or fauna that are unusual, spectacular, historically important, scientifically valuable, or unique, or that represent outstanding or rare examples of native species
- Preservation of water resources in their natural or traditional state, scenic areas or vistas, wildlife habitats, or fragile ecosystems
- Preservation of land for passive recreational use, such as hiking, photography or nature studies, and, if specifically designated, bicycling, horseback riding or fishing
- Preservation of agricultural uses and land suitable for agricultural production
- Utilization of land for shaping the development of the city, limiting urban sprawl, and disciplining growth
- Utilization of non-urban land for spatial definition of urban areas
- Utilization of land to prevent encroachment on floodplains
- Preservation of land for its aesthetic or passive recreational value and its contribution to the quality of life of the community

Funding Overview

Open Space and Mountain Parks' CIP projects are funded from two sources, the Open Space Fund and the Lottery Fund:

Approximately 92 percent of Open Space Fund revenue derives from dedicated sales and use tax collections. There are three sales taxes that support the Open Space Fund: the 0.40 percent sales tax which has no sunset; the 0.33 percent sales tax which will be reduced to 0.22

percent on January 1, 2019; and the 0.15 percent sales tax which will be repurposed for Transportation uses as of January 1, 2020, for general city purposes as of January 1, 2030, and expires December 31, 2039.

- Open Space and Mountain Parks also expends Lottery Funds on CIP projects. The Lottery Fund derives its revenue from the Colorado Conservation Trust Fund. Lottery Funds are not restricted to OSMP.

Current Focus for Capital Planning and Projects in 2016

While core service delivery continues throughout the year, OSMP also is pursuing high-profile community initiatives in support of board and council goals. Those community initiatives translated into department priority projects are as follows:

- Continue Flood Recovery of Trails and Habitat (will continue into 2017, includes county coordination)
- Submit Final North Trail Study Area (TSA) Plan to council for approval by mid 2016
- Following North TSA approval by council, Begin Visitor Master Plan update to be recast as Open Space Master Plan – establishes policy guidance, priorities and measures of success across services and programs, and addresses overarching issues such as night time and temporal use
- Implement Top Priorities of West TSA, North TSA, Agricultural Resource Management Plan, and Forest and Grassland Management Plan
- Continue to Improve the Visitor Experience – distinguish between new initiatives and existing services (New initiatives include such items as Voice and Sight program implementation and monitoring, recycling at trailheads, and dog waste composting. Existing efforts include current day-to-day outreach and education and volunteer programs.)
- Develop Regional Trails through strategic property acquisition, coordination with other agencies, and other avenues as needed (e.g., Eldorado to Walker Ranch, Joder and the Boulder Creek Path extension).

2013 Flood Impact

Recognizing the importance of accessibility to open space to the Boulder community, no Open Space and Mountain Parks trails or trailheads remain closed because of flood damage. However significant recovery work remains to restore trails to sustainable conditions. In addition to the sheer volume of work-- about 150 distinct projects were identified by FEMA, with an estimated

recovery cost of over $7 million dollars-- Open Space and Mountain Parks needed to tread new ground with our partners at FEMA and other flood recovery agencies. Trails, trailheads, water delivery structures, and agricultural fences are not typically considered public infrastructure as part of disaster relief for municipalities. In addition to our work with FEMA, OSMP continues to work with other state and federal agencies to identify and secure funding for the restoration of ecological systems and privately owned irrigation ditches. These are neither considered municipal infrastructure by FEMA nor eligible for public assistance from that agency. Over the past two years, OSMP has completed 90 of the projects identified by FEMA and several other ecological restoration projects and partnerships with irrigation ditch companies in which OSMP is a share holder. With the opening of the Gregory Canyon access road and trailhead, OSMP has completed work at trailheads. 2015 also saw the re-opening of the Sanitas Valley Trail.

Highlights

Projects Expected to be Completed in 2015

Land and Visitor Services

- Repaired flood damage on Sanitas Valley Trail – graded and resurfaced
- Repaired flood damage on Chapman Drive – created water control structures, graded and resurfaced
- Repaired flood damage to Chautauqua Meadow Trail – designed, graded and resurfaced the trail tread
- South Mesa Trailhead bridge – designed, built and installed a new bridge over South Boulder Creek at the South Mesa Trailhead
- South Boulder Creek West Trail – repaired and restored functionality
- Ertl Pond – installed water level control device in dam and restored the trail over the dam
- Restored Eggleston #4 irrigation ditch
- South Boulder Creek Bridge – installed replacement bridge over South Boulder Creek at South Boulder Road
- Hedgecock Bridge – installed a replacement bridge over South Boulder Creek at the Hedgecock farmstead
- Gregory Canyon Access Road – graded and resurfaced (asphalt) the access road tread
- Lion's Lair Trail – finished construction of this trail on the Wittemyer Property
- Joder Ranch – repaired and built an interim trail from US 36 to Olde Stage Road
- Flagstaff Drive Sediment Basin – designed, built and installed the second sediment catch basin on Flagstaff Drive

- Cherryvale South HVAC – designed and installed new HVAC system for Cherryvale South office building
- Agricultural fences – cleaned flood debris out of fences, repaired fences
- Improved and added structures to organic farmsteads

Ecological Systems

- Tall oatgrass control – initiated grazing to manage tall oatgrass in the Shanahan Ridge area
- Weed management – used a Colorado State Department of Agriculture grant to map and manage 19 state-listed noxious weeds
- Bluebell Creek – restored two acres of Bluebell Creek by planting 300 trees and shrubs and seeding with native plant species
- Boulder Creek vegetation management – removed non-native Russian olive and crack willow and planted native trees and shrubs
- Boulder Creek restoration and relocation – restored flood damaged stream channel and riparian area while providing the Green Ditch its water rights
- Boulder Creek/South Boulder Creek Confluence area – completed design of repairs of flood damaged stream
- North TSA inventory report – completed resources inventory
- Trail repair support – coordinated with trails staff to design, build and repair trails while protecting natural resources
- Wildlife monitoring — continued to monitor wildlife populations as outlined in Ecosystem and Visitor Access Plans, in association with habitat improvement projects, and to learn more about post-flood responses
- OSMP Research Program — supported research projects conducted by other agencies and institutions to increase scientific knowledge of ecosystems on OSMP and assist with decision making
- Habitat restoration — improved habitat conditions for sensitive species like northern leopard frog and shrub-nesting birds
- Forest Management – thinned 165 acres of forested land in the mountain backdrop to restore forest health and reduce fire risk

Hartnagle Homestead after restoration.

Cultural Resources

- Hartnagle House was stabilized
- Foothills Nature Center design plan was produced and minor

repairs/upgrades were implemented.

- Continued repair of historic buildings on farmsteads

Environmental Planning

- Draft North Trail Study Area Plan completed

Priority Projects for 2016

Land and Visitor Services

- Continue to repair and restore trails, trailheads, ditches, and fences damaged in the September 2013 rainfall event
- Improve and add structures to organic farmsteads
- Add trail connections from Baseline Road to Chautauqua
- Design, build and install bridge across South Boulder Creek in Greenbelt Meadows area

Ecological Systems

- Pollinator surveys – begin pollinator studies within the tall oatgrass grazing area on Shanahan Ridge
- CDOT wetland mitigation – create and restore 25 acres of wetlands as mitigation for wetland impacts associated with US 36 Highway improvements
- Boulder Creek/South Boulder Creek Confluence area – complete restoration and repair of flood damaged stream and riparian area
- Volunteer raptor monitoring program — improve data collection methodology for volunteer raptor monitoring program by developing online data entry
- Habitat restoration — improve habitat conditions for northern leopard frogs at Fancher ponds
- OSMP Research Program — support OSMP research program to address departmental-wide research questions; create request for proposals containing staff research priorities
- Forest Management – treat 200 acres of forested land in the mountain backdrop to restore forest health and reduce fire risk
- South Boulder Creek restoration – complete restoration of aquatic habitat on South Boulder Creek upstream of South Boulder Road
- North TSA – begin resource protection measures identified in the North TSA
- Grassland Ecosystem Management Plan – implement resource conservation projects in the Grassland Management Area Plan
- Forest Ecosystem Management Plan (FEMP) – continue implementation of the FEMP

Cultural Resources

- Complete Hartnagle House renovation
- Complete Viele House water mitigation
- Complete Hunter Kolb House renovation
- Viele House renovations
- Foothills Nature Center renovations

Environmental Planning

- North Trail Study Area Plan recommended by Open Space Board of Trustees and accepted by City Council. Initiate early action items.

Highlights of 2017-2021 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 including establishing a trailhead at Chapman Drive and State Highway 119
- Substantial completion of trail, trailhead and agricultural projects called for in the North and East TSA Plans and in the Open Space Master Plan (revised Visitor Master Plan)
- Substantial completion of agricultural projects called for in the Agricultural Management Plan
- Completion of the South Boulder Creek in-stream flow improvements in conjunction with the Gross Reservoir expansion memorandum of understanding
- Implement medium and long term office and work space plans

Ecological Systems

- Goodhue Ditch fish passage project – construct fish passage on the Goodhue Ditch diversion structure to improve habitat for native and sport fish in South Boulder Creek
- Riparian Area Restoration – substantially complete restoration of streams and riparian areas impacted by flooding

Cultural Resources

- Repair and renovate major farmstead properties, including Viele/Van Vleet and Wright

Environmental Planning

- Complete Open Space and Mountain Parks Master Plan

Board Action

At its June 15, 2015 meeting, the Open Space Board of Trustees unanimously passed a motion approving the 2016 - 2021 OSMP CIP and recommended approval of the same by the Planning Board and City Council.

Guiding Principles and Project Prioritization

CIP Guiding Principles:

All proposed projects in the 2016 - 2021 CIP are consistent with applicable guiding principles. OSMP staff developed budget guiding principles specific to OSMP services and in support of CIP principles.

The 2016-2021 CIP continues to include flood-related recovery and habitat restoration projects. Anticipated to be complete during 2017, flood recovery and restoration projects total $2,008,300 million budgeted in 2016. As noted in prior work plan and budget updates and actions, the focus on flood recovery delays work in other areas, including adopted plans' implementation.

Another important theme within the CIP is taking care of existing infrastructure, such as trail, trail -head and other visitor services infrastructure. A relatively recently formalized investment program in OSMP is maintenance and management of historical and cultural assets within the city's open space system. As the department has acquired properties, structures such as cabins, farm houses, barns and other facilities are included in those properties. In some cases, if structures are of no historical significance or are not needed to serve Open Space purposes, those properties or facilities can be demolished, or subdivided and sold. In other cases, those facilities and structures can be leased as part of maintaining historical and cultural uses. Some facilities and structures are considered a part of the historical and cultural fabric of the Open Space system. The department continues to evaluate this program; however, it appears there is a need to invest in structures to preserve safety, integrity and the potential historical and/or cultural value to the community.

Regional partnerships continue to be an important aspect of OSMP's work as a critical mass of adjacent open space and natural lands managers is connecting to the OSMP system. The draft 2016 CIP includes funding the Boulder Creek Path west extension, which was included in the Intergovernmental Agreement (IGA) recommended by OSBT and approved by council. OSMP's

local match for that project is approximately $500,000. The city's Transportation Division is proposing $50,000 in its 2016 CIP to help the city partner with Boulder County on this local match. An additional obligation in the 2016 CIP is a one-time $2 million payment to Denver Water for the South Boulder Creek In-Stream Flow Improvements.

A continuing significant investment program is the real estate acquisition program, which also is connected to our regional partnerships. Eventually, as remaining strategic acquisitions largely complete the vision of the Open Space area, the department will need to move more and more toward stewardship of the system. The land system(s) will be similar in character as exists today ranging from natural lands management, striving to balance preservation of valuable and unique ecosystems with access and passive recreation; to agricultural and cultural lands that support livestock and local farming; to open lands providing a defining border and character for the Boulder community.

OSMP Facility Modifications (Space Needs), a new line item in the CIP responds to the need to address inadequate space and infrastructure to support OSMP staffing, vehicles, equipment and materials. A study is underway to develop a short, mid and long-term investment program to provide the space and facilities needed to support a quality set of OSMP services.

Finally, another new line item in the proposed OSMP CIP is an innovations program that allows the department to experiment with new types of facilities. An example is a design effort focused on "Biomimicry," a blend of biological sciences and engineering such that the engineering learns from nature's designs to create more resilient, efficient and effective infrastructure. This innovations program is slated to begin as flood recovery begins to taper.

Prioritization

Prioity areas are noted above. The department continues to be in a state of transition. Staff is striving to establish a reasonable and responsive direction in the proposed 2016 – 2021 CIP. As leadership and the organization transitions there is ample opportunity to make adjustments in the out years of the CIP while the OSMP fund remains fiscally sound.

Projects not in Master Plans

Council requested that staff begin the update process for the Visitor Master Plan (VMP) and include addressing overarching issues. Since that time, the department and external consultants

have identified the need for an OSMP "Master Plan." Staff is exploring ways to recast the VMP update as an opportunity to develop an OSMP Master Plan, continuing to address the City Council identified overarching issues, and establishing a set of policies and priorities that help unite the department behind a set of shared goals, objectives and metrics that implement the voter-approved Open Space sections of the City Charter. Also, an OSMP Master Plan would inform and be clearly linked to the Boulder Valley Comprehensive Plan. As is typical for other city departments, master plans or strategic plans that could result in capital investment are included in the CIP. The OSMP Master Plan, including updates to the visitor element, is scheduled to start in 2016 and will continue into 2017. Other systems plan elements would be updated or refreshed thereafter, which is why there is an ongoing amount in the master plan line item. Ecological Systems Plans (Forest and Grassland) currently are considered as operating intensive, rather than capital. However, it is possible that updates to those systems plans could result in capital investments in future years of the CIP.

Projects Not Previously Identified in the CIP

- Flood repair projects in the Chautauqua area
- Riparian area flood damage restoration
- Farm site improvements on OSMP land
- OSMP facility modifications related to increasing space needs
- Restore the Goodhue Ditch fish passage
- Fund innovative capital projects including biomimicry
- Project contract management of installation of South Mesa Trailhead bridge
- Provide funding contributing to western extension of the Boulder Creek Bike path
- Open Space and Mountain Parks Master Plan. Proposed to improve clarity about OSMP initiatives and improve integration with Boulder Valley Comprehensive Plan
- Rehabilitation and improvements to the Foothills Nature Center

Operation and Maintenance Impacts

As new and rerouted trails are built along with new trailheads, the need for operations and maintenance funds will increase. The impact is slight in the near term and, in fact, may decrease since older infrastructure will be replaced with new. Also, staff has been striving to design and build more sustainable trail systems such that less maintenance is required over time. For example, more sustainable trail design techniques proved to be effective during the September 2013 rain event with those trails requiring substantially less repair work. However, as trails and

trailheads age they will need maintenance just as any aging facility does. Maintenance costs on the farmsteads will be needed to keep the buildings in usable condition.

It is anticipated additional funding will be required for operation and maintenance as the OSMP infrastructure expands. Current projections indicate that existing revenue sources for OSMP will be adequate to provide needed operation and maintenance funding.

Deferred Eliminated, or Changed Projects

Due to the September 2013 flood, other projects have been deferred, delayed and/or modified. For example, West TSA overall completion is being deferred by a few years. Some flood recovery projects are in the West TSA, repairing trails and infrastructure in place or through re-routing to allow for more resilient infrastructure.

Unfunded Projects and Emerging Needs

By developing an OSMP Master Plan, the department will develop a clear vision for its future and to determine if the there are unfunded projects or emerging needs.

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Table 12-1: 2016-2021 Funding Summary By Department

		Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
OPEN SPACE & MOUNTAIN PARKS	Department Total	$ 49,060,930	$ 11,900,930	$ 7,945,000	$ 7,455,000	$ 7,080,000	$ 7,390,000	$ 7,290,000	$ -
CIP-CAPITAL ENHANCEMENT	Subtotal	$ 11,324,600	$ 4,074,600	$ 1,975,000	$ 1,475,000	$ 1,100,000	$ 1,400,000	$ 1,300,000	$ -
	Boulder Crk Above 95th	$ 500,000	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ -
	ETSA - Plan and Implementation	$ 650,000	$ -	$ -	$ 200,000	$ 50,000	$ 200,000	$ 200,000	$ -
	Facility Modifications-Space	$ 900,000	$ 200,000	$ 200,000	$ 200,000	$ 100,000	$ 100,000	$ 100,000	$ -
	Flood Eng. Trails	$ 572,600	$ 572,600	$ -	$ -	$ -	$ -	$ -	$ -
	Goodhue Ditch Fish Passage	$ 300,000	$ -	$ 300,000	$ -	$ -	$ -	$ -	$ -
	NTSA - Plan and Implementation	$ 700,000	$ 100,000	$ 200,000	$ 200,000	$ 100,000	$ 50,000	$ 50,000	$ -
	OSMP Innovations	$ 550,000	$ -	$ 75,000	$ 175,000	$ 100,000	$ 100,000	$ 100,000	$ -
	OSMP Master Plan Update	$ 852,000	$ 252,000	$ 200,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ -
	S.Bldr Crk at E.Bldr Ditch Const	$ 300,000	$ -	$ 300,000	$ -	$ -	$ -	$ -	$ -
	South Boulder Creek Instream	$ 2,000,000	$ 2,000,000	$ -	$ -	$ -	$ -	$ -	$ -
	STSA - Plan and Implementation	$ 300,000	$ -	$ -	$ -	$ -	$ 200,000	$ 100,000	$ -
	Visitor Infrastructure System Wide	$ 2,000,000	$ 100,000	$ 200,000	$ 200,000	$ 500,000	$ 500,000	$ 500,000	$ -
	WTSA Implementation	$ 1,700,000	$ 350,000	$ 500,000	$ 400,000	$ 150,000	$ 150,000	$ 150,000	$ -
CIP-CAPITAL MAINTENANCE	Subtotal	$ 3,036,330	$ 1,626,330	$ 270,000	$ 280,000	$ 280,000	$ 290,000	$ 290,000	$ -
	Agriculture Facilities Projects	$ 720,000	$ 110,000	$ 110,000	$ 120,000	$ 120,000	$ 130,000	$ 130,000	$ -
	Boulder & S Bldr Crk Flood Repair	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ -
	Cultural Resource/Facility Restorat	$ 500,000	$ -	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ -
	Farm Site Improvements	$ 360,000	$ 60,000	$ 60,000	$ 60,000	$ 60,000	$ 60,000	$ 60,000	$ -
	Flood Trails	$ 991,000	$ 991,000	$ -	$ -	$ -	$ -	$ -	$ -
	Foothills Nature Center	$ 205,330	$ 205,330	$ -	$ -	$ -	$ -	$ -	$ -
	Hartnagle House Restoration	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ -
	South Mesa Trailhead Bridge	$ 60,000	$ 60,000	$ -	$ -	$ -	$ -	$ -	$ -
CIP-LAND ACQUISITION	Subtotal	$ 34,200,000	$ 5,700,000	$ 5,700,000	$ 5,700,000	$ 5,700,000	$ 5,700,000	$ 5,700,000	$ -
	Mineral Rights Acquisition	$ 600,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ -
	OSMP Real Estate Acquisition	$ 32,400,000	$ 5,400,000	$ 5,400,000	$ 5,400,000	$ 5,400,000	$ 5,400,000	$ 5,400,000	$ -
	Water Rights Acquisition	$ 1,200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ -
CIP-NEW FACILITY/INFRASTRUCTURE	Subtotal	$ 500,000	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ -
	Boulder Creek Bikepath Extension	$ 500,000	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ -

Mapping

The mapping for CIP projects is now in a GIS-based electronic map accessed here. All the mapable projects proposed for funding in the 2016-2021 are shown. If the icons are clicked, the project name, project number (referenced on the project sheets), department, funding source, and year with initial funding will be shown. For many projects the initial funding is currently showing as 2015 as projects have funding for planning and design before actual construction however, the construction timing may be in the future. Please consult the project sheets in each department section for project descriptions, phasing and funding information. Projects with funding earmarked for citywide or system improvements are not shown on the map. Ongoing refinement of the GIS-based map will result in greater clarity of project information.

Project Name: Agriculture Facilities Projects

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	OPEN SPACE & MOUNTAIN PARKS	**Subcommunity:**	SYSTEM-WIDE
Project Number:	555AG15001	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

This item funds smaller capital maintenance projects for the repair, replacement or renovation of existing OSMP agricultural infrastructure. Typically this money is used for replacement or new installation of fences (approx. 8-10 fence projects per year at $5k-$10k per project) and agricultural irrigation items such as head gates, division boxes and irrigation ponds (approx. 4-6 irrigation projects per year at $7k to $12k). The projects are either identified in the Agricultural Resource Management Plan that is on track to be adopted in early 2016, the current OSMP fence inventory, or as opportunistic projects identified throughout the year.

Project Phasing

Construction Phase for smaller capital maintenance projects. Planning and Design: $0
Construction: $110,000 in 2016, similar costs projected through 2021 ($110,000 in 2017, $120,000 in 2018 and 2019, $130,000 in 2020 and 2021)

Public Process

The Agricultural Resource Management Plan will go through a public process and will identify some of the projects to be funded in this category. For the individual sites, the infrastructure is already present and these funds will generally be used to replace the existing infrastructure with facilities of similar design and function. Adjacent property owners will be consulted, as necessary.

Interdepartmental and Interagency Collaboration

The city's Utilities staff 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 program to be funded annually in the OSMP CIP.

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	$100,000	$110,000	$110,000	$120,000	$120,000	$130,000	$130,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$820,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: 0

Funding Source for O&M:

Additional Annual O&M Description:

This maintenance work will reduce future O&M costs.

Project Name: Boulder Crk Above 95th Restoration

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	OPEN SPACE & MOUNTAIN PARKS	**Subcommunity:**	AREA III
Project Number:	555ES16002	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

Restore Boulder Creek between 75th Street and 95th Street to improve ecological functioning, restore flood damage and protect agricultural land and water rights

Project Phasing

1.Design $80,000
2. Permitting $70,000
3. Construction $350,000

Public Process

The Boulder Creek Drainageway Masterplanning porcess includes multiple opportunities for public participation. Coordination will occur with UDFCD, Boulder County agricultural lessees, and affected landowners. Public input opportunities at OSBT public meeting, press release and notification via the permitting process.

Interdepartmental and Interagency Collaboration

Continue collaboration with Boulder Creek Drainageway Masterplan partners. Coordination with OSMP agricultural staff and OSMP Water Resources Coordinator. Coordination with and permitting through federal, state and county agencies.

Change From Past CIP

New

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	$0	$500,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$500,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: 0

Funding Source for O&M:

Additional Annual O&M Description:

Minimal post project monitoring and weed mgmt by staff.

Project Name: Boulder Creek Bikepath Extension

Project at a Glance

Project Type:	CIP-NEW FACILITY/INFRASTRUCTUR		
Department:	OPEN SPACE & MOUNTAIN PARKS	**Subcommunity:**	AREA III
Project Number:	555TA16001	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

County has been awarded a grant of about $4.4M to extend the Boulder Creek Bike Path from its current end at Four Mile Canyon to Betasso. The limits of this proejct are outside of the Boulder city limits. The local match required for the project is about $1.1M which the City and County will split. The city's OSMP department is providing $500k and the city's transportation department will provide $50k. The project will be lead by Boulder County Transportation. They will manage the design and construction of the project with input from OSMP staff. This project is federally funded so the county will follow the requirements for this type of funding including county, state and federal environemental review and permitting.

Project Phasing

Project being lead by Boulder County. Design planned for 2015 with construction anticipated in 2016. The city has entered into an MOU with Boulder County and the city's match money will be paid to Boulder County per this MOU.

Public Process

The County will lead the public process with city OSMP and Transportation input.

Interdepartmental and Interagency Collaboration

Process to be lead by Boulder County Transportation with input from OSMP, the city's Transportation Department, and CDOT.

Change From Past CIP

New Project

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	$0	$500,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$500,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: None

Funding Source for O&M:

Additional Annual O&M Description:

County will manage the trail maintenance.

Project Name: Boulder & S Bldr Crk Flood Repair

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	OPEN SPACE & MOUNTAIN PARKS	**Subcommunity:**	AREA III
Project Number:	555ES15002	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

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.

Project Phasing

Construction - $100k
2016 funds are additonal construction funds added to prior year design and construction funds.

Public Process

Public input opportunities at OSBT public meeting, press release, and notification via the permitting process.

Interdepartmental and Interagency Collaboration

This project will be coordinated with the COB utilities workgroup and the existing city utilities in this area, the CDOT US36 Wetland Mitigaton project, the Colorado Water Conservation Board, the Colorado Parks and Wildlife Division, affected landowners.

Change From Past CIP

Added 2016 funding.

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	$250,000	$100,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$350,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: 0

Funding Source for O&M:

Additional Annual O&M Description:

Monitoring and weed control during establishment by staff.

Project Name: Cultural Resource/Facility Restorat

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	OPEN SPACE & MOUNTAIN PARKS	**Subcommunity:**	SYSTEM-WIDE
Project Number:	555CR15001	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

Improvement of the condition of historic structures, including but not limited to barns, hosues, sheds, and shelters, as well as planning and development of a cultural preservation assessment and prioritization plan that will inform the priorities for the future.

Project Phasing

Planning - $20k. The early fundng will cover an assessment and prioritization of the OSMP cultural and historic resources. This effort will inform the future spending in coordination with the department master plan.
Construction - $80k. All remaining funds will be used for maintenance activities.

Public Process

Updates on work will be provided to the OSBT, as needed. Most work is maintenance to existing structures so public process is not anticipated.

Interdepartmental and Interagency Collaboration

Work will be coordinated with Boulder County Preservation staff and the State Historic Preservation office

Change From Past CIP

Added program to be funded annually to address on-going needs

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	$60,000	$0	$100,000	$100,000	$100,000	$100,000	$100,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$560,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: Unknown

Funding Source for O&M:

Additional Annual O&M Description:

Improvements to facilities will likely reduce O&M needs

Project Name: ETSA - Plan and Implementation

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	OPEN SPACE & MOUNTAIN PARKS	**Subcommunity:**	AREA III
Project Number:	555ETSA001	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

The East Trail Study Area (TSA) encompasses approximately 11,000 acres of OSMP including Sawhill Ponds, the East Boulder Trail, the Bobolink and Teller Farm trailheads. It extends general east of the City of Boulder, southeast of the Diagonal Highway and north of US 36. The East Trail Study Area (TSA) Plan seeks to improve visitor experiences and increase the sustainability of trails and trailheads while conserving the area's natural, cultural and agricultural resources. Outcomes may include:
-strategies to provide high-quality visitor experiences for a diversity of recreational opportunities,
-visitor infrastructure enhancements, such as trail connections, and trail and trailhead improvements,
-actions that sustain trails and surrounding landscapes. Such as:
--projects to reduce trail erosion, the re-routing of trails around wildlife habitats,
--the removal of redundant paths and
--the restoration of disturbed areas.
-protection of sensitive ecological areas and the restoration of disturbed areas.

Project Phasing

Planning - 2018: $200,000, 2019: 100,000 Followed by implementation in 2020 and beyond.

Public Process

There will be ample opportunity for community input. Staff is currently experimenting with a number of techniques to broaden community participation in the North TSA plan and will also learn from the OSMP masterplan effort. The results of these processes will inform staff's approach to public process in the East TSA.

Interdepartmental and Interagency Collaboration

The East TSA plan includes opportunities to collaborate with other departments around issues such as ecological conservation, fitness and health, climate action, multi-modal linkages, etc. The level of collaboration with Boulder County, Colorado Parks and Wildlife, and other agency partners will be commensurate with their interest and the benefit to the community.

Change From Past CIP

Shifted start date to 2018 after master plan and added 2018 funds

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	$0	$0	$0	$200,000	$50,000	$200,000	$200,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$650,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: TBD

Funding Source for O&M:

Additional Annual O&M Description:

Monitor, maintain, rehabilitate trails when needed.

Project Name: Facility Modifications-Space Needs

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	OPEN SPACE & MOUNTAIN PARKS	**Subcommunity:**	SYSTEM-WIDE
Project Number:	555FA16001	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

The department is undergoing a space needs analysis. It is intended to evaluate space alternatives including utilizing the current space spread across various locations either as it exists or reconfigured, or if there is a need to pursue additional space. The analysis will identify short, medium and long term preferred alternatives that may require remodeling existing spaces and/or reconstruction of some facilities, and/or evaluating new spaces.

Project Phasing

2016 funding will likely cover the short term alternatives identified in the space needs analysis. The medium to long term solutions will be identified and funded in out years of the CIP. Funding amounts will be modified in out years, if needed.

Public Process

N/A

Interdepartmental and Interagency Collaboration

This effort will be coordinated with FAM so they can serve as a technical resource to help direct and review any proposals and cost estimates. Furthermore, coordination with FAM allows for potential collaboration on current and future citywide solutions.

Change From Past CIP

New Project

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	$0	$200,000	$200,000	$200,000	$100,000	$100,000	$100,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$900,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: TBD

Funding Source for O&M:

Additional Annual O&M Description:

Any additional O&M can't be quantified until the plan is developed.

Project Name: Farm Site Improvements

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	OPEN SPACE & MOUNTAIN PARKS	**Subcommunity:**	SYSTEM-WIDE
Project Number:	555AG16001	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

This funding is for deferred maintenance to existing agricultural buildings and infrastructure. It is mainly for out-buildings and structures that are used for hay and equipment storage, livestock shelters and grain storage. The funding could also be used for maintenance on homes that exist on OSMP properties that are used for agricultural production. The improvements may be identified in the Agricultural Resource Management Plan that is expected to be approved in early 2016 or through other methods. The necessary work and funding level may be revised in future years as the needs and the work planning is completed.

Project Phasing

Construction Phase for maintenance to existing OSMP inftrastructure. Planning and Design: $0
Construction: $60,000 in 2016 (same through 2021)

Public Process

The projects are maintenance to existing structures on OSMP properties so no porcess is anticipated.

Interdepartmental and Interagency Collaboration

Most of this maintenance work is on OSMP property and, if needed, will be coordinated with the adjacent property owners and the cultural resources staff in OSMP.

Change From Past CIP

This is a new program to be funded annually

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	$0	$60,000	$60,000	$60,000	$60,000	$60,000	$60,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$360,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: 0 **Funding Source for O&M:**

Additional Annual O&M Description:

The maintenance will lessen O&M requirements.

Project Name: Flood Eng. Trails

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	OPEN SPACE & MOUNTAIN PARKS	**Subcommunity:**	AREA III
Project Number:	555BOULD33	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

This CIP project titled Flood Engineered Trails is a group of repairs that are intended to correspond with the related FEMA project, or worksheet, for OSMP trail reconstruction when the trail is replaced at least partially outside of the existing trail alignment.
Locations included in this project include the Lower Big Bluestem Trail repair, the South Mesa Trail repair and smaller trails that will be partially reconstructed outside of their current alignment.

Project Phasing

2016 Expected:
Lower Big Bluestem Trail Repairs; Construction - $155.3k
South Mesa Trail Repair: Construction - $317.3k
Small Trail Repairs: Construction - $100k

Public Process

Staff will provide updates to the Open Space Board and will hold public hearings for these discussions, if the trail realignments are significant.

Interdepartmental and Interagency Collaboration

All work will be coordinated with OSMP Ecologists and Cultural Resources Staff. In addition OSMP will coordinate with city's central flood recovery group.

Change From Past CIP

Added 2016 flood recovery locations

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Lottery	$0	$155,300	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Open Space	$477,650	$417,300	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$155,300**						

Additional Annual Operating and Maintenance

Additional Annual O&M: 0 **Funding Source for O&M:**

Additional Annual O&M Description:

Trail reconstruction will reduce O&M cost

Project Name: Flood Trails

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	OPEN SPACE & MOUNTAIN PARKS	**Subcommunity:**	AREA III
Project Number:	555BOULD24	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

This project is a grouping of flood recovery locations intended to correspond with the related FEMA project (worksheet) for OSMP trail reconstruction when the trail is replaced in the existing trail alignment.
Specific projects that are continued or started in 2016 include: Chautauqua trail repairs, Shanahan trail repairs, and other smaller trail repairs.

Project Phasing

Chautauqua Trail Repairs: Construction - $75k
Shanahan Trail Repair: Design - $30k, Construction - $786k
Small Trail Repairs: Construction - $100k

Public Process

No public process is planned as the trail repair is occurring in the current location and considered maintenance to the existing system. Trail users will be notified through public outreach methods including press releases and the website.

Interdepartmental and Interagency Collaboration

Work will be coordinated with OSMP Ecologists and Cultural and Historical Staff. In addition OSMP will coordinate with city's central flood recovery group.

Change From Past CIP

Added 2016 funding for 2016 flood recovery locations.

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	$1,432,550	$991,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$2,423,550**						

Additional Annual Operating and Maintenance

Additional Annual O&M: 0

Funding Source for O&M:

Additional Annual O&M Description:

Trail reconstruction will reduce O&M cost from flood damage.

Project Name: Foothills Nature Center

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	OPEN SPACE & MOUNTAIN PARKS	**Subcommunity:**	NORTH BOULDER
Project Number:	555CR16001	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

In 2015, a University of Colorado Denver group is embarking on a Design Review of the Foothills Nature Center, which consists of several historic buildings. Their assessment will examine the department's and community's needs and blend them with use of the current buildings. The 2016 CIP request will be used to carry out repair, renovation and rehabilitation of the complex. This will likely include rehabilitation of the current buildings, and revamping of the trailhead and parking area to make it more user friendly and welcoming.

Project Phasing

Management of project phasing and budget per phase will depend on the extent of the work, that is yet to be determined.

Public Process

This complex is within the North Trail Study Area, so needs of community will be addressed. We will also communicate with the immediate neighbors.

Interdepartmental and Interagency Collaboration

None

Change From Past CIP

New

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Lottery	$0	$205,330	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$205,330**						

Additional Annual Operating and Maintenance

Additional Annual O&M: 0

Funding Source for O&M:

Additional Annual O&M Description:

Unknown - but the improvements are likely to reduce O&M needs.

Project Name: Goodhue Ditch Fish Passage

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	OPEN SPACE & MOUNTAIN PARKS	**Subcommunity:**	AREA III
Project Number:	555ES16001	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

Design and construct a fish passage structure on the Goodhue Ditch Diversion on South Boulder Creek to allow for the passage of native and sport fish and to connect upstream and downstream aquatic habitat

Project Phasing

1.Design $25,000
2. Permitting $20,000
3. Construction $255,000

Public Process

Public input opportunities at OSBT public meeting, press release, and notification via the permitting process.

Interdepartmental and Interagency Collaboration

Collaborate with the ditch company and shareholders, Colorado Parks and Wildlife, local conservation groups and the affected public.

Change From Past CIP

New Project

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	$0	$0	$300,000	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$300,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:	No	**Funding Source for O&M:**	

Additional Annual O&M Description:

Project Name: Hartnagle House Restoration

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	OPEN SPACE & MOUNTAIN PARKS	**Subcommunity:**	AREA III
Project Number:	555CR15002	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

The Hartnagle House was built in the early 1900's 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.

Project Phasing

Construction - $100k
Improvements to the house with this funding will stabilize the structure and protect it from naturally caused damage. Future needs will be evaluated and additional construction funds programmed, as needed.

Public Process

Because this is minor maintenance, no public process is anticipated.

Interdepartmental and Interagency Collaboration

Because the repairs are isolated to a single property and is not substantive, no outside collaboration is needed.

Change From Past CIP

2016 funding added.

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	$65,000	$100,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$165,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: 0

Funding Source for O&M:

Additional Annual O&M Description:

This work will reduce future ops and maintenance needs.

Project Name: Mineral Rights Acquisition

Project at a Glance

Project Type:	CIP-LAND ACQUISITION		
Department:	OPEN SPACE & MOUNTAIN PARKS	**Subcommunity:**	SYSTEM-WIDE
Project Number:	555MRA001	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

This on-going program provides funding to purchase underlying mineral interests from private property owners 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. 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. Funds also provide for research, mapping and analyzing potential acquisitions. This project is for ongoing funding program. 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.

Project Phasing

Funding is for mineral acquisitions and associated costs only.

Public Process

None

Interdepartmental and Interagency Collaboration

Collaboration with other departments and agencies are generally not required for the acquisition of mineral rights.

Change From Past CIP

None

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	$561,184	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$1,161,184**						

Additional Annual Operating and Maintenance

Additional Annual O&M: 0

Funding Source for O&M:

Additional Annual O&M Description:

Included in annual appropiation for operations

Project Name: NTSA - Plan and Implementation

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	OPEN SPACE & MOUNTAIN PARKS	**Subcommunity:**	AREA III
Project Number:	555NTSA001	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

The NTSA encompassess 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/Diagional Highway. The Plan will delineate some new trails and major maintenance for some designated trails and closure and reclamation of the other undesignated tails, trailhead 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.

Project Phasing

2015-2016 Funding - NTSA Planning
2017-2021 - Implementation of plan elements

Public Process

The public process includes email, newsletters, public workshops, on trail and at trailhead outreach, engagement with the youth and outreach at local businesses. There are regular check-ins with the OSBT, updates to the city council and final review and acceptance with a public hearing by the OSBT and city council.

Interdepartmental and Interagency Collaboration

Coordination with the city Parks and Recreation Department for the Boulder Resevoir Master Plan, with Boulder County Parks and Open Space on neighboring properties and with CDOT on properties adjacent to their facilities, including US36.

Change From Past CIP

Funding added in 2018, 2019 and 2021 - $200k total

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	$100,000	$100,000	$200,000	$200,000	$100,000	$50,000	$50,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$800,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: TBD

Funding Source for O&M:

Additional Annual O&M Description:

Monitor, maintain, rehabilitate trails when needed

Project Name: OSMP Innovations

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	OPEN SPACE & MOUNTAIN PARKS	**Subcommunity:**	AREA III
Project Number:	555CO16001	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

Explore and encourage the use of innovations on OSMP property, to evaluate different approaches to design and management of the OSMP system. For example, an initial biomimicry innovation project could utilize biological concepts to rethink road and trail design on the Bluebell Trail in Chautauqua. The use of innovations will be explored further starting in 2016 and continuing with the first year of funding in 2017.

Project Phasing

Funding will be defined in 2016 and early 2017 to determine next steps likely starting with design and followed by construction in 2018 and beyond.

Public Process

The OSBT will be updated and involved as determined throughout the planning of what projects to explore with this funding.

Interdepartmental and Interagency Collaboration

Interdepartmental and Interagency Collaboration will be defined in 2016 and into early 2017 depending on the type and extent of the innovation projects. Specifically for biomimicry, the EPA consultant will continue to provide guidance throughout the process, as available.

Change From Past CIP

New

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	$0	$0	$75,000	$175,000	$100,000	$100,000	$100,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$550,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: TBD

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: OSMP Master Plan Update

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	OPEN SPACE & MOUNTAIN PARKS	**Subcommunity:**	SYSTEM-WIDE
Project Number:	555OSMP001	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

At their 2015 retreat, City Council requested that staff begin an update of the Visitor Master Plan and include addressing a set of previously identified "overarching issues". Since then, OSM has been undergoing assessments both internally and externally which have identified the need for an OSMP "Master Plan". Staff will recast the VMP update to develop an OSMP Master Plan, still addressing the overarching issues. The plan will also establish a set of policies and priorities and to align the department with shared goals, measureable objectives and metrics to implement the Open Space sections of the City Charter. An OSMP Master Plan will improve integration of departmental work group efforts and be clearly linked to the Boulder Valley Comprehensive Plan. As previously committed, the master planning process, including updates to the VMP components, would begin once the North TSA is completed, likely in mid-2016. The process is anticipated to take between 18 and 24 months to complete.

Project Phasing

Planning - 2016 and 2017
Implementation - 2018 - 2021 - the amount to be refined or reallocated based on the outcome of the plan.

Public Process

There will be ample opportunity to community input. Staff is currently experimenting with a number of techniques to broaden community participation in the North TSA plan. The results of that effort will inform staff's approach to public process in for the OSMP master plan.

Interdepartmental and Interagency Collaboration

The OSMP Master plan will link with the Boulder Valley Comprehensive Plan. This will provide a nexus for interdepartmental collaboration around issues such as ecological conservation, fitness and health, climate action, multi-modal linkages, etc. The level of collaboration with Boulder County, Colorado Parks and Wildlife, and other agency partners will be commensurate with their interest and the benefit to the community.

Change From Past CIP

New Project

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	$0	$252,000	$200,000	$100,000	$100,000	$100,000	$100,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$852,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:	TBD	**Funding Source for O&M:**	

Additional Annual O&M Description:

Not known at this time.

Project Name: OSMP Real Estate Acquisition

Project at a Glance

Project Type:	CIP-LAND ACQUISITION		
Department:	OPEN SPACE & MOUNTAIN PARKS	**Subcommunity:**	SYSTEM-WIDE
Project Number:	555REA001	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	N/A

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 OSBT and the City Council.

Project Phasing

All of this funding is for property acquisition and associated costs including immediate deferred maintenance needs.

Public Process

Property acquisition is reviewed at an OSBT hearing and then by the city council with an associated public hearing.

Interdepartmental and Interagency Collaboration

Coordinate with internal OSMP staff including ecologists, cultural and historic, integrated pest management, agricultural management and water resources. Typically other department or outside agency coordination is not required.

Change From Past CIP

None

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	$8,844,322	$5,400,000	$5,400,000	$5,400,000	$5,400,000	$5,400,000	$5,400,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$41,244,322**						

Additional Annual Operating and Maintenance

Additional Annual O&M: Minimal

Funding Source for O&M:

Additional Annual O&M Description:

Incremental maintenance costs for new properties

Project Name: S.Bldr Crk at E.Bldr Ditch Const

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	OPEN SPACE & MOUNTAIN PARKS	**Subcommunity:**	EAST BOULDER
Project Number:	555ES16003	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

Improve existing ditch infrastructure to minimize impacts to OSMP land from ditch maintenance activities while ensuring delivery of water rights. Improvements will also allow fish passage at the existing diversion.

Project Phasing

1. Design $50,000
2. Permitting $60,000
3. Construction $190,000

Public Process

Public input opportunities at OSBT public meeting, press release, and notification via the permitting process.

Interdepartmental and Interagency Collaboration

Collaborate with Ditch Company and shareholders, Colorado Parks and Wildlife, local conservation groups and the affected public.

Change From Past CIP

New

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	$0	$0	$300,000	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$300,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: 0

Funding Source for O&M:

Additional Annual O&M Description:

O&M costs for ditch maintenance are reduced by this project.

Project Name: South Boulder Creek Instream Flow

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	OPEN SPACE & MOUNTAIN PARKS	**Subcommunity:**	AREA III
Project Number:	555SBIF001	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

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.

History 2010-2015: This project is being lead by Denver Water and implements an Intergovernmental Agreement (IGA) to establish and operate an environmental pool to store 5,000 acre-feet of water shared between the City of Boulder and the City of Lafayette to be released for instream flow purposes for the benefit of the water dependent environment of South Boulder Creek. The IGA parties include the City of Boulder, Denver Water and the City of Lafayette and was signed on February 24, 2010. The IGA outlines the responsibilities of the parties in the implementation of the "environmental pool" including financial and operational considerations. The IGA specifies that both the City of Boulder and the City of Lafayatte's cost share of the environmental pool is $2 million each or $4 million combined. Denver Water is contributing approximately $2.4 million towards the environmental pool.
In order to most effectively use the water in this environmental pool for instream flow, several modifications to ditch diversions structures need to be built on South Boulder Creek to allow for fish passage. 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 in-stream flow rates. The City of Boulder's portion of the costs are estimated to be $400,000 with $150,000 set aside in 2013, $100,000 in 2014 and $150,000 in 2015. The project completion date is based on Denver Water's projection that will begin construction of the expanded reservoir in 2016.

Project Phasing

2016 - $2Mil - Contractual commitment to be paid to Denver Water upon issuance of the U.S. Corps of Enginners 404 permit.

Public Process

The process is being lead by Denver Water for the Gross Resevoir expansion project. The Boulder City Council was involved in the review and approval process for this project that lead to the executed intergovernmental agreement to implement this project.

Interdepartmental and Interagency Collaboration

Denver Water is leading this effort in coordination with the City of Boulder, the City of Lafayette and the permitting agencies.

Change From Past CIP

None

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	$396,177	$2,000,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$2,396,177**						

Additional Annual Operating and Maintenance

Additional Annual O&M: 0

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: South Mesa Trailhead Bridge Replace

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	OPEN SPACE & MOUNTAIN PARKS	**Subcommunity:**	AREA III
Project Number:	555PM15001	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

The South Mesa Bridge needs to be replaced to allow construction access for flood recovery efforts. The 2016 funding is for construction management of the project.

Project Phasing

The $60k in 2016 is for construction management. Design, Bid and construction funds encumbered – 2015, Construction – 2016.

Public Process

None anticipated as this is the replacement of an existing structure in place.

Interdepartmental and Interagency Collaboration

Working with ecologist staff and cultural resources staff in the OSMP department. Permitting being acquired from the county, state and federal governments.

Change From Past CIP

Added 2016 funding

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	$580,000	$60,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$640,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: 0

Funding Source for O&M:

Additional Annual O&M Description:

Replacing existing structure - no added O&M

Project Name: STSA - Plan and Implementation

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	OPEN SPACE & MOUNTAIN PARKS	**Subcommunity:**	AREA III
Project Number:	555STSA001	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

The South Trail Study Area (TSA) encompasses approximately 10,000 acres of OSMP lands. This planning area includes both the Marshall Mesa/Southern Grasslands area and the Eldorado Mountain/Doudy Draw areas for which TSA plans were completed in 2005 and 2006 respectively. This plan will add the city-owned lands managed as open space in Jefferson County and city open space acquired since 2006. The TSA is located south of Colorado Highway 170 (Eldorado Springs Drive/Marshall Road). The South Trail Study Area (TSA) Plan seeks to improve visitor experiences and increase the sustainability of trails and trailheads while conserving the area's natural, cultural and agricultural resources. Outcomes may include:
-strategies to provide high-quality visitor experiences for a diversity of recreational opportunities,
-visitor infrastructure enhancements, such as trail connections, and trail and trailhead improvements,
-actions that sustain trails and surrounding landscapes. Such as:
--projects to reduce trail erosion, the re-routing of trails around wildlife habitats,
--the removal of redundant paths and
--the restoration of disturbed areas.
-protection of sensitive ecological areas and the restoration of disturbed areas.

Project Phasing

Planning - 2020: $200,000, 2021: 100,000

Public Process

There will be ample opportunity for community input. Staff is currently experimenting with a number of techniques to broaden community participation in the North TSA plan and will have learned from that and other planning processes. The results of thes efforts will inform staffs approach to public process for the South TSA.

Interdepartmental and Interagency Collaboration

The South TSA plan includes opportunities to collaborate with other departments around issues such as ecological conservation, fitness and health, climate action, multi-modal linkages, etc. The level of collaboration with Jefferson and Boulder Counties, Colorado Parks and Wildlife, and other agency partners will be commensurate with their interest and the benefit to the community.

Change From Past CIP

New Project

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	$0	$0	$0	$0	$0	$200,000	$100,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$300,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: TBD

Funding Source for O&M:

Additional Annual O&M Description:

Monitor, maintain, and rehabilitate trails as needed.

Project Name: Visitor Infrastructure System Wide

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	OPEN SPACE & MOUNTAIN PARKS	**Subcommunity:**	SYSTEM-WIDE
Project Number:	555VISW001	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

This program provides funding on a system-wide basis for planning capital maintenance and new construction on existing trails and trailheads, other facilities that improve the visitor experience (e.g. safe roads crossings) and capital restoration of areas where visitor impacts are high. The project is for ongoing funding program. Projects are identified throught the various trail study area plans or opportunistically as needs arise throughout the year.

Project Phasing

Construction - All funds are for planning and construction of capital maintenance and smaller new facilities, typically trails or trailheads.
2016 Construction- $100k
2017-18 Construction- $200k/year
2019-21 Construction- $500k/year

Public Process

Projects are approved by the OSBT. The public has input via email and public meetings in the trail study area planning process.

Interdepartmental and Interagency Collaboration

Where appropiate OSMP coordinates with City of Boulder Parks and Recreation, Boulder County and CDOT depending on the location of the projects.

Change From Past CIP

Funding lowered in 2016 because flood work is of greater priority.

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	$0	$100,000	$200,000	$200,000	$500,000	$500,000	$500,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$2,000,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: 0

Funding Source for O&M:

Additional Annual O&M Description:

Monitor, Maintain, rehabiliate trails when needed

Project Name: Water Rights Acquisition

Project at a Glance

Project Type:	CIP-LAND ACQUISITION		
Department:	OPEN SPACE & MOUNTAIN PARKS	**Subcommunity:**	SYSTEM-WIDE
Project Number:	555WRA001	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

This on-going project provides funding to purchase additional water from private owners or others for use on Open Space and Mountain Parks for agricultural and environmental purposes. By purchasing the water rights, the city is purchasing a physical asset. 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 departments water rights portfolio. This project is for an ongoing funding program. In addition, should mineral rights or real property become available to purchase and funds allocated for that purpose are insufficient, water rights acquisition funds may be utilized to make up the deficiency.

Project Phasing

All funds are for water rights acquisition and associated costs.

Public Process

None

Interdepartmental and Interagency Collaboration

Coordinate with internal OSMP staff including ecologists, cultural and historic, integrated pest management, agricultural management and water resources. Typically other department or outside agency coordination is not required.

Change From Past CIP

None

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	$529,115	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$1,729,115**						

Additional Annual Operating and Maintenance

Additional Annual O&M: Minimal

Funding Source for O&M:

Additional Annual O&M Description:

Included in annual appropriations for operations

Project Name: WTSA Implementation

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	OPEN SPACE & MOUNTAIN PARKS	**Subcommunity:**	AREA III
Project Number:	555WTSA001	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

This funding is for implementation of trail projects that were identified in the West Trail Study Areas.
The funds will allow for implementation of the following projects: Chautauqua Phase II (Ski Jump reroute, Chautauqua Trail repair, 6th street connector designation and repair), Flagstaff Trail reroute (as it drops down into Gregory Canyon Trailhead/Road), Royal Arch repairs, Long Canyon Reroute, Completion of Lion's Lair (Wittemyer), partial implementation of trail projects on NIST, the Dakota Ridge connector trails (in conjuction with the work occurring at Sanitas).

Project Phasing

Construction Phase: Chautauqua Trail repair and completion of Lion's Lair (Wittemyer)- $45k
Construction Phase: Chautauqua Phase II (Ski Jump reroute, 6th street connector repair, Flagstaff Trail reroute (as it drops down into Gregory Canyon Trailhead/Road), Royal Arch repairs, Long Canyon Reroute, partial implementation of trail projects on NIST, the Dakota Ridge connector trails (in conjuction with the work occurring at Sanitas)- $305k.
Future years- Construction ($500k in 2017, $400k in 2018, $150k/year 2019-2021).

Public Process

All of the trail project were identified in the West Trail Study Area Plan, which went through a lengthy public involvement process. However, the Flagstaff Trail Reroute and next steps of the NIST project may require additional public process including outreach to interested community members and OSBT.

Interdepartmental and Interagency Collaboration

Depending on which alternative is pursued for the Flagstaff Trail project, additional collaboration with City Transportation may be needed.

Change From Past CIP

Funding/year has been changed from 2015 to account for flood recovery

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	$393,471	$350,000	$500,000	$400,000	$150,000	$150,000	$150,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$2,093,471**						

Additional Annual Operating and Maintenance

Additional Annual O&M: 0

Funding Source for O&M:

Additional Annual O&M Description:

Trail repairs will reduce on-going O&M.

Overview of Department Mission

In 2014 the City Council adopted the Boulder Parks and Recreation Master Plan and guiding principles that provide a focused mission statement to promote the health and well-being of the entire Boulder community by collaboratively providing high-quality parks, facilities and programs. This plan reflected over two years of public input as to the future of the urban park system and identified six core themes to implement the community vision. They include: enhancing community health & wellness; taking care of what we have; financial sustainability; building community; youth engagement; and organizational readiness.

These six themes were structured to fit within the city Sustainability Framework Plan. During the leadership transition of 2014 the department focused on staff development and training under the organizational readiness goal accomplishing 30 staffing changes for efficiency, increasing training programs, and hiring a new director. In 2015 the department is focusing on youth engagement through the Year of the Child with expanded youth and family services and development of nature play focus. In addition the department is implementing an Asset Management Program to understand existing conditions on $200 million assets, reduce backlog of deferred maintenance to lower overall facility condition index (FCI) to an industry standard. In 2016 the department will complete implementation of the Asset Management Program and begin work with expanded partnership development to secure capital funding for enhancements and new facilities.

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.

Capital Improvement Bond Fund

Funding from the Capital Improvement Bond (CIB) Fund supported a number of projects managed by Parks and Recreation. CIB funding is indicated by the following symbol:

Current Focus for Capital Planning Projects in 2016

The department will continue to focus on the key themes identified in the department master plan including:

- Community Health and Wellness – facilities are being improved with upgrades to North Boulder Recreation Center Aquatics Facility and expansion of outdoor fitness and athletic

facilities as the results of recent plans and studies.

- Taking Care of Existing Facilities – through implementation of the Asset Management Software and increase in funding for playgrounds, turf and irrigation, court resurfacing and park structures to extend the useful life of critical facilities and increase the condition of many assets.
- Building Community Relationships – through improvements to the Civic Area, many opportunities exist to enhance the gathering spaces and activation areas to invite all members of the community to enjoy this unique public space in downtown Boulder.
- Youth Activity and Engagement – many youth sports facilities and play areas will be enhanced and renovated through the 2016 CIP projects that will continue to allow the department to focus on youth and provide opportunities for children in the community.

2013 Flood Impact

The magnitude of the 2013 flood to Parks and Recreation was approximately $2 million in damages to many parks and facilities located along urban stream corridors. The majority of parks and facilities damaged during the flood have been fully restored and open to the public. The department is completing final work on the remaining flood damaged properties including Evert Pierson Memorial Kids' Fishing Pond, Knollwood Tennis Courts and demolition of the Flatirons Event Center after supporting recovery of the Spice of Life private business to a new private location.

Highlights

Projects Expected to be Completed in 2015

Boulder Reservoir, North Shore.

- Boulder Reservoir Infrastructure Improvements: In 2015, 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
- Pearl Street Mall Irrigation Replacement: Completed renovation of critical irrigation infrastructure and tree replacement to maintain and enhance the Pearl Street Mall
- 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

- Valmont City Park Planning: Completed 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
- Parks and Recreation Facility Renovations: Crestview Park has been 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.

Priority Projects for 2016

- Aquatics Facility Upgrades: Renovations and enhancements for indoor aquatics facilities will start in 2016 with North Boulder Recreation Center pool repairs and enhancements that were identified as part of the Aquatics Study completed in 2014. These projects will be funded from both parks and recreation CIP as well as FAM
- 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
- 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. 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

- 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.

Highlights of 2017-2021 Projects

- Athletic Field Improvements: The upgrade of existing natural grass fields and the conversion of select 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 benefits 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
- Aquatics Upgrades: Renovations and enhancements for indoor aquatics facilities will start in continue with East Boulder Recreation Center pool repairs and enhancements planned for 2018 and South Boulder Recreation Center or Spruce Pool for 2020.

Board Action

The Parks and Recreation Board (PRAB) unanimously approved the following two resolutions in support of the BPRD 2016-2021 CIP at the March 23, 2015 meeting: a motion to approve the 2016 recommended expenditures from the Permanent Parks and Recreation Fund and a motion to approve the recommended 2016 – 2021 Parks and Recreation Department Capital Improvement Program (CIP).

Guiding Principles and Project Prioritization

CIP Guiding Principles

The proposed projects identified in the 2016-2021 CIP are consistent with the CIP Guiding Principles and the current Parks and Recreation Master Plan. The following guiding principles are applied when identifying and evaluating priority capital improvement projects:

- 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.

Prioritization

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 2016-2021 CIP are intended to improve ongoing maintenance needs by reducing the backlog of deferred maintenance projects that have increased maintenance over time. Projects such as Aquatics Facility Maintenance and court and asphalt 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 community's overall green house gas (GHG) 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.

The department has also initiated Asset Management Best Practices through the use of Facility Condition Index (FCI) and an Asset Priority Index (API) to refine prioritization of projects. These include the following additional criteria that are reviewed by the department prior to project funding:

- Economic Impact to the Community – This criterion asks you to think about how the asset contributes economically to the community. Does it increase property values or provide for an activity that will generate income for businesses
- Substitutability – This measure considers the uniqueness of the asset or the impact if the asset were lost, destroyed, or disposed o
- Resource preservation – Asset plays a direct role in an agency's natural and/or cultural resource management programs or improves the ecological functions for the surrounding community
- Use – Asset facilitates the highest level of affordability, accessibility, and ease of use by all demographic segments of the community
- Community Benefit – Asset supports community and social values of the department.

Projects Not in Master Plan
None

Projects not Previously Identified in the CIP

- Athletic Field Improvements: As recommended in the department's master plan and the Athletic Field Study, the Parks and Recreation Department intends to improve existing natural turf athletic fields and to replace some targeted existing turf fields with new synthetic turf in select park sites
- Aquatic Facility Repairs and Enhancements: As part of recommendations of the master plan and the recently completed Aquatics Facility Study the department has identified deferred

maintenance needs within the existing facilities

- Turf Repairs and Replacement: These projects will provide upgrades to existing park natural turf areas and reduce the overall backlog of work identified in the master plan and the Asset Management Plan
- Flatiron Golf Restroom: Currently the course is in need of repairs to the restrooms on the course as well as improved cart paths
- Parking Lot Repairs: 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
- General Park Structure Repairs & Replacements: Based on the master plan and the asset management plan a number of park structures from shelters to key buildings have a backlog of deferred maintenance needs. This project will accelerate the repairs and replacement of these facilities to meet design criteria for safe and functional facilities
- South Boulder Reservoir and Tom Watson Site Plan: This project will provide for community engagement and design / planning services to develop plans and estimates for future improvements at both important facilities. The improvements will continue to support growth in the north of Boulder as well as improve visitor experiences at two aging facilities
- Scott Carpenter / Mapleton Site Plans: Development of site plans and cost estimates for capital repairs to existing facilities per the athletic field study and related city services proposed to be relocated or expanded
- Park Operations Yards Master Plan and Maintenance Facility Site Plans: Development of site plans and cost estimates for capital repairs to existing maintenance facilities per the master plan, the General Maintenance and Management Plan and the Yards recommendation.

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 due to 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, 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 $2million in damages to infrastructure some of the costs of which are eligible for 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. Projects that were deferred include:

Recreation Facility Enhancements – In 2015, funding was identified for key improvements to the City's recreation facilities. As a result of the increased construction costs for flood recovery in 2015, this project had to be deferred until 2016. This will also allow the department to complete a strategic plan to determine the priority of upgrades to recreation facilities and complete the projects in 2016.

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 have implemented 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 maintenance backlog estimated at over $27 million on approximately $200 million in assets, 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) 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
- Developing a long-term capital investment strategy to identify partnerships and non-traditional funding sources to support desired new facilities and enhancements to existing facilities.

The department has unfunded significant deficiency and high priority projects included in the current capital investment strategy program.

Key unfunded projects include:

- Work collaboratively with Boulder Fire Department to coordinate Fire Station #3 with potential move to Mapleton including identification of funding for relocation of athletic fields to Stazio or Valmont and upgrade of Mapleton Park to a community park serving the surrounding area
- Full replacement of Scott Carpenter Outdoor Pool
- System-wide compliance with federal standards for the Americans with Disabilities Act (ADA)
- Increased capacity and additional facilities for youth and adult sports
- Expansion and enhancement of recreation centers and aquatics facilities that accommodate increased demand for lap swimming, fitness equipment and classroom space
- 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 facilities
- Infrastructure associated with Valmont City Park Phase 2 development.

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Table 13-1: 2016-2021 Funding Summary By Department

		Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
PARKS & RECREATION	Department Total	$ 32,872,000	$ 4,458,000	$ 5,920,000	$ 5,217,000	$ 6,500,000	$ 5,277,000	$ 5,500,000	$ -
CIP-CAPITAL ENHANCEMENT	Subtotal	$ 11,500,000	$ 1,750,000	$ 1,850,000	$ 3,100,000	$ 1,600,000	$ 1,600,000	$ 1,600,000	$ -
	Aquatic Facility Enhancements	$ 2,900,000	$ 400,000	$ -	$ 2,000,000	$ -	$ 500,000	$ -	$ -
	Athletic Field Development	$ 4,500,000	$ 500,000	$ 1,000,000	$ 500,000	$ 1,000,000	$ 500,000	$ 1,000,000	$ -
	Lighting Ordinance	$ 500,000	$ 250,000	$ 250,000	$ -	$ -	$ -	$ -	$ -
	Playground and Irrigation Repairs	$ 3,600,000	$ 600,000	$ 600,000	$ 600,000	$ 600,000	$ 600,000	$ 600,000	$ -
CIP-CAPITAL MAINTENANCE	Subtotal	$ 17,048,000	$ 1,558,000	$ 3,620,000	$ 1,393,000	$ 2,900,000	$ 3,677,000	$ 3,900,000	$ -
	ADA Compliance Initiatives	$ 1,100,000	$ 100,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ -
	Aquatics Facility Repairs	$ 1,288,000	$ 238,000	$ -	$ 273,000	$ -	$ 777,000	$ -	$ -
	Boulder Reservoir South	$ 4,500,000	$ -	$ 1,000,000	$ -	$ -	$ 1,500,000	$ 2,000,000	$ -
	Court Repairs and Resurfacing	$ 1,500,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ -
	EAB Response Measures	$ 2,160,000	$ 220,000	$ 220,000	$ 220,000	$ 500,000	$ 500,000	$ 500,000	$ -
	Flatiron Golf Course Repairs	$ 300,000	$ 300,000	$ -	$ -	$ -	$ -	$ -	$ -
	Park Structure Repairs and	$ 1,500,000	$ -	$ 500,000	$ -	$ 500,000	$ -	$ 500,000	$ -
	Parking Lot Repairs	$ 1,500,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ -
	Recreation Facility Repairs	$ 2,000,000	$ -	$ 1,000,000	$ -	$ 1,000,000	$ -	$ -	$ -
	Turf Repairs and Replacement	$ 1,200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ -
CIP-CAPITAL PLANNING	Subtotal	$ 500,000	$ 400,000	$ 100,000	$ -	$ -	$ -	$ -	$ -
	Reservoir/Tom Watson Site Plan	$ 200,000	$ 200,000	$ -	$ -	$ -	$ -	$ -	$ -
	Scott Carpenter/Mapleton Site	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ -
	Urban Forest Management Plan	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ -
	Yard/Maintenance Facility Site	$ 100,000	$ -	$ 100,000	$ -	$ -	$ -	$ -	$ -
CIP-LAND ACQUISITION	Subtotal	$ 1,874,000	$ -	$ -	$ 374,000	$ 1,500,000	$ -	$ -	$ -
	Boulder Junction Rail Plaza	$ 1,874,000	$ -	$ -	$ 374,000	$ 1,500,000	$ -	$ -	$ -
CIP-NEW FACILITY/INFRASTRUCTURE	Subtotal	$ 1,950,000	$ 750,000	$ 350,000	$ 350,000	$ 500,000	$ -	$ -	$ -
	Boulder Junction Pocket Park	$ 1,450,000	$ 750,000	$ 350,000	$ 350,000	$ -	$ -	$ -	$ -
	Violet Park	$ 500,000	$ -	$ -	$ -	$ 500,000	$ -	$ -	$ -

Mapping

The mapping for CIP projects is now in a GIS-based electronic map accessed here. All the mapable projects proposed for funding in the 2016-2021 are shown. If the icons are clicked, the project name, project number (referenced on the project sheets), department, funding source, and year with initial funding will be shown. For many projects the initial funding is currently showing as 2015 as projects have funding for planning and design before actual construction however, the construction timing may be in the future. Please consult the project sheets in each department section for project descriptions, phasing and funding information. Projects with funding earmarked for citywide or system improvements are not shown on the map. Ongoing refinement of the GIS-based map will result in greater clarity of project information.

Project Name: ADA Compliance Initiatives

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PARKS & RECREATION	**Subcommunity:**	SYSTEM-WIDE
Project Number:	5153302200	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**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 identify key priorities each year.

Project Phasing

Projects are completed on a site by site basis as other park improvements are installed for specific park and recreation facility sites.

Public Process

A full public engagement process was completed as part of the department's ADA system wide plan. As projects are ready for construction additional community engagement will be done for major park improvement projects that receive ADA upgrades and improvements.

Interdepartmental and Interagency Collaboration

Projects are coordinated with other city departments including transportation and FAM for upgrades and was coordinated through federal guidelines for ADA compliance.

Change From Past CIP

Included funding in the out years

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Permanent Parks & Recreation	$0	$100,000	$200,000	$200,000	$200,000	$200,000	$200,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$1,100,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:	None	**Funding Source for O&M:**	

Additional Annual O&M Description:

funds are used to improve access to existing facilities

Project Name: Aquatic Facility Enhancements

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PARKS & RECREATION	**Subcommunity:**	SYSTEM-WIDE
Project Number:	5152185510	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	

Project Description

Based on recommendations of the aquatics Facility Study, these projects would provide implementation of key indoor aquatic facility enhancements or "watertainment" facilities that encourage additional community use for all age groups. These features include expanded waterplay for youth, warm water experiences for aging population and a variety of family oriented water features from a "lazy river" to water climbers. Projects will be developed with an extensive public engagement process for each facility.

Project Phasing

The Aquatic Facility Report identified enhancements to existing facilities. Initial work will take place at North Recreation Center Pool with additional work in out years at EBRC and Spruce Pool.

Public Process

A full public engagement process was completed as part of the department's Aquatics Facility plan. As projects are ready for construction additional community engagement will be done for pool improvement projects that receive upgrades and improvements.

Interdepartmental and Interagency Collaboration

Projects are coordinated with FAM for upgrades and project management tasks

Change From Past CIP

New project

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
.25 Cent Sales Tax	$0	$400,000	$0	$2,000,000	$0	$500,000	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$2,900,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: None

Funding Source for O&M:

Additional Annual O&M Description:

Projects will expand play opportunities at existing facilities

Project Name: Aquatics Facility Repairs

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PARKS & RECREATION	**Subcommunity:**	SYSTEM-WIDE
Project Number:	5152186050	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	

Project Description

As part of recommendations of the master plan and the recently completed Aquatics Facility Study the department has identified deferred maintenance needs within the existing facilities. 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 the Aquatics Facility Study ongoing maintenance and repairs to recreation facilities have been prioritize starting with the three indoor facilities. Pools are an integral component in providing health and wellness programs as well as generating revenues for the city.

Project Phasing

The Aquatic Facility Report identified repairs and enhancements to existing facilities. Initial repairs will take place at North Recreation Center Pool with additional work in out years at EBRC and Spruce Pool.

Public Process

A full public engagement process was completed as part of the department's Aquatics Facility plan. As projects are ready for construction additional community engagement will be done for pool improvement projects that receive upgrades and improvements.

Interdepartmental and Interagency Collaboration

Projects are coordinated with FAM for upgrades and project management tasks

Change From Past CIP

Previously funded in Repairs and Renovation, not in CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
.25 Cent Sales Tax	$0	$238,000	$0	$273,000	$0	$777,000	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$1,288,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: None

Funding Source for O&M:

Additional Annual O&M Description:

Funds are used to improve access to existing aquatic facilities

Project Name: Athletic Field Development

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PARKS & RECREATION	**Subcommunity:**	SYSTEM-WIDE
Project Number:	5153302060	**BVCP Area:**	AREA I
CEAP Required:	No	**CEAP Status:**	

Project Description

As recommended in the department's master plan and the Athletic Field Study, the Parks and Recreation Department intends to improve existing natural turf athletic fields and to replace some targeted existing turf fields with new synthetic turf in select park sites. The upgrade of existing natural grass fields and the conversion of select 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 benefits 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 Stazio Complex, 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 indicated in the department's master plan and Athletic Field Study by providing appropriate facilities and opportunities for youth sports. Additionally, this project will provide efficiency and improvement in maintenance and operations in order to allow the department more flexibility in maintenance of athletic fields throughout the community.

Project Phasing

Improvements to existing fields will be done on an annual basis.

Public Process

Public process will be conducted for major athletic field upgrades as part of normal park and recreation facility upgrades.

Interdepartmental and Interagency Collaboration

Projects are coordinated with FAM for upgrades and project management tasks

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Permanent Parks & Recreation	$0	$500,000	$1,000,000	$500,000	$1,000,000	$500,000	$1,000,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$4,500,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: None

Funding Source for O&M:

Additional Annual O&M Description:

Funds are used to improve existing facilities

Project Name: Boulder Junction Pocket Park

Project at a Glance

Project Type:	CIP-NEW FACILITY/INFRASTRUCTUR		
Department:	PARKS & RECREATION	**Subcommunity:**	CROSSROADS
Project Number:	5153501100	**BVCP Area:**	AREA I
CEAP Required:	No	**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, hard-scape pavers, retaining walls, landscape, irrigation and civic park amenities to support the park space.

Project Phasing

Project development is coordinated with on going site improvements.

Public Process

A full public engagement process was completed as part of the city's planning process.

Interdepartmental and Interagency Collaboration

Projects are coordinated with other city departments including transportation and public works.

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Bldr Junction Cap Imprvmt	$501,053	$750,000	$350,000	$350,000	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$1,951,053**						

Additional Annual Operating and Maintenance

Additional Annual O&M: 6,668

Funding Source for O&M:

Additional Annual O&M Description:

Annual maintenance will include irrigation, mowing, and maintenance.

Project Name: Boulder Junction Rail Plaza

Project at a Glance

Project Type:	CIP-LAND ACQUISITION		
Department:	PARKS & RECREATION	**Subcommunity:**	CROSSROADS
Project Number:	5153501050	**BVCP Area:**	AREA I
CEAP Required:	No	**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.

Project Phasing

Project development is coordinated with on going site improvements.

Public Process

A full public engagement process was completed as part of the city's planning process.

Interdepartmental and Interagency Collaboration

Projects are coordinated with other city departments including transportation and public works.

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Bldr Junction Cap Imprvmt	$0	$0	$0	$374,000	$1,500,000	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$1,874,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Boulder Reservoir South Improvement

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PARKS & RECREATION	**Subcommunity:**	AREA III
Project Number:	Multiple	**BVCP Area:**	AREA III
CEAP Required:	Yes	**CEAP Status:**	

Project Description

The department's master plan and the Reservoir Master Plan identified a number of deferred maintenance backlog items to buildings and grounds. Many of these facilities have not had major repairs or upgrades for a number of years and no longer function as designed. These funds will support the recent bond funded improvements made to the infrastructure at the Reservoir including new bath house and shelter, renovated boat house and improvements to picnic and family areas.

Project Phasing

Initial work will include site assessments for major buildings and development of design drawings prior to construction.

Public Process

A full public engagement process was completed as part of the department's Reservoir Management Plan. Additional public engagement will take place in 2016 as part of the final design development for the site.

Interdepartmental and Interagency Collaboration

Projects are coordinated with FAM and Public Works for upgrades to infrastructure and with Fire Department for coordination of access and public safety.

Change From Past CIP

New project

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
.25 Cent Sales Tax	$0	$0	$500,000	$0	$0	$750,000	$1,000,000
						Funding to Completion	$0
						Future Unfunded	$0
Permanent Parks & Recreation	$0	$0	$500,000	$0	$0	$750,000	$1,000,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$4,500,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: None

Funding Source for O&M:

Additional Annual O&M Description:

Funds are used to improve access to existing buildings

Project Name: Court Repairs and Resurfacing

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PARKS & RECREATION	**Subcommunity:**	SYSTEM-WIDE
Project Number:	5152182080	**BVCP Area:**	
CEAP Required:	No	**CEAP Status:**	N/A

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. The department manages tennis courts and mixed courts open free to the public for recreational health and wellness activities. As these courts age they require resurfacing and preventative maintenance to extend the useful life-cycle of these assets.

Project Phasing

As part of the Asset Management Program (AMP) all court facilities have been evaluated and are placed on a 10 year rotation for resurfacing and repairs.

Public Process

Public process will be conducted for major court changes or additions of new courts as part of normal park and recreation facility upgrades.

Interdepartmental and Interagency Collaboration

Projects are coordinated with FAM and Public Works for coordination with similar work for efficiency in pricing and shared contractors.

Change From Past CIP

Previously included in Repairs and Renovation money, not in CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
.25 Cent Sales Tax	$0	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$1,500,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:	None	**Funding Source for O&M:**	

Additional Annual O&M Description:

Funds are used to maintain existing courts at desired condition

Project Name: EAB Response Measures

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PARKS & RECREATION	**Subcommunity:**	SYSTEM-WIDE
Project Number:	5152183100	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**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 September, an Information Item detailing the 2015 Emerald Ash Borer management plan will be presented to City Council.
As a result of the recent discovery of the Emerald Ash Borer (EAB), a response plan has been developed 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 educate the community on safe EAB treatment, 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.

Project Phasing

As part of the Forest Management Plan and the EAB Response Plan annual work plans will be developed to address expanded EAB infestation.

Public Process

An extensive public process will be conducted for education and replacement options as the infestation of EAB expands.

Interdepartmental and Interagency Collaboration

This is an inter-department and inter-agency process including CU, State and Federal agencies.

Change From Past CIP

Increased funding in out years

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
.25 Cent Sales Tax	$230,000	$220,000	$220,000	$220,000	$500,000	$500,000	$500,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$2,390,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:	None	**Funding Source for O&M:**	

Additional Annual O&M Description:

Annual funds are utilized to remove and replace existing Ash trees

Project Name: Flatiron Golf Course Repairs

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PARKS & RECREATION	**Subcommunity:**	SOUTHEAST BOULDER
Project Number:	5153304150	**BVCP Area:**	AREA I
CEAP Required:	No	**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 prioritizes 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 functionality of the golfers on the course. This project allows the golf course to remain competitive in a growing market.

Project Phasing

This project will be completed within one year.

Public Process

Public process will be conducted with facility user groups as appropriate to provide notification of work and minimize disturbance to facility use.

Interdepartmental and Interagency Collaboration

This work will be coordinated with other departments as needed.

Change From Past CIP

Added $100,000 in 2016

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Permanent Parks & Recreation	$0	$300,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$300,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:	None	**Funding Source for O&M:**	

Additional Annual O&M Description:

Project Name: Lighting Ordinance Implementation

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PARKS & RECREATION	**Subcommunity:**	SYSTEM-WIDE
Project Number:	5152182070	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	

Project Description

Boulder's park system is foundational to the mission of the Parks and Recreation Department. Upon completion of the department's master plan in 2014, the department committed to ongoing renovations of playgrounds and irrigation systems to ensure safe, functional 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 life-cycle program and communicated to the public through an extensive public engagement process. Projects are necessary to comply with goals and commitments identified in the department's master plan and to maintain quality and safety standards as facilities age. 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.

Project Phasing

This project will include design and replacement of existing lighting.

Public Process

Public process will be coordinated with other department's doing similar work in individual neighborhoods as needed.

Interdepartmental and Interagency Collaboration

This work will be coordinated with other departments responsible for light replacement as needed.

Change From Past CIP

No changes

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
.25 Cent Sales Tax	$0	$250,000	$250,000	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$500,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:	None	**Funding Source for O&M:**	

Additional Annual O&M Description:

Project Name: Parking Lot Repairs

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PARKS & RECREATION	**Subcommunity:**	SYSTEM-WIDE
Project Number:	5152182040	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**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 safety, functionality and accessibility. FAM has placed parking lot repairs as a priority on their proposed CIP project. This project will provide appropriate resurfacing and repair necessary to meet standards and compliance and to extend the life-cycle of these assets.

Project Phasing

As part of the Asset Management Program (AMP) all parking lots have been evaluated and are placed on a 10 year rotation for resurfacing and repairs.

Public Process

Interdepartmental and Interagency Collaboration

Projects are coordinated with FAM and Public Works for coordination with similar work for efficiency in pricing and shared contractors.

Change From Past CIP

Included funding for each year at a consistent dollar amount

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
.25 Cent Sales Tax	$0	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$1,500,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: None

Funding Source for O&M:

Additional Annual O&M Description:

Funds are used to maintain existing courts at desired condition

Project Name: Park Structure Repairs and Replace

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PARKS & RECREATION	**Subcommunity:**	SYSTEM-WIDE
Project Number:	5152182015	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	

Project Description

Based on the master plan and the asset management plan a number of park structures from shelters to key buildings have a backlog of deferred maintenance needs. This project will accelerate the repairs and replacement of these facilities to meet design criteria for safe and functional facilities.

Project Phasing

As part of the Asset Management Program (AMP) all park structures have been evaluated and are placed on a 10 year rotation for resurfacing and repairs.

Public Process

Public process will be conducted for major shelter or structure changes or additions of new structures such as shade structures as part of normal park and recreation facility upgrades.

Interdepartmental and Interagency Collaboration

Projects are coordinated with FAM where appropriate.

Change From Past CIP

Previously included in Repairs and Renovation money, not in CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
.25 Cent Sales Tax	$0	$0	$500,000	$0	$500,000	$0	$500,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$1,500,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:	None	**Funding Source for O&M:**	

Additional Annual O&M Description:

Funds are used to maintain existing courts at desired condition

Project Name: Playground and Irrigation Repairs

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PARKS & RECREATION	**Subcommunity:**	SYSTEM-WIDE
Project Number:	Multiple	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	

Project Description

Boulder's park system is foundational to the mission of the Parks and Recreation Department. Upon completion of the department's master plan in 2014, the department committed to ongoing renovations of playgrounds and irrigation systems to ensure safe, functional 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 life-cycle program and communicated to the public through an extensive public engagement process. Projects are necessary to comply with goals and commitments identified in the department¶s master plan and to maintain quality and safety standards as facilities age. 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.

Project Phasing

As part of the Asset Management Program (AMP) all playground facilities and irrigation systems have been evaluated and are placed on a 20 year rotation for upgrades and repairs.

Design: $13,970
Construction: $125,730

Public Process

Public process will be conducted with specific neighborhood and user groups the year prior to the projects to identify concerns and community desires for play structures and park features.

Interdepartmental and Interagency Collaboration

Projects are coordinated with other departments to identify overlapping work and shared savings.

Change From Past CIP

Increased in lottery fund, decreased in .25 cent sales tax fund

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
.25 Cent Sales Tax	$0	$239,700	$239,700	$239,700	$239,700	$239,700	$239,700
						Funding to Completion	$0
						Future Unfunded	$0
Lottery	$0	$360,300	$360,300	$360,300	$360,300	$360,300	$360,300
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$3,600,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: None

Funding Source for O&M:

Additional Annual O&M Description:

Funds are used to maintain existing facilities at desired condition

Project Name: Recreation Facility Repairs

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PARKS & RECREATION	**Subcommunity:**	NORTH BOULDER
Project Number:	5152186150	**BVCP Area:**	AREA I
CEAP Required:	No	**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 management. To continue supporting these key themes, the department will be providing repairs, renovations and upgrades to recreation centers. In 2016, the department will complete a strategic plan for all recreation centers that illustrates implementation 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.

Project Phasing

The department is undertaking a comprehensive analysis of all major recreation facilities including building condition assessments and programming needs in 2015. Design for major upgrades identified in this study will be programmed in appropriate years.

Public Process

Public process will be conducted as part of the Recreation Facility Plan with additional public outreach prior to individual facility upgrades being implemented.

Interdepartmental and Interagency Collaboration

Projects are coordinated with FAM for overall building facility condition assessments as well as with Human Services as part of their overall master plan for facilities.

Change From Past CIP

New project

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
.25 Cent Sales Tax	$0	$0	$1,000,000	$0	$1,000,000	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$2,000,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:	None	**Funding Source for O&M:**	

Additional Annual O&M Description:

Funds are used to maintain existing courts at desired condition

Project Name: Reservoir/Tom Watson Site Plan

Project at a Glance

Project Type:	CIP-CAPITAL PLANNING STUDIES		
Department:	PARKS & RECREATION	**Subcommunity:**	AREA III
Project Number:	5153305055	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	

Project Description

As identified in the master plan, the Boulder Reservoir Management Plan and the Athletic Field Study this project will provide for community engagement and design / planning services to develop plans and estimates for future improvements at both important facilities. The improvements will continue to support growth in the north of Boulder as well as improve visitor experiences at two aging facilities.

Project Phasing

This is a planning project and will be done during one year.

Public Process

Public process will be conducted as part of the project with the general public as well as the specific user groups of existing facilities at both sites. This will include coordination with the Recreation Facility Report, Aquatics Report and the Athletic Field Study to look at multiple design options to develop new park facilities to address community needs for these specialized facilities

Interdepartmental and Interagency Collaboration

The plan will coordinated with appropriate departments and agencies as needed.

Change From Past CIP

New project

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Permanent Parks & Recreation	$0	$200,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$200,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: None

Funding Source for O&M:

Additional Annual O&M Description:

Future O&M will depend on final planning recommendations.

Project Name: Scott Carpenter/Mapleton Site Plan

Project at a Glance

Project Type:	CIP-CAPITAL PLANNING STUDIES		
Department:	PARKS & RECREATION	**Subcommunity:**	CROSSROADS
Project Number:	5153302300	**BVCP Area:**	AREA I
CEAP Required:	Yes	**CEAP Status:**	

Project Description

Development of site plans and cost estimates for capital repairs to existing facilities per the athletic field study and related city services proposed to be relocated or expanded.

Project Phasing

This is a planning project and will be done during one year.

Public Process

Public process will be conducted as part of the project with the general public as well as the specific user groups of existing facilities at both sites. This will include coordination with the Aquatics Report and the Athletic Field Study to look at multiple design options to develop new park facilities to address community needs.

Interdepartmental and Interagency Collaboration

The plan will coordinated with the Fire Department for relocation of Fire Station #3 as well as other departments impacted by proposed changes.

Change From Past CIP

New project

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Permanent Parks & Recreation	$0	$100,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$100,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: None

Funding Source for O&M:

Additional Annual O&M Description:

Future O&M will depend on final planning recommendations.

Project Name: Turf Repairs and Replacement

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PARKS & RECREATION	**Subcommunity:**	SYSTEM-WIDE
Project Number:	5152182065	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	

Project Description

These projects will provide upgrades to existing park natural turf areas and reduce the overall backlog of work identified in the master plan and the Asset Management Plan. The department manages natural grass areas in neighborhood and community parks. As park use has intensified and urban growth continues these areas require more frequent care to extend the life-cycle of the turf and provide a safe and attractive playing area for all ages.

Project Phasing

As part of the Asset Management Program (AMP) all park turf areas have been evaluated and are placed on a 10 year rotation for reseeding and renovations.

Public Process

Public process will be conducted as part of general park upgrades.

Interdepartmental and Interagency Collaboration

Projects are coordinated with other departments where appropriate

Change From Past CIP

Previously included in Repairs and Renovation money, not in CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
.25 Cent Sales Tax	$0	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$1,200,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: None

Funding Source for O&M:

Additional Annual O&M Description:

None anticipated, funds are used to enhance existing areas

Project Name: Urban Forest Management Plan

Project at a Glance

Project Type:	CIP-CAPITAL PLANNING STUDIES		
Department:	PARKS & RECREATION	**Subcommunity:**	SYSTEM-WIDE
Project Number:	5153303050	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**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. This funding will complete the Urban Forest Management Plan began in 2015.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 effectively 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 recommended 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.

Project Phasing

This is a management planning project and will be done over several years.

Public Process

Extensive public process will be conducted as part of the project with the general public to assist in developing long-term forest best management practices for the urban tree canopy.

Interdepartmental and Interagency Collaboration

This plan will support work with multiple departments and agencies for the Emerald Ash Borer and other impacts to the canopy.

Change From Past CIP

Added 2016 budget

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Permanent Parks & Recreation	$0	$100,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$100,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:	None	**Funding Source for O&M:**	

Additional Annual O&M Description:

Addt'l O&M reqs will be implemented in out years

Project Name: Violet Park

Project at a Glance

Project Type:	CIP-NEW FACILITY/INFRASTRUCTUR		
Department:	PARKS & RECREATION	**Subcommunity:**	NORTH BOULDER
Project Number:	5153302500	**BVCP Area:**	AREA I
CEAP Required:	Yes	**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.

Project Phasing

This is a new park development and will include a public planning phase, design phase and construction phase.

Public Process

Extensive public process will be conducted as part of the project with the general public to assist in developing long-term park and recreation facilities

Interdepartmental and Interagency Collaboration

The work will be coordinated through Greenways planned trail improvement project.

Change From Past CIP

No changes

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Permanent Parks & Recreation	$0	$0	$0	$0	$500,000	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$500,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:	2,529	**Funding Source for O&M:**	

Additional Annual O&M Description:

New facilities planned for the park. Final O&M TBD

Project Name: Yard/Maintenance Facility Site Plan

Project at a Glance

Project Type:	CIP-CAPITAL PLANNING STUDIES		
Department:	PARKS & RECREATION	**Subcommunity:**	EAST BOULDER
Project Number:	5153302310	**BVCP Area:**	AREA I
CEAP Required:	No	**CEAP Status:**	

Project Description

Development of site plans and cost estimates for capital repairs to existing maintenance facilities per the master plan, the General Maintenance and Management Plan and the Yards recommendation.

Project Phasing

This is a planning study to evaluate maintenance operations for efficiency and required asset improvements.

Public Process

Internal pubic engagement with staff and various departments will be conducted as part of this process.

Interdepartmental and Interagency Collaboration

This plan will coordinate closely with all YARDS service related departments

Change From Past CIP

New project

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Permanent Parks & Recreation	$0	$0	$100,000	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$100,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:	None	**Funding Source for O&M:**	

Additional Annual O&M Description:

Addt'l O&M identified in this plan will be implemented in out years

Overview of Department Mission

The mission of the Boulder Police Department is very simple: Working with the community to provide service and safety. The mission entails a full range of services which includes but is not limited to crime prevention, enforcement, security, investigations, management of public disorder and quality of life issues, emergency and disaster response, and training.

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) .

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, or
- Use of existing operating funding to build a capital fund or pool of money available for capital projects.

Another source of funding for capital projects in the Police Department has been the use of Asset Forfeiture funds. These funds are from seized assets that were used during the commission of crimes. The department has been given approval from the U.S. Department of Justice to use the Asset Forfeiture funds, up to $950,000, to purchase a new Records Management System (RMS). Once these funds are used, there will not be sufficient funds remaining for any additional CIP projects.

Funding from the Capital Improvement Bond (CIB) Fund supported projects managed by the Police Department. CIB funding is indicated by the following symbol:

Current Focus for Capital Planning and Projects in 2016

The Police Department will work with multiple departments to update the citywide inventory of the existing radio system infrastructure, and provide a strategic plan for replacements and upgrades needed to have reliable radio communication throughout the city, now and into the future.

Highlights

Projects Expected to be Completed in 2015

- Priority improvements to the current radio system infrastructure. These improvements will help the current system work better by moving some of the infrastructure closer to the city, building a new transmitter site on the east side of town, and relocating and improving receiver sites in town, as well as moving some equipment off phone lines and allowing for use of radio over internet (ROIP) technology to improve signal strength and clarity.

Priority Projects for 2016

- Acquisition and implementation of a Records Management System (RMS) to replace the current, outdated system
- Radio System Infrastructure Assessment (with Facilities and Asset Management)

Highlights of 2017-2021 Projects

None

Guiding Principles and Project Prioritization

CIP Guiding Principles

Projects included in the CIP are in line with CIP Guiding Principles. These projects have been identified in the Police Master Plan, leveraged funding was accessed where possible, and the department is working collaboratively with multiple other departments in a comprehensive look at the radio system infrastructure, in order to maximize public safety and minimize duplicative efforts and costs.

Prioritization

Future and on-going capital needs have been identified and prioritized through the 2013 Police Master Plan and are listed in the unfunded section below.

Projects Not in Master Plan

None

Projects Not Previously Identified in the CIP

The RMS was not in the previous CIP. It was added when the ability to use the Asset Forfeiture funds for this purchase was identified and confirmed.

Operation and Maintenance Impacts

RMS Operations and Maintenance (O&M) costs have been built in to the department's operating budget for the near-term. The department will be working with Information Technology on identifying appropriate replacement funding strategies going forward.

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:

- Public Safety Building Expansion and Renovation. Construct a 25,000 expansion for Police functions with additional parking for 165 spaces in a parking garage, along with associated renovations to the existing facility. Estimated cost $16.4 million.
- City-wide Radio Infrastructure. The Radio Infrastructure study will inform the CIP for replacement and upgrades to this critical city asset. Estimated cost $5.5 million.
- Gold Elite Radio Consoles. The new narrowing banding mandates, required by the FCC, will make this type of system necessary in the Police/Fire Communications Center. Estimated cost $1.5 million.

Table 14-1: 2016-2021 Funding Summary By Department

		Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
POLICE	Department Total	$ 950,000	$ 950,000	$ -	$ -	$ -	$ -	$ -	$ -
CIP-CAPITAL MAINTENANCE	Subtotal	$ 950,000	$ 950,000	$ -	$ -	$ -	$ -	$ -	$ -
	Records Management System	$ 950,000	$ 950,000	$ -	$ -	$ -	$ -	$ -	$ -

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Project Name: Records Management System (RMS)

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	POLICE	**Subcommunity:**	SYSTEM-WIDE
Project Number:	255RMS2015	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**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 acquisition of the 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.

Project Phasing

Request for Proposal RFP - completed and sent out 2015
RMS anticipated aquisition in late 2015 up to $950,000
RMS aniticpated completion 2016

Public Process

NONE

Interdepartmental and Interagency Collaboration

NONE

Change From Past CIP

Request for Proposal sent out

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
General	$0	$950,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$950,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $100,000

Funding Source for O&M:

Additional Annual O&M Description:

This would be for the maintenance agreement and future replacement.

City of Boulder

TRANSPORTATION

2016-2021 Capital Improvement Program

Overview of Department Mission

The Public Works Department is dedicated to maintaining and improving the quality of life in Boulder by planning for future needs, promoting environmental quality, building and maintaining municipal infrastructure, managing public investments, and protecting health and safety.

The mission of the Transportation Division of the Public Works Department is to provide for the mobility of persons and goods by developing and maintaining a safe, efficient, environmentally sound and balanced transportation system with emphasis on providing travel choices through all modes – pedestrian, bicycle, transit and vehicular transportation, including aircraft and airport facilities.

Funding Overview

Investment in transportation infrastructure is occurring through five separate funds. An update to the Transportation Master Plan (TMP) was completed in 2014. The plan update affirmed policy direction and set the course for Capital Improvements Program (CIP) investments. Transportation continues to implement projects funded out of the Capital Bond and successful federal and state transportation grants. In November, 2013, the Boulder voters passed a transportation tax that will fund deferred transportation maintenance and some key multi-modal improvements. The CIP reflects the results of this new funding.

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: an ongoing 0.6 percent 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 funds. In November of 2013, Boulder voters passed two tax initiatives that increase the transportation fund by .15 percent dedicated sales tax annually for the next 16 years. This is the second year of incorporating 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 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 are being used on these improvements in addition to other money budgeted in the Transportation CIP and funds obtained from federal transportation grants (Pearl N. Multiway Boulevard and Multi-use Path). Other department funding sources are also being used for these projects including Public Works Utilities (infrastructure upgrades) and Parks and Recreation (Boulder Junction Fund- new park facilities).

Boulder Junction Improvements at Junction Place and Goose Creek.

Capital Bond Fund

Funding from the Capital Improvement Bond (CIB) Fund supported a number of projects managed by Transportation. CIB funding is indicated by the following symbol:

Current Focus for Capital Planning and Projects in 2016

The projects in the capital improvements program are selected and developed to implement TMP priorities. The TMP prioritized a system of "complete street" corridors in the city for strategic investment and completion. Complete Streets not only includes the street itself but also facilities for the associated ¼ mile travel shed on either side. Complete Streets capital projects incorporate commissioned art in the design and infrastructure, typically at a rate of 1 to 1.5 percent, and address or recognize place-making in coordination with land use and zoning, and adjacent land owners. The 2016 Transportation focus for 2016 is on:

- Newly awarded TIP funding projects
- Boulder Creek Underpass and Multiuse path improvements, with funding from the Community, Culture, and Safety Tax

Highlights

Projects Expected to be Completed in 2015

- Pearl Parkway Multi-use Path TIP Project – North side of Pearl from 30th to 47th and Multi-way Boulevard from 30th east to the railroad tracks.
- Diagonal – 28th Street to East of 30th Street reconstruction and multi-modal improvements
- Foothills/Valmont Operational Improvements
- 63rd Street widening between Arapahoe and Valmont including a structure replacement over the Leggett ditch
- 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
- 28th Street Multi-Use 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.

Priority Projects for 2016

- The 2016-2021 CIP is the significant transition year for integration of the project submittals that were successful in securing federal funding through the Denver Regional Council of Governments (DRCOG) Transportation Improvement Program (TIP). The city was successful in securing $11.6 million in federal matching funds for four projects. Funding identified in the previous 2015-2020 CIP generically as "TIP local match" was redistributed for the required

local match for these projects.

- Boulder Slough Multi-use Path (30th to 3100 Pearl) $480,000
- Broadway Reconstruction (Violet to US 36) $6,225,000
- 30th and Colorado Ave. Ped./Bike Underpass $4,750,000
- 19th Street Complete Streets (Norwood to Upland) $100,000

- In addition to the city TIP projects the city is also a funding partner on two Boulder County TIP projects. This funding is identified in the 2016-2021 CIP under the "Boulder County/City Joint TIP Projects" line item. The total city contribution is $289,000. The two projects are bike/ pedestrian infrastructure improvements:
  - 71st St Multi-use Path (Winchester to Idyllwild Trail) $151,000
  - Williams Fork Trail Multi-use Path (63rd to Twin Lakes) $138,000
- Another significant highlight this year is funding in support of the Arapahoe Ave. /Boulder Creek Path Underpass improvements funded through the Community Culture and Safety Ballot Initiative. Funding of $5.2 million was identified in the ballot item to enhance (widen and improve lighting) the Boulder Creek Path from Eben Fine Park through the Civic Center to 17th Street including replacing the Arapahoe Avenue underpass. In concert with this investment $2.5 million has been programmed for associated complete street and reconstruction elements to complete the previous Capital Bond project from 15th Street to Broadway.
- 28th Street (Baseline to Iris) Complete Street - construction
- 30th Street (Baseline Rd. to Arapahoe Ave.) and Colorado Ave. (Folsom St. to Foothills Parkway) Transportation Corridor Scoping - public process and design

Highlights of 2017-2021 Projects

Highlight projects for the 2017-2021 timeframe of the CIP focus on the projects previously noted in the Highlight section above as these projects transition from the public process design phase to right-of-way acquisition and construction. Leveraged funding is included under the "TIP Local Match/TMP Implementation" line item for the next round federal grant applications and is included as a placeholder in 2019 through 2021.

Board Action

The Transportation Advisory Board (TAB) was briefed on the Transportation Fund, Transportation Development Fund, and the Boulder Junction Improvement Fund Capital Improvement Programs at their April 13, 2015 and May 11, 2015 meetings. At their June 8, 2015 meeting the TAB held a public hearing and unanimously recommended adoption of the staff recommended 2016-2021

Capital Improvements Programs.

Guiding Principles and Project 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 2016-2021 CIP are consistent with the TMP, updated in 2014, and its budget guiding principles. 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.

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 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 TMP 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 council/board budget processes, a list of budget guiding principles has been developed and updated to reflect the positive vote in November, 2013 to approve a new tax for transportation maintenance. 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

Boulder Junction Improvement Fund Guiding Principles

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 was completed in 2014 with acceptance by City Council on August 5, 2014. Results from the update have been used to inform the 2016-2021 CIP.

Projects Not Previously Identified in the CIP

The recommended Transportation Fund 2016-2021 CIP includes the following changes:

- TIP Local Match/TMP Implementation-as mentioned above in the budget strategy section, CIP funding in this line item was reallocated to cover the local match requirements of the successful DRCOG TIP submittals; leveraging $11.6 million in federal funding. Remaining line item funding in the next three years of the CIP (2016-2018) will be focused on TMP implementation with an emphasis on the top corridor priorities (Arapahoe, 30th Street and Colorado Avenue).
- Arapahoe Ave. (15th to Broadway) Complete Street Reconstruction/Boulder Creek Underpass - in response to the opportunity associated with funding ($5.2 million) from the Community Culture and Safety Ballot initiative to enhance the Boulder Creek Path through the Civic area $2.5 million in transportation funding has been identified to leverage the path funding to make complete street improvements and complete the reconstruction of Arapahoe Avenue from 15th Street to Broadway.
- Boulder County/City Joint TIP Projects - in addition to the city's DRCOG TIP projects the city is teaming with Boulder County to make joint pedestrian/bike improvements in the Gunbarrel area. $289,000 of city funding and $364,000 of county funding will leverage $1,492,000 of federal funds to make multi-use path improvements to 71st Street and Williams Fork Trail/ Spine Road.

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 percent 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 increases over the last few years into the maintenance and operations of the system and this provided a significant boost with the tax passed in November 2013.

Deferred, Eliminated, or Changed Projects

Transportation Fund

TIP Local Match/TMP Implementation – as mentioned above in the budget strategy section, CIP funding in this line item was reallocated to cover the local match requirements of the successful DRCOG TIP submittals

Transportation Development Fund

TIP Local Match/TMP Implementation – funding for this item has been increased by $930,000 over the 2015-2020 CIP. Funding will be focused on TMP implementation with an emphasis on the top corridor priorities (Arapahoe, 30th Street and Colorado Avenue).

Unfunded Projects and Emerging Needs

The unfunded projects list in the Transportation Fund is informed by the 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 may potentially 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 $5 million in capital improvements needed for the city's railroad crossings to be Quiet Zone compliant.

For the bigger picture transportation unfunded improvements, the 2014 TMP established updated funding at three levels —Current Funding, Action Plan, and Vision Plan – through 2035.

Table 15-1: 2016-2021 Funding Summary By Department

		Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
PW/TRANSPORTATION	Department Total	$ 56,338,000	$ 8,774,500	$ 7,788,500	$ 15,692,500	$ 6,527,500	$ 11,027,500	$ 6,527,500	$ -
CIP-CAPITAL ENHANCEMENT	Subtotal	$ 13,772,000	$ 3,884,500	$ 1,877,500	$ 6,127,500	$ 627,500	$ 627,500	$ 627,500	$ -
	19th St (Norwood to Sumac)	$ 257,000	$ 257,000	$ -	$ -	$ -	$ -	$ -	$ -
	Arap Comp St Recon/Bldr Crk	$ 2,500,000	$ 2,500,000	$ -	$ -	$ -	$ -	$ -	$ -
	Broadway Recon Violet to 36	$ 7,050,000	$ 500,000	$ 1,250,000	$ 5,300,000	$ -	$ -	$ -	$ -
	Greenways Program	$ 585,000	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ -
	Misc Development Coordination	$ 300,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ -
	Signal Maintenance & Upgrade	$ 200,000	$ -	$ -	$ 200,000	$ -	$ -	$ -	$ -
	TIP Local Match TMP	$ 2,880,000	$ 480,000	$ 480,000	$ 480,000	$ 480,000	$ 480,000	$ 480,000	$ -
CIP-CAPITAL MAINTENANCE	Subtotal	$ 14,402,000	$ 1,694,000	$ 1,694,000	$ 1,864,000	$ 1,550,000	$ 6,050,000	$ 1,550,000	$ -
	Deficient Street Light Pole	$ 893,000	$ 265,000	$ 265,000	$ -	$ 121,000	$ 121,000	$ 121,000	$ -
	Major Capital Reconstruction	$ 4,800,000	$ 800,000	$ 800,000	$ 800,000	$ 800,000	$ 800,000	$ 800,000	$ -
	Ped Facilities Repair, Replace,	$ 3,774,000	$ 629,000	$ 629,000	$ 629,000	$ 629,000	$ 629,000	$ 629,000	$ -
	Rehab Runway & Eastern Taxiway	$ 4,935,000	$ -	$ -	$ 435,000	$ -	$ 4,500,000	$ -	$ -
CIP-CAPITAL PLANNING STUDIES	Subtotal	$ 589,000	$ 338,000	$ 100,000	$ 151,000	$ -	$ -	$ -	$ -
	Bldr County/City Joint TIP Projects	$ 289,000	$ 138,000	$ -	$ 151,000	$ -	$ -	$ -	$ -
	East Arapahoe Transp Corridor	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ -
	Trans Corridor 30th & Colorado	$ 200,000	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -
CIP-NEW FACILITY/INFRASTRUCTURE	Subtotal	$ 27,575,000	$ 2,858,000	$ 4,117,000	$ 7,550,000	$ 4,350,000	$ 4,350,000	$ 4,350,000	$ -
	28th St - Valmont to Iris (Baseline	$ 860,000	$ 860,000	$ -	$ -	$ -	$ -	$ -	$ -
	28th St Valmont to Iris (Baseline)	$ 470,000	$ 470,000	$ -	$ -	$ -	$ -	$ -	$ -
	30th St and Colorado Bike/Ped	$ 7,500,000	$ 500,000	$ 1,300,000	$ 5,700,000	$ -	$ -	$ -	$ -
	Bikeway Facilities -	$ 1,350,000	$ 225,000	$ 225,000	$ 225,000	$ 225,000	$ 225,000	$ 225,000	$ -
	BJ Traffic Signal Bluff St & 30th	$ 228,000	$ -	$ 228,000	$ -	$ -	$ -	$ -	$ -
	BJ Traffic Signal Jct & Valmont	$ 304,000	$ -	$ 304,000	$ -	$ -	$ -	$ -	$ -
	Boulder Junction - Develop Coord	$ 150,000	$ 75,000	$ 75,000	$ -	$ -	$ -	$ -	$ -
	Boulder Slough Multiuse Path 30th	$ 480,000	$ 120,000	$ 360,000	$ -	$ -	$ -	$ -	$ -
	Ped Facs Enh Missing Links	$ 750,000	$ 125,000	$ 125,000	$ 125,000	$ 125,000	$ 125,000	$ 125,000	$ -
	TIP Local Match/TMP	$ 15,483,000	$ 483,000	$ 1,500,000	$ 1,500,000	$ 4,000,000	$ 4,000,000	$ 4,000,000	$ -

Mapping

The mapping for CIP projects is now in a GIS-based electronic map accessed here. All the mapable projects proposed for funding in the 2016-2021 are shown. If the icons are clicked, the project name, project number (referenced on the project sheets), department, funding source, and year with initial funding will be shown. For many projects the initial funding is currently showing as 2015 as projects have funding for planning and design before actual construction however, the construction timing may be in the future. Please consult the project sheets in each department section for project descriptions, phasing and funding information. Projects with funding earmarked for citywide or system improvements are not shown on the map. Ongoing refinement of the GIS-based map will result in greater clarity of project information.

Project Name: 19th St (Norwood to Sumac)

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/TRANSPORTATION	**Subcommunity:**	NORTH BOULDER
Project Number:	310TR154NG	**BVCP Area:**	AREA I
CEAP Required:		**CEAP Status:**	

Project Description

This project will design and construct sidewalk, curb and gutter improvements along the west and east sides of 19th Street from Norwood Avenue to Sumac Avenue. The project will also provide a bicycle lane and improve ADA facilities in the project area.

We are currently requesting additional funding for this project from CDOT. Project phasing and description will be updated upon receipt of additional funds.

Project Phasing

2016: Planning: $257,000

Public Process

This project was submitted to TAB and Council as a Transportation Alternatives Program (TAP) project prior to submitting it to CDOT for federal funding. Staff will hold public meetings and meet with adjacent property owners to acquire input for the project.

Interdepartmental and Interagency Collaboration

The project will be coordinated with other city departments, particularly P&DS as well as Utilities.

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Transportation	$0	$257,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$257,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:	**Funding Source for O&M:**
Additional Annual O&M Description:	

Project Name: 28th St Valmont to Iris (Baseline)

Project at a Glance

Project Type:	CIP-NEW FACILITY/INFRASTRUCTUR		
Department:	PW/TRANSPORTATION	**Subcommunity:**	MULTIPLE SUBCOMMUNITIES
Project Number:	310TD019NC	**BVCP Area:**	AREA I
CEAP Required:	Yes	**CEAP Status:**	Completed 2001

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.
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.
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 project.

Project Phasing

2015: Planning: $0
2015 - 2016: Acquisition: $888,853
2015 - 2017: Construction: $1,470,000

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Transportation Development	$1,888,853	$470,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$2,358,853**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: 28th St - Valmont to Iris (Baseline

Project at a Glance

Project Type:	CIP-NEW FACILITY/INFRASTRUCTUR		
Department:	PW/TRANSPORTATION	**Subcommunity:**	
Project Number:	310TR743NC	**BVCP Area:**	
CEAP Required:		**CEAP Status:**	

Project Description

28th Street - Valmont to Iris (Baseline to Iris)

Project Phasing

2014 Carryover

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Transportation	$2,572,762	$860,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$3,432,762**						

Additional Annual Operating and Maintenance

Additional Annual O&M:	**Funding Source for O&M:**
Additional Annual O&M Description:	

Project Name: 30th St and Colorado Bike/Ped Under

Project at a Glance

Project Type:	CIP-NEW FACILITY/INFRASTRUCTUR		
Department:	PW/TRANSPORTATION	**Subcommunity:**	UNIVERSITY
Project Number:	310TR153NG	**BVCP Area:**	AREA I
CEAP Required:		**CEAP Status:**	

Project Description

The University of Colorado's development of their East Campus will significantly increase bicycle, pedestrian and transit travel between the main and east campuses including the Colorado Avenue and 30th Street corridors. This connection will join the two campus areas with a safe grade separated crossing/underpass crossing Colorado Avenue and 30th Street . This project is included in the Transportation Master Plan. This project will provide direct access to transit stops serving the STAMPEDE, BOUND and 209 transit services and connect the University neighborhoods with the Park East and other neighborhoods in East Boulder. 30th Street is identified as a Regional Corridor in the DRCOG Regional Bicycle Corridor System. Colorado Avenue is within a 1/4 mile of the identified Boulder Creek Community Corridor of the DRCOG Regional Bicycle Corridor System and fulfills the function of that facility as a connection between the two campuses of the University of Colorado a major regional employer and institution. The final configuration will be determined through the city's public involvement and design analysis process.

Project Phasing

2015 - 2017: Planning: $2,000,000
2017: Acquisition: $300,000
2018: Construction: $5,700,000

Public Process

This project was submitted to TAB and Council as a Transportation Improvement Project (TIP) prior to submitting it to DRCOG for federal funding. Staff will hold public meetings and meet with adjacent property owners to acquire input for the project.

Interdepartmental and Interagency Collaboration

The project will be coordinated with other city departments, particularly P&DS as well as Utilities.

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Transportation	$500,000	$500,000	$1,300,000	$5,700,000	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$8,000,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:	**Funding Source for O&M:**
Additional Annual O&M Description:	

Project Name: Arap Comp St Recon/Bldr Crk Underpa

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/TRANSPORTATION	**Subcommunity:**	CENTRAL BOULDER
Project Number:	310TR156NC	**BVCP Area:**	AREA I
CEAP Required:	No	**CEAP Status:**	

Project Description

This project will entail reconstruction of the street into concrete from 15th Street to Broadway, including pavement removal and reconstruction, undergrounding utility improvements, including storm sewer installation, reconstruction of deteriorated sidewalks, installation of ADA-compliant curb ramps, urban design and landscaping elements. This project will be combined with the culture, community and safety tax 13th/Arapahoe Underpass project. The 13th and Arapahoe underpass project will construct a new box culvert to serve as a grade-separated pedestrian/bike underpass. The box culvert will be east of the existing bridge and the multi-use path currently under the bridge span would be removed.

Project Phasing

This project is estimated to cost $2.5 million.

Public Process

Staff will hold public meetings and meet with adjacent property owners to acquire input for the project.

Interdepartmental and Interagency Collaboration

The project will be coordinated with other city departments, particularly P&DS as well as Utilities.

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Transportation	$0	$2,500,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$2,500,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Bikeway Facilities - Enhancements

Project at a Glance

Project Type:	CIP-NEW FACILITY/INFRASTRUCTUR		
Department:	PW/TRANSPORTATION	**Subcommunity:**	SYSTEM-WIDE
Project Number:	310TR692OC	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	N/A

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.
Annual funding was increased starting in 2014 due to the passage of the 2013 Transportation Tax.

Project Phasing

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 construction improvements to improve connectivity to the future US 36 Bikeway.

Public Process

Interdepartmental and Interagency Collaboration

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 Department and the Parks Department 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 increased by $100,000 due to 2013 Transportation Tax

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Transportation	$379,813	$225,000	$225,000	$225,000	$225,000	$225,000	$225,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$1,729,813**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Minimal incremental increases in on-going maintenance costs.

Project Name: Broadway Recon Violet to 36

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/TRANSPORTATION	**Subcommunity:**	NORTH BOULDER
Project Number:	310TR152NG	**BVCP Area:**	AREA I
CEAP Required:		**CEAP Status:**	

Project Description

This section of Broadway is in deteriorated condition but also has high levels of bicycling, walking, vehicular and transit travel. This section of roadway is a gateway to north Boulder and the downtown and there has been a major redevelopment of the area with additional residential and commercial space. it's anticipated that there will be more redevelopment in the future. The Low Street bicycling network evaluation has identified this corridor for bicycling and pedestrian improvements to accommodate a range of bicyclists and ability levels. The proposed improvements will reconstruct the deteriorated pavement condition of the roadway, provide underground utility upgrades and provide additional bicycle, pedestrian and transit improvements to address and future travel needs. Connections to adjacent intersecting transportation facilities will be made.

Project Phasing

2015 - 2017: Planning: $1,750,000
2017: Acquisition: $250,000
2018: Construction: $5,300,000

Public Process

This project was submitted to TAB and Council as a Transportation Improvement Project (TIP) prior to submitting it to DRCOG for federal funding. Staff will hold public meetings and meet with adjacent property owners to acquire input for the project.

Interdepartmental and Interagency Collaboration

The project will be coordinated with other city departments, particularly P&DS as well as Utilities and Greenways.

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Transportation	$1,250,000	$500,000	$1,250,000	$5,300,000	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$8,300,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: BJ Traffic Signal Bluff St & 30th

Project at a Glance

Project Type:	CIP-NEW FACILITY/INFRASTRUCTUR		
Department:	PW/TRANSPORTATION	**Subcommunity:**	CROSSROADS
Project Number:	310BJ002NC	**BVCP Area:**	AREA I
CEAP Required:	No	**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.

Project Phasing

2017: Planning: $25,000
2017: Acquisition: $0
2017: Construction: $203,000

Public Process

The development and adoption of the TV AP was the result of a 3-year planning process that included design charrettes, open houses and numberous meetings with property owners in the area. The plan was approved by the Planning Board and City Council.

Interdepartmental and Interagency Collaboration

The TVAP was a coordinated multi-department design effort between Planning, Public Works (Transportation and Utilities), Housing and Human Services, Parks and Recreation, Downtown and University Hill Management Divisions and 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

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Bldr Junction Cap Imprvmt	$0	$0	$228,000	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$228,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project may result in minimal incremental increases in on-going maint

Project Name: BJ Traffic Signal Jct & Valmont

Project at a Glance

Project Type:	CIP-NEW FACILITY/INFRASTRUCTUR		
Department:	PW/TRANSPORTATION	**Subcommunity:**	CROSSROADS
Project Number:	310BJ003NC	**BVCP Area:**	AREA I
CEAP Required:	No	**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.
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 the Planning Board and City Council.
The TVAP was a coordinated multi-department design effort between Planning, Public Works (Transportation and Utilities), Housing and Human Services, Parks and Recreation, Downtown and University Hill Management Divisions and 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.

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 sine-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.

Project Phasing

2017: Planning: $25,000
2017: Acquisition: $0
2017: Construction: $279,000

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Bldr Junction Cap Imprvmt	$0	$0	$304,000	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$304,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project may result in minimal incremental increases in on-going maint

Project Name: Bldr County/City Joint TIP Projects

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/TRANSPORTATION	**Subcommunity:**	GUNBARREL
Project Number:	310TR157NG	**BVCP Area:**	AREA II
CEAP Required:		**CEAP Status:**	

Project Description

In addition to the city TIP projects, the city is also a funding partner on two Boulder County TIP projects. This funding is identified in the 2016-2021 CIP under the Boulder County/City Joint TIP Projects line item. The total city contribution is $289k. The two projects are bike/pedestrian infrastructure improvements:

- 71st St Multi-Use Path (Winchester to Idylwild Trail) - $151k
- Williams Fork Trail Multi-Use Path (63rd to Twin Lakes) - $138k

Project Phasing

2016 - Planning
2017 - Planning/Acquisition
2018 - Construction

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Transportation	$50,000	$138,000	$0	$151,000	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$339,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Boulder Junction - Develop Coord

Project at a Glance

Project Type:	CIP-NEW FACILITY/INFRASTRUCTUR		
Department:	PW/TRANSPORTATION	**Subcommunity:**	CROSSROADS
Project Number:	310BJ001OC	**BVCP Area:**	AREA I
CEAP Required:	No	**CEAP Status:**	

Project Description

This project began in 2011, and funding is for ongoing planning and development coordination within the Phase I 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 I 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 provide 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.

Project Phasing

Close coordination with Community Planning and Sustainability, Public Works – Utilities, 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 at 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.

Public Process

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 the Planning Board and City Council.

Interdepartmental and Interagency Collaboration

The TVAP was a coordinated multi-department design effort between Planning, Public Works (Transportation and Utilities), Housing and Human Services, Parks and Recreation, Downtown and University Hill Management Divisions and 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

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Bldr Junction Cap Imprvmt	$86,017	$75,000	$75,000	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$236,017**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Boulder Slough Multiuse Path 30th

Project at a Glance

Project Type:	CIP-NEW FACILITY/INFRASTRUCTUR		
Department:	PW/TRANSPORTATION	**Subcommunity:**	CROSSROADS
Project Number:	310TR151NG	**BVCP Area:**	AREA I
CEAP Required:		**CEAP Status:**	

Project Description

Construction of a 10 foot wide multi-use path along the Boulder Slough from 30th Street to 3100 Pearl and a bicycle/pedestrian bridge crossing the Boulder Slough for bidirectional bicycle/pedestrian travel connecting to the multi-use path west and east of this project. Installation of signage and wayfinding with destinations and distances noted.

Project Phasing

2015: Planning: $120,000
2016: Acquisition: $120,000
2017: Construction: $360,000

Public Process

This project was submitted to TAB and Council as a Transportation Improvement Project (TIP) prior to submitting it to DRCOG for federal funding. Staff will hold public meetings and meet with adjacent property owners to acquire input for the project.

Interdepartmental and Interagency Collaboration

The project will be coordinated with other city departments, particularly P&DS as well as Utilities and Greenways.

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Transportation	$120,000	$120,000	$360,000	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$600,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:		**Funding Source for O&M:**	
Additional Annual O&M Description:			

Project Name: Deficient Street Light Pole Replace

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/TRANSPORTATION	**Subcommunity:**	SYSTEM-WIDE
Project Number:	310TR001OC	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**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 that 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.

Project Phasing

2015 - 2021: Construction: $1,214,000

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Transportation	$321,000	$265,000	$265,000	$0	$121,000	$121,000	$121,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$1,214,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Funding will repair existing poles, lessening on-going costs

Project Name: East Arapahoe Transp Corridor Study

Project at a Glance

Project Type:	CIP-CAPITAL PLANNING STUDIES		
Department:	PW/TRANSPORTATION	**Subcommunity:**	MULTIPLE SUBCOMMUNITIES
Project Number:	310TR480NC	**BVCP Area:**	AREA I
CEAP Required:	No	**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.

Project Phasing

2016: Planning: $100,000

Public Process

Interdepartmental and Interagency Collaboration

Close coordination with Community Planning & Sustainability to better integrate land use and transportation; Public Works - Utilities on replacement, modifications and updates to the city's utilities systems; the Parks Department along the golf course frontage; CDOT for design review and approval (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 amenities.

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Transportation	$146,183	$100,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$246,183**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Major Capital Reconstruction

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/TRANSPORTATION	**Subcommunity:**	SYSTEM-WIDE
Project Number:	310TR003OC	**BVCP Area:**	
CEAP Required:	No	**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 of2013. The majority of the tax dollars were for maintenance of our existing 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 substandard bridges, structures, signs and systems." This funding will provide the ability to complete the capital repairs that are not eligible for grant funding or to be used as leveraged funds for this type of project as opportunities rise.

Project Phasing

$800,000 annually

Public Process

Public 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.

Interdepartmental and Interagency Collaboration

Transportation will coordinate with the Utilities 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 the Parks Department, DUHMD, CU or CDOT if the project exists on their property or adjacent to their property.

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Transportation	$750,000	$800,000	$800,000	$800,000	$800,000	$800,000	$800,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$5,550,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Repair of existing assets will reduce on-going maintenance costs

Project Name: Misc Development Coordination

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/TRANSPORTATION	**Subcommunity:**	SYSTEM-WIDE
Project Number:	310TD004OC	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**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.

Project Phasing

$50,000 annually

Public Process

Projects generally require coordination with adjacent neighborhoods and property owners.

Interdepartmental and Interagency Collaboration

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 are not the responsibility of the developer.

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Transportation Development	$47,491	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$347,491**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

May result in minimal incremental increases in ongoing maintenance

Project Name: Ped Facs Enh Missing Links Crossing

Project at a Glance

Project Type:	CIP-NEW FACILITY/INFRASTRUCTUR		
Department:	PW/TRANSPORTATION	**Subcommunity:**	MULTIPLE SUBCOMMUNITIES
Project Number:	310TR112OC	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**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$50,000 starting in 2014 due to the passage of the 2013 Transportation Tax.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 an information item in 2006. These guidelines were updated in 2012.
The public process for installing missing sidewalk 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.
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.

Project Phasing

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Transportation	$230,950	$125,000	$125,000	$125,000	$125,000	$125,000	$125,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$980,950**						

Additional Annual Operating and Maintenance

Additional Annual O&M: **Funding Source for O&M:**

Additional Annual O&M Description:

Adjacent property owners are responsible for sidewalk maintenance.

Project Name: Ped Facilities Repair, Replace, ADA

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/TRANSPORTATION	**Subcommunity:**	SYSTEM-WIDE
Project Number:	310TR773OC	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**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 in 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 find.

Project Phasing

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.

Public Process

A neighborhood meeting is held for identified repair area owners in advance of the work starting and individual notices are mailed out yearly to the adjacent property owners.

Interdepartmental and Interagency Collaboration

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

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Transportation	$1,049,185	$629,000	$629,000	$629,000	$629,000	$629,000	$629,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$4,823,185**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Adjacent property owners are generally responsible for sidewalk maint

Project Name: Rehab Runway & Eastern Taxiway

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/TRANSPORTATION	**Subcommunity:**	EAST BOULDER
Project Number:	310AP001NG	**BVCP Area:**	AREA I
CEAP Required:	No	**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.

Project Phasing

Planning - $435,000
Construction - $4,500,000
No phases in 2015

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Airport	$0	$0	$0	$435,000	$0	$4,500,000	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$4,935,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Signal Maintenance & Upgrade

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/TRANSPORTATION	**Subcommunity:**	SYSTEM-WIDE
Project Number:	310TR778OC	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**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 program implementation, as this is approximately the cost to signalize or upgrade one intersection. Funding was available in 2014 and will be again in 2018.
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 downside (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 create 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).

Project Phasing

No phases identified

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Transportation Development	$200,000	$0	$0	$200,000	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$400,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Trans Corridor 30th & Colorado

Project at a Glance

Project Type:	CIP-CAPITAL PLANNING STUDIES		
Department:	PW/TRANSPORTATION	**Subcommunity:**	MULTIPLE SUBCOMMUNITIES
Project Number:	310TR479OC	**BVCP Area:**	AREA I
CEAP Required:	No	**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 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.
This process will be identified to coordinate with the TIP Funding Grant received for this project.

Project Phasing

$100,000

Public Process

Interdepartmental and Interagency Collaboration

Close coordination with Community Planning and Sustainability, Public Works – Utilities, 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 at 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

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Transportation	$0	$100,000	$100,000	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$200,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: TIP Local Match TMP Implementation

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/TRANSPORTATION	**Subcommunity:**	SYSTEM-WIDE
Project Number:	310TD052OG	**BVCP Area:**	AREA I
CEAP Required:		**CEAP Status:**	

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.

Project Phasing

$480,000 annually

Public Process

Public process, CEAP and design to be determined in relationship to specific projects.

Interdepartmental and Interagency Collaboration

As the projects are identified and refined, necessary interdepartmental coordination will be identified.

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Transportation Development	$0	$480,000	$480,000	$480,000	$480,000	$480,000	$480,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$2,880,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: TIP Local Match/TMP Implementation

Project at a Glance

Project Type:	CIP-NEW FACILITY/INFRASTRUCTUR		
Department:	PW/TRANSPORTATION	**Subcommunity:**	MULTIPLE SUBCOMMUNITIES
Project Number:	310TR052OG	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**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 project submitted in future years' DRCOG TIP submittal process (the next process starts in 2014 with funding available for 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.

Project Phasing

2015 - 2021: Planning: $18,444,433

Public Process

Public process, CEAP and design to be determined in relationship to specific projects.

Interdepartmental and Interagency Collaboration

As the projects are completed and refined, necessary interdepartmental coordination will be identified.

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Transportation	$2,961,433	$483,000	$1,500,000	$1,500,000	$4,000,000	$4,000,000	$4,000,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$18,444,433**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Overview of Department Mission

The Utilities Division is responsible for the oversight of water, wastewater, and stormwater and flood services. The mission of the Utilities Division is to provide quality water services, as desired by the community, in a manner which emphasizes efficient management of fiscal and natural resources and protects human and environmental health. These services include:

- Wastewater Collection and Treatment
- Water Resources Management and Delivery
- Potable Water Treatment
- Water Quality Protection
- Flood/Emergency Planning, Management and Response
- Stormwater Collection and Conveyance
- Infrastructure Construction and Maintenance

The Utilities Division is also responsible for the Greenways Program, which is described following this section.

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 (CIP) is derived primarily from monthly utility fees. Any revenue increases for 2016 will be reviewed by the Water Resources Advisory Board and considered by City Council. 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), 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 (CDPHE). These revenues are project specific and are highly variable depending on the external agency's funding situation and priorities.

Projects may be funded by issuing revenue bonds with the debt service financed by general utility charges. For the years 2015-2021, it is anticipated that new bonds will be issued for the following projects:

Water

- Betasso Water Treatment Plant Improvements ($24 million in 2016) to fund improvements to maintain compliance with federal Safe Drinking Water Act regulations
- Southern Water Supply Pipeline II (Carter Lake Pipeline) and the 2018 Waterline Replacement budget ($37.6 million in 2018)
- Barker Dam Outlet and Boulder Reservoir Water Treatment Facility ($10.3 million in 2020) to fund repairs to the outlet works.

Wastewater

- Sanitary Sewer Bond ($10 million in 2015) to fund replacement of large diameter interceptor pipe
- Waste Water Treatment Facility (WWTF) improvements ($18.5 million in 2020) to fund phosphorus treatment to meet Regulation 85 requirements.

Stormwater and Flood Management

- Wonderland Creek and Four Mile Canyon Creek projects ($23 million in 2015)
- South Boulder Creek Improvements ($25 million in 2018) to fund improvements designed to mitigate flood hazards in the South Boulder Creek West Valley area.

The preliminary 2016 budget reflects the following revenue increases: 8 percent Water, 5 percent Wastewater, and 4 percent Stormwater/Flood Management. The following table summarizes the 2015 adopted revenue increase and proposed revenue increase projections for 2016-2018. The proposed 2016 increases are in bold.

Table 16-1 Proposed Utility Rate Increases

	2015	2016	2017	2018
Water	5%	**8%**	8%	8%
Wastewater	30%	**5%**	5%	5%
Stormwater/Flood Management	75%	**4%**	8%	8%

Current Focus for Capital Planning and Projects in 2016

Water Utility

- The Betasso Water Treatment Facility (WTF) will undergo significant capital investment to address pretreatment, residuals handling and asset management issues. Utilities has budgeted $24,000,000 in 2016 to fund these improvements
- The Carter Lake Pipeline is a source water project identified to meet the following goals: improve water quality, operational security, and year round water supply to the Boulder reservoir WTF. The City of Boulder is one of several project partners. Utilities has budgeted $34,000,000 for the project's construction in 2018.

Wastewater Utility

- The WWTF Nitrogen Upgrades construction project will be bid in 2015, but construction will continue through 2016. This project will address more stringent effluent discharge requirements for nitrogen identified in CDPHE Regulation 85
- The IBM Lift Station Improvements construction project will be bid in 2015 but construction will continue through 2016. This project will involve major civil, mechanical and electrical issues to meet various CDPHE criteria
- The wastewater interceptor evaluation will continue in 2016. Utilities staff is investigating alternatives to realign a section of the large diameter pipe downstream of 61st Street to the WWTF.

Stormwater and Flood Management Utility

- Flood mitigation and path improvements along Fourmile Canyon Creek at 19th Street are anticipated to be bid in 2016
- A CEAP for the Fourmile Canyon Creek stream reach upstream of Upland Avenue to west of Broadway is expected to be completed in 2016
- Flood mitigation plans are anticipated to be completed in 2016 for Boulder Creek and Bear

Canyon Creek

- Stream bank restoration work on Boulder Creek at Eben Fine Park, which is being funded by the Community Culture and Safety tax is anticipated to be completed in 2016
- Area-wide rehabilitation, repairs, and capacity improvements to the storm sewers serving the University Hill and Downtown areas.

Stream bank restoration work on Boulder Creek at Eben Fine Park.

2013 Flood Impact

Flood Recovery efforts had a significant impact on the Utilities Division. The costs to date for repair and restoration for all three Utilities including administrative costs is $8.3 million. Two repair projects in the sanitary sewer system that are not yet completed include the stabilization of an interceptor at Boulder Creek and 61st Street and the removal of debris at an interceptor at the Wastewater Treatment Facility. Sections of multi-use path, which were damaged during the removal of sediment from Boulder Creek, are scheduled to be repaired this fall.

Highlights

Water Utility

Projects Expected to be Completed in 2015

- Sunshine Transmission line replacement
- Betasso capital improvement project design
- Treated water transmission line design
- Distribution main replacement program
- 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

Priority Projects for 2016

- Betasso Water Treatment Facility construction

- Treated water transmission line construction
- Distribution Main Replacement program
- Source Water Facilities Rehabilitation program
- Carter Lake Pipeline planning & land acquisition
- Lakewood & Silver Lake Hydro
- Albion Dam repairs
- Boulder Reservoir inspection.

Highlights of 2017-2021 Projects

- The Barker Gravity line, which conveys water from Barker Reservoir to Kossler Reservoir, is in need of repair. The pipeline will be replaced over a 15 year period at a cost of approximately $20,000,000. Utilities has budgeted approximately $1,200,000 in the CIP annually for this project
- Albion Dam is in need of repairs. The work involves re-facing the dam, and construction to extend the outlet works. Approximately $4,000,000 has been allocated to this project in 2019
- The Barker Dam Outlet Works is in need of repairs. This work involves an alternatives evaluation to investigate the value of micro tunneling the left abutment
- The Carter Lake Pipeline is a source water project identified to meet the following goals: improve water quality, operational security, and year round water supply to the Boulder reservoir WTF. The City of Boulder is one of several project partners. Utilities has budgeted approximately $34,000,000 for the project's construction in 2018
- The Betasso WTF will undergo significant capital investment to address pretreatment, residuals handling and asset management issues. Utilities has budgeted approximately $24,000,000 in 2016 to fund these improvements
- The Boulder Reservoir WTF will undergo improvements to address aging filters, backup power, and residual handing issues. Utilities has budgeted approximately $2,000,000 in 2020 to fund these improvements
- The Treated Water Transmission Main Replacement program will focus on the rehabilitation of water pipelines larger than 12-inch diameter
- The Distribution main replacement program will focus on the rehabilitation of water lines smaller than 12-inch diameter. This is an annual program funded at approximately $3,500,000 per year.

Wastewater Utility

Projects Expected to be Completed in 2015

- Wastewater Collection System Condition Assessment Program (ongoing)
- Wastewater Collection System Rehabilitation Program (ongoing)
- Update to the Wastewater Collection System Master Plan (WWCSMP)
- Main Interceptor Realignment at 61st St and Boulder Creek
- Installation of 9 Permanent Collection System Flow Meters
- Design of realignment of main interceptor where it enters the WWTF, construction anticipated in 2016
- Wastewater Interceptor Evaluation (ongoing).

Priority Projects for 2016

- WWTF Nitrogen Upgrades construction project
- IBM Lift Station Improvements construction project
- Construction of main interceptor realignment at WWTF
- Wastewater Collection System Condition Assessment Program (ongoing)
- Wastewater Collection System Rehabilitation Program (ongoing)
- Wastewater Interceptor Evaluation (ongoing)
- Wastewater Collection System Flow Monitoring (ongoing).

Highlights of 2017-2021 Projects

- In 2020, the WWTF will undergo additional improvements to meet more stringent effluent phosphorus standards associated with Regulation 85. Utilities has budgeted $18,500,000 for these improvements, which will be required for the next permit cycle
- Utilities staff has indentified the need for a potential realignment of the large diameter wastewater interceptor downstream of 61st Street. Utilities has budgeted for a $10,000,000 bond to fund this project.

Stormwater and Flood Management Utility

Projects Expected to be Completed in 2015

- Flood mapping studies are expected to be completed in 2015 and submitted to FEMA for Boulder Slough, and Upper Goose and Twomile Canyon Creeks and Skunk, Kings Gulch and

Bluebell Canyon Creeks

- Flood mitigation major drainageway plans are anticipated to be completed by the end of 2015 for South Boulder Creek and Gregory Canyon Creek
- The Urban Drainage and Flood Control District (UDFCD) also completes maintenance projects along the major drainageways. In 2015 this includes a request for sediment removal along Wonderland Creek from Foothills Parkway to the confluence with Goose Creek. Selective thinning of non-native vegetation is also planned and coordinated through the UDFCD for Bear Canyon Creek. These maintenance projects will help maintain conveyance capacity in these drainageways
- A Stormwater Master Plan (SMP) Update will be completed in 2015 to integrate flood inundation data from the 2013 flood event
- A Storm sewer condition assessment program was initiated in 2015 to comprehensively clean and TV inspect the storm sewer collection system
- A storm sewer rehabilitation program was initiated in 2015 to rehabilitate, repair, or replace storm sewers as necessary based on defects identified in the condition assessment program
- A Storm sewer expansion program was initiated in 2015 to determine areas of the city where there is not adequate storm drainage infrastructure. Construction of new storm sewers is expected to commence in 2016.

Priority Projects for 2016

- Wonderland Creek Foothills to Winding Trail
- Fourmile Canyon Creek at 19th Street
- Storm sewer rehabilitation and expansion programs.

Highlights of 2017-2021 Projects

- Mitigation plans are currently underway for improvements along South Boulder Creek, Bear Canyon Creek, Gregory Creek and Boulder Creek. CIP projects will be based on the recommendations of the mitigation planning studies. Funding is shown for construction of improvements to mitigate flood hazards in the South Boulder Creek West Valley area using bond money shown in 2018
- Mitigation plans for Skunk, Bluebell, King's Gulch, Twomile and Upper Goose Creeks will be initiated in 2016 after mapping updates have been completed for these drainages. CIP projects will be based on the updated mapping and mitigation planning efforts.

Board Action

The preliminary 2016 Utilities budget and 2016-2021 CIP was presented to the WRAB on April 27, 2015 as a discussion item. The WRAB hosted a public hearing and continued their discussion of the preliminary 2016 Utilities budget and 2016-2021 CIP on May 18, 2015. At the June 22, 2015 meeting WRAB hosted a public hearing during which the board voted 3-0 to recommend approval of the proposed CIP.

Guiding Principles and Project Prioritization

The proposed Utilities Division CIP is consistent with the CIP guiding principles with the primary focus on sustaining and improving existing infrastructure systems, increasing efficiency and planning for adequate funding to care for essential systems. The projects identified in the 2016-2021 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 (WWCSMP) – 2010
- Wastewater Utility Master Plan (WWUMP) – 2010

Stormwater/ Flood Management

- Stormwater Master Plan (SMP) –2007

- Comprehensive Flood and Stormwater (CFS) Master Plan – 2004
- Various individual Drainageway mitigation plans

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 and mitigation 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
- 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
- Opportunities to leverage outside funding.

Within current appropriations all projects proposed have sufficient funds for ongoing operations and maintenance, and 90 percent 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 2016-2021 CIP have been previously identified in associated master plans. However, several projects have been added based on information identified from the September 2013 flood disaster.

Projects Not Previously Identified in the CIP

The following new projects have been identified in the 6-year CIP:

Water Utility

- Green Lake 2 Dam
- Skyscraper Dam
- Automated Meter Reading

Wastewater Utility

- New projects being identified in the 2015 master plan update.

Stormwater and Flood Management Utility

- New projects being identified in the 2015 master plan update.

Operation 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.

Construction Cost Inflation

Based on various cost inflation indexes, it is recommended to project a capital improvement construction costs inflationary rate of 4 percent during the 2016-2021 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, Eliminated, or Changed Projects

Water Utility

- Funding for the Betasso Water Treatment Facility (BWTF) was increased to $24,000,000 in 2016 to combine various facility upgrades and to take advantage of a favorable bond rate climate. Previously, the BWTF was funded at $12,000,000 in 2016 and $14,000,000 in 2026.

Stormwater & Flood Management Utility

- Funding for the South Boulder Creek project was increased to $25,000,000 in 2018 to fund the proposed US 36 stormwater detention facility to prevent overtopping of US 36 during a 100-yr flood event. Previously, the South Boulder Creek project was funded for $10,000,000 in 2018 and $25,000,000 in 2021, which was outside the 2016-2021 planning horizon
- Funding shown for Boulder Creek in 2016 was reduced by $250,000 and moved to 2018 so that detailed information can be used to identify projects as part of the mitigation plan that is currently being developed. More detailed information will be available in 2016.

Unfunded Projects and Emerging Needs

The following unfunded projects have been identified:

Stormwater/ Flood Management

- South Boulder Creek Flood Mitigation Phases II and III - 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 and retirement 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. Betasso 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 processes, are the reasons that large capital funding is recommended in 2016-2017.

Regulatory changes are another source of uncertainty and create emerging needs. For example, as explained in the 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 Wastewater Treatment Facility capital improvements.

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Table 16-2: 2016-2021 Funding Summary By Department

		Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
PW/STORMWATER & FLOOD UTILITY	Department Total	$ 61,417,767	$ 5,209,921	$ 7,119,924	$ 33,256,596	$ 5,028,682	$ 5,673,278	$ 5,129,366	$ -
CIP-CAPITAL ENHANCEMENT	Subtotal	$ 25,792,750	$ 3,365,021	$ 5,201,224	$ 6,688,096	$ 3,726,682	$ 3,682,578	$ 3,129,149	$ -
	Bear Canyon Creek Flood	$ 500,000	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ -
	Bluebell & King's Gultch	$ 600,000	$ -	$ 100,000	$ 500,000	$ -	$ -	$ -	$ -
	Boulder Creek Flood Mitigation	$ 4,750,000	$ -	$ 2,500,000	$ 2,250,000	$ -	$ -	$ -	$ -
	Fourmile - Upstream of Upland	$ 5,250,000	$ 500,000	$ 500,000	$ 1,000,000	$ 1,500,000	$ 1,250,000	$ 500,000	$ -
	Greenways Program - Flood fund	$ 585,000	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ 97,500	$ -
	Greenways Program - Lottery	$ 752,646	$ 125,441	$ 125,441	$ 125,441	$ 125,441	$ 125,441	$ 125,441	$ -
	Gregory Creek Flood Mitigation	$ 500,000	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ -
	Local Drainage Improvements	$ 4,941,298	$ 730,080	$ 759,283	$ 789,655	$ 821,241	$ 854,090	$ 986,949	$ -
	Skunk Creek Flood Mitigation	$ 600,000	$ -	$ 100,000	$ 500,000	$ -	$ -	$ -	$ -
	Stormwater Quality Improvements	$ 1,076,390	$ 162,000	$ 169,000	$ 175,500	$ 182,500	$ 190,000	$ 197,390	$ -
	Twomile Canyon Creek	$ 600,000	$ -	$ 100,000	$ 500,000	$ -	$ -	$ -	$ -
	Upper Goose Creek Drainage	$ 5,637,416	$ 750,000	$ 750,000	$ 750,000	$ 1,000,000	$ 1,165,547	$ 1,221,869	$ -
CIP-CAPITAL MAINTENANCE	Subtotal	$ 5,172,732	$ 594,900	$ 618,700	$ 643,500	$ 669,000	$ 1,330,700	$ 1,315,932	$ -
	Storm Sewer Rehabilitation	$ 2,438,766	$ 270,400	$ 281,200	$ 292,500	$ 304,000	$ 632,700	$ 657,966	$ -
	Transportation Coordination	$ 2,668,966	$ 324,500	$ 337,500	$ 351,000	$ 365,000	$ 633,000	$ 657,966	$ -
	Utility Billing Computer System	$ 65,000	$ -	$ -	$ -	$ -	$ 65,000	$ -	$ -
CIP-LAND ACQUISITION	Subtotal	$ 3,627,285	$ 500,000	$ 550,000	$ 600,000	$ 633,000	$ 660,000	$ 684,285	$ -
	Preflood Property Acquisition	$ 3,627,285	$ 500,000	$ 550,000	$ 600,000	$ 633,000	$ 660,000	$ 684,285	$ -
CIP-NEW FACILITY/INFRASTRUCTURE	Subtotal	$ 26,825,000	$ 750,000	$ 750,000	$ 25,325,000	$ -	$ -	$ -	$ -
	South Boulder Creek Phase I	$ 26,825,000	$ 750,000	$ 750,000	$ 25,325,000	$ -	$ -	$ -	$ -

		Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
PW/WASTEWATER UTILITY	Department Total	$ 57,597,850	$ 4,355,600	$ 5,987,421	$ 5,571,420	$ 7,335,868	$ 27,434,276	$ 6,913,265	$ -
CIP-CAPITAL ENHANCEMENT	Subtotal	$ 29,118,797	$ 570,000	$ 2,050,397	$ 1,476,915	$ 2,877,582	$ 20,606,179	$ 1,537,724	$ -
	Goose Creek SS Interceptor	$ 3,420,445	$ -	$ -	$ 25,000	$ 647,590	$ 1,346,988	$ 1,400,867	$ -
	Marshall Landfill	$ 100,000	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ -
	Wastewater Treatment Facility	$ 150,000	$ 150,000	$ -	$ -	$ -	$ -	$ -	$ -
	WWTF Activated Sludge	$ 175,479	$ -	$ 175,479	$ -	$ -	$ -	$ -	$ -
	WWTF Electrical	$ 1,320,000	$ 120,000	$ 1,200,000	$ -	$ -	$ -	$ -	$ -
	WWTF Instrumentation/Control	$ 2,866,016	$ -	$ 674,918	$ 701,915	$ 729,992	$ 759,191	$ -	$ -
	WWTF Laboratory	$ 50,000	$ 50,000	$ -	$ -	$ -	$ -	$ -	$ -
	WWTF Permit Improvements	$ 21,036,857	$ 150,000	$ -	$ 750,000	$ 1,500,000	$ 18,500,000	$ 136,857	$ -
CIP-CAPITAL MAINTENANCE	Subtotal	$ 28,479,053	$ 3,785,600	$ 3,937,024	$ 4,094,505	$ 4,458,286	$ 6,828,097	$ 5,375,541	$ -
	Condition Assessment Program	$ 5,380,670	$ 811,200	$ 843,648	$ 877,394	$ 912,490	$ 948,989	$ 986,949	$ -
	Sanitary Sewer Manhole	$ 1,829,626	$ 216,320	$ 224,973	$ 233,972	$ 243,331	$ 253,064	$ 657,966	$ -
	Sanitary Sewer Rehabilitation	$ 18,294,276	$ 2,758,080	$ 2,868,403	$ 2,983,139	$ 3,102,465	$ 3,226,563	$ 3,355,626	$ -
	Utility Billing Computer System	$ 65,000	$ -	$ -	$ -	$ -	$ 65,000	$ -	$ -
	WWTF Cogeneration	$ 184,481	$ -	$ -	$ -	$ -	$ 184,481	$ -	$ -
	WWTF Digester Complex	$ 2,200,000	$ -	$ -	$ -	$ 200,000	$ 2,000,000	$ -	$ -

Table 16-2: 2016-2021 Funding Summary By Department (Cont.)

		Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
PW/WATER UTILITY	Department Total	$ 112,717,413	$ 33,449,251	$ 8,679,585	$ 40,757,592	$ 11,196,676	$ 11,243,012	$ 7,391,297	$ -
CIP-CAPITAL ENHANCEMENT	Subtotal	$ 70,618,250	$ 26,610,000	$ 2,511,322	$ 37,964,303	$ 1,668,882	$ 692,685	$ 1,171,058	$ -
	Automated Meter Reading	$ 684,285	$ -	$ -	$ -	$ -	$ -	$ 684,285	$ -
	Barker Dam and Reservoir	$ 115,000	$ 65,000	$ 50,000	$ -	$ -	$ -	$ -	$ -
	Barker Dam Outlet	$ 1,110,551	$ 100,000	$ 175,000	$ -	$ 835,551	$ -	$ -	$ -
	Betasso Water Treatment Facility	$ 25,140,000	$ 25,140,000	$ -	$ -	$ -	$ -	$ -	$ -
	Green Lake 2 Dam	$ 561,773	$ -	$ -	$ -	$ -	$ 75,000	$ 486,773	$ -
	Lakewood Dam	$ 124,707	$ -	$ -	$ 124,707	$ -	$ -	$ -	$ -
	Lakewood Hydroelectric/PRV	$ 430,000	$ 130,000	$ -	$ -	$ 300,000	$ -	$ -	$ -
	NCWCD Conveyance - Carter Lake	$ 40,451,585	$ 850,000	$ 2,036,322	$ 37,565,263	$ -	$ -	$ -	$ -
	Orodell Hydro/PRV Facility	$ 75,000	$ 75,000	$ -	$ -	$ -	$ -	$ -	$ -
	Pearl Street Hydro/PRV Facility	$ 267,664	$ -	$ -	$ 24,333	$ 243,331	$ -	$ -	$ -
	Source Water	$ 400,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ -	$ -	$ -
	Utility Billing Computer System	$ 125,000	$ -	$ -	$ -	$ -	$ 125,000	$ -	$ -
	Water System Security/Quality	$ 540,000	$ 150,000	$ 150,000	$ 150,000	$ 90,000	$ -	$ -	$ -
	Wittemyer Ponds	$ 592,685	$ -	$ -	$ -	$ 100,000	$ 492,685	$ -	$ -
CIP-CAPITAL MAINTENANCE	Subtotal	$ 39,299,163	$ 6,839,251	$ 6,168,263	$ 2,743,289	$ 9,277,794	$ 8,050,327	$ 6,220,239	$ -
	Albion Dam	$ 3,882,997	$ 125,000	$ -	$ 341,636	$ 3,416,361	$ -	$ -	$ -
	Barker Gravity Pipeline Repair	$ 7,003,748	$ 667,416	$ 1,169,859	$ 1,216,653	$ 1,265,319	$ 1,315,932	$ 1,368,569	$ -
	Barker - Kossler Penstock Repair	$ 116,986	$ -	$ 116,986	$ -	$ -	$ -	$ -	$ -
	Betasso Hydroelectric / PRF	$ 860,000	$ -	$ 380,000	$ 480,000	$ -	$ -	$ -	$ -
	Betasso Storage Tank	$ 292,465	$ -	$ 292,465	$ -	$ -	$ -	$ -	$ -
	Boulder Reservoir	$ 168,434	$ 50,000	$ -	$ -	$ -	$ 118,434	$ -	$ -
	Distribution Waterline	$ 18,613,540	$ 3,352,960	$ 3,487,078	$ -	$ 3,771,624	$ 3,922,489	$ 4,079,389	$ -
	Farmer's Ditch	$ 108,160	$ -	$ -	$ -	$ 108,160	$ -	$ -	$ -
	Goose Lake Dam	$ 75,000	$ -	$ -	$ 75,000	$ -	$ -	$ -	$ -
	Island Lake Dam	$ 50,000	$ -	$ -	$ 50,000	$ -	$ -	$ -	$ -
	Kohler Storage Tank Roof	$ 799,875	$ 799,875	$ -	$ -	$ -	$ -	$ -	$ -
	Kossler Dam	$ 75,000	$ 75,000	$ -	$ -	$ -	$ -	$ -	$ -
	Lakewood Pipeline	$ 316,330	$ -	$ -	$ -	$ 316,330	$ -	$ -	$ -
	Reservoir Water Treatment	$ 2,314,000	$ 314,000	$ -	$ -	$ -	$ 2,000,000	$ -	$ -
	Silver Lake Dam	$ 100,000	$ -	$ -	$ 100,000	$ -	$ -	$ -	$ -
	Silver Lake Hydroelectric/PRV	$ 155,000	$ 25,000	$ 50,000	$ 80,000	$ -	$ -	$ -	$ -
	Skyscraper Dam	$ 171,071	$ -	$ -	$ -	$ -	$ -	$ 171,071	$ -
	Source Water Pressure Reducing,	$ 1,294,682	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 343,472	$ 351,210	$ -
	Sunshine Hydroelectric/PRV	$ 271,875	$ -	$ 271,875	$ -	$ -	$ -	$ -	$ -
	Watershed Improvements	$ 180,000	$ 80,000	$ -	$ -	$ -	$ 100,000	$ -	$ -
	Zone 1 Transmission Pipes	$ 500,000	$ -	$ -	$ 250,000	$ -	$ -	$ 250,000	$ -
	Zone 2 Transmission Pipes	$ 500,000	$ -	$ 250,000	$ -	$ -	$ 250,000	$ -	$ -
	Zone 3 Transmission Pipes	$ 1,450,000	$ 1,200,000	$ -	$ -	$ 250,000	$ -	$ -	$ -

Table 16-2: 2016-2021 Funding Summary By Department (Cont.)

		Estimated Total Cost	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
PW/WATER UTILITY (Cont.)	Department Total	$ 112,717,413	$ 33,449,251	$ 8,679,585	$ 40,757,592	$ 11,196,676	$ 11,243,012	$ 7,391,297	$ -
CIP-NEW FACILITY/INFRASTRUCTURE	Subtotal	$ 2,800,000	$ -	$ -	$ 50,000	$ 250,000	$ 2,500,000	$ -	$ -
	Carter Lake Hydroelectric	$ 2,800,000	$ -	$ -	$ 50,000	$ 250,000	$ 2,500,000	$ -	$ -

Mapping

The mapping for CIP projects is now in a GIS-based electronic map accessed here. All the mapable projects proposed for funding in the 2016-2021 are shown. If the icons are clicked, the project name, project number (referenced on the project sheets), department, funding source, and year with initial funding will be shown. For many projects the initial funding is currently showing as 2015 as projects have funding for planning and design before actual construction however, the construction timing may be in the future. Please consult the project sheets in each department section for project descriptions, phasing and funding information. Projects with funding earmarked for citywide or system improvements are not shown on the map. Ongoing refinement of the GIS-based map will result in greater clarity of project information.

Project Name: Bear Canyon Creek Flood Mitigation

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/STORMWATER & FLOOD UTILITY	**Subcommunity:**	MULTIPLE SUBCOMMUNITIES
Project Number:	610SW02300	**BVCP Area:**	AREA I
CEAP Required:	Yes	**CEAP Status:**	2016

Project Description

A flood mitigation plan is being developed which will identify feasible mitigation improvements. Projects requiring a CEAP will be identified after the mitigation plan is completed.

Project Phasing

Planning and Design $100,000 in 2015 and 2016
Construction $500,000 in 2017

Public Process

mitigation plan reviewed by WRAB and Council

Interdepartmental and Interagency Collaboration

coordinate with CU

Change From Past CIP

none

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Stormwater & Flood Mgt Utility	$100,000	$500,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$600,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $0

Funding Source for O&M:

Additional Annual O&M Description:

increasing capacity of culverts, no additional maintenance

Project Name: Bluebell & King's Gultch

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/STORMWATER & FLOOD UTILITY	**Subcommunity:**	SOUTH BOULDER
Project Number:	610SW00900	**BVCP Area:**	AREA I
CEAP Required:	Yes	**CEAP Status:**	2017

Project Description

A flood mitigation plan will be developed that will identify feasible mitigation improvements. Projects requiring a CEAP will be identified after the mitigation plan is completed.

Project Phasing

Planning $60,000 in 2017
Design and Acquisition $100,000 in 2018
Construction $440,000 in 2018

Public Process

WRAB and Council review mitigation plan

Interdepartmental and Interagency Collaboration

none

Change From Past CIP

none

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Stormwater & Flood Mgt Utility	$0	$0	$100,000	$500,000	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$600,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $1,000

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Boulder Creek Flood Mitigation

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/STORMWATER & FLOOD UTILITY	**Subcommunity:**	MULTIPLE SUBCOMMUNITIES
Project Number:	610SW01500	**BVCP Area:**	AREA I
CEAP Required:	Yes	**CEAP Status:**	2016

Project Description

This project will provide funds for flood mitigation work along Boulder Creek. Projects requiring a CEAP will be identified after the mitigation plan is completed.

Project Phasing

$600,000 in 2015 for Design
$2.5 M in 2017 for construction
$2.25 M in 2018 for construction

Public Process

WRAB and Council will review the Mitigation Plan

Interdepartmental and Interagency Collaboration

Urban Drainage and Flood Control District is coordinating a watershed wide mitigation planning effort which includes Boulder County and Longmont.

Change From Past CIP

funding moved from 2016 to 2018 and decreased by $250,000

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Stormwater & Flood Mgt Utility	$600,000	$0	$2,500,000	$2,250,000	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$5,350,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: No

Funding Source for O&M:

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Fourmile - Upstream of Upland Ave

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/STORMWATER & FLOOD UTILITY	**Subcommunity:**	NORTH BOULDER
Project Number:	Various	**BVCP Area:**	AREA I
CEAP Requied:	Yes	**CEAP Status:**	2016

Project Description

This project will provide flood mitigation along Fourmile Canyon Creek west of 19th Street. Detention, sediment capture, controlling spill flows, path connections and underpasses at Violet and Upland will be evaluated in the CEAP.

Project Phasing

The total estimated cost will be determined as part of the CEAP. A total of $6.9 M is included in the 2016-2021 CIP from Flood and Greenways funding.

Public Process

CEAP will be reviewed by the Greenways Advisory Committee

Interdepartmental and Interagency Collaboration

coordinate with Parks, Transportation, Open Space

Change From Past CIP

added funding in 2021

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Greenways Lottery	$0	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000
						Funding to Completion	$0
						Future Unfunded	$0
Stormwater & Flood Utility Funds & Greenways Contribution	$0	$585,200	$585,200	$1,085,200	$1,585,200	$1,335,200	$585,200
						Funding to Completion	$0
						Future Unfunded	$0
Greenways Transportation	$0	$85,200	$85,200	$85,200	$85,200	$85,200	$85,200
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$6,872,400**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $10,000

Funding Source for O&M:

Additional Annual O&M Description:

new easements and new potential path

Project Name: Gregory Creek Flood Mitigation

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/STORMWATER & FLOOD UTILITY	**Subcommunity:**	CENTRAL BOULDER
Project Number:	610SW02400	**BVCP Area:**	AREA I
CEAP Required:	Yes	**CEAP Status:**	2016

Project Description

A flood mitigation plan is being developed which will identify feasible mitigation improvements. Projects requiring a CEAP will be identified after the mitigation plan is completed.

Project Phasing

Planning $ 60,000 in 2015
Design and Acquisition $100,000 in 2016
Construction $440,000 in 2017
Total Project Cost $ 600,000

Public Process

WRAB and Council will review the mitigation plan

Interdepartmental and Interagency Collaboration

none

Change From Past CIP

none

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Stormwater & Flood Mgt Utility	$100,000	$500,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$600,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $1,000

Funding Source for O&M:

Additional Annual O&M Description:

new easements will need to be maintained

Project Name: Local Drainage Improvements

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/STORMWATER & FLOOD UTILITY	**Subcommunity:**	MULTIPLE SUBCOMMUNITIES
Project Number:	610SW77000	**BVCP Area:**	AREA I
CEAP Required:	No	**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 nearterm attention are the west valley of South Boulder Creek and Chautauqua.

Project Phasing

Public Process

No additional public process is anticipated.

Interdepartmental and Interagency Collaboration

Projects will be coordinated with the Transportation Division.

Change From Past CIP

New Project

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Stormwater & Flood Mgt Utility	$712,400	$730,080	$759,283	$789,655	$821,241	$854,090	$986,949
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$5,653,698**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $0

Funding Source for O&M:

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Preflood Property Acquisition

Project at a Glance

Project Type:	CIP-LAND ACQUISITION		
Department:	PW/STORMWATER & FLOOD UTILITY	**Subcommunity:**	MULTIPLE SUBCOMMUNITIES
Project Number:	610SW62200	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**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 update 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.
The project is for an ongoing funding program.. Funding has been escalated to reflect inflation.

Project Phasing

This fund is used as properties come on the market that are identified as high hazard flood properties

Public Process

none

Interdepartmental and Interagency Collaboration

none

Change From Past CIP

none

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Stormwater & Flood Mgt Utility	$3,204,566	$500,000	$550,000	$600,000	$633,000	$660,000	$684,285
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$6,831,851**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $0

Funding Source for O&M:

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Restoration, Water Quality and Trai

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/Greenways	**Subcommunity:**	SYSTEM-WIDE
Project Number:	610GW00000	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	

Project Description

Miscellaneous water quality, habitat restoration and trail improvements projects.

Project Phasing

Public Process

Projects will be coordinated with Transportation, Utilities, Parks and Open Space or the developers of a property.

Interdepartmental and Interagency Collaboration

Projects are developed with input from the City's Transportation, Utilities, Open Space, and Parks Departments, Boulder County, as well as through coordination with developers.

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Greenways Lottery	$25,440	$25,440	$25,440	$25,440	$25,440	$25,440	$25,440
						Funding to Completion	$0
						Future Unfunded	$0
Greenways Stormwater & Flood Mgt Utility	$12,280	$12,280	$12,280	$12,280	$12,280	$12,280	$12,280
						Funding to Completion	$0
						Future Unfunded	$0
Greenways Transportation	$12,280	$12,280	$12,280	$12,280	$12,280	$12,280	$12,280
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$350,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

These projects are enhancements to existing conditions

Project Name: Skunk Creek Flood Mitigation

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/STORMWATER & FLOOD UTILITY	**Subcommunity:**	MULTIPLE SUBCOMMUNITIES
Project Number:	610SW00600	**BVCP Area:**	AREA I
CEAP Required:	Yes	**CEAP Status:**	2017

Project Description

A flood mitigation plan will be developed which will identify feasible mitigation improvements. Projects requiring a CEAP will be identified after the mitigation plan is completed.

Project Phasing

Planning $60,000 in 2017
Design and Acquisition $100,000 in 2017
Construction $440,000 in 2018

Public Process

WRAB and Council will review mitigation plan

Interdepartmental and Interagency Collaboration

coordiante with CU

Change From Past CIP

none

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Stormwater & Flood Mgt Utility	$0	$0	$100,000	$500,000	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$600,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $1,000

Funding Source for O&M:

Additional Annual O&M Description:

will be covered by existing maintenance budgets

Project Name: South Boulder Creek Phase I

Project at a Glance

Project Type:	CIP-NEW FACILITY/INFRASTRUCTUR		
Department:	PW/STORMWATER & FLOOD UTILITY	**Subcommunity:**	MULTIPLE SUBCOMMUNITIES
Project Number:	610SW00400	**BVCP Area:**	AREA III
CEAP Required:	Yes	**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. 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.

Project Phasing

Planning and Environmental Clearances $277,000 in 2016 and 2017
Design $2,000,000 in 2017 and 2018
Construction $25,000,000 in 2019

Public Process

This project will be reviewed through the Boulder Valley Comprehenisve Plan update.

Interdepartmental and Interagency Collaboration

The regional detention facility will impact Colorado Deaprtment of Transportation, University of Colorado and Open Space properties. Utilities staff will coordinate with these other entities. Coordination will also occur through the Boulder Valley Comprehensive Plan update.

Change From Past CIP

Funding added in 2018 (bond) for a total construction budget of $25M

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Stormwater & Flood Mgt Utility	$451,683	$750,000	$750,000	$25,325,000	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$27,276,683**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $10,000

Funding Source for O&M:

Additional Annual O&M Description:

Detention Berm will require on-going maintenance

Project Name: Storm Sewer Rehabilitation

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/STORMWATER & FLOOD UTILITY	**Subcommunity:**	SYSTEM-WIDE
Project Number:	610SW76000	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	N/A

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.

Project Phasing

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Stormwater & Flood Mgt Utility	$444,156	$270,400	$281,200	$292,500	$304,000	$632,700	$657,966
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$2,882,922**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $0

Funding Source for O&M:

Additional Annual O&M Description:

No increase; funded by existing operating budget

Project Name: Stormwater Quality Improvements

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/STORMWATER & FLOOD UTILITY	**Subcommunity:**	SYSTEM-WIDE
Project Number:	610SW77500	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

This project will fund stormwater quality projects as identified in the Stormwater Master Plan to improve water quality in Boulder Creek and its 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.

Project Phasing

Ongoing Program

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Stormwater & Flood Mgt Utility	$274,675	$162,000	$169,000	$175,500	$182,500	$190,000	$197,390
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$1,351,065**						

Additional Annual Operating and Maintenance

Additional Annual O&M: 0

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Transportation Coordination

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/STORMWATER & FLOOD UTILITY	**Subcommunity:**	SYSTEM-WIDE
Project Number:	610SW78000	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	N/A

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.

Project Phasing

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Stormwater & Flood Mgt Utility	$366,017	$324,500	$337,500	$351,000	$365,000	$633,000	$657,966
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$3,034,983**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $0

Funding Source for O&M:

Additional Annual O&M Description:

No increase; funded by existing operating budget

Project Name: Twomile Canyon Creek

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/STORMWATER & FLOOD UTILITY	**Subcommunity:**	MULTIPLE SUBCOMMUNITIES
Project Number:	610SW00800	**BVCP Area:**	AREA I
CEAP Required:	Yes	**CEAP Status:**	2017

Project Description

A flood mitigation plan will be developed which will identify feasible mitigation improvements. Projects requiring a CEAP will be identified after the mitigation plan is completed.

Project Phasing

Planning - $60,000 in 2017
Design and Acquisition - $100,000 in 2017
Construction - $440,000 in 2018

Public Process

WRAB and Council will review the mitigation plan

Interdepartmental and Interagency Collaboration

none

Change From Past CIP

none

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Stormwater & Flood Mgt Utility	$0	$0	$100,000	$500,000	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$600,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $1,000

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Upper Goose Creek Drainage

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/STORMWATER & FLOOD UTILITY	**Subcommunity:**	CENTRAL BOULDER
Project Number:	610SW75000	**BVCP Area:**	AREA I
CEAP Required:	Yes	**CEAP Status:**	No

Project Description

This project will fund the construction of a drainage improvments 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 Maste 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 projected funding needed in the phasing plan below simply refers to funding for the total of all project phases beyond 2019.

Project Phasing

Planning $ 2,000,000.00
Acquisition $ 0
Construction $ 15,905,163

Public Process

Need to add info on public process.

Interdepartmental and Interagency Collaboration

Coordination with the city's Transportation Division. Impacted parcels will not be known until flood mitigation alternatives are identified.

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Stormwater & Flood Mgt Utility	$175,000	$750,000	$750,000	$750,000	$1,000,000	$1,165,547	$1,221,869
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$5,812,416**						

Additional Annual Operating and Maintenance

Additional Annual O&M: 0

Funding Source for O&M:

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Condition Assessment Program

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/WASTEWATER UTILITY	**Subcommunity:**	SYSTEM-WIDE
Project Number:	610WW45100	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	N/A

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 was funded at $780,000 (2015) and will be escalated at 4% annually for the 2016-2021 CIP. This project is for an ongoing funding program.

Project Phasing

This is an annual program funded between $800,000 - $1,000,000 per year for the 2016-2021 CIP.

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Wastewater Utility	$780,000	$811,200	$843,648	$877,394	$912,490	$948,989	$986,949
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$6,160,670**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $0

Funding Source for O&M:

Additional Annual O&M Description:

No increase; funded by existing budget

Project Name: Goose Creek SS Interceptor Rehab

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/WASTEWATER UTILITY	**Subcommunity:**	EAST BOULDER
Project Number:	610WW43300	**BVCP Area:**	AREA I
CEAP Required:	No	**CEAP Status:**	N/A

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 connecitons. Utilities staff is in the process of updating the WWCSMP to incorportate 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 "underfunded" amount reflected below simply refers to funding for the project beyong 2019.

Project Phasing

Planning: $25,000 (2018)
Construction: $3,400,000 (2019-2021)

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Wastewater Utility	$0	$0	$0	$25,000	$647,590	$1,346,988	$1,400,867
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$3,420,445**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $0

Funding Source for O&M:

Additional Annual O&M Description:

No increase; funded by existing operating budget

Project Name: Marshall Landfill

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/WASTEWATER UTILITY	**Subcommunity:**	
Project Number:	610WW07800	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	N/A

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.

Project Phasing

Planning $20,000 (2016)
Construction $80,000 (2016)

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Wastewater Utility	$0	$100,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$100,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $0 **Funding Source for O&M:**

Additional Annual O&M Description:

No increase; funded by existing operating budget

Project Name: Sanitary Sewer Manhole Rehabilitati

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/WASTEWATER UTILITY	**Subcommunity:**	SYSTEM-WIDE
Project Number:	610WW42000	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	

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.

Project Phasing

This is an annual program funded at approxiimately $200,000 per year.

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Additional funding included

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Wastewater Utility	$0	$216,320	$224,973	$233,972	$243,331	$253,064	$657,966
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$1,829,626**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Sanitary Sewer Rehabilitation

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/WASTEWATER UTILITY	**Subcommunity:**	SYSTEM-WIDE
Project Number:	610WW40000	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	

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 $2,000,000 per year (2015) escalated at 4% annually for the 2016-2021 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. The sanitary interceptor conveys 90% of the city's flow to the Wastewater Treatment facility (WWTF). City staff completed an inspection of approximately 6 miles of the interceptor in the spring of 2014 and found significant internal corrosion in numerous pipe sections. City staff will be completing inspection of an additional 10-12 miles of concrete sewer in 2014. The bond funds will be used to rehabilitate the worst condition sewer sections utilizing a combination of open cut and lining technologies.

Project Phasing

This project is funded annual at approximately$2,000,000.

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Addtnl funding for rehabilitation of the sanitary interceptor sewer

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Wastewater Utility	$3,000,161	$2,758,080	$2,868,403	$2,983,139	$3,102,465	$3,226,563	$3,355,626
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$21,294,437**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Wastewater Treatment Facility Pumps

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/WASTEWATER UTILITY	**Subcommunity:**	AREA III
Project Number:	610WW60000	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

This project will fund the rehabilitation of existing pumps at the 75th Street WWTF. The 2016 will be allocated based on asset management needs.

Project Phasing

Construction: $150,000 (2016)

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Wastewater Utility	$0	$150,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$150,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $0

Funding Source for O&M:

Additional Annual O&M Description:

No increase; funded by existing operating budget

Project Name: WWTF Activated Sludge

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/WASTEWATER UTILITY	**Subcommunity:**	AREA III
Project Number:	610WW64000	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

This project will fund the rehabilitation of the facility's turblex blowers.

Project Phasing

Construction $58,000 (2017)

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Wastewater Utility	$389,376	$0	$175,479	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$564,855**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $0

Funding Source for O&M:

Additional Annual O&M Description:

No increase; funded by existing operating budget

Project Name: WWTF Cogeneration

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/WASTEWATER UTILITY	**Subcommunity:**	AREA III
Project Number:	610WW62900	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	NA

Project Description

This project is to provide funding for a major overhaul of the two cogeneration engines. Major engine rebuilds occur every 7 years and are funded at $150,000 (in 2009 dollars) escalated at 4% annually.

Project Phasing

Construction: $185,000 (2020)

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Wastewater Utility	$39,995	$0	$0	$0	$0	$184,481	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$224,476**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: WWTF Digester Complex

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/WASTEWATER UTILITY	**Subcommunity:**	AREA III
Project Number:	610WW60700	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	

Project Description

This project is to replace the WWTF secondary digester floating cover. The cover has failed on several occasions in recent years.

Project Phasing

Planning and design: $200,000 (2019)
Construction: $2,000,000 (2020)

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Wastewater Utility	$0	$0	$0	$0	$200,000	$2,000,000	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$2,200,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:	**Funding Source for O&M:**
Additional Annual O&M Description:	

Project Name: WWTF Electrical

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/WASTEWATER UTILITY	**Subcommunity:**	AREA III
Project Number:	610WW63900	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

This project will fund the rehabilitation of various exisiting electrical systems at the 75th Street WWTF. Maintaining the facility's electrical infrastructutre is a critical component to ensure adequate treatment. This project will include the replacement of numerous major electrical components. The 2016 funding will cover the planning and design, and the 2017 funding will cover the construction.

Project Phasing

Planning & design: $120,000 (2016)
Construction $1,200,000 (2017)

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Wastewater Utility	$0	$120,000	$1,200,000	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$1,320,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $0 **Funding Source for O&M:**

Additional Annual O&M Description:

No increase; funded by existing operating budget

Project Name: WWTF Instrumentation/Control

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/WASTEWATER UTILITY	**Subcommunity:**	AREA III
Project Number:	610WW63700	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	N/A

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 PAS Strategic Plan identified $6,000,000 worth of I&C improvements over a 10-year period.

Project Phasing

Construction: $1,127,000 (2015)
Construction: $2,800,000 (2016-2020)

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Wastewater Utility	$1,127,477	$0	$674,918	$701,915	$729,992	$759,191	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$3,993,493**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

No increase; funded by existing operating budget

Project Name: WWTF Laboratory

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/WASTEWATER UTILITY	**Subcommunity:**	AREA III
Project Number:	610WW61000	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

This project will provide funds for improvements to the 75th Street WWTF laboratory. The funds will be used to replace the laboratory's benches and casing. The funds will also be used to repair a leaky roof.

Project Phasing

Construction $60,000 (2016)

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Wastewater Utility	$0	$50,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$50,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $0 **Funding Source for O&M:**

Additional Annual O&M Description:

No increase; funded by existing operating budget

Project Name: WWTF Permit Improvements

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/WASTEWATER UTILITY	**Subcommunity:**	AREA III
Project Number:	610WW61700	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

This project will address additional WWTF facilities required to meet new effluent regulations identified in the 2011 Colorado Discharge Permit System (CDPS) Permit. The WWTF must meet the new effluent limits by December 2017. The project was bid in May 2015. The 2015-2016 funding is for the project's construction.

Project Phasing

Nitrogen Project Construction $4,000,000 (2015 & 2016)
Phosphorus Project
Planning & Design: $2,250,000 (2018 & 2019)
Construction: $18,500,000 (2020)

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Funding for construction of improvement added in 2009

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Wastewater Utility	$1,694,112	$150,000	$0	$750,000	$1,500,000	$18,500,000	$136,857
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$22,730,969**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

No increase; funded by existing operating budget

Project Name: WWTF Rehabilitation

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/WASTEWATER UTILITY	**Subcommunity:**	AREA III
Project Number:	610WW61500	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

Projects identified from the Wastewater Utility Asset Management Planning Tool.

Project Phasing

Public Process

N/A

Interdepartmental and Interagency Collaboration

Projects are coordinated with Boulder County land use and planning

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Wastewater Utility	$0	$0	$0	$0	$0	$150,000	$375,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$525,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Albion Dam

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/WATER UTILITY	**Subcommunity:**	OUTSIDE PLANNING AREA
Project Number:	610WA62800	**BVCP Area:**	OUTSIDE PLANNING AREA
CEAP Required:	No	**CEAP Status:**	N/A

Project Description

In 2015, the reservoir will require evacuation and implementation of a more permanent repair to the trash rack and pipe inlet area that can service until the dam rehabilitation project is scheduled.

Project Phasing

This 2015 schedule will depend on run-off conditions and water levels in the reservoir as the summer progresses. An RFP for rehabilitiation alternatives will also issued in 2015.

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$80,000	$125,000	$0	$341,636	$3,416,361	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$3,962,997**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Automated Meter Reading

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/WATER UTILITY	**Subcommunity:**	SYSTEM-WIDE
Project Number:	610WA45400	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	NA

Project Description

This project will replace water meters with a system allowing for remote reading of usage.

Project Phasing

Project to be phased over a five year period.

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$0	$0	$0	$0	$0	$0	$684,285
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$684,285**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Barker Dam and Reservoir

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/WATER UTILITY	**Subcommunity:**	OUTSIDE PLANNING AREA
Project Number:	610WA11000	**BVCP Area:**	OUTSIDE PLANNING AREA
CEAP Required:	No	**CEAP Status:**	Not Required

Project Description

This project will fund deficiency corrections at the existing Barker Dam, including security-related improvements. The repairs and improvements are required as part of the agency (SEO and FERC) Dam Safety Inspection Evaluations and while they are not an immediate safety concern, they are necessary to eliminate the potential of storage limitations being enforced or regulated.

Project Phasing

The project will begin in 2015. Construction is anticipated to be complete in 2016.

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

-

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$4,425	$65,000	$50,000	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$119,425**						

Additional Annual Operating and Maintenance

Additional Annual O&M: 0

Funding Source for O&M:

Additional Annual O&M Description:

No increase, funding by existing operating budget.

Project Name: Barker Dam Outlet

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/WATER UTILITY	**Subcommunity:**	OUTSIDE PLANNING AREA
Project Number:	610WA10900	**BVCP Area:**	OUTSIDE PLANNING AREA
CEAP Required:	Yes	**CEAP Status:**	

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 2017. 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.

Project Phasing

This project will begin in 2017. The project is anticipated to complete construction in 2020.

Public Process

CEAP is to be finalized in 2016 along with final approval of the project.

Interdepartmental and Interagency Collaboration

Change From Past CIP

Project schedule shifted out due to satisfactory gate inspections

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$0	$100,000	$175,000	$0	$835,551	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$1,110,551**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $0

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Barker Gravity Pipeline Repair

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/WATER UTILITY	**Subcommunity:**	OUTSIDE PLANNING AREA
Project Number:	610WA10600	**BVCP Area:**	OUTSIDE PLANNING AREA
CEAP Required:	No	**CEAP Status:**	

Project Description

This project will provide funds for ongoing repairs to the Barker Gravity Pipeline. A rehabilitation segment will be placed in 2016 and the results will be used to update the 15 year rehabilitiation cost estimates forecast for 2017 to 2031.

Project Phasing

A rehabilitation segment is planned in 2016 and the results will be used to update the 15 year rehabilitiation cost estimates forecast for 2017 to 2031.

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$470,882	$667,416	$1,169,859	$1,216,653	$1,265,319	$1,315,932	$1,368,569
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$7,474,630**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Barker-Kossler Penstock Repair

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/WATER UTILITY	**Subcommunity:**	OUTSIDE PLANNING AREA
Project Number:	610WA10700	**BVCP Area:**	OUTSIDE PLANNING AREA
CEAP Required:	No	**CEAP Status:**	

Project Description

This project will provide funds for analysis and targeted repairs for areas discovered in the inspection in 2017. An analysis will be performed on approximate remaining operational life including recommendations from metallurgical and corrosion experts.

Project Phasing

Investigation of condition and maintenance/rehabilitiation requirements in 2017 with recommendations/results to be used for rehabilitiation program estimate for future years.

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$0	$0	$116,986	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$116,986**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Betasso Hydroelectric / PRF

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/WATER UTILITY	**Subcommunity:**	OUTSIDE PLANNING AREA
Project Number:	610WA97400	**BVCP Area:**	OUTSIDE PLANNING AREA
CEAP Required:	No	**CEAP Status:**	Not Required

Project Description

This project will rehabiliate the Betasso Hydroelectric / Pressure Reducing Facility inclusing a required 10 year scheduled maintenance overhaul of the existing turbine-generator equipment, replacement of the HPU and replacement of the transformer.

Project Phasing

The turbine generator maintenence and HPU replacement is scheduled for replacement in 2017. Ongoing transformer monitoring will allow transformer replacement to be delayed until 2018.

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

-

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$102,950	$0	$380,000	$480,000	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$962,950**						

Additional Annual Operating and Maintenance

Additional Annual O&M: 0

Funding Source for O&M:

Additional Annual O&M Description:

No incrase, funded by existing operating budget

Project Name: Betasso Storage Tank Rehabilitation

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/WATER UTILITY	**Subcommunity:**	OUTSIDE PLANNING AREA
Project Number:	610WA67600	**BVCP Area:**	OUTSIDE PLANNING AREA
CEAP Required:	No	**CEAP Status:**	Not Required

Project Description

The project includes rehabilitation and exterior painting of the Betasso Storage Tank. The improvements will address deterioration of the protective paint coating of the elevated steel tank due to weather and other environmental factors.

Project Phasing

Included with the Betasso CIP project between 2016 and 2018.

Public Process

See the larger Betasso CIP project.

Interdepartmental and Interagency Collaboration

See the larger Betasso CIP project.

Change From Past CIP

-

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$0	$0	$292,465	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$292,465**						

Additional Annual Operating and Maintenance

Additional Annual O&M: 0

Funding Source for O&M:

Additional Annual O&M Description:

No increase, funded by existing operating budget.

Project Name: Betasso Water Treatment Facility

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/WATER UTILITY	**Subcommunity:**	OUTSIDE PLANNING AREA
Project Number:	610WA94700	**BVCP Area:**	OUTSIDE PLANNING AREA
CEAP Required:	No	**CEAP Status:**	Not required

Project Description

This project is for rehabilitations and improvements to Betasso, the city's primary water treatment facility which has been in continuous operation for almost 50 years. Improvements will address pretreatment capacity, high water content in residuals and result in less hauling required to dispose of residuals. Additional projects include replacement of filter media, installation of plate settlers, electrical and backup power upgrades.

Project Phasing

Alternatives Analysis: Completed
Preliminary Design: Summer 2015
Boulder County Special Use Permit Application: Summer 2015
Final Design: February 2016
Boulder County Permit and CDPHE applications.
Bonding: June 2016
Construction Start: Fall 2016
Construction Completion: Fall 2018

$2,000,000 Water Fund (Design)
$24,000,000 Bond Proceeds (Construction)
$240,000 Bond Issuance Costs

Public Process

WRAB, PB and CC review of CIP/Budget.
City bonding process ealry 2016.
County neighborhood meetings early 2016 and late 2016.
County Special Use Permit review process and commisioner meetings.

Interdepartmental and Interagency Collaboration

Boulder County Land Use, Transportation and Open Space. CDPHE and Sugarloaf Fire District.

Change From Past CIP

Increased funding includes future projects & leverages low bond rates

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$1,073,818	$25,140,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$26,213,818**						

Additional Annual Operating and Maintenance

Additional Annual O&M: TBD

Funding Source for O&M:

Additional Annual O&M Description:

Any extra fraction of an FTE will be offset by reduced residual costs

Project Name: Boulder Reservoir

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/WATER UTILITY	**Subcommunity:**	GUNBARREL
Project Number:	610WA61000	**BVCP Area:**	AREA I
CEAP Required:	No	**CEAP Status:**	

Project Description

Inspection of outlet pipes in 2016 to assess degree of corrosion. Funds in 2020 are for security upgrades at the reservoir.

Project Phasing

Work to be completed in 2016 and 2020.

Public Process

None

Interdepartmental and Interagency Collaboration

None

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$0	$50,000	$0	$0	$0	$118,434	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$168,434**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Carter Lake Hydroelectric

Project at a Glance

Project Type:	CIP-NEW FACILITY/INFRASTRUCTUR		
Department:	PW/WATER UTILITY	**Subcommunity:**	OUTSIDE PLANNING AREA
Project Number:	610WA93000	**BVCP Area:**	OUTSIDE PLANNING AREA
CEAP Required:	Yes	**CEAP Status:**	

Project Description

Analyze potential for hydroelectric facility on the city's portion of the Carter Lake Pipeline and then design and build if preferred.

Project Phasing

Alternatives analysis in 2018 with CEAP and then potentially design (2019) and construction (2020).

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$0	$0	$0	$50,000	$250,000	$2,500,000	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$2,800,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Distribution Waterline Replacement

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/WATER UTILITY	**Subcommunity:**	SYSTEM-WIDE
Project Number:	610WA38900	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	Not Required

Project Description

The project describes on-going annual funding for waterline reconstruction in the city's 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 are required to maintain a functioning water distribution system over time.

Project Phasing

Work is done annually and year round. Design, bidding and inspection is done in house for less than 10% of the budget. Remaining fuinds are used for construction.

Public Process

WRAB, PB and CC CIP/budget review. Neighborhoods are notified a couple of weeks in advance of the construction and on the water info website.

Interdepartmental and Interagency Collaboration

City & County Transportation, City & County Open Space, City Development Review, City Planning, City Flood, City Wastewater, Xcel, Century Link, BNSF, Private Developers, BVSD, RTD, small water districts and Ditch Companies.

Change From Past CIP

-

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$3,556,517	$3,352,960	$3,487,078	$0	$3,771,624	$3,922,489	$4,079,389
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$22,170,057**						

Additional Annual Operating and Maintenance

Additional Annual O&M: 0

Funding Source for O&M:

Additional Annual O&M Description:

No increase, funded by existing operating budget.

Project Name: Farmer's Ditch

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/WATER UTILITY	**Subcommunity:**	OUTSIDE PLANNING AREA
Project Number:	610WA55000	**BVCP Area:**	OUTSIDE PLANNING AREA
CEAP Required:	No	**CEAP Status:**	

Project Description

Improvements and freebord maintence of the ditch where segment vunerabilities were highlighted by the 2013 flood event.

Project Phasing

Construction of impacted segments to be completed in 2015.

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$150,000	$0	$0	$0	$108,160	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$258,160**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Goose Lake Dam

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/WATER UTILITY	**Subcommunity:**	OUTSIDE PLANNING AREA
Project Number:	610WA61200	**BVCP Area:**	OUTSIDE PLANNING AREA
CEAP Required:	No	**CEAP Status:**	Not Required

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.

Project Phasing

Project will begin and be completed in 2015 subject to ability to drain the reservoir for inspection. Else outlet assessment will be shifted out and additional funding for underwater inspection may be required.

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

-

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$20,000	$0	$0	$75,000	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$95,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: 0

Funding Source for O&M:

Additional Annual O&M Description:

-

Project Name: Green Lake 2 Dam

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/WATER UTILITY	**Subcommunity:**	OUTSIDE PLANNING AREA
Project Number:	610WA62700	**BVCP Area:**	OUTSIDE PLANNING AREA
CEAP Required:	No	**CEAP Status:**	Not Required

Project Description

This project will provide funds for the evaluation of alternatives and design of the rehabilitation of Green Lake 2 Dam. Green Lake 2 Dam is in need of extensive rehabilitation to allow continued storage of water.

Project Phasing

Funding allocated in the current CIP is for analysis of alternatives in 2020 and then design plus construction in 2021/2022.

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

-

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$75,000	$0	$0	$0	$0	$75,000	$486,773
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$636,773**						

Additional Annual Operating and Maintenance

Additional Annual O&M: 0

Funding Source for O&M:

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Island Lake Dam

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/WATER UTILITY	**Subcommunity:**	OUTSIDE PLANNING AREA
Project Number:	610WA62600	**BVCP Area:**	OUTSIDE PLANNING AREA
CEAP Required:	No	**CEAP Status:**	

Project Description

This project is to fund valve actuations improvements and instrumentation necessary at the dam.

Project Phasing

Work to be initiated in 2018.

Public Process

None

Interdepartmental and Interagency Collaboration

None

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$0	$0	$0	$50,000	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$50,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Kohler Storage Tank Roof

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/WATER UTILITY	**Subcommunity:**	SOUTH BOULDER
Project Number:	610WA67100	**BVCP Area:**	AREA I
CEAP Required:	No	**CEAP Status:**	

Project Description

Installation of an old roof on the Kohler Tank. Walls were completed during the summer of 2013.

Project Phasing

Design: 2013
Wall Construction: Summer 2013
Roof Construction: Winter 2015/2016

Public Process

WRAB, PB and CC CIP/budget review.
Neighborhood mailing 1 month before construction.

Interdepartmental and Interagency Collaboration

City roofing permit.

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$103,487	$799,875	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$903,362**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $0

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Kossler Dam

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/WATER UTILITY	**Subcommunity:**	OUTSIDE PLANNING AREA
Project Number:	610WA11900	**BVCP Area:**	OUTSIDE PLANNING AREA
CEAP Required:		**CEAP Status:**	

Project Description

Kossler Dam Face Rehabilitation Project is to be completed in 2015. Temporary repairs will be required for the Kossler Reservoir Inlet Structure in 2016. Both the Inlet Structure and the Outlet Structure will require full rehabilitation/replacement within 10 years and is presently scheduled for 2022/2023.

Project Phasing

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Inlet Repairs added in 2016 and Inlet/Outlet Rehab in 2022/23

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$735,817	$75,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$810,817**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Lakewood Dam

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/WATER UTILITY	**Subcommunity:**	OUTSIDE PLANNING AREA
Project Number:	610WA62000	**BVCP Area:**	OUTSIDE PLANNING AREA
CEAP Required:	No	**CEAP Status:**	

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.

Project Phasing

This project will begin in 2018. The project is anticipated to complete construction in 2019.

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$0	$0	$0	$124,707	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$124,707**						

Additional Annual Operating and Maintenance

Additional Annual O&M:	**Funding Source for O&M:**
Additional Annual O&M Description:	

Project Name: Lakewood Hydroelectric/PRV

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/WATER UTILITY	**Subcommunity:**	AREA III
Project Number:	610WA90100	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	

Project Description

10-year turbine generator overhaul in 2016.

Project Phasing

Generator overhaul to be completed in 2016. Forecast PRV refurbishment in 2019.

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$0	$130,000	$0	$0	$300,000	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$430,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Lakewood Pipeline

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/WATER UTILITY	**Subcommunity:**	OUTSIDE PLANNING AREA
Project Number:	610WA78000	**BVCP Area:**	OUTSIDE PLANNING AREA
CEAP Required:	Yes	**CEAP Status:**	Yes

Project Description

The Sixth Internal Inspection of the Lakewood Pipeline is scheduled for 2015. This inspection should confirm the expected corossion rates indicated by the previous inspections and make a recommendation as to fitness for operational condition.

Project Phasing

Fall of 2015 is presently scheduled for the sixth Internal Inspection.

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$255,400	$0	$0	$0	$316,330	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$571,730**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: NCWCD Conveyance - Carter Lake Pipe

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/WATER UTILITY	**Subcommunity:**	OUTSIDE PLANNING AREA
Project Number:	610WA54700	**BVCP Area:**	OUTSIDE PLANNING AREA
CEAP Required:	Yes	**CEAP Status:**	

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 Northen Colorado Water Conservancy District is the lead agency and the City of Boulder and the Left Hand Water District are project participants.

Project Phasing

CIP budget continues through 2016 for ROW and preliminary design costs. Final design and construction is scheduled for 2017/2018.

Public Process

The pipeline construction and alignment was approved by Boulder County under the 1041 permit process.

Interdepartmental and Interagency Collaboration

Coordination with Boulder County and Northern Colorado Water Conservance District

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$500,000	$850,000	$2,036,322	$37,565,263	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$40,951,585**						

Additional Annual Operating and Maintenance

Additional Annual O&M:	$0	**Funding Source for O&M:**	

Additional Annual O&M Description:

Project Name: Orodell Hydro/PRV Facility

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/WATER UTILITY	**Subcommunity:**	OUTSIDE PLANNING AREA
Project Number:	610WA33100	**BVCP Area:**	OUTSIDE PLANNING AREA
CEAP Required:	No	**CEAP Status:**	

Project Description

Integrate the existing external roll sea pressure reducing valves into the SCADA system so operators can better control and monitor flows down the Boulder Canyon treated water transmission lines. Currently the station only has two manual settings and cannot be controlled or monitored remotelly in an emergency.

Project Phasing

Previously funded design completed summer 2015
Construction winter 2015/2016 - $75,000

Public Process

WRAB, PB and CC CIP/budget process.

Interdepartmental and Interagency Collaboration

None.

Change From Past CIP

Added this year to provide better system resiliency

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$0	$75,000	$0	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$75,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $0

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Pearl Street Hydro/PRV Facility

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/WATER UTILITY	**Subcommunity:**	AREA III
Project Number:	610WA36000	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	Not required

Project Description

This project includes installation of a hydroelectric 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 will be captured to produce electricity with the addition of the turbine and generator.

Project Phasing

Design and Construction: Begin feasibility study in early 2018, design in late 2018 with construction completion in early 2020.

Public Process

WRAB, PB and CC review of CIP/Budget.

Interdepartmental and Interagency Collaboration

Boulder County Building Department, HHS for shared access considerations.

Change From Past CIP

-

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$0	$0	$0	$24,333	$243,331	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$267,664**						

Additional Annual Operating and Maintenance

Additional Annual O&M: TBD

Funding Source for O&M:

Additional Annual O&M Description:

TBD, operating costs will be offset by hydroelectric revenue

Project Name: Reservoir Water Treatment Facility

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/WATER UTILITY	**Subcommunity:**	GUNBARREL
Project Number:	610WA90000	**BVCP Area:**	AREA I
CEAP Required:	No	**CEAP Status:**	

Project Description

Replace the filter valve actuators, filter media, filter valves, residual lagoon asphalt and upgrade backup power.

Project Phasing

Replace filter valve actuators that are failing in 2016. Design in early 2020, finish construction in early 2021. 5% of budget for design, remainder for product acquisitiion and installation.

Public Process

WRAB, PB and CC CIP/budget review.

Interdepartmental and Interagency Collaboration

City of Boulder building permit.

Change From Past CIP

Funding added for filter rehabs, residuals and backup power.

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$7,100	$314,000	$0	$0	$0	$2,000,000	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$2,321,100**						

Additional Annual Operating and Maintenance

Additional Annual O&M:	$0	**Funding Source for O&M:**	

Additional Annual O&M Description:

Project Name: Silver Lake Dam

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/WATER UTILITY	**Subcommunity:**	OUTSIDE PLANNING AREA
Project Number:	610WA61500	**BVCP Area:**	OUTSIDE PLANNING AREA
CEAP Required:	No	**CEAP Status:**	

Project Description

To meet SEO Dam Safety requirements, a full outlet system inspection is required in 2015.

Project Phasing

Outlet Inspection to be completed in 2015 with reservoir lowered/drained and underwater inspection equipment as may be required.

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$75,000	$0	$0	$100,000	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$175,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Silver Lake Hydroelectric/PRV

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/WATER UTILITY	**Subcommunity:**	OUTSIDE PLANNING AREA
Project Number:	610WA97000	**BVCP Area:**	OUTSIDE PLANNING AREA
CEAP Required:	No	**CEAP Status:**	

Project Description

Silver Lake Hydroelectric Facility has been increased in 2016 through 2018 for PLC upgrades and replacement of the turbine needles/seats

Project Phasing

In 2016 complete short term PLC upgrades and alternatives analysis for permanent upgrades, permanent PLC upgrades in 2017 and repalcement of the needles/seats in 2018.

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$150,000	$25,000	$50,000	$80,000	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$305,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:	**Funding Source for O&M:**
Additional Annual O&M Description:	

Project Name: Skyscraper Dam

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/WATER UTILITY	**Subcommunity:**	OUTSIDE PLANNING AREA
Project Number:	610WA64000	**BVCP Area:**	OUTSIDE PLANNING AREA
CEAP Required:	No	**CEAP Status:**	

Project Description

Funding is for infrastructure evaluation and gate replacement as recommended in the Source Water Master Plan.

Project Phasing

Project to be initiated in 2021

Public Process

None

Interdepartmental and Interagency Collaboration

None

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$0	$0	$0	$0	$0	$0	$171,071
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$171,071**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Source Pumping and Hydro Rehab

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/WATER UTILITY	**Subcommunity:**	MULTIPLE SUBCOMMUNITIES
Project Number:	610WA94000	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	

Project Description

Funding for capital maintenance for the ciritical hydroelectric, pressure reducing, and reversible pump-generator system components not identified as individual capital projects.

Project Phasing

Funding for this ongoing maintenance program to begin in 2016.

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$0	$150,000	$150,000	$150,000	$150,000	$343,472	$351,210
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$1,294,682**						

Additional Annual Operating and Maintenance

Additional Annual O&M:	**Funding Source for O&M:**
Additional Annual O&M Description:	

Project Name: Source Water Monitoring/Protection

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/WATER UTILITY	**Subcommunity:**	SYSTEM-WIDE
Project Number:	610WA44200	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	

Project Description

Flow release and water quality monitoring system instrumentation improvements for the source water system.

Project Phasing

Ongoing implementation starting in 2015 and to be completed in 2019 (5 years).

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$100,000	$100,000	$100,000	$100,000	$100,000	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$500,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:	**Funding Source for O&M:**
Additional Annual O&M Description:	

Project Name: Sunshine Hydroelectric/PRV Facility

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/WATER UTILITY	**Subcommunity:**	AREA III
Project Number:	610WA34700	**BVCP Area:**	AREA III
CEAP Required:	No	**CEAP Status:**	Not Required

Project Description

Project includes rehabilitation of the Sunshine Hydroelectric Pressure Reducing Station including flow meter and rehabilitation or replacement of the existing control system. The project is located adjacent to Sunshine Canyon south of Mount Sanitas.

Project Phasing

Design and Construction: Begin design in early 2017 with completion in early 2018.

Public Process

WRAB, PB and CC review of CIP/Budget.

Interdepartmental and Interagency Collaboration

Shared access considerations with OSMP.

Change From Past CIP

-

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$0	$0	$271,875	$0	$0	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$271,875**						

Additional Annual Operating and Maintenance

Additional Annual O&M: 0

Funding Source for O&M:

Additional Annual O&M Description:

No increase, funded by existing operating budget

Project Name: Water System Security/Quality Imprv

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/WATER UTILITY	**Subcommunity:**	SYSTEM-WIDE
Project Number:	610WA44000	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**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. Water quality monitoring will be installed in conjunction with security bimprovements where appropriate.

Project Phasing

Various cameras, fences, network connections and water quality monitory at treated water starnded facilities such as Devil's Thumb Tank, Booton Reservoir, Kohler Reservoir, Maxwell Reservoir and 101 Pearl.

Public Process

WRAB, PB and CC CIP/budget review.

Interdepartmental and Interagency Collaboration

City Open Space, Boulder County and City Development Review.

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$158,073	$150,000	$150,000	$150,000	$90,000	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$698,073**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $5,000

Funding Source for O&M:

Additional Annual O&M Description:

Maintain panels and instruments

Project Name: Watershed Improvements

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/WATER UTILITY	**Subcommunity:**	OUTSIDE PLANNING AREA
Project Number:	610WA52000	**BVCP Area:**	OUTSIDE PLANNING AREA
CEAP Required:	No	**CEAP Status:**	

Project Description

General Watershed improvements as recommended in the 2009 Source Water Master Plan.

Project Phasing

Ongoing improvements to facilitiate continued reliable operation of the watershed source water storage and delivery system. CIP budget continues until 2016.

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$146,357	$80,000	$0	$0	$0	$100,000	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$326,357**						

Additional Annual Operating and Maintenance

Additional Annual O&M: $0 **Funding Source for O&M:**

Additional Annual O&M Description:

Project Name: Wittemyer Ponds

Project at a Glance

Project Type:	CIP-CAPITAL ENHANCEMENT		
Department:	PW/WATER UTILITY	**Subcommunity:**	OUTSIDE PLANNING AREA
Project Number:	610WA65000	**BVCP Area:**	OUTSIDE PLANNING AREA
CEAP Required:	Yes	**CEAP Status:**	No

Project Description

Wittemyer Ponds – this facility consists of multiple reservoirs planned for potential use in terms of city water exchanges. Alternatives for improving the ponds to reservoirs will be considered for final implementation.

Project Phasing

The alternatives study and CEAP are planned for 2019 with design and construction for 2020/2021.

Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$0	$0	$0	$0	$100,000	$492,685	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$592,685**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Project Name: Zone 1 Transmission Pipes

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/WATER UTILITY	**Subcommunity:**	SYSTEM-WIDE
Project Number:	610WA00200	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**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. Funding is in the CIP to develop a program to inspect, prioritize and begin replacement of the transmission pipes, (pipes that are 14" diameter and larger).

Project Phasing

$500,000 for preliminary inspection, rehabilitation and program development.

Public Process

WRAB, PB and CC CIP/budget review. Neighborhoods are notified a couple of weeks in advance of the construction and on the water info website.

Interdepartmental and Interagency Collaboration

City & County Transportation, City & County Open Space, City Development Review, City Planning, City Flood, City Wastewater, Xcel, Century Link, BNSF, Private Developers, BVSD, RTD, small water districts and Ditch Companies.

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$0	$0	$0	$250,000	$0	$0	$250,000
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$500,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:	$0	**Funding Source for O&M:**	

Additional Annual O&M Description:

Project Name: Zone 2 Transmission Pipes

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/WATER UTILITY	**Subcommunity:**	SYSTEM-WIDE
Project Number:	610WA00400	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**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. Funding is in the CIP to develop a program to inspect, prioritize and begin replacement of the transmission pipes, (pipes that are 14" diameter and larger).

Project Phasing

$500,000 for preliminary inspection, rehabilitation and program development.

Public Process

WRAB, PB and CC CIP/budget review. Neighborhoods are notified a couple of weeks in advance of the construction and on the water info website.

Interdepartmental and Interagency Collaboration

City & County Transportation, City & County Open Space, City Development Review, City Planning, City Flood, City Wastewater, Xcel, Century Link, BNSF, Private Developers, BVSD, RTD, small water districts and Ditch Companies.

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$0	$0	$250,000	$0	$0	$250,000	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$500,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:	$0	**Funding Source for O&M:**	

Additional Annual O&M Description:

Project Name: Zone 3 Transmission Pipes

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/WATER UTILITY	**Subcommunity:**	SYSTEM-WIDE
Project Number:	610WA00500	**BVCP Area:**	SYSTEM-WIDE
CEAP Required:	No	**CEAP Status:**	

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. Funding is in the CIP to develop a program to inspect, prioritize and begin replacement of the transmission pipes, (pipes that are 14" diameter and larger).

Project Phasing

$250,000 for preliminary inspection, rehabilitation and program development.

$1,200,000 for replacement of the deteriorating 18" transmission line between Boulder Canyon/Sunshine Hydro and Chautauqua Reservoir. Leftover Sunshine Transmission line funds may be used to supplement this depending on inspection results there. Design at 10% in Winter 2015/2016, Construction in Winter 2016/2017.

Public Process

WRAB, PB and CC CIP/budget review. Neighborhoods are notified a couple of weeks in advance of the construction and on the water info website.

Interdepartmental and Interagency Collaboration

City & County Transportation, City & County Open Space, City Development Review, City Planning, City Flood, City Wastewater, Xcel, Century Link, BNSF, Private Developers, BVSD, RTD, small water districts and Ditch Companies.

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	$0	$1,200,000	$0	$0	$250,000	$0	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$1,450,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:	$0	**Funding Source for O&M:**	

Additional Annual O&M Description:

Project Name: Utility Billing Computer System

Project at a Glance

Project Type:	CIP-CAPITAL MAINTENANCE		
Department:	PW/UTILITIES	**Subcommunity:**	SYSTEM-WIDE
Project Number:	Various	**BVCP Area:**	SYSTEM-WIDE
CEAP Requied:	No	**CEAP Status:**	

Project Description

This project is for the upgrade of the existing Utility Billing Computer System.

Project Phasing

The upgrade is ancipated in 2020.

Public Process

None

Interdepartmental and Interagency Collaboration

This project will be coordinated it IT and Finance.

Change From Past CIP

Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Stormwater & Flood Mgt Utility	$50,000	$0	$0	$0	$0	$65,000	$0
						Funding to Completion	$0
						Future Unfunded	$0
Wastewater Utility	$0	$0	$0	$0	$0	$65,000	$0
						Funding to Completion	$0
						Future Unfunded	$0
Water Utility	$0	$0	$0	$0	$0	$125,000	$0
						Funding to Completion	$0
						Future Unfunded	$0
Total Funding Plan:	**$305,000**						

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

Additional Annual O&M Description:

Appendix A, UNFUNDED PROJECTS

Capital Funding History and Future Approach to 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. There is currently 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 yet returned to where it was in 2000. Furthermore, the purchasing power of current funding is significantly less than in 2000.

Continued and ongoing CIP funding exists in certain areas through enterprise funds (e.g. Water, Wastewater, Stormwater/Flood funds), funds with dedicated tax revenues earmarked for capital investment (e.g. Permanent Parks fund) and funds with dedicated taxes or fees intended to ensure that growth pays its way (e.g. Development Excise Tax and impact fees). These sources are dependent on numerous factors, including economic conditions and approved utility rates, and cover only a portion of capital needs in the city, however, they have been steady sources for capital investment over time.

Recent Increases in 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 second round 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. However, work continued to identify capital needs across the city with the Comprehensive Financial Strategy (CFS) project. The initial work of the CFS, capital phase involved looking at capital needs and making recommendations to council for short-term capital project funding. Additionally the CFS looked at larger infrastructure investment needs, long -term capital deficiencies, place-making capital investment and long-term operating needs.

City staff incorporated information learned from the 2013 Flood in this strategic work. Through the 2015 budget process and in response to community feedback, utility rates were adjusted to perform utility system-wide asset assessment and accelerate maintenance and replacement work, especially in the wastewater and stormwater/flood management areas. This is reflected in current utility CIP funding levels.

In November 2014, Boulder voters passed the Community, Culture and Safety tax. This

temporary, 0.3 percent sales and use tax increase over three years will provide more than $27 million to improve community spaces, bolster cultural projects and organizations, and enhance safety in and around the downtown and University Hill. The passage of this tax addressed only a portion of the capital needs identified in the CFS and was targeted to specific capital enhancements.

Strategic Planning for Unfunded Projects

Moving forward, the intention is to build on the efforts of the past decade and establish a purposeful and continuous process for capital investment to support the city's vision. Near term steps include commencing a citywide facility and asset assessment and an ongoing process for planning, funding and scheduling necessary maintenance and replacement of all capital assets. The process is expected to take a few years to complete with the goal of having a strategic approach to citywide capital planning that is integrated with the city's comprehensive plan and long term vision. This begins with establishing a baseline, developing a consistent process and ongoing system for prioritizing capital projects for asset maintenance as well as emerging needs. The strategic approach will recognize 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.

Finally, in conjunction with ongoing operating analysis and the review of the long-term financial structural gap, and understanding capital funding gaps identified through the asset assessment and capital strategy work, 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 bullets provide a summary of the unfunded capital. 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 where they are available at all), but rather they illustrate the challenges and opportunities that lie ahead. (Note: the list below does not include OSMP or Utilities projects, as existing and future funding is anticipated to be able to address the emerging and long-term capital needs in these areas.) It is anticipated that the upcoming work on an asset assessment inventory, in conjunction with

ongoing capital investment strategic work and the updated Boulder Valley Comprehensive Plan, will lay out a more comprehensive list of infunded capital , as well as options to address the needs.

Citywide

- An emerging city-wide issue is our aging radio infrastructure. FAM has submitted a 2016 budget request for a radio infrastructure analysis and strategic plan. This strategic plan will impact all users of the city's radio system including public safety, public works, Parks and Recreation and Open Space and Mountain Parks. Additional costs for replacement will be determined using the results of the study.

DUHMD

- University Hill Commercial District Pedestrian Lighting
- Alley Master Plan implementation

FAM

- Parking Lot Repairs at the Municipal Service Center and Public Safety Building parking lots
- Energy Efficiencies and Renewables
- Electric Vehicle Infrastructure
- Facility Space / Office Space (existing and future city employees)

Fire

- 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
    - One-time Buildings $11,412,500, Land up to $8,600,000, On-going $459,000
- Replacement or Remodel of Fire Station 4 north of the current location of 4100 Darley Avenue
    - One-time Building $2,442,750, Land up to $2,000,000, On-going $165,000
- Remodel Fire Station 6 currently located at 5145 N 63rd Street
    - One-time $1,154,625, On-going $165,000
- Remodel Fire Station 2 at the current location of 2225 Baseline Road.
    - One-time Building $3,842,000, Land up to $3,500,000, On-going $229,500
- Remodel Fire Station 5 at the current location of 4365 19th Street.
    - One-time Building $1,084,500, On-going $229,500
- Remodel Fire Station 1 at the current location of 2441 13th Street.

- One-time Building $3,397,125, On-going $128,800
- Remodel Fire Station 7 at the current location of 1380 55th Street.
  - One-time Building $1,096,875, On-going $42,000.
- Fire Training Center Phase 2 - Driving area and storage building
  - One-time Concrete $2,500,000, Building $2,250,000, On-going $60,000.
- Fire Training Center Phase 3 - Additional classroom and office space.
  - One-time $1,500,000, On-going $56,000.

Information Technology

- New, emerging software-based automation opportunities that will continually arise.
- Future replacement 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).
- IT infrastructure replacement (e.g. PCs, networks, servers, telephones, etc) for 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.

Parks & Recreation

- Work collaboratively with Boulder Fire Department to coordinate Fire Station #3 with potential move to Mapleton including identification of funding for relocation of athletic fields to Stazio or Valmont and upgrade of Mapleton Park to a community park serving the surrounding area
- Full replacement of Scott Carpenter Outdoor Pool
- 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 and aquatics facilities that accommodate increased demand for lap swimming, fitness equipment and classroom space
- 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 facilities
- Infrastructure associated with Valmont City Park Phase 2 development.
- Address maintenance backlog estimated at over $27 million on approximately $200 million assets.

Transportation

- The unfunded projects list in the Transportation Fund is informed by the area/corridor planning processes including next phase Civic Area planning, Envision East Arapahoe and 30th Street/Colorado Avenue planning.
- Boulder Junction implementation may potentially 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.

Appendix B, 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 and floodplains; wetlands; geology and soils; water quality; air quality; resource conservation; cultural and 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.

- 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 2016-2021 CIP are recommended to complete a Community and Environmental Assessment Process (CEAP).

Open Space and Mountain Parks Department

- Historical Structures and Trails – Stabilization and Restoration*
- Visitor Infrastructure – System-wide*

Parks and Recreation Department

- Boulder Reservoir South Improvements*
- Violet Park (in conjunction with Greenways Fourmile Canyon Creek improvements)

Transportation Division

- 28th Street – Baseline to Iris (CEAP Completed 2001)
- Baseline Underpass Broadway to 28th (CEAP Completed 2013)
- Broadway Reconstruction (Violet to US36)*
- 30th and Colorado Ave. Ped/Bike Underpass*
- 19th Street Complete Streets (Norwood to Iris)*

Utilities Division / Tributary Greenways

- Barker Dam Hydroelectric and Dam outlet
- Carter Lake Pipeline NCWCD Conveyance & Carter Lake Hydroelectric
- Fourmile Canyon Creek Flood Mitigation – Upstream of Upland

- Lakewood Pipeline
- South Boulder Creek Flood Mitigation Phase I*
- Wittemyer Ponds*

The following are flood mitigation plans in their early stages. As specific projects and their scope are identified the need for CEAP will be evaluated in annual process.

- Bear Canyon Creek Flood Mitigation
- Bluebell and King's Gulch Flood Mitigation
- Boulder Creek Flood Mitigation
- Gregory Creek Flood Mitigation
- Skunk Creek Flood Mitigation
- Twomile Canyon Creek Flood Mitigation
- Upper Goose Creek Drainage

*As the scope of work is defined the necessity of a CEAP or other public review will be determined.