



**CITY OF BOULDER
PLANNING BOARD MEETING AGENDA**
DATE: June 19, 2014
TIME: 6 p.m.
PLACE: Council Chambers, 1777 Broadway

1. CALL TO ORDER

2. APPROVAL OF MINUTES

The [March 20, 2014](#) Planning Board Minutes are scheduled for approval.

3. PUBLIC PARTICIPATION

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

A. [Call Up Item](#): Staff Level Site Review (LUR2014-00028). The call-up period expires on June 23, 2014.

B. [Call Up Item](#): Staff Level Site Review and Preliminary Plat (LUR2013-00050) and Use Review (LUR2012-00091). The call-up period expires June 23, 2013.

5. PUBLIC HEARING ITEMS

A. [Public hearing and Planning Board recommendation to City Council on the draft TMP Update Plan document.](#)

6. MATTERS FROM THE PLANNING BOARD, PLANNING DIRECTOR, AND CITY ATTORNEY

7. DEBRIEF MEETING/CALENDAR CHECK

8. ADJOURNMENT

**CITY OF BOULDER PLANNING BOARD
MEETING GUIDELINES**

CALL TO ORDER

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

AGENDA

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

PUBLIC PARTICIPATION

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

DISCUSSION AND STUDY SESSION ITEMS

Discussion and study session items do not require motions of approval or recommendation.

PUBLIC HEARING ITEMS

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

1. Presentations

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

2. Public Hearing

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

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

3. Board Action

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

MATTERS FROM THE PLANNING BOARD, DIRECTOR, AND CITY ATTORNEY

Any Planning Board member, the Planning Director, or the City Attorney may introduce before the Board matters which are not included in the formal agenda.

ADJOURNMENT

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

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

CITY OF BOULDER
PLANNING BOARD ACTION MINUTES
March 20, 2014
1777 Broadway, Council Chambers

A permanent set of these minutes and an audio recording (maintained for a period of seven years) are retained in Central Records (telephone: 303-441-3043). Minutes and streaming audio are also available on the web at: <http://www.bouldercolorado.gov/>

PLANNING BOARD MEMBERS PRESENT:

Aaron Brockett, Chair
Bryan Bowen
Crystal Gray
Liz Payton
John Putnam

PLANNING BOARD MEMBERS ABSENT:

John Gerstle
Leonard May

STAFF PRESENT:

David Driskell, Director for CP&S
Susan Richstone, Deputy Director for CP&S
Lesli Ellis, Comprehensive Planning Manager
Hella Pannewig, Assistant City Attorney
David Thompson, Civil Engineer II, Transportation
Molly Winter, Director of Downtown and University Hill Management Division & Parking Services
Sarah DeSouza, Parks & Recreation
Marcy Cameron, Historic Preservation Planner
Marie Zuzack, Planner I
Jeff Yegian, Division of Housing Manager
Jay Sugnet, Comprehensive Housing Planner
Micki Kaplan, Senior Transportation Planner
Susan Meissner, Administrative Assistant III

1. CALL TO ORDER

Chair, **A. Brockett**, declared a quorum at 5:03 p.m. and the following business was conducted.

2. APPROVAL OF MINUTES

There were no minutes scheduled for approval.

3. PUBLIC PARTICIPATION

1. **Scott McCarey, 140 S. 32nd Street**, spoke about the importance of alternative means of transportation and biking. He encouraged the board to consider including in the TDM plan a means for monitoring and enforcing developments' trip reductions.

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

- A. Wetland Permit (LUR2014-00015) South Boulder Creek – bank restoration, visitor access. Expires March 21, 2014.
- B. Wetland Permit (LUR2014-00016) Boulder Creek Bank Repairs East of 61st St. Expires March 21, 2014.
- C. Wetland Permit (LUR2014-00017) Boulder Creek Bank Repairs at Green Ditch Diversion. Expires March 21, 2014.
- D. Wetland Permit (LUR2014-00019) SH 93 & Coal Creek Flood Repairs. Expires March 21, 2014.

None of these items were called up.

5. PUBLIC HEARING ITEMS

- A. Introduction, first reading and consideration of a motion to order published by title only, an ordinance amending Section 9-6-5, “Temporary Lodging, Dining, Entertainment, and Cultural Uses,” B.R.C. 1981, by increasing the number of mobile food vehicles allowed on private property in designated zone districts and setting forth related details.

Staff Presentation:

M. Winter presented the item to the board.

Board Questions:

M. Winter answered questions from the board.

S. DeSouza answered questions from the board.

Board Comments:

J. Putnam thought the proposed ordinance made sense; it was well thought through and there is little opposition. Think about the barriers to food truck activity in other parts of town and consider whether trucks could provide an interim way to enliven east Arapahoe.

L. Payton supported the staff recommendation.

A. Brockett supported food trucks and thought this was a good step. Consider creating more opportunities and allowing them to operate in MU-4 zones such as Depot Square. He was sympathetic to brick and mortar restaurants but suggested that trucks be allowed to operate once restaurants close and after 9pm with property owners' permission. Late night operation could help to mitigate alcohol

consumption issues. He thought the Park Central parking lot was too far removed to get food truck activity into the Hill and downtown areas in a way that is reasonable.

Board members unanimously thought that it would make sense to allow food trucks in MU-4 zones. They suggested that staff discuss this possibility with property owners and provide feedback to Council.

B. Bowen was comfortable with MU-4, late night hours and allowing food trucks within 150 feet of restaurants after the restaurants' operating hours.

A. Brockett was sensitive to the timing issue but thought that MU-4 addition seemed feasible. He thought that the other recommendations could take longer. The ordinance could benefit from another round of edits and vetting.

C. Gray was afraid that the allowance of food trucks downtown after restaurant hours would generate much controversy. She recommended that it be up for consideration but not included in the ordinance language.

On a motion by **A. Brockett**, seconded by **J. Putnam** voted 5-0 (**L. May** and **J. Gerstle** absent) to recommend to City Council adoption of the proposed amendments to Section 9-6-5, "Temporary Lodging, Dining, Entertainment, and Cultural Uses," B.R.C. 1981, to increase the number of mobile food vehicles allowed on private property in designated zone districts and setting forth related details with the modification that the MU-4 district be added to the zone districts in which mobile food vehicles may be allowed.

On a motion by **A. Brockett**, seconded by **J. Putnam**, the Planning Board voted 5-0 (**L. May** and **J. Gerstle** absent) to request that City Council consider allowing later hours of operation and consider allowing food trucks to operate within 150 feet of restaurants when those restaurants are closed.

A friendly amendment by **C. Gray**, accepted by **A. Brockett**, recommended that staff continue its evaluation through 2014 to identify opportunity sites and zones where food trucks may be an appropriate use.

C. Gray thought the research and pilot study to date was highly successful.

J. Putnam suggested that staff allow food trucks to locate in areas where there are fewer opportunities to walk to restaurants.

6. MATTERS FROM THE PLANNING BOARD, PLANNING DIRECTOR, AND CITY ATTORNEY

H. Pannewig explained that the board will need to select a chair and ex-officio board representatives.

C. Gray will be absent for the April 3, 2014 meeting.

A. Modifications to the Transportation Demand Management (TDM) Toolkit

Staff Presentation:

C. Hagelin presented the item to the board.

Board Questions:

C. Hagelin answered questions from the board.

Board Comments:

J. Putnam thought that the proposed TDM modifications were terrific and looked forward to hearing more. He thought that the current toolkit was a bit clunky and needed to be sold to the developers and employers. Poll them on things that may add value to developments such as showers, locker rooms, etc. In addition to a technical exercise, think of it as a sales and marketing exercise to motivate developers to go above and beyond as much as possible.

A. Brockett noted that developers often claim to have a TDM plan and suggested that the TDM plan be more quantified, perhaps similar to the LEED program.

C. Gray thought that the three year Eco-Pass was unacceptable in exchange for parking reductions. She would like to find a way to require that Eco-Passes be provided for longer than three years.

B. Bowen recommended increasing the Eco-Pass provision timeframe to five years.

A. Brockett suggested that the escrow account be required for three years but would prefer to see it continued for an additional seven years.

J. Putnam disagreed with requiring Eco-Passes for a longer period of time. The cost is uncertain and the city does not control RTD. There may be a different level of commitment for paid parking situations.

B. Bowen noted that parking reductions provide a savings of \$25,000 per parking stall and create additional rentable area. He would like to see the implementation of a Boulder-wide Eco-Pass.

A. Brockett would like to see a mechanism for quantifying developers' TDM plans and recommended that a rating system like LEED be implemented. It would inform the board of the quality of the transportation plan and provide clear expectations to the developer.

C. Gray noted that Eco-Passes are not found to be very effective in getting people to use alternate modes of transportation and recommended devise means of improving that rating. Support businesses in educating employees about alternate ways of getting to work. See what kinds of businesses and housing types generate the most and least parking demand.

B. Bowen asked that staff consider means for looking into neighborhood parking districts and providing Eco-Passes to employees in specific areas. He noted that bike racks are good for short term use but bike lockers are in high demand for employees; staff is encouraging them for office projects.

B. Comprehensive Housing Strategy Update

Staff Presentation:

D. Driskell introduced the item.

J. Sugnet presented to the board.

Board Comments:

C. Gray would like to see how many new units the inclusionary housing requirements have added. She would like to better understand how the Chap funds are allocated.

A. Brockett would like to see how many of the new housing units were deed restricted inclusionary units.

C. Gray thought this report was very comprehensive. She encouraged staff to work with CU; if CU better met housing needs on campus, rental housing would be released to the local rental market. Break outreach efforts down by neighborhoods and go to them for meetings. Neighbors can tell staff how their neighborhoods can be transformed and where to place different housing types in alignment with city goals. People will feel threatened unless they're included in the process.

L. Payton noted that the Landmarks Board and staff are looking for ways to preserve smaller properties. Encourage property owners to landmark properties and make it possible for people to have ADUs and OAU's.

J. Putnam liked the outreach concept and suggested that Planning Board be informed of Housing Strategy subcomponents in small digestible chunks. He would like to know which

opportunity sites are under consideration before decisions are made. The city will need external funding; look into Public Private Partnerships and Private Private Public Partnerships.

A. Brockett agreed with **J. Putnam**. Break housing updates into smaller chunks and inform the Planning Board of opportunity sites and tools early in the process. He would like for Planning Board to have the opportunity to comment on the list of potential tools and strategy between Council meetings.

C. Gray thought it was a good idea to widen the scope. She recommended that staff also look into VRBO and Airbnb. Investor properties are being converted to short-term rentals because they're more lucrative than longer-term rentals; they remove housing from the housing stock. She would like inclusionary zoning requirements to be more transparent at the time that variances are permitted.

B. Bowen agreed with **C. Gray**. He thought that some of the code for zoning allowances should be changed, especially occupancy limits. He supported OAU and ADU comments, would enjoy seeing the Housing Strategy presented in smaller chunks throughout the process, and asked to see the affordable housing trends. He thought that the Civic Area virtual platform would be a useful tool. It was positive that affordable housing gets increasingly more affordable over time. Look at third party entities that could benefit the city; see what Thistle and other businesses can do to become more efficient and streamlined.

A. Brockett was excited to see this along with the TDM and East Arapahoe Area Plan Updates. There are good synergies.

C. Gray recommended identifying opportunity sites and making early wins. Go back to neighborhoods as building blocks to identify what would be early wins for them. For annexations, she thought we should ask for more affordable housing and not allow congregate care to be a part of the requirements.

C. East Arapahoe Area Plan Update

Staff Presentation:

L. Ellis presented the item to the board.

Board Comments:

C. Gray would like to discuss Complete Streets in relation to East Arapahoe with Victor Dover.

A. Brockett requested that staff create a high level document to help guide development along the East Arapahoe corridor before some of the more detailed actions are completed. Contextual

guidelines would help the Planning Board to evaluate future development. He noted that **L. May** has discussed this as well.

B. Bowen agreed with **A. Brockett** and thought guidelines would help the public to understand the broader vision for the corridor. The stronger the vision and the more it differs from what is there now, the more likely it is to happen. He encouraged the city to work with property owners to redevelop opportunity sites along East Arapahoe as they could inspire other changes in the area. Creative things can happen because it is not too expensive and there are many needed uses.

L. Payton recommended that staff survey East Arapahoe to identify the cultural heritage as soon as possible; it should be preserved to maintain authenticity.

C. Gray noted that Arapahoe used to be the Veterans' Memorial Highway and had a planting plan. Work with the neighbors to identify what would make East Arapahoe feel like more of a place; she noted that many placemaking tools cannot be employed due to the current zoning code.

A. Brockett recommended making some early code modifications to enable use changes. Do not keep the areas around Arapahoe symmetrical to maintain existing single family neighborhoods. He would like to see a focus on BRT; intercity BRT connections would be a catalyst for the corridor. There is much potential East of 30th Street. Evaluate it and do something bold. He would like to see the proposed update to the Transportation Master Plan.

J. Putnam noted that this is a regional corridor and eastern gateway to the city that should be addressed early. If the city feels that the BRT is critical, do everything possible to make it work. Look at land uses; assure that proposed developments consider that the corridor is located at the confluence of two large riparian zones that are critical for wildlife and bicycle transportation. Improve east-west bicycle and pedestrian connections along the creek and Arapahoe.

C. Gray noted that BRT could be a great and efficient transportation system but could divide Arapahoe. RTD normally pays for concrete but does not pay for streetscapes. She encouraged staff to stay abreast of this and work with RTD.

A. Brockett suggested that perhaps two sets of design guidelines would be helpful, one for the corridor and another for the surrounding areas.

7. DEBRIEF MEETING/CALENDAR CHECK

S. Richstone discussed upcoming Planning Board calendar items.

8. ADJOURNMENT

The Planning Board adjourned the meeting at 9:01 p.m.

APPROVED BY

Board Chair

DATE

DRAFT

MEMORANDUM

TO: Planning Board
FROM: Chandler Van Schaack, Case Manager
DATE: June 19, 2014
SUBJECT: **Call Up Item:** Staff Level Site Review (LUR2014-00028): Request for a Height Modification only to construct a new single family detached dwelling unit on a 10,006 sq. ft. property at 3550 4th St. in the RR-2 zone district at a height of 27'3¼" where 26'1" is the maximum principal building height permitted for the property per the RR-2 zone district standards. The call-up period expires on June 23, 2014.

Background. The project site is located on 4th Street just south of the intersection of 4th and Kalmia Avenue, as shown below in **Figure 1**. The 10,006 square foot lot is zoned Residential- Rural 2 (RR-2), which is defined in section 9-5-2(c)(1)(A) of the land use code as "Single-family detached residential dwelling units at low to very low residential densities." Currently, the site contains an existing 2-story single family home constructed in 1961. The lot is considered nonstandard as to minimum lot size due to the fact that it does not meet the 30,000 square foot minimum lot size requirement for the RR-2 zone district.

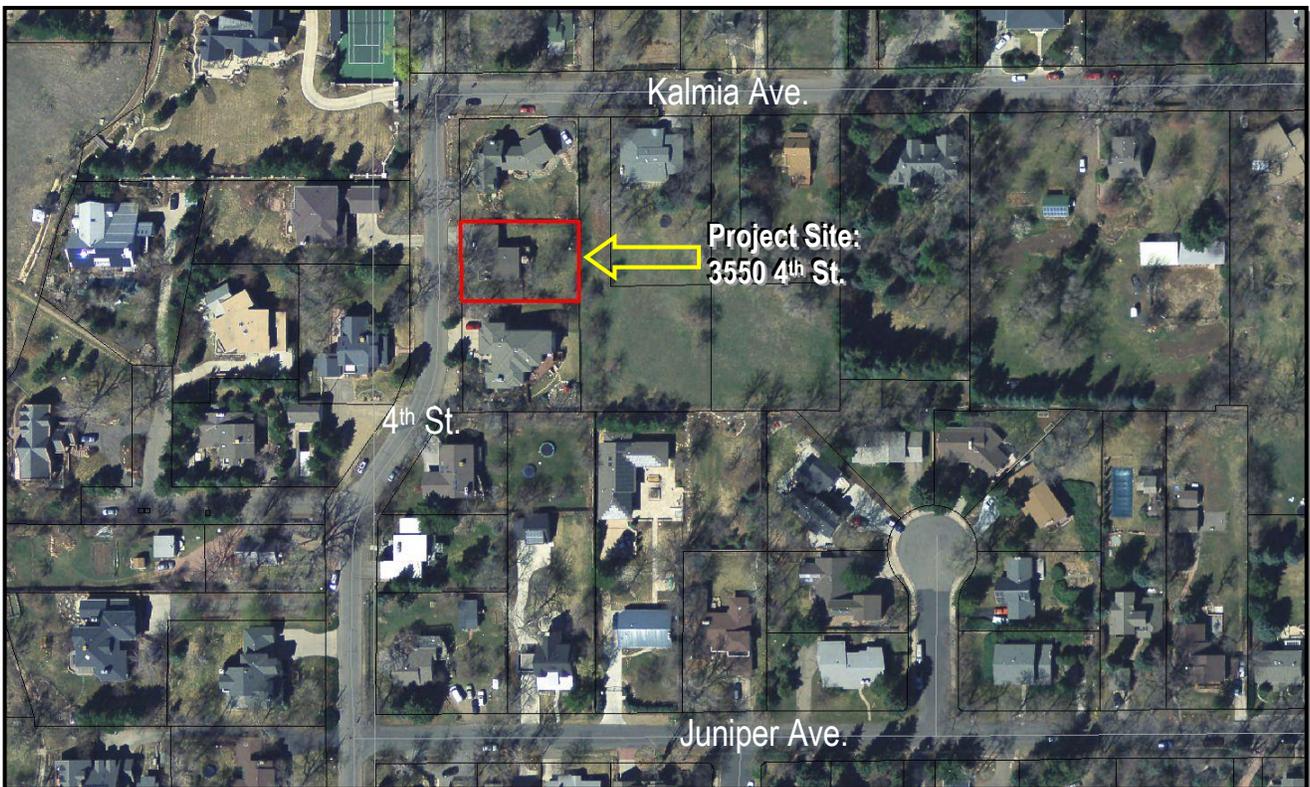


Figure 1: Vicinity Map

Proposed Project. The proposed project includes demolition of the existing single-family dwelling unit on the site and construction of a new, 4,003 sq. ft., two-story single family dwelling unit (demolition permit already approved by Landmarks). The applicant is requesting a modification to the maximum height for a principal building or structure on a nonstandard lot in the RR-2 zone district to allow for a principal building height of 27' 3¼" where 26' 1" is the maximum permitted height based on the size of the subject lot. The applicant has requested the proposed height modification to accommodate a two story building design in the rear of the property. A public hearing is not required

for this proposal because the requested principal building height does not exceed the overall maximum principal building height for the zone district of 35 feet as set forth in section 9-7-1, B.R.C. 1981.

Aside from the requested height modification, the proposed project meets all other applicable zoning standards, including solar access, building setbacks, and compatible development regulations. Due to the steep grade present on the subject property (approximately 8 percent), the proposed new home presents an elevation to the street which is substantially lower than the measured height of the proposed structure of 27' 3³/₄". From 4th Street, the actual height from grade level would be approximately 17 feet, with the main entry providing access to the uppermost floor and the lower floor becoming exposed as the slope falls away to the east. The applicant is proposing a modern design utilizing stone veneer, stucco, wood and metal as well as significant fenestration to create visual interest at the pedestrian level while remaining compatible with the surrounding residences. In terms of scale, the proposed home will be lower in perceived height than the neighboring homes to the north and south, and will be consistent with the overall size of homes in the surrounding area. Refer to **Attachment C** for the Applicant's proposed plans.

Project Analysis.

The minimum lot size for properties in the RR-2 zone is 30,000 square feet. In this case, the applicant's lot is 10,006 square feet and is considered nonstandard. Section [9-10-3\(b\)\(2\), B.R.C. 1981](#) establishes a maximum height for structures in the RR-2 zone that is proportionate to the lot area. Ordinarily, the maximum height allowed in the RR-2 zone is 35'; however, in this case the maximum height allowed under the code is 26'1" where 27' 3³/₄" is proposed. (Consequently, a similar modification was approved through Site Review for the neighboring property to the north for a 31' 6" residence in 2003).

Overall, the proposal was found to be consistent with the existing neighborhood and all applicable Site Review criteria found in section 9-2-14, B.R.C. 1981. Please refer to **Attachment B** for staff's complete analysis of the review criteria.

Public Comment. Required public notice was provided in the form of written notifications to property owners within 600 feet of the subject property. In addition, a public notice sign was posted on the property and therefore, all public notice requirements of section 9-4-3, "*Public Notice Requirements*," B.R.C. 1981 were met. Staff received comments from a neighboring property owner concerned about the city's land use regulations in general as they pertain to the neighborhood; however, no comments expressed opposition to this project specifically.

Conclusion. Staff finds that the proposed project meets the relevant criteria pursuant to section 9-2-14, "*Site Review*," B.R.C. 1981 (please refer to **Attachment B**). This proposal was approved by Planning and Development Services staff on June 9, 2014 and the decision may be called up before Planning Board on or before **June 23, 2014** (Please refer to **Attachment A**). There is one Planning Board meeting within the 14-day call up period, on **June 19, 2014**. Questions about the project or decision should be directed to Chandler Van Schaack at (303) 441-3137 or vanschaack@bouldercolorado.gov.

Attachments

- A. Signed Disposition
- B. Analysis of Review Criteria
- C. Applicant's Proposed Plan



CITY OF BOULDER
Community Planning and Sustainability

1739 Broadway, Third Floor • P.O. Box 791, Boulder, CO 80306-0791
phone 303-441-1880 • fax 303-441-3241 • www.bouldercolorado.gov

CITY OF BOULDER PLANNING DEPARTMENT
NOTICE OF DISPOSITION

You are hereby advised that the following action was taken by the Planning Department based on the standards and criteria of the Land Use Regulations as set forth in Chapter 9-2, B.R.C. 1981, as applied to the proposed development.

DECISION: **Approved with condition**
PROJECT NAME: **Ingold Residence**
DESCRIPTION: **SITE REVIEW HEIGHT MODIFICATION ONLY for a new single family detached dwelling unit at a height of 27'3¾" on a 10,006 sq. ft. property where 26'1" is the maximum principal building height permitted for the property per the RR-2 zone district standards.**
LOCATION: **3550 4th St.**
COOR: **N06W07**
LEGAL DESCRIPTION: **See Attached "Exhibit A"**
APPLICANT/OWNER: **John and Tracy Ingold**
APPLICATION: **LUR2014-00028**
ZONING: **RR-2**
CASE MANAGER: **Chandler Van Schaack**
VESTED PROPERTY RIGHT: **NO; the owner has waived the opportunity to create such right under Section 9-2-19, B.R.C. 1981.**

FOR CONDITIONS OF APPROVAL, SEE THE FOLLOWING PAGES OF THIS DISPOSITION.

Approved On: 6.9.14
Date

By: [Signature]
David Driskell, Executive Director of Community Planning and Sustainability

This decision may be appealed to the Planning Board by filing an appeal letter with the Planning Department within two weeks of the decision date. If no such appeal is filed, the decision shall be deemed final fourteen days after the date above mentioned.

Appeal to Planning Board expires: 6.23.14

IN ORDER FOR A BUILDING PERMIT APPLICATION TO BE PROCESSED FOR THIS PROJECT, A SIGNED DEVELOPMENT AGREEMENT AND SIGNED PLANS MUST BE SUBMITTED TO THE PLANNING DEPARTMENT WITH DISPOSITION CONDITIONS AS APPROVED SHOWN ON THE PLANS, IF THE DEVELOPMENT AGREEMENT IS NOT SIGNED WITHIN NINETY (90) DAYS OF THE FINAL DECISION DATE, THE PLANNING DEPARTMENT APPROVAL AUTOMATICALLY EXPIRES.

Pursuant to Section 9-2-12 of the Land Use Regulations (Boulder Revised Code, 1981), the applicant must begin and substantially complete the approved development within three years from the date of final approval. Failure to "substantially complete" (as defined in Section 9-2-12) the development within three years shall cause this development approval to expire.

CONDITIONS OF APPROVAL

1. The Applicant shall ensure that the **development shall be in compliance with all approved plans** dated June 9, 2014 on file in the City of Boulder Planning Department, except to the extent that the development may be modified by the conditions of this approval.
2. Prior to issuance of a building permit, the Applicant shall dedicate to the City, at no cost, the following easement, meeting the City of Boulder Design and Construction Standards, as part of a Technical Document Review application, the form and final location of which shall be subject to the approval of the City Manager:
 - a. A 10-foot wide drainage and utility easement located along the northern property line.

EXHIBIT A: LEGAL DESCRIPTION

That portion of the Southwest ¼ of the Northeast ¼ of section 24, Township 1 North, Range 71 West of the 6th P.M., County of Boulder, State of Colorado described as follows: Beginning at the East ¼ corner of said section 24; Thence Northerly along the East line of section 24, A distance of 769.38 feet; Thence Westerly parallel with the East-West center line of said section 24, A distance of 2,442 feet to the true point of beginning; Thence Northerly parallel with the east line of said section 24, A distance of 80.70 feet; Thence Westerly, Parallel to the East-West center line of said section 24, A distance of 124 feet, more or less, to the East line of Fourth Street of the City of Boulder, as the same appears of record, and exists on the ground; Thence Southerly along the East line of said Fourth Street, A distance of 80.70 feet; Thence Easterly, Parallel with the East-West center line of Section 24, A distance of 124 feet, more or less, to the true point of beginning.

Case #: LUR2014-00028

Project Name: Ingold Residence

Date: June 19, 2014

ONLY CRITERIA APPLICABLE TO A HEIGHT MODIFICATION HAVE BEEN INCLUDED BELOW.**CRITERIA FOR REVIEW**

No site review application shall be approved unless the approving agency finds that:

(1) Boulder Valley Comprehensive Plan:

Y (A) The proposed site plan is consistent with the land use map and the service area map and, on balance, the policies of the Boulder Valley Comprehensive Plan.

The proposal is to demolish an existing single family dwelling unit and construct a new dwelling unit on the same lot. The Boulder Valley Comprehensive Plan Land Use Designation for 3550 4th St. is Very Low Density Residential, which anticipates a density of two or less units per acre. The site, zoned RR-2 (Residential – Rural 2), lies within a larger neighborhood area zoned RR-2 that extends north- south from Linden Ave. to just north of Iris Ave., and from Broadway on the east to the eastern city limits. The subject lot is 10,006 sq. ft. in size, which is considered non-standard for the RR-2 zoning district (the minimum required lot size per dwelling unit in the RR-2 zone is 30,000 sq. ft.). Development of nonstandard lots in the RR-2 zone which are smaller than the minimum lot size but larger than one-fourth of the minimum lot size is permissible through the Land Use Regulations if the building meets the setback requirements as well as special maximum height requirements for principal buildings on nonstandard lots.

N/A(B) The proposed development shall not exceed the maximum density associated with the Boulder Valley Comprehensive Plan residential land use designation. Additionally, if the density of existing residential development within a three hundred-foot area surrounding the site is at or exceeds the density permitted in the Boulder Valley Comprehensive Plan, then the maximum density permitted on the site shall not exceed the lesser of:

As mentioned above, the proposal is to replace an existing dwelling unit on a nonstandard lot within the RR-2 zone district; therefore, no change to the existing density on or surrounding the site is proposed. The existing residential density within a three-hundred foot area surrounding the site is 1.5 dwelling units per acre, which is consistent with the Very Low Density Residential Land Use Designation; therefore the criteria below are not applicable.

N/A (i) The density permitted in the Boulder Valley Comprehensive Plan, or,

N/A (ii) The maximum number of units that could be placed on the site without waiving or varying any of the requirements of Chapter 9-8, "Intensity Standards," B.R.C. 1981.

(2) Site Design: Site Design: Projects should preserve and enhance the community's unique sense of place through creative design that respects historic character, relationship to the natural environment, multi-modal transportation connectivity and its physical setting. Projects should utilize site design techniques which are consistent with the purpose of site review in subsection (a) of this

section and enhance the quality of the project. In determining whether this subsection is met, the approving agency will consider the following factors:

Y (F) Building Design, Livability, and Relationship to the Existing or Proposed Surrounding Area

Y (i) The building height, mass, scale, orientation, and configuration are compatible with the existing character of the area or the character established by an adopted plan for the area;

The proposed single-family residence is compatible with the existing neighborhood character and scale of the other residences. The proposed development takes into consideration the existing neighborhood character, which consists of a variety of sizes and architectural styles, and utilizes high quality exterior finish materials and street-facing fenestration to enhance street interest along 4th Street.

Y (ii) The height of buildings is in general proportion to the height of existing buildings and the proposed or projected heights of approved buildings or approved plans for the immediate area;

The residences adjacent to the project site to the north and south are 31'6" and 32' in height, respectively, with the property to the north having received approval of a height modification request in 2003. All of the homes along that portion of 4th Street are affected by the steep grades in that area, including the subject property which has an 8 percent slope. While the defined height of the proposed structure is 27' 3¾", the new home presents an elevation to the street which is substantially lower. From 4th Street, the actual height from grade level would be approximately 17 feet, with the main entry providing access to the uppermost floor and the lower floor becoming exposed as the slope falls away to the east. With the neighboring properties having taller building heights than the proposed building both in terms of the perceived height from grade as well as the measured height, the proposed building will remain compatible with the surrounding buildings and will actually appear relatively modest compared to many of the other two-story homes in the area.

Y (iii) The orientation of buildings minimizes shadows on and blocking of views from adjacent properties;

In terms of shadows, the proposed building is subject to and has demonstrated compliance with the Solar Access standards for Solar Access Area 1 as required by section 9-9-17 of the Boulder Revised Code. In terms of views from adjacent properties, the most significant views are those to the west and southwest, which will be maintained for the adjacent properties due to the fact that both of those residences are taller in height than the proposed structure. There are two vacant flag lots immediately adjacent to the subject site on the east, which create a large amount of open space between the subject property and the next developed properties to the south and east; therefore, no significant impacts to existing viewsheds from homes along Kalmia or Jackpine Ct. are expected to occur. Staff has not received any comments from neighbors concerned over the loss of existing views.

Y (iv) If the character of the area is identifiable, the project is made compatible by the appropriate use of color, materials, landscaping, signs, and lighting;

As mentioned above, the character of the surrounding area is comprised of a variety of home sizes and architectural styles, with many of the homes being modern interpretations of traditional residential building forms. While the proposed structure is more of a modern design than the homes immediately to the north and south, the materials and overall building form are compatible with the surrounding area and will add to the area's varied single family character.

Y (v) Projects are designed to a human scale and promote a safe and vibrant pedestrian experience through the location of building frontages along public streets, plazas, sidewalks and paths, and through the use of building elements, design details and landscape materials that include, without limitation, the location of entrances and windows, and the creation of transparency and activity at the pedestrian level;

The design of the proposed residence successfully addresses the street by incorporating a variety of building features as well as use of fenestration to frame the main covered entryway and create transparency between the interior of the building and the street. A variety of building materials, including stone veneer, stucco, wood and metal also serve to create pedestrian interest.

Y (vii) For residential projects, the project assists the community in producing a variety of housing types, such as multifamily, townhouses and detached single family units, as well as mixed lot sizes, number of bedrooms and sizes of units;

The existing single-family residence unit type is not being altered with this development proposal. The existing residence will be demolished and the proposed residence constructed in its place. The proposed single family dwelling is consistent with the existing housing types in the surrounding area as well as with the intent of the underlying zoning.

Y (xii) Exteriors or buildings present a sense of permanence through the use of authentic materials such as stone, brick, wood, metal or similar products and building material detailing;

The material palette consists of stucco, random-cut stone veneer, metal roofing and exposed timber beam ends. The street-facing elevation is comprised primarily of stone veneer, while the building sides include primarily stucco with numerous windows and stone-veneer chimneys serving to break up the faces and create visual interest. The broad side of the main chimney feature is located on the south side of the east face of the home, and is framed on both sides by large floor-to-ceiling windows. The north side of the east face also includes a portion of the second chimney, and incorporates stucco and additional windows.

Structural Engineer:
C & H Engineering
 1091 Stone Ridge Dr.
 Bozeman Montana 59718
 406-587-1115

General Contractor:
Live Modern, L.L.C.
 Ron Patryas
 2011 100 Year Party Ct. #1
 Longmont, CO 80504
 303-709-0694

Project:
Ingold Residence
 3550 4th Street
 Boulder Colorado



P.O. Box 1742
 Boulder, CO 80306
 Ph. 720.441.7460
 1657 North Rockwell St.
 Chicago, IL 60647
 Ph. 312-655-0940
 ©2014

Robert L. Gilbert, AIA
 Michael B. Donohue
 ARCHITECTURAL LICENSES
 STATE
 MONTANA
 COLORADO
 ILLINOIS
 MICHIGAN
 WASHINGTON

IL DES. FIRM REG.#184-004141

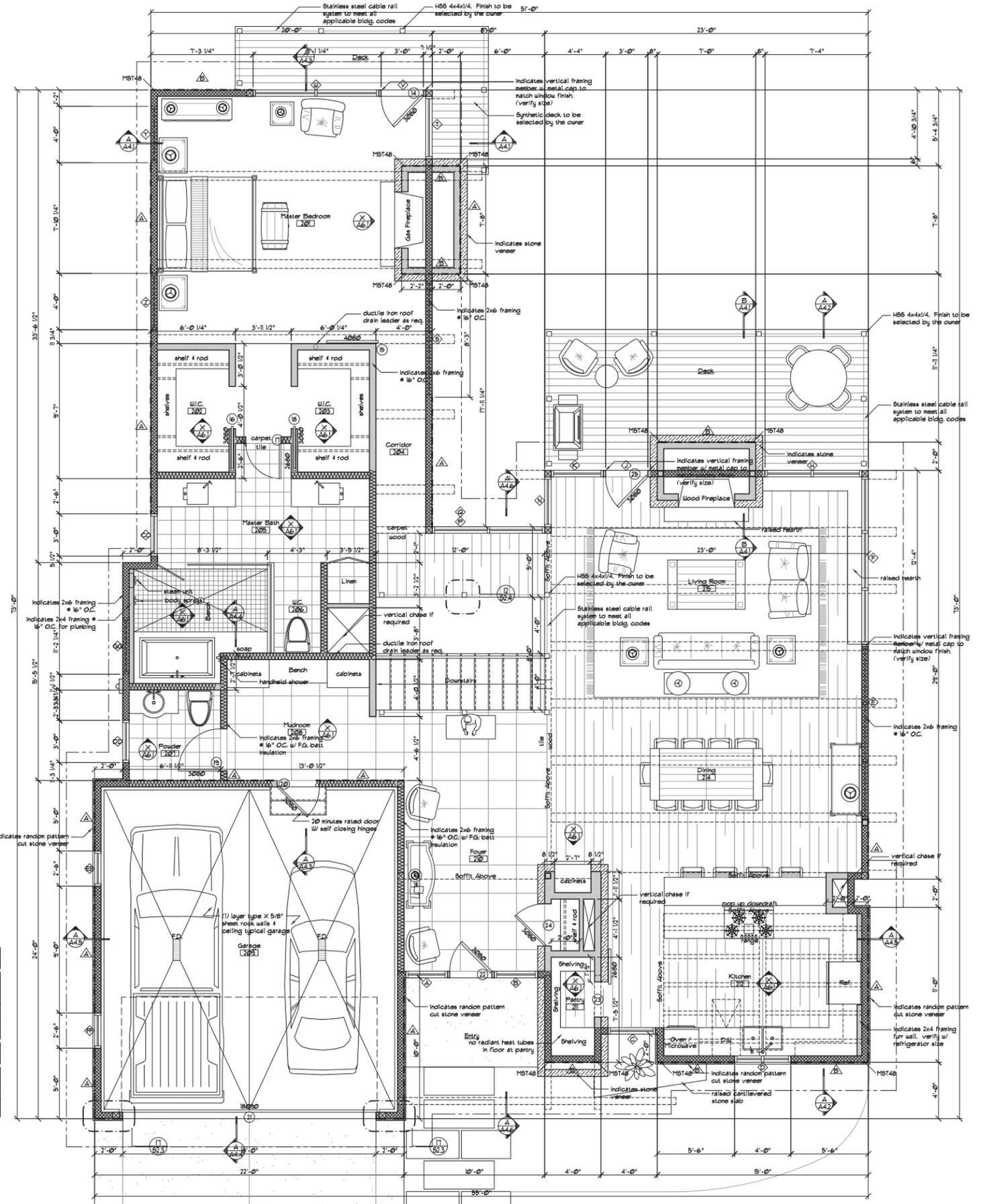
ISSUE	DATE
Final Struct. Review	2-6-14
Review Set	3-2-14
Review Set	3-18-14
Review Set	4-10-14
Lead Use Review	4-17-14
LUR corrections	5-12-14
DRAWN BY:	RLG / MBD
CHECKED BY:	xxxx
JOB No.:	1312

A2.I

SHEAR WALL SCHEDULE					
WALL	SHEATHING	NAILS	SPACING	BLOCKING / PLATE	ANCHOR BOLTS (2001 N.D.S. TABLE 11E)
▲	1/2" (32/16) APA RATED ONE SIDE	8D COMMON	12" O.C. FIELD 4" O.C. EDGE	2" NOM / 2" NOM	5/8" DIA x 10" W/ 3"x3"x1/4" WASHERS @ 4'-0" O.C. / 350 WALL
▲	1/2" (32/16) APA RATED ONE SIDE	8D COMMON	12" O.C. FIELD 3" O.C. EDGE	3" NOM / 2" NOM	5/8" DIA x 10" W/ 3"x3"x1/4" WASHERS @ 1'-6" O.C. / 490 WALL
- - - - - INDICATES LOCATION OF SHEARWALL					

HOLD DOWN SCHEDULE						
H.D. DESIGNATION	SIMPSON NO.	STUDS	STUD SCREWS	ANCHOR BOLT	LOAD	
▲	HDUB	(2) 2x6	14 SD6 1/4"x2 1/2"	5/8" Dia. 66TB24	8B24	5645
▲	HDUB	(3) 2x6	20 SD6 1/4"x2 1/2"	1/8" Dia. 66TB28	9B28	7855

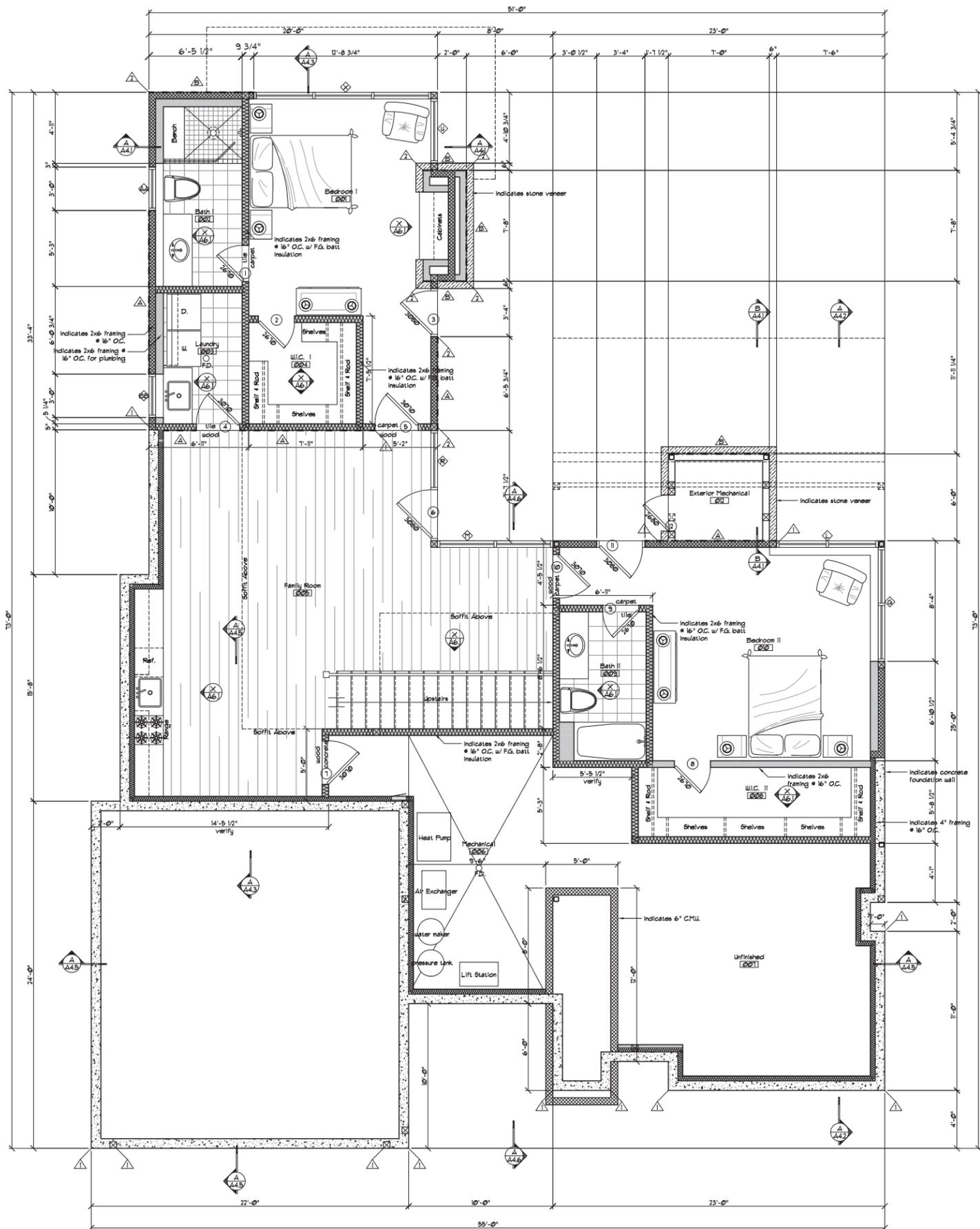
NOTE:
 HOLD-DOWNS
 1. SEE DETAILS ON 8 DRAWINGS FOR HOLD-DOWN CONNECTIONS



Upper Level Floor Plan
 1/4" = 1'-0"

SHEAR WALL SCHEDULE					
WALL	SHEATHING	NAILS	SPACING	BLOCKING / PLATE	ANCHOR BOLTS (2001 N.D.S. TABLE 11E)
▲	1/2" (32/16) APA RATED ONE SIDE	8D COMMON	12" O.C. FIELD 4" O.C. EDGE	2" NOM / 2" NOM	5/8" DIA x 10" W/ 3"x3"x1/4" WASHERS • 4'-0" O.C. / 35Ø WALL
▲	1/2" (32/16) APA RATED ONE SIDE	8D COMMON	12" O.C. FIELD 3" O.C. EDGE	3" NOM / 2" NOM	5/8" DIA x 10" W/ 3"x3"x1/4" WASHERS • 1'-6" O.C. / 49Ø WALL
- - - - - INDICATES LOCATION OF SHEARWALL					
HOLD DOWN SCHEDULE					
H.D. DESIGNATION	SIMPSON NO.	STUDS	STUD SCREWS	ANCHOR BOLT	LOAD
▲	HDB5	(2) 2x6	14 SD9 1/4"x2 1/2"	5/8" Dia. 66TB24	5645
▲	HDB8	(3) 2x6	20 SD5 1/4"x2 1/2"	1/8" Dia. 66TB28	1855

NOTE:
HOLD-DOWNS
1. SEE DETAILS ON 6 DRAWINGS FOR HOLD-DOWN CONNECTIONS



Lower Level Floor Plan
1/4" = 1'-0"

Structural Engineer:
C & H Engineering
1091 Stone Ridge Dr.
Bozeman Montana 59718
406-587-1115

General Contractor:
Live Modern, L.L.C.
Ron Patryas
2011 100 Year Party Ct. #1
Longmont, CO 80504
303-709-0694

Project:
Ingold Residence
3550 4th Street
Boulder Colorado

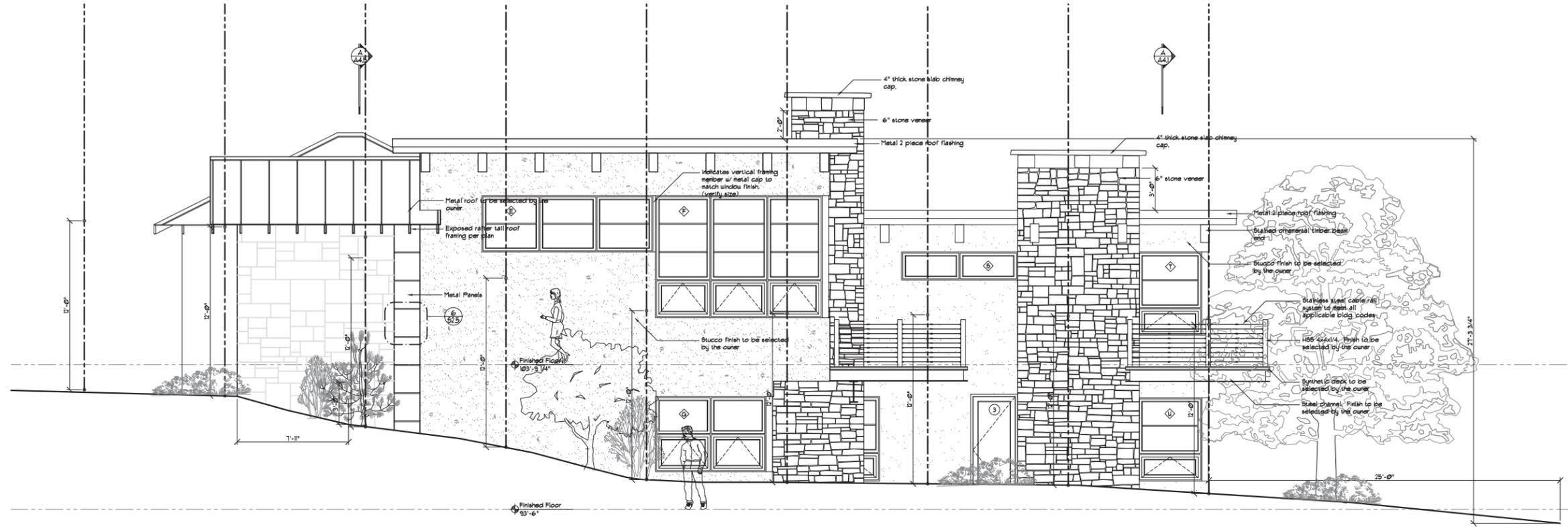


P.O. Box 1742
Boulder, CO 80306
Ph. 720.441.7460
1657 North Rockwell St.
Chicago, IL 60647
Ph. 312-655-0940
©2014

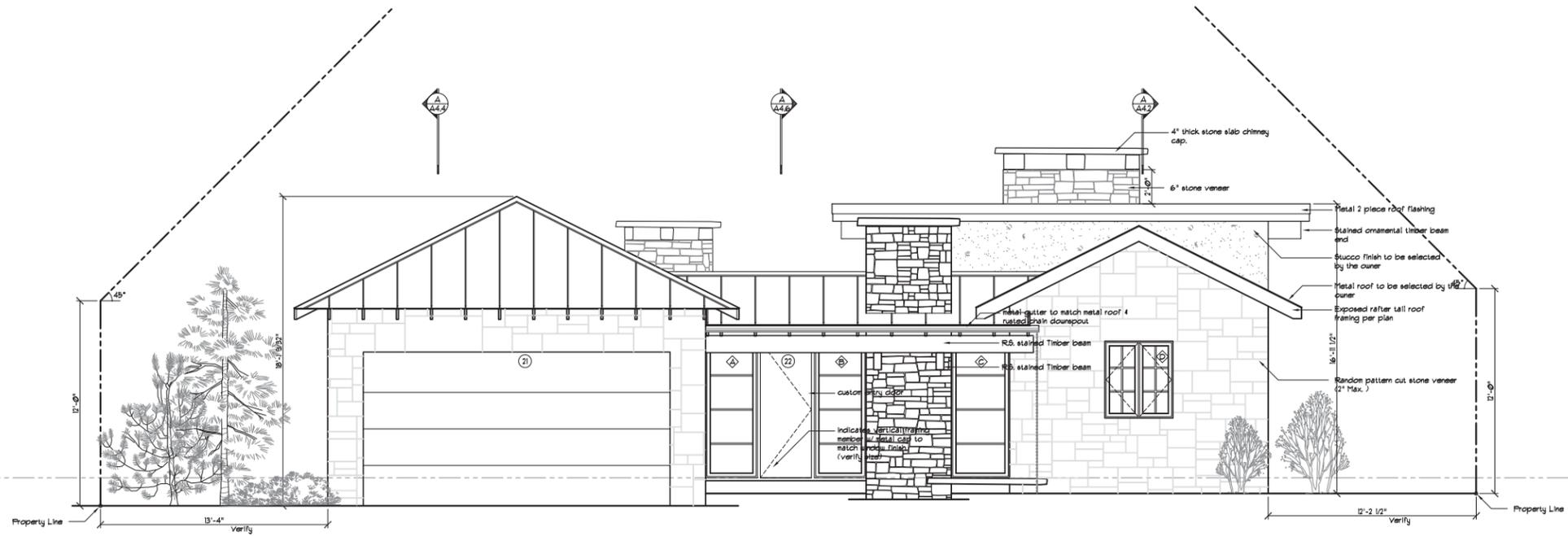
Robert L. Gilbert, AIA
Michael B. Donohue
ARCHITECTURAL LICENSES
STATE
MONTANA
COLORADO
ILLINOIS
MICHIGAN
WASHINGTON

ISSUE	DATE
Final Struct. Review	2-6-14
Review Set	3-2-14
Review Set	3-18-14
Review Set	4-10-14
Lead Use Review	4-17-14
LUR corrections	5-12-14
DRAWN BY:	RLG / MBD
CHECKED BY:	xxxxx
JOB No.:	1312

A2.2



South Elevation
1/4" = 1'-0"



West Elevation
1/4" = 1'-0"

Structural Engineer:
C & H Engineering
1091 Stone Ridge Dr.
Bozeman Montana 59718
406-587-1115

General Contractor:
Live Modern, L.L.C.
Ron Patryas
2011 100 Year Party Ct. #1
Longmont, CO 80504
303-709-0694

Project:
Ingold Residence
3550 4th Street
Boulder Colorado



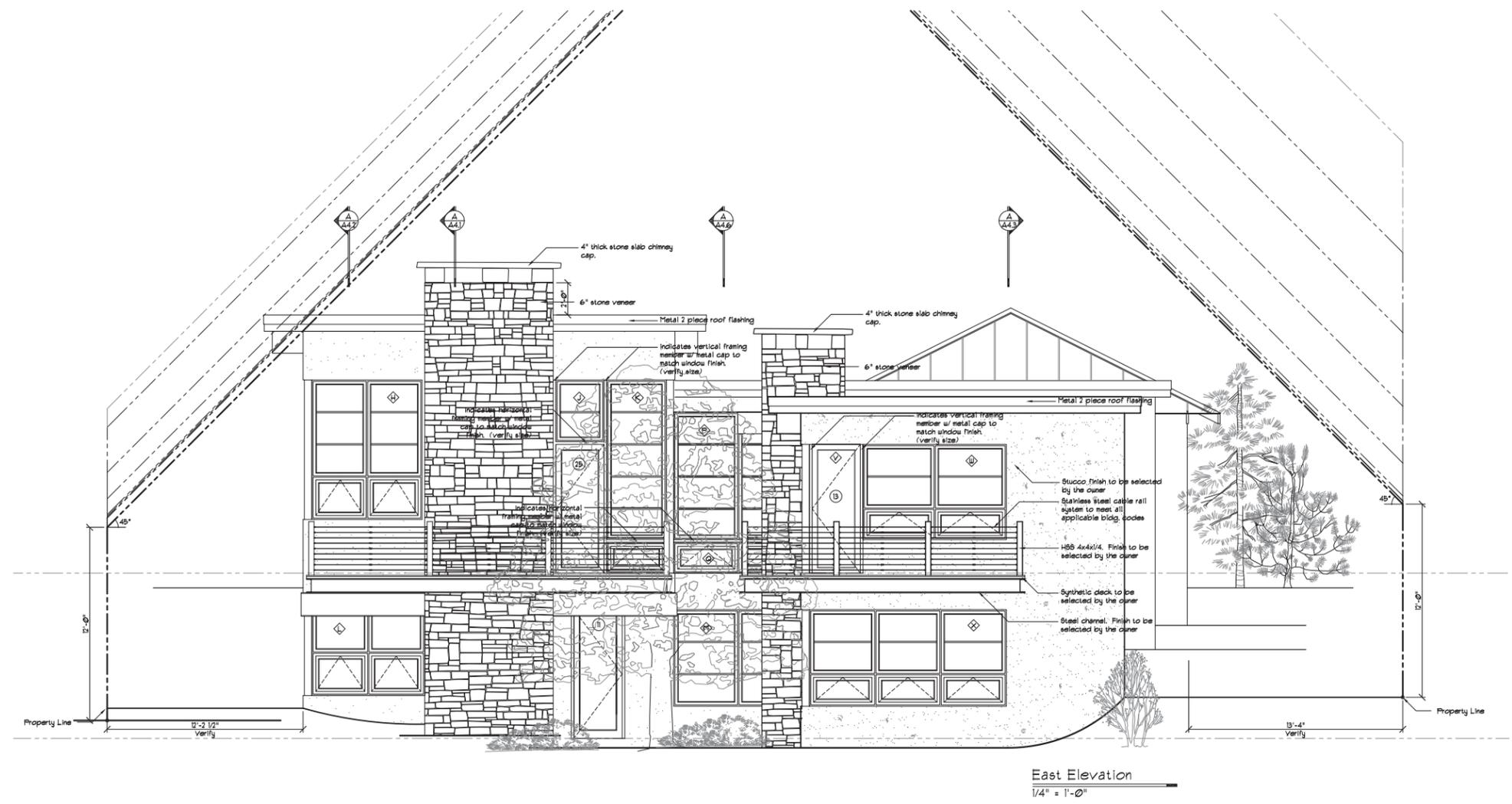
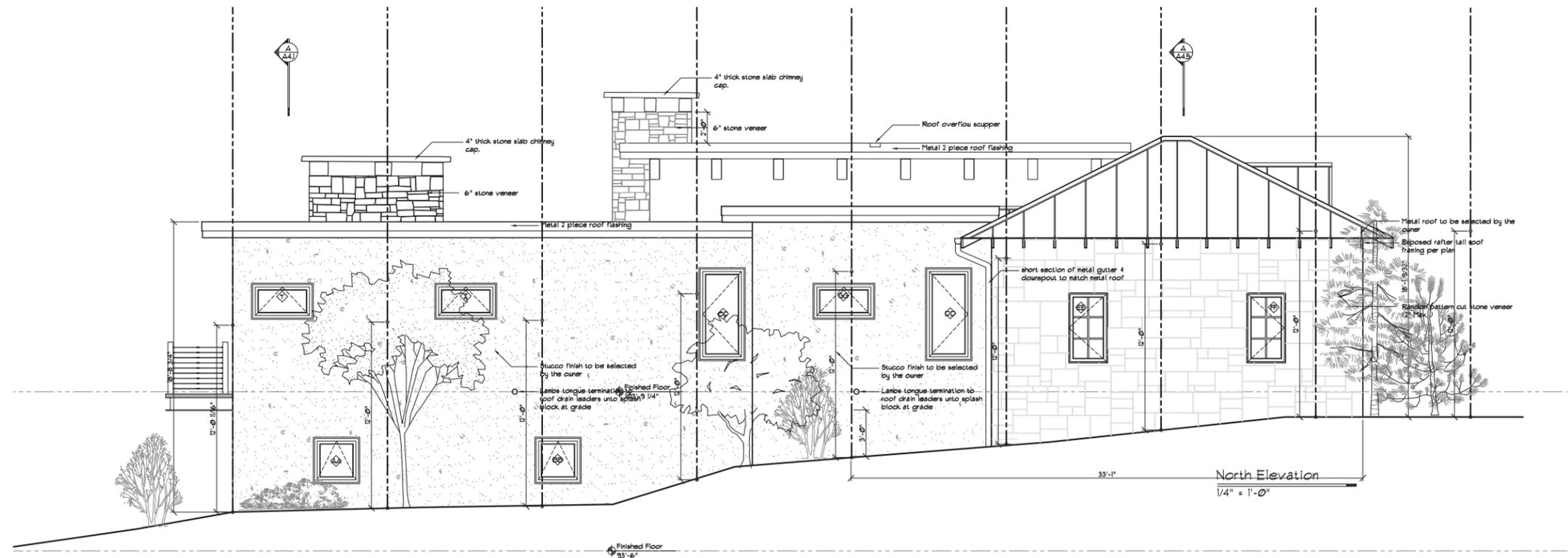
P.O. Box 1742
Boulder, CO 80306
Ph. 720.441.7460
1657 North Rockwell St.
Chicago, IL 60647
Ph. 312-655-0940
© 2014

Robert L. Gilbert, AIA
Michael B. Donohue
ARCHITECTURAL LICENSES
STATE
MONTANA
COLORADO
ILLINOIS
MICHIGAN
WASHINGTON

IL DES. FIRM REG.#184-004141

ISSUE	DATE
Final Struct. Review	2-6-14
Review Set	3-2-14
Review Set	3-18-14
Review Set	4-11-14
Land Use Review	5-12-14
LUR corrections	5-12-14
DRAWN BY:	RLG / MBD
CHECKED BY:	xxxx
JOB No.:	1312

A3.1



Structural Engineer:
C & H Engineering
 1091 Stone Ridge Dr.
 Bozeman Montana 59718
 406-587-1115

General Contractor:
Live Modern, L.L.C.
 Ron Patryas
 2011 100 Year Party Ct. #1
 Longmont, CO 80504
 303-709-0694

Project:
Ingold Residence
 3550 4th Street
 Boulder Colorado



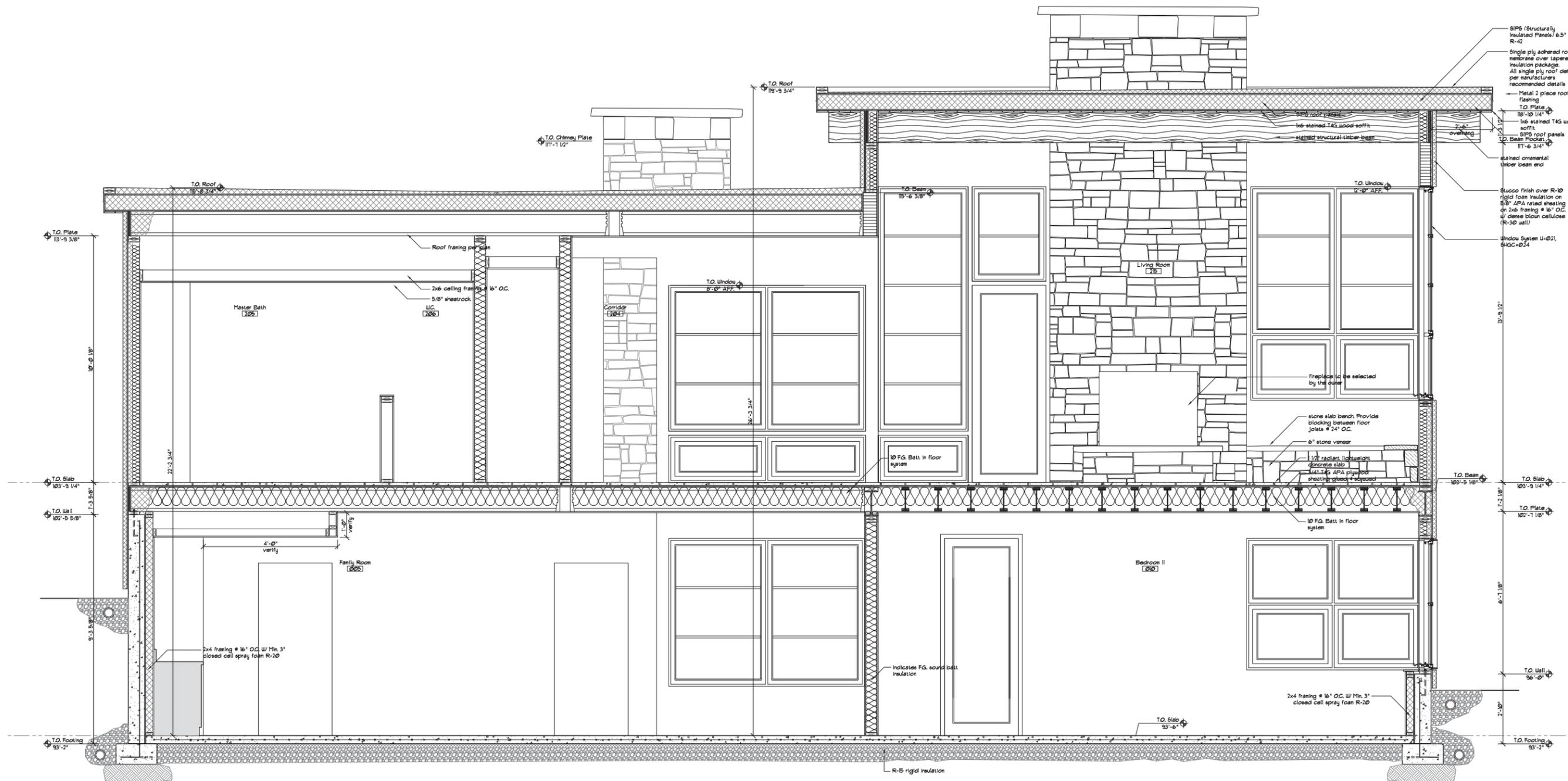
P.O. Box 1742
 Boulder, CO 80306
 Ph. 720.441.7460
 1657 North Rockwell St.
 Chicago, IL 60647
 Ph. 312-655-0940
 ©2014

Robert L. Gilbert, AIA
 Michael B. Donohue
 ARCHITECTURAL LICENSES
 STATE
 MONTANA
 COLORADO
 ILLINOIS
 MICHIGAN
 WASHINGTON

IL DES. FIRM REG.#184-004141

ISSUE	DATE
Final Struct. Review	2-6-14
Review Set	3-2-14
Review Set	3-18-14
Review Set	4-11-14
Land Use Review	5-12-14
LUR corrections	5-12-14
DRAWN BY:	RLG / MBD
CHECKED BY:	xxxx
JOB No.:	1312

A3.2



A Building Section Lateral
 1/2" = 1'-0"

Structural Engineer:
C & H Engineering
 1091 Stone Ridge Dr.
 Bozeman Montana 59718
 406-587-1115

General Contractor:
Live Modern, L.L.C.
 Ron Patryas
 2011 100 Year Party Ct. #1
 Longmont, CO 80504
 303-709-0694

Project:
Ingold Residence
 3550 4th Street
 Boulder Colorado

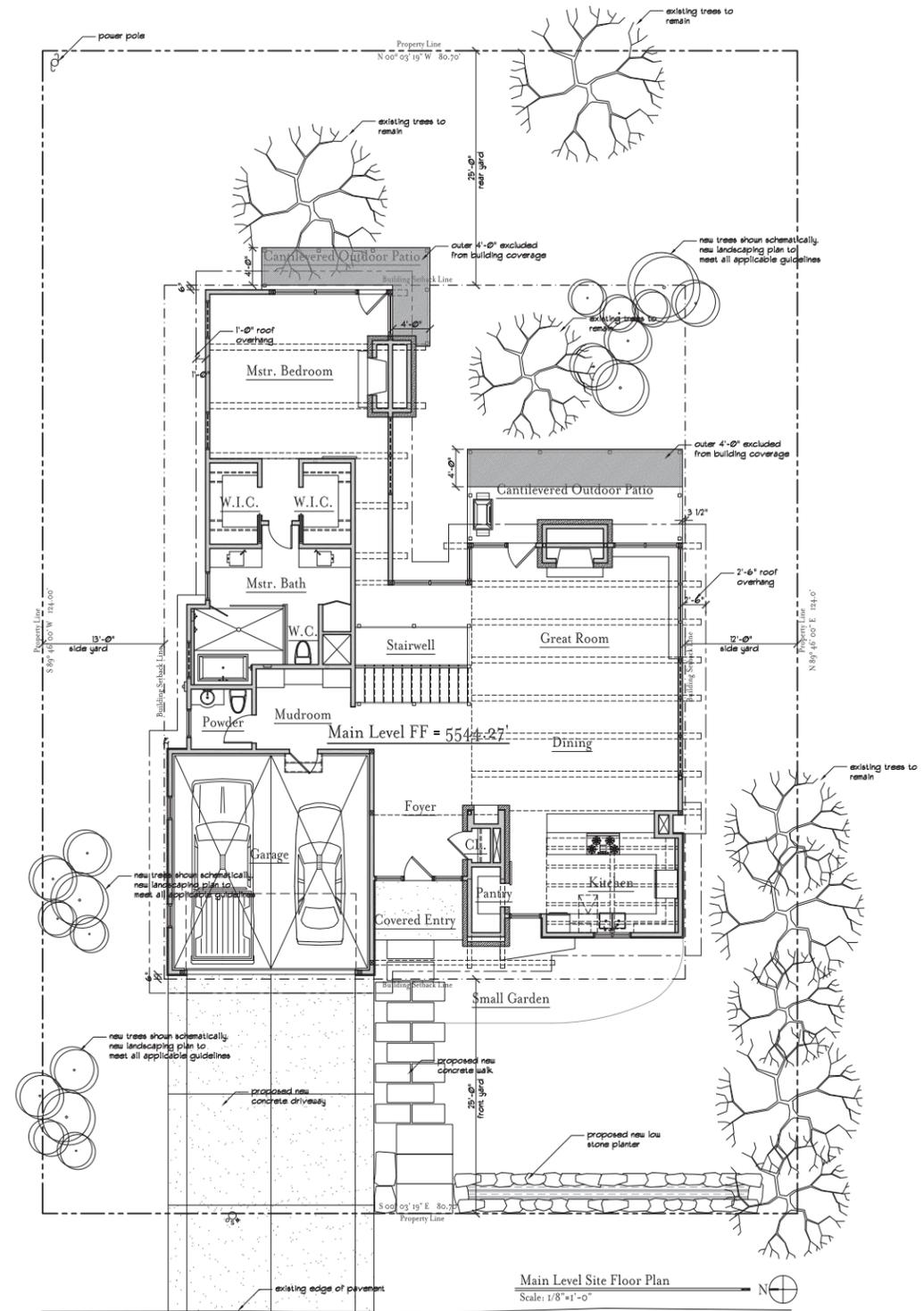
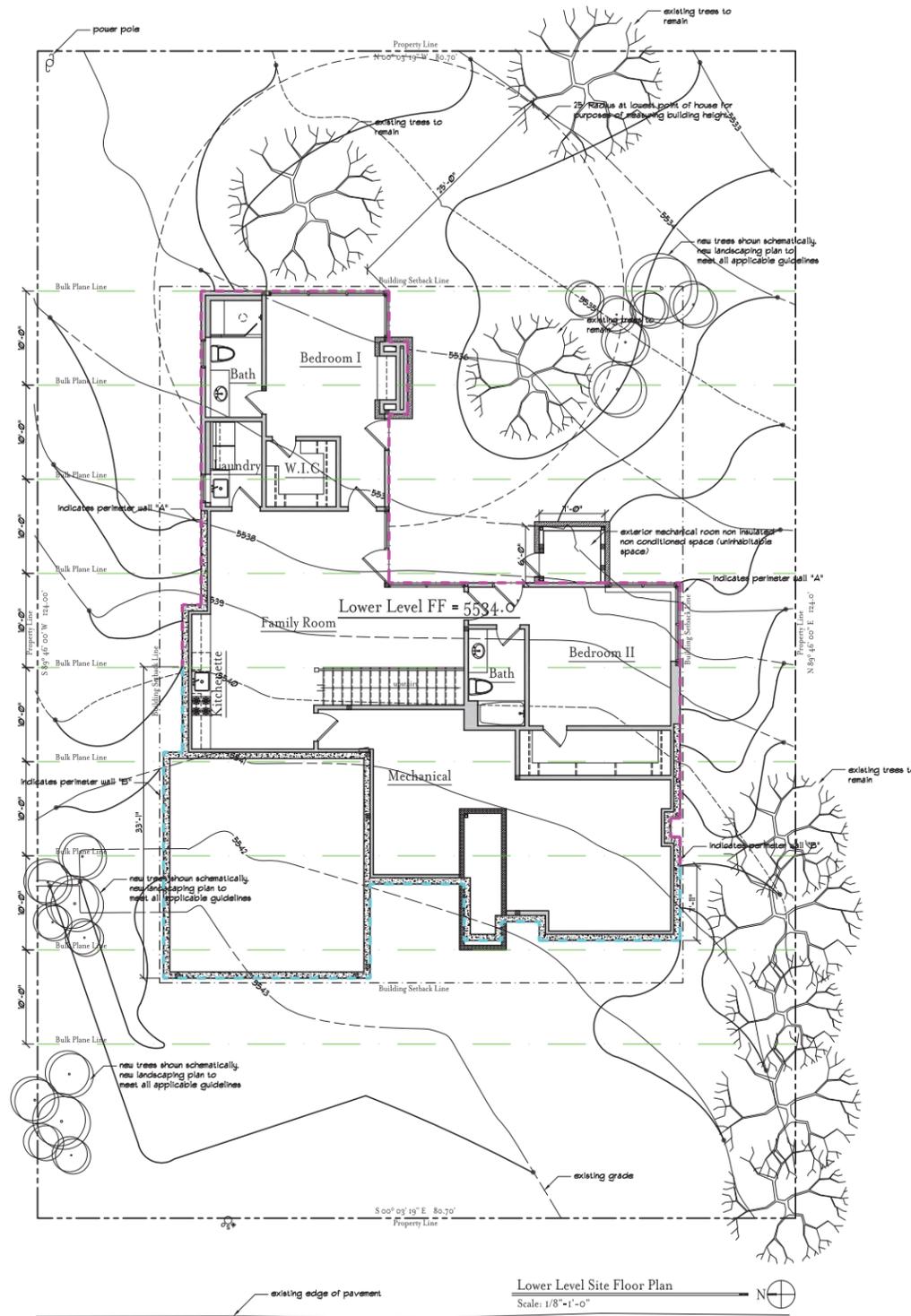


P.O. Box 1742
 Boulder, CO 80306
 Ph. 720.441.7450
 1657 North Rockwell St.
 Chicago, IL 60647
 Ph. 312-655-0940
 ©2014

Robert L. Gilbert, AIA
 Michael B. Donohue
 ARCHITECTURAL LICENSES
 STATE
 MONTANA
 COLORADO
 ILLINOIS
 MICHIGAN
 WASHINGTON

ISSUE	DATE
Final Struct. Review	2-6-14
Review Set	3-2-14
Review Set	3-18-14
Review Set	4-10-14
Land Use Review	4-17-14
LIUR corrections	5-12-14
DRAWN BY:	RLG / MBD
CHECKED BY:	xxxx
JOB No.:	1312

A4.7



Site & Building Area Tabulations		
Property Address	3550 4th St. Boulder CO	
Zoning District	RR2	
Use Module	R1	
Form Module	b	
Intensity Module	2	
Sub Community	Central Boulder	
Neighborhood	Juniper / Kalmia	
Land Use	Very Low Density	
Minimum front yard	25'	
Minimum side yard	10'	
Minimum total both yards	25'	
Minimum rear yard	25'	
Maximum building height	25' - 1 1/8"	(Can submit site plan application to increase building height up to 35'-0")
Floor Area	(10,006 Sq. Ft. x 0.2) + 2,100 Sq. Ft. = 4,101 Sq. Ft. = Maximum Floor Area	
Site Area	10,006 Sq. Ft.	(10,006 Sq. Ft. x .2) + 1,050 Sq. Ft. = 3,051 Sq. Ft.
Master Patio Countable	7 Sq. Ft.	
Great Room Patio Countable	118 Sq. Ft.	
Building Footprint	2790 Sq. Ft.	
Sub-Total	2,915 Sq. Ft.	
Allowable Building Coverage	= 3,051 Sq. Ft.	
Proposed Building Coverage	= 2,915 Sq. Ft.	
Perimeter Wall "A"	160'-0"	
Perimeter Wall "B"	118'-0"	
Total	278'-0"	
160'-0" / 278'-0"	0.57-5%	
Lower Level Area	2,228.0 Sq. Ft.	
2,228.0 Sq. Ft. x 0.57-5%	1,281.1 Sq. Ft.	
Lower Level Countable Floor Area	1,281.1 Sq. Ft.	
Main Level	2,170.0 Sq. Ft.	
Garage	528.0 Sq. Ft.	
Lower Level	1,281.1 Sq. Ft.	
Balcony Egress	24.0 Sq. Ft.	
Sub-Total	4,003.1 Sq. Ft.	
Allowable Floor Area	= 4,020.0 Sq. Ft.	
Proposed Floor Area	= 4,003.1 Sq. Ft.	

Structural Engineer:
C & H Engineering
1091 Stone Ridge Dr.
Bozeman Montana 59718
406-587-1115

General Contractor:
Live Modern, L.L.C.
Ron Patryas
2011 100 Year Party Ct. #1
Longmont, CO 80504
303-709-0694

Project:
Ingold Residence
3550 4th Street
Boulder Colorado



Robert L. Gilbert, AIA
Michael B. Donohue
ARCHITECTURAL LICENSES
STATE
MONTANA
COLORADO
ILLINOIS
MICHIGAN
WASHINGTON

ISSUE	DATE
Final Struct. Review	2-6-14
Review Set	3-2-14
Review Set	3-18-14
Review Set	4-10-14
Land Use Review	4-17-14
LUR corrections	5-12-14
DRAWN BY:	RLG / MBD
CHECKED BY:	xxxx
JOB No.:	132

C2.I

MEMORANDUM

TO: Planning Board
FROM: Chandler Van Schaack, Case Manager
DATE: June 19, 2014
SUBJECT: **Call Up Item:** Staff Level Site Review and Preliminary Plat (LUR2013-00050) and Use Review (LUR2012-00091): For the redevelopment of a 2.275-acre site located at the intersection of Foothills Parkway and Diagonal Highway within the Business Transitional -1 (BT-1) zoning district with a new 4,992 square foot convenience store and 10-pump fueling station. The proposal includes variations to the site access standards and minimum site and parking lot landscaping requirements. The call-up period expires June 23, 2013.

Background. The 99,103 square foot (2.275-acre) project site is zoned Business Transitional -1 (BT-1), which is defined in the land use code as:

“Transitional business areas which generally buffer a residential area from a major street and are primarily used for commercial and complementary residential uses, including without limitation, temporary lodging and office uses.” (section 9-5-2(c)(2)(E), B.R.C. 1981).

The project site is located at the intersection of Foothills Parkway and Diagonal Highway in, as shown below in **Figure 1**, within the Business Transitional -1 (BT-1) zoning district. The subject site was first developed in 1965 as a drive-in restaurant, and a gas station and auto repair shop were subsequently added. Currently, the site contains a towing company, auto repair shop and Sinclair service station. The site contains several dilapidated and vacant buildings, outdoor storage of inoperable vehicles and auto parts, and a large, unmaintained surface parking lot with six access points. The areas to the north and south of the project site are zoned BT-1, while the parcels to the east and west are within unincorporated Boulder County. There are also high-density residential and industrial areas to the south of the subject site.

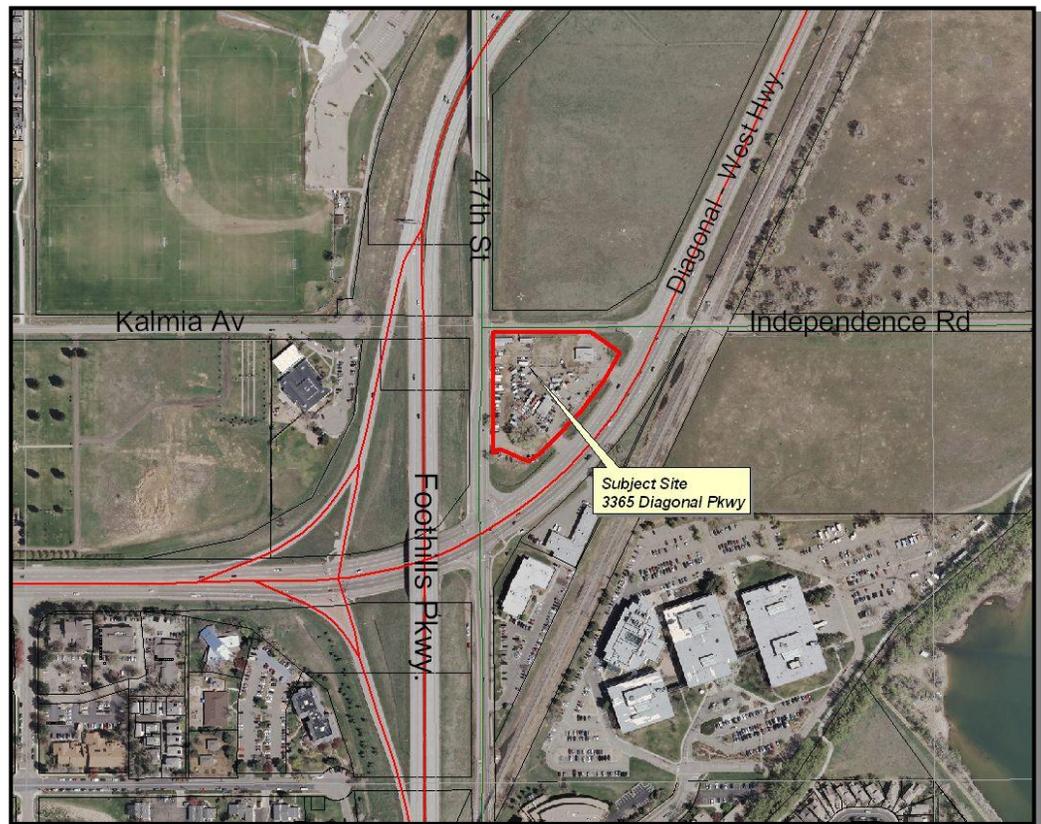


Figure 1: Vicinity Map

A [Concept Plan](#) for the proposal was heard by the Planning Board on February 7, 2013. At the hearing, the board indicated that the site was an appropriate location for the proposed use, but because of its status as a gateway site into the city special attention should be paid to incorporating high quality landscaping and building materials

as well as bold, interesting, and original architecture. Additional considerations discussed by the board included not exceeding minimum parking requirements, incorporating additional uses such as a restaurant into the development, and minimizing impacts from site access and lighting.

Proposed Project. The proposed development consists of subdividing the existing 2.275-acre lot into two lots, with Lot 1 (1.79-acres) to be redeveloped with a 4,992 square foot Kum & Go convenience store and 10-pump fueling station, and Lot 2 (0.47-acres) to be left vacant for redevelopment at a later time. The proposed one-story building, at a height of just under 25 feet, represents a unique and modern fueling station design and utilizes stacked brick, stone, and metal with abundant glazing on the east elevation. A Use Review is required for the proposed fueling station use per the use standards for the BT-1 zone district. Refer to **Attachment C** for the Applicant's proposed plans.

The applicant is requesting a code modification from the interior parking lot landscaping requirements due to truck access and turning radii requirements for fuel and merchandise deliveries. . The applicant is also requesting modifications to the city street tree requirements along Diagonal Hwy. to allow for 21 street trees where 28 is the minimum required, as Diagonal Hwy. is a Colorado Department of Transportation (CDOT) right-of-way, and CDOT has specific sight distance standards that conflict with the City of Boulder landscape requirements. The applicant is proposing to compensate for the requested modifications by providing approximately 40% of the project site as landscaping where 10% is the minimum required per the BT-1 zone district standards, with an abundance of planting around the site's perimeter. Two access points are proposed for the site, including one from Diagonal and an additional access point from Independence Rd. This request requires a modification to the city access standards, which allow only one access point per site. The site plan includes 16 off-street parking spaces, which is the minimum required per the parking standards for non-residential uses in the BT-1 zone district (and a significant reduction from the Concept Plan proposal).

Project Analysis. Overall, the proposal was found to be consistent with the Site Review criteria found in section 9-2-14, B.R.C. 1981 as well as the Use Review criteria found in section 9-2-15, B.R.C. 1981. Please refer to **Attachment B** for staff's complete analysis of the review criteria.

Public Comment. Required public notice was provided in the form of written notifications to property owners within 600 feet of the subject property. In addition, a public notice sign was posted on the property and therefore, all public notice requirements of section 9-4-3, "*Public Notice Requirements*," B.R.C. 1981 were met. Staff has received requests for additional information on the proposal but has not received any comments opposing the proposed development.

Conclusion. Staff finds that the proposed project meets the relevant criteria pursuant to sections 9-2-14, "*Site Review*," and 9-2-15, "*Use Review*," B.R.C. 1981 (please refer to **Attachment B**). This proposal was approved by Planning and Development Services staff on June 9, 2014 and the decision may be called up before Planning Board on or before **June 23, 2014**. There is one Planning Board meeting within the 14-day call up period, on **June 19, 2014**. Questions about the project or decision should be directed to Chandler Van Schaack at (303) 441-3137 or vanschaackc@bouldercolorado.gov.

Attachments

- A. Signed Disposition
- B. Analysis of Review Criteria
- C. Applicant's Proposed Plan



CITY OF BOULDER
Community Planning and Sustainability

1739 Broadway, Third Floor • P.O. Box 791, Boulder, CO 80306-0791
 phone 303-441-1880 • fax 303-441-3241 • www.bouldercolorado.gov

CITY OF BOULDER PLANNING DEPARTMENT
NOTICE OF DISPOSITION

You are hereby advised that the following action was taken by the Planning Department based on the standards and criteria of the Land Use Regulations as set forth in Chapter 9-2, B.R.C. 1981, as applied to the proposed development.

DECISION: **Approved with conditions**
 PROJECT NAME: **3365 Diagonal Kum & Go**
 DESCRIPTION: **USE REVIEW and SITE REVIEW for a new 4,992 square foot convenience store and 10-pump fueling station to be located on new Lot 1. Although no development is shown on new Lot 2, it is included in the approved site plan area. This Site Review approval also includes approval of a preliminary plat to subdivide an existing 2.275 acre lot into two lots: Lot 1 (1.798 acres) and Lot 2 (0.477 acres).**
 LOCATION: **3365 Diagonal Hwy**
 COOR: **N06W02**
 LEGAL DESCRIPTION: **See attached "Exhibit A"**
 APPLICANT: **Kum & Go c/o Ryan J. Halder**
 OWNER: **Kum & Go, LC, an Iowa limited liability company**
 APPLICATION: **LUR2012-00091 (Use Review); LUR2013-00050 (Site Review)**
 ZONING: **BT-1**
 CASE MANAGER: **Chandler Van Schaack**
 VESTED PROPERTY RIGHT: **NO; the owner has waived the opportunity to create such right under Section 9-2-19, B.R.C. 1981.**

REQUESTED MODIFICATIONS TO LAND USE REGULATIONS

- **Section 9-9-5, "Site Access Control,"** to allow for two site access points where one access point is permitted;
- **Section 9-9-12, "Landscaping and Screening Standards,"** for modifications to street tree requirements to allow for 21 street trees where 28 is the minimum required;
- **Section 9-9-14, "Parking Lot Landscaping Standards"** for modifications to interior parking lot landscaping requirements to allow for 4.6% of the total parking lot area to be landscaped where 5% is the minimum required.

FOR CONDITIONS OF APPROVAL, SEE THE FOLLOWING PAGES OF THIS DISPOSITION.

Approved On: _____

Date

6.9.14

By: _____

David Driskell, Executive Director of Community Planning and Sustainability

This decision may be appealed to the Planning Board by filing an appeal letter with the Planning Department within two weeks of the decision date. If no such appeal is filed, the decision shall be deemed final fourteen days after the date above mentioned.

Appeal to Planning Board expires: 6.23.14

IN ORDER FOR A BUILDING PERMIT APPLICATION TO BE PROCESSED FOR THIS PROJECT, A SIGNED DEVELOPMENT AGREEMENT AND SIGNED PLANS MUST BE SUBMITTED TO THE PLANNING DEPARTMENT WITH DISPOSITION CONDITIONS AS APPROVED SHOWN ON THE PLANS, IF THE DEVELOPMENT AGREEMENT IS NOT SIGNED WITHIN NINETY (90) DAYS OF THE FINAL DECISION DATE, THE PLANNING DEPARTMENT APPROVAL AUTOMATICALLY EXPIRES.

Pursuant to Section 9-2-12 of the Land Use Regulations (Boulder Revised Code, 1981), the applicant must begin and substantially complete the approved development within three years from the date of final approval. Failure to "substantially complete" (as defined in Section 9-2-12) the development within three years shall cause this development approval to expire.

CONDITIONS OF APPROVAL

CONDITIONS OF SITE REVIEW APPROVAL:

1. The Applicant shall ensure that the **development shall be in compliance with all approved plans** dated May 16, 2014 on file in the City of Boulder Planning Department, except to the extent that the development may be modified by the conditions of this approval.
2. Prior to building permit application, the Applicant shall submit a Technical Document Review application for the following items, subject to the approval of the City Manager:
 - a. **Final architectural plans**, including material samples and colors, to insure compliance with the intent of this approval and compatibility with the surrounding area. The architectural intent shown on the approved plans dated May 16, 2014 is acceptable. Planning staff will review plans to assure that the architectural intent is performed.
 - b. A **final site plan** which includes detailed floor plans and section drawings.
 - c. A **final utility plan** meeting the City of Boulder Design and Construction Standards.
 - d. A **final storm water report and plan** meeting the City of Boulder Design and Construction Standards.
 - e. **Final transportation plans** meeting the City of Boulder Design and Construction Standards and CDOT Access Code Standards, for all transportation improvements. These plans must include, but are not limited to: (1) street plan and profile drawings; (2) street cross-sectional drawings; (3) signage and striping plans in conformance with Manual on Uniform Traffic Control Devices (MUTCD) standards; (4) transportation detail drawings to include a detail drawing of the proposed right-in / right-out barrier island; (5) geotechnical soils report; and (6) pavement design report.
 - f. **CDOT access permit** meeting the CDOT Access Code Standards, for all transportation improvements within the CDOT right-of-way. A separate CDOT access permit shall be submitted for (1) the 47th Street improvements; (2) the removal of the western access off State Highway 119; (3) the removal of the eastern access off State Highway 119; and (4) the proposed right-in / right-out access off State Highway 119.

Address: 3365 Diagonal Hwy.

- g. A **detailed landscape plan**, including size, quantity, and type of plants existing and proposed; type and quality of non-living landscaping materials; any site grading proposed; and any irrigation system proposed, to insure compliance with this approval and the City's landscaping requirements. Removal of trees must receive prior approval of the Planning Department. Removal of any tree in City right of way must also receive prior approval of the City Forester.
 - h. A **detailed outdoor lighting plan** showing location, size, and intensity of illumination units, indicating compliance with section 9-9-16, B.R.C.1981.
3. Prior to building permit application, the Applicant shall submit a Technical Document Review application for a **Final Plat**, subject to the review and approval of the City Manager and execute a subdivision agreement meeting the requirements of chapter 9-12, "Subdivision," B.R.C. 1981.

CONDITIONS OF USE REVIEW APPROVAL:

1. The Applicant shall ensure that the **development shall be in compliance with all approved plans** dated May 16, 2014 on file in the City of Boulder Planning Department, except to the extent that the development may be modified by the conditions of this approval. Further, the Applicant shall ensure that the approved use is operated in compliance with the following restrictions:
 - a. The Applicant shall operate the business in accordance with the management plan dated May 21, 2014 which is attached to this Notice of Disposition as Exhibit B.
2. The Applicant **shall not expand or modify the approved use**, except pursuant to subsection 9-2-15(h), B.R.C. 1981.

**EXHIBIT A
LEGAL DESCRIPTION**

A TRACT OF LAND IN THE SW¹/₄ OF THE NW¹/₄ OF SECTION 21, TOWNSHIP 1 NORTH, RANGE 70 WEST OF THE 6TH P.M., DESCRIBED AS FOLLOWS: BEGINNING AT A POINT ON THE WEST LINE OF SAID SECTION 21, FROM WHICH THE SOUTHWEST CORNER OF THE NW¹/₄ OF SAID SECTION BEARS S 0°13' E, 933.3 FEET, THENCE N 0°13' W ALONG THE WEST LINE OF SAID SECTION 21, A DISTANCE OF 361 FEET TO A POINT ON THE SOUTH LINE OF COUNTY ROAD RIGHT OF WAY; THENCE N 89°39' E ALONG THE SOUTH LINE OF SAID COUNTY ROAD, 321.9 FEET TO A POINT ON THE WESTERLY LINE OF HIGHWAY NO. 119; THENCE S 32°29' E, 102.9 FEET; THENCE S 27°44' W, 65.1 FEET; THENCE ALONG A CURVE ON THE NORTHERLY RIGHT OF WAY LINE OF HIGHWAY NO. 119, THE CHORDS OF WHICH ARE: S 33°52' W, SO FEET; S 36°48' W, SO FEET; S 39°31' W, SO FEET; S 42°01' W, SO FEET; S 44°58' W, SO FEET; S 47°24' W, 50 FEET; S 50°11' W, 50 FEET; THENCE N 62°30' W, 90.4 FEET TO THE EAST LINE OF THE COUNTY ROAD RIGHT OF WAY; THENCE S 85°43' W, 31.6 FEET, MORE OR LESS, TO THE POINT OF BEGINNING, COUNTY OF BOULDER, STATE OF COLORADO.

ATTACHMENT

May 21, 2014

**KUM & GO 943 – 3365 DIAGONAL HIGHWAY
MANAGEMENT PLAN**

- (A) Hours of operation: 24 hours a day 7 days a week; 365 days a year.
- (B) Number of employees: 10 fulltime and 5-10 part time associates
- (C) Services offered: Fuel – Diesel, Unleaded, Mid-grade, Premium, E-85; Fresh food & Bakery items in our “Go Fresh Market”; Grocery items; Packaged Beverages; Fountain Beverages
- (D) Coordinated times for deliveries and trash collection: Normal trash collection time are between 4:00 AM and 5:00 PM depending on trash service provider. All other deliveries we allow 24/7 – 365. We encourage them to avoid our busy times of day like morning, lunch and evening rush.
- (E) Contact information for future communication. Ryan Halder, 515-457-6232 or rjh@kumandgo.com

Case #: LUR2013-00050

Project Name: 3365 Diagonal Kum & Go

Date: June 19, 2014

CRITERIA FOR REVIEW

No site review application shall be approved unless the approving agency finds that:

(1) Boulder Valley Comprehensive Plan:

✓ (A) The proposed site plan is consistent with the land use map and the service area map and, on balance, the policies of the Boulder Valley Comprehensive Plan.

The BVCP Land Use Designation for the site is Transitional Business, which per Chapter III of the BVCP is a designation "*shown along certain major streets*" and comprised of "*areas usually zoned for less intensive business uses than in the General Business areas, and they often provide a transition to residential areas.*" The zoning for the project site is BT-1, which allows fuel stations through the Use Review process.

BVCP Policies with which the proposed development is consistent include:

- 2.05 Design of Community Edges and Entryways
- 2.37 Enhanced Design for Private Sector Projects
- 5.03 Diverse Mix of Uses and Business Types
- 5.04 Vital and Productive Retail Base

N/A (B) The proposed development shall not exceed the maximum density associated with the Boulder Valley Comprehensive Plan residential land use designation. Additionally, if the density of existing residential development within a three-hundred-foot area surrounding the site is at or exceeds the density permitted in the Boulder Valley Comprehensive Plan, then the maximum density permitted on the site shall not exceed the lesser of:

Not Applicable, as the proposed development does not include a residential component.

N/A (i) The density permitted in the Boulder Valley Comprehensive Plan, or,

N/A (ii) The maximum number of units that could be placed on the site without waiving or varying any of the requirements of [chapter 9-8](#), "Intensity Standards," B.R.C. 1981.

✓ (C) The proposed development's success in meeting the broad range of BVCP policies considers the economic feasibility of implementation techniques required to meet other site review criteria.

The proposed project sensitively utilizes an infill site to provide commercial development in place of an existing outdated, dilapidated commercial use. The proposed development is in a prime location to serve in-commuters and therefore further support Boulder as a regional employment center. The unique architectural treatment of the building reflects the site's prominence as a gateway into the city, and will therefore maintain value over time.

(2) Site Design: Projects should preserve and enhance the community's unique sense of place through creative design that respects historic character, relationship to the natural environment, multi-modal transportation connectivity and its physical setting. Projects should utilize site design techniques which are consistent with the purpose of site review in subsection (a) of this section and enhance the quality of the project. In determining whether this subsection is met, the approving agency will consider the following factors:

___(A) Open Space: Open space, including, without limitation, parks, recreation areas, and playgrounds:

The open space criteria are in general not applicable to the proposed development, as there is no residential component and the business type is typically auto-oriented and transient. While approximately 40% of the project site (Lot 1) will be landscaped open space, it is designed for aesthetic enhancement of the site only, and due to its proximity to a major highway is not appropriate for active recreational usage.

N/A (i) Useable open space is arranged to be accessible and functional and incorporates quality landscaping, a mixture of sun and shade and places to gather;

N/A (ii) Private open space is provided for each detached residential unit;

N/A (iii) The project provides for the preservation of or mitigation of adverse impacts to natural features, including, without limitation, healthy long-lived trees, significant plant communities, ground and surface water, wetlands, riparian areas, drainage areas and species on the federal Endangered Species List, "Species of Special Concern in Boulder County" designated by Boulder County, or prairie dogs (*Cynomys ludovicianus*), which is a species of local concern, and their habitat;

N/A (iv) The open space provides a relief to the density, both within the project and from surrounding development;

N/A (v) Open space designed for active recreational purposes is of a size that it will be functionally useable and located in a safe and convenient proximity to the uses to which it is meant to serve;

N/A (vi) The open space provides a buffer to protect sensitive environmental features and natural areas; and

N/A (vii) If possible, open space is linked to an area- or city-wide system.

N/A (B) *Open Space in Mixed Use Developments (Developments that contain a mix of residential and non-residential uses)*

N/A (i) The open space provides for a balance of private and shared areas for the residential uses and common open space that is available for use by both the residential and non-residential uses that will meet the needs of the anticipated residents, occupants, tenants, and visitors of the property; and

N/A (ii) The open space provides active areas and passive areas that will meet the needs of the anticipated residents, occupants, tenants, and visitors of the property and are compatible with the surrounding area or an adopted plan for the area.

___(C) Landscaping

✓ (i) The project provides for aesthetic enhancement and a variety of plant and hard surface materials, and the selection of materials provides for a variety of colors and contrasts and the preservation or use of local native vegetation where appropriate;

Substantial greenery is provided on the site. The greenery provides screening along roadways and will reduce headlight spill from the site. Noxious vegetation will be removed and will be replaced with vegetation approved and outlined in the City of Boulder Landscape Requirements.

N/A (ii) Landscape design attempts to avoid, minimize, or mitigate impacts to important native species, plant communities of special concern, threatened and endangered species and habitat by integrating the existing natural environment into the project;

Not applicable, as the site is already fully developed, and does not contain any important native species or plant communities.

✓ (iii) The project provides significant amounts of plant material sized in excess of the landscaping requirements of [sections 9-9-12](#), "Landscaping and Screening Standards" and [9-9-13](#), "Streetscape Design Standards," B.R.C. 1981; and

40 percent of the site is to be landscaped. The minimum required landscaping within the BT-1 zone district is 10 percent.

✓ (iv) The setbacks, yards, and useable open space along public rights-of-way are landscaped to provide attractive streetscapes, to enhance architectural features, and to contribute to the development of an attractive site plan.

The landscaping along Independence Road and 47th Street enhances the aesthetic appeal of the site and the building. While a variation to the street tree requirements has been requested for the area along Diagonal Highway due to the fact that it is a CDOT-governed roadway that has specific sight distance standards that conflict with the City of Boulder Landscape Requirements for street trees, overall substantial landscaping is provided throughout the site to improve the aesthetics of the site and provide an attractive site plan.

___(D) Circulation: Circulation, including, without limitation, the transportation system that serves the property, whether public or private and whether constructed by the developer or not:

✓ (i) High speeds are discouraged or a physical separation between streets and the project is provided;

The building (where most pedestrian activity will occur) will be separated from HWY 119 by a landscape buffer, fueling canopy & drive aisles.

✓ (ii) Potential conflicts with vehicles are minimized;

Pedestrian facilities are provided within the site to reduce pedestrian and vehicular conflicts. Substantial access drives provide clearance for all parked vehicles and vehicles traveling through the site to reduce vehicular conflicts.

✓ (iii) Safe and convenient connections are provided that support multi-modal mobility through and between properties, accessible to the public within the project and between the project and the existing and proposed transportation systems, including, without limitation, streets, bikeways, pedestrian ways and trails;

Sidewalks and bike lanes are provided along the Independence Road and 47th Street for pedestrian access to the site.

✓ (iv) Alternatives to the automobile are promoted by incorporating site design techniques, land use patterns, and supporting infrastructure that supports and encourages walking, biking, and other alternatives to the single-occupant vehicle;

The installation of sidewalks within the site and along the right of way encourage walking to the site. The installation of a bike lane along the south side of Independence Road, and on-site bike racks encourages biking to the site. Two stops for the RTD BOLT line are also adjacent to the site.

N/A (v) Where practical and beneficial, a significant shift away from single-occupant vehicle use to alternate modes is promoted through the use of travel demand management techniques;

Not applicable. The proposed use is an automobile fueling station; therefore it is neither practical nor feasible for the applicant to promote a significant shift away from single-occupancy vehicle usage.

✓ (vi) On-site facilities for external linkage are provided with other modes of transportation, where applicable;

The installation of sidewalks within the site and along the right of way encourages walking to the site from off-site pedestrian facilities to the south. The installation of a bike lane along the south side of Independence Road and connecting to the existing bike facilities along 47th street encourages biking to the site.

N/A (vii) The amount of land devoted to the street system is minimized; and

Not applicable, as there are no new streets proposed.

✓ (viii) The project is designed for the types of traffic expected, including, without limitation, automobiles, bicycles, and pedestrians, and provides safety, separation from living areas, and control of noise and exhaust.

Sidewalks and bike lanes are provided along the Independence Road and 47th Street for pedestrian access to the site. The minimum amount of parking will be provided for automobiles. Screening of the site is provided at the perimeter of the site to limit headlight spill and improve the aesthetic appeal of the site. The project is buffered from residential uses via commercial/office uses, sporting fields and vacant land.

___(E) Parking

✓ (i) The project incorporates into the design of parking areas measures to provide safety, convenience, and separation of pedestrian movements from vehicular movements;

Onsite parking will be separated from pedestrian facilities via green space.

✓ (ii) The design of parking areas makes efficient use of the land and uses the minimum amount of land necessary to meet the parking needs of the project;

The applicant is providing the required number of parking spaces, which is a significant reduction from the Concept Plan proposal.

✓ (iii) Parking areas and lighting are designed to reduce the visual impact on the project, adjacent properties, and adjacent streets; and

All parking lot lighting is directed to the parking lot and complies with current City code with respect to lighting levels & spill. The visual impact of the parking area will be reduced by the significant landscaping surrounding the site.

✓ (iv) Parking areas utilize landscaping materials to provide shade in excess of the requirements in Subsection [9-9-6](#) (d), "Parking Area Design Standards," and Section [9-9-14](#), "Parking Lot Landscaping Standards," B.R.C. 1981.

A modification to the parking lot landscaping standards has been requested in order to allow for 4.2% of the total area of the parking lot to be landscaped where 5% is the minimum required. A substantial amount of the landscaping is along the perimeter of the site and 40 percent of the site is landscaped. The required landscaping minimum for this site is 10 percent. The substantial greenery on site, in conjunction with the proposed canopy structure, offsets the under-landscaped parking area. Additionally, based on the proposed use and the need for large turn radii for larger delivery vehicles, offsetting the site with more landscaping on the perimeter will accommodate the needs of the site.

___(F) Building Design, Livability, and Relationship to the Existing or Proposed

Surrounding Area

✓ (i) The building height, mass, scale, orientation, and configuration are compatible with the existing character of the area or the character established by an adopted plan for the area;

The proposed building will be a significant improvement over the current site conditions, and will remain in character with the surrounding area while also serving as an example of unique and modern architecture for other nearby sites as they eventually redevelop. The area surrounding the site is difficult to categorize, as the site is surrounded on two sides by major highways and is immediately adjacent to a large undeveloped lot to the north. The only real development that can be said is in close proximity to the site are the Fire Facility and University facilities in the IG zone to the southeast of the site across Diagonal Highway. These buildings are one and two-story buildings with no real architectural unity or coherence. As such, this proposal presents an opportunity to help shape the future character of the area, and presents a scale and configuration appropriate to the gateway context of the site.

✓ (ii) The height of buildings is in general proportion to the height of existing buildings and the proposed or projected heights of approved buildings or approved plans for the immediate area;

As mentioned above, the nearest buildings, which are across the street to the southeast, are one and two-stories in height. The proposed building will be just under 25 feet in height, which is within the 35' height limit for the BT-1 zone and is generally consistent with the height of existing buildings nearby.

✓ (iii) The orientation of buildings minimizes shadows on and blocking of views from adjacent properties;

While this criterion is currently not applicable, as the site to the north is vacant and the project site is surrounded on all other sides by highways, the height and orientation of the building is such that views from the property to the north would be preserved should it redevelop in the future.

N/A (iv) If the character of the area is identifiable, the project is made compatible by the appropriate use of color, materials, landscaping, signs, and lighting;

Not applicable. As discussed above, the character for this area has yet to be established. The construction of this site will set a precedent for future development of the surrounding lots and gateway retail stores elsewhere in Boulder.

✓ (v) Projects are designed to a human scale and promote a safe and vibrant pedestrian experience through the location of building frontages along public streets, plazas, sidewalks and paths, and through the use of building elements, design details and landscape materials that include, without limitation, the location

of entrances and windows, and the creation of transparency and activity at the pedestrian level;

At 25' in height, the current proposal is designed to a human scale. The building orientation and materials promote a vibrant pedestrian experience by aligning the building frontages orthogonally along the sites north-south axis, thereby addressing both Diagonal Highway as well as 47th Street. The building uses a combination of stone, metal, and intermittent scored brick banding to create a pleasing pattern along the south and west frontages. On the main frontage, the building presents large floor-to-ceiling windows with an angled metal screen wall adding texture and providing shading to the store customers. Overall, the proposal represents a significant shift away from traditional gas station design, and will provide visual interest to both pedestrians and drivers alike.

✓ (vi) To the extent practical, the project provides public amenities and planned public facilities;

The development provides public sidewalk and bike lanes along Independence Road and 47th Street.

N/A (vii) For residential projects, the project assists the community in producing a variety of housing types, such as multifamily, townhouses and detached single family units, as well as mixed lot sizes, number of bedrooms and sizes of units;

N/A (viii) For residential projects, noise is minimized between units, between buildings, and from either on-site or off-site external sources through spacing, landscaping, and building materials;

✓ (ix) A lighting plan is provided which augments security, energy conservation, safety, and aesthetics;

The applicant has provided a lighting plan which conforms to the city lighting standards.

✓ (x) The project incorporates the natural environment into the design and avoids, minimizes, or mitigates impacts to natural systems;

Compared to the existing conditions on the site, the project increases the green space within the lot, reduces runoff from the site, and improves water quality.

✓ (xi) Buildings minimize or mitigate energy use; support on-site renewable energy generation and/or energy management systems; construction wastes are minimized; the project mitigates urban heat island effects; and the project reasonably mitigates or minimizes water use and impacts on water quality.

The proposed building will be required to meet the city's rigid energy code (IECC = 30%). The applicant also plans to certify this building through the LEED program.

✓ (xii) Exteriors or buildings present a sense of permanence through the use of authentic materials such as stone, brick, wood, metal or similar products and building material detailing;

The materials palette for the proposed building is stone, brick, metal and glass. All of the proposed materials are high-quality and durable.

✓ (xiii) Cut and fill are minimized on the site, the design of buildings conforms to the natural contours of the land, and the site design minimizes erosion, slope instability, landslide, mudflow or subsidence, and minimizes the potential threat to property caused by geological hazards;

Cut and fill are minimized on site while still providing the proper drainage throughout the site. By installing temporary and permanent erosion control measures, the site minimizes any potential threat to adjacent property.

✓ (xiv) In the urbanizing areas along the Boulder Valley Comprehensive Plan boundaries between Area II and Area III, the building and site design provide for a well-defined urban edge; and

The unique design of this building will provide a sense of arrival for those entering the City from the northeast, and will help to begin creating a well-defined urban edge at that location.

✓ (xv) In the urbanizing areas located on the major streets shown on the map in Appendix A of this title near the Boulder Valley Comprehensive Plan boundaries between Area II and Area III, the buildings and site design establish a sense of entry and arrival to the City by creating a defined urban edge and a transition between rural and urban areas.

The unique design of this building will provide a sense of arrival for those entering the City from the northeast. The site and building design are such that the building will be visible to people entering and leaving the city, and will stand out as a unique and recognizable building. The sandstone accenting slanted roof both serve to create a sense of arrival into Boulder, and use a vernacular familiar to other significant projects throughout the city.

N/A (G) *Solar Siting and Construction: For the purpose of ensuring the maximum potential for utilization of solar energy in the City, all applicants for residential site reviews shall place streets, lots, open spaces, and buildings so as to maximize the potential for the use of solar energy in accordance with the following solar siting criteria:*

N/A (H) *Additional Criteria for Poles Above the Permitted Height: No site review application for a pole above the permitted height will be approved unless the approving agency finds all of the following:*

N/A (I) *Land Use Intensity Modifications:*

N/A (J) Additional Criteria for Floor Area Ratio Increase for Buildings in the BR-1 District:

N/A (K) Additional Criteria for Parking Reductions: The off-street parking requirements of [section 9-9-6](#), "Parking Standards," B.R.C. 1981, may be modified as follows:

N/A (L) Additional Criteria for Off-Site Parking: The parking required under [section 9-9-6](#), "Parking Standards," B.R.C. 1981, may be located on a separate lot if the following conditions are met:

USE REVIEW CRITERIA

Criteria for Review: No use review application will be approved unless the approving agency finds all of the following:

✓ (1) Consistency with Zoning and Non-Conformity: The use is consistent with the purpose of the zoning district as set forth in [Section 9-5-2\(c\)](#), "Zoning Districts Purposes," B.R.C. 1981, except in the case of a non-conforming use;

The zoning for the project site is BT-1, which allows fuel stations through the Use Review process. BT-1 is defined as:

"Transitional business areas which generally buffer a residential area from a major street and are primarily used for commercial and complementary residential uses, including without limitation, temporary lodging and office uses" (section 9-5-2(c)(2)(E), B.R.C. 1981).

✓ (2) Rationale: The use either:

✓ (A) Provides direct service or convenience to or reduces adverse impacts to the surrounding uses or neighborhood;

The proposed convenience store and fueling station will provide a direct service to the surrounding uses by offering nearby businesses and residents as well as commuters into and out of the city a place to purchase gas and basic food and grocery items. The convenience store will provide a service that is currently not available in that area. In terms of visual impacts, the proposed use will represent a significant reduction from the current use, which consists of several dilapidated and vacant buildings, outdoor storage of inoperable vehicles and auto parts, and a large, unmaintained surface parking lot with six access points.

N/A (B) Provides a compatible transition between higher intensity and lower intensity uses;

N/A (C) Is necessary to foster a specific city policy, as expressed in the Boulder Valley Comprehensive Plan, including, without limitation, historic

preservation, moderate income housing, residential and non-residential mixed uses in appropriate locations, and group living arrangements for special populations; or

N/A (D) Is an existing legal non-conforming use or a change thereto that is permitted under subsection (e) of this section;

3) Compatibility: The location, size, design, and operating characteristics of the proposed development or change to an existing development are such that the use will be reasonably compatible with and have minimal negative impact on the use of nearby properties or for residential uses in industrial zoning districts, the proposed development reasonably mitigates the potential negative impacts from nearby properties;

The proposed project sensitively utilizes an infill site to provide commercial development in place of an existing outdated and underutilized commercial use. Currently, the site contains a towing company, auto repair shop and Sinclair service station. The site contains several dilapidated and vacant buildings, outdoor storage of inoperable vehicles and auto parts, and a large, unmaintained surface parking lot with six access points.

The proposed development includes removing the existing buildings, subdividing the lot into two new lots, and developing the northernmost lot with a new 4,992 s.f. convenience store and 10-pump fueling station. The use will be open for business 24 hours per day. The proposed building will be just under 25 feet in height, which is within the 35' height limit for the BT-1 zone and is generally consistent with the height of existing buildings nearby. The number of access points will be reduced from six to two, and significant landscaping will be added in place of what is currently a primarily dirt lot. With two major highways surrounding the site on either side, the site is in a prime location to serve in- and out-commuters and therefore further support Boulder as a regional employment center. Overall, while the site will likely become busier after it is redeveloped than it is currently, the visual and traffic safety impacts will be significantly reduced, and the architecture will remain in character with the surrounding area while also serving as an example of unique and modern architecture for other nearby sites as they eventually redevelop.

(4) Infrastructure: As compared to development permitted under [Section 9-6-1](#), "Schedule of Permitted Uses of Land," B.R.C. 1981, in the zone, or as compared to the existing level of impact of a non-conforming use, the proposed development will not significantly adversely affect the infrastructure of the surrounding area, including, without limitation, water, wastewater, and storm drainage utilities and streets;

Compared to possible allowable by-right uses on the site, the proposed use would not significantly adversely affect the existing infrastructure of the surrounding area. As mentioned above, the proposed building is well within the maximum allowable size. The applicant will be required to submit a final transportation plan, storm water plan, final grading and drainage plan and final utility plan for Technical Document Review.

(5) Character of Area: The use will not change the predominant character of the surrounding area; and

The areas to the north and south of the project site are zoned BT-1, while the parcels to the east and west are within unincorporated Boulder County. There are also high-density residential and industrial areas to the south of the subject site.

The proposed building will be a significant improvement over the current site conditions, and will remain in character with the surrounding area while also serving as an example of unique and modern architecture for other nearby sites as they eventually redevelop. The character of the area surrounding the site is difficult to categorize, as the site is surrounded on two sides by major highways and is immediately adjacent to a large undeveloped lot to the north. The only real development that can be said is in close proximity to the site are the Fire Facility and University facilities in the IG zone to the southeast of the site across Diagonal Highway. These buildings are one and two-story buildings with no real architectural unity or coherence. As such, this proposal presents an opportunity to help shape the future character of the area, and presents a scale and configuration appropriate to the gateway context of the site.

N/A (6) Conversion of Dwelling Units to Non-Residential Uses: There shall be a presumption against approving the conversion of dwelling units in the residential zoning districts set forth in [Subsection 9-5-2\(c\)\(1\)\(a\)](#), B.R.C. 1981, to non-residential uses that are allowed pursuant to a use review, or through the change of one non-conforming use to another non-conforming use. The presumption against such a conversion may be overcome by a finding that the use to be approved serves another compelling social, human services, governmental, or recreational need in the community including, without limitation, a use for a day care center, park, religious assembly, social service use, benevolent organization use, art or craft studio space, museum, or an educational use.

CONDITIONAL USE REVIEW STANDARDS

Section 9-6-9 (d) Fuel Service Stations or Retail Fuel Sales:

The following criteria apply to any fuel service station or retail fuel sales in a business or industrial district. A fuel service station use shall comply with paragraphs (d)(1) through (d)(8) of this section. Retail fuel sales uses shall comply with all standards except paragraphs (d)(2) and (d)(6) of this section:

N/A (1) Any fuel service station that is located adjacent to any residential uses shall meet the requirements of [section 9-2-15](#), "Use Review," B.R.C. 1981.

Not applicable, as the site is not located adjacent to any residential uses.

N/A (2) Areas for the storage of vehicles to be serviced in excess of twenty-four hours are in enclosed areas or shielded from view from adjacent properties.

Not applicable, as there is no vehicle service component to the proposed use.

✓ (3) There is adequate space to allow up to three cars to stack in a line at a pump without using any portion of the adjacent street.

Standard met.

✓ (4) The visual impact of the use is minimized and screened from adjacent rights-of-way and properties through placement of buildings, screening, landscaping, and other site design techniques.

Standard met. See responses to Site Review criteria above.

✓ (5) Dispensing pumps are not located within twenty-five feet of a property line abutting a street.

Standard met.

N/A (6) In addition to the parking requirements of [sections 9-7-1](#), "Schedule of Form and Bulk Standards," and [9-9-6](#), "Parking Standards," B.R.C. 1981, and the stacking requirements of paragraph (d)(3) of this section, adequate space is provided for the storage of two vehicles per service bay off-street.

Not applicable, as there is no vehicle service component to the proposed use.

✓ (7) The location, size, design, and operating characteristics of the proposed facility are reasonably compatible with the use of nearby properties.

Standard met. See response to Use Review criterion #3, "Compatibility," above.

✓ (8) A minimum landscaped side yard setback of twenty feet and a minimum rear yard landscaped setback of twenty-five feet are required where the use abuts residential uses or residential zoning districts.

Standard met.

N/A (9) Retail fuel sales in industrial zones shall only be permitted in association with a convenience retail store pursuant to subsection [9-6-3\(g\)](#), B.R.C. 1981.

Not applicable, as the project site is not located within an industrial zone district.

N/A (10) Servicing of vehicles is limited to the checking and adding of fluids and air and the cleaning of windows. No other repair or servicing of vehicles is permitted on site.

Not applicable, as there is no vehicle service component to the proposed use.

DWG: F:\Projects\012-1417_LDVP\Development_Plans\121417_COV.dwg
 DATE: May 15, 2014 4:56pm XREFS: 121417_TBLK_DP
 USER: abower
 DOCUMENT NUMBER: 140702

PROJECT TEAM:

OWNER/APPLICANT:

KUM & GO L.C.
 6400 WESTOWN PARKWAY
 WEST DES MOINES, IA 50266
 CONTACT: RYAN HALDER
 PH: 515.457.6232

WATER:

BOULDER PUBLIC WORKS
 1739 BROADWAY
 BOULDER, COLORADO 80302
 CONTACT: MATT ENGLISH
 PH: 303.441.1880

ENGINEER:

OLSSON ASSOCIATES
 4690 TABLE MOUNTAIN DRIVE, SUITE 200
 GOLDEN, CO 80403
 CONTACT: JOSH ERRAMOUSPE
 PH: 303.237.2072

SANITARY SEWER:

BOULDER PUBLIC WORKS
 1739 BROADWAY
 BOULDER, COLORADO 80302
 CONTACT: N/A
 PH: 303.441.1880

GEOTECHNICAL ENGINEER:

OLSSON ASSOCIATES
 8720 SOUTH 114TH ST, SUITE 107
 LA VISTA, NE 68128
 CONTACT: ED SCHNACKENBERG
 PH: 402.827.7220

STORM SEWER:

BOULDER PUBLIC WORKS
 1739 BROADWAY
 BOULDER, COLORADO 80302
 CONTACT: N/A
 PH: 303.441.1880

LANDSCAPE ARCHITECT:

OLSSON ASSOCIATES
 11035 AURORA AVENUE
 URBANDALE, IA 50322
 CONTACT: JOE STOBBERL
 PH: 515.331.6517

ELECTRIC/GAS:

XCEL
 2655 63RD STREET
 BOULDER, COLORADO 80301
 CONTACT: JOSE COMPOS
 PH: 303.245.2349

SURVEYOR:

OLSSON ASSOCIATES
 4690 TABLE MOUNTAIN DRIVE, SUITE 200
 GOLDEN, CO 80403
 CONTACT: DANA SPERLING
 PH: 303.237.2072

TELEPHONE:

CENTURYLINK
 1860 SOUTH FLATIRON COURT
 BOULDER, COLORADO 80301
 CONTACT: CATHY DUNBAR
 PH: 303.441.7113

LEGAL DESCRIPTION:

A TRACT OF LAND IN THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 21, TOWNSHIP 1 NORTH, RANGE 70 WEST OF THE 6TH PRINCIPAL MERIDIAN, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE N1/16 CORNER OF SECTIONS 21 AND 20 FROM WHICH THE WEST QUARTER CORNER OF SAID SECTION 21 BEARS S00°06'56"E, A DISTANCE OF 1324.09 FEET AS MONUMENTED AND SHOWN HEREON; THENCE S00°06'56"E, ALONG THE WEST LINE OF SAID NORTHWEST QUARTER OF SECTION 21, A DISTANCE OF 30.00 FEET TO THE SOUTHERLY RIGHT-OF-WAY LINE FOR INDEPENDENCE ROAD; THENCE N89°38'31"E, ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE, A DISTANCE OF 31.60 FEET TO THE EASTERLY RIGHT-OF-WAY LINE FOR 47TH STREET AND THE POINT OF BEGINNING;

THENCE CONTINUING ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE FOR INDEPENDENCE ROAD THE FOLLOWING TWO (2) COURSES:

- 1) N89°38'31"E, A DISTANCE OF 290.30' FEET;
- 2) S32°29'29"E, A DISTANCE OF 102.90' FEET TO THE NORTHWESTERLY RIGHT-OF-WAY LINE FOR DIAGONAL HIGHWAY;

THENCE ALONG SAID NORTHWESTERLY RIGHT-OF-WAY LINE FOR DIAGONAL HIGHWAY THE FOLLOWING EIGHT (8) COURSES:

- 1) S27°43'31"W, A DISTANCE OF 65.10' FEET;
- 2) S33°51'31"W, A DISTANCE OF 50.00' FEET;
- 3) S36°47'31"W, A DISTANCE OF 50.00' FEET;
- 4) S39°30'31"W, A DISTANCE OF 50.00' FEET;
- 5) S42°00'31"W, A DISTANCE OF 50.00' FEET;
- 6) S44°57'31"W, A DISTANCE OF 50.00' FEET;
- 7) S47°23'31"W, A DISTANCE OF 50.00' FEET;
- 8) S50°10'31"W, A DISTANCE OF 50.00' FEET TO SAID EASTERLY RIGHT-OF-WAY LINE FOR 47TH STREET;

THENCE ALONG SAID EASTERLY RIGHT-OF-WAY LINE FOR 47TH STREET THE FOLLOWING TWO (2) COURSES:

- 1) N62°30'29"W, A DISTANCE OF 91.26' FEET;
- 2) N0°06'56"W, A DISTANCE OF 359.02' FEET TO THE POINT OF BEGINNING.

CONTAINING 99,103 SQ. FT. OR 2.275 ACRES, MORE OR LESS.

BENCHMARKS:

1. PROJECT BENCHMARK: THE PUBLISHED VALUES OF BOULDER COUNTY PRIMARY MONUMENT CONTROL STATION "B 322 RESET". EL=5508.90' (NAVD88)
2. SITE BENCHMARK: 3" ALUMINUM CAP LOCATED IN THE INTERSECTION OF 47TH STREET AND INDEPENDENCE ROAD. EL=5304.38' (NAVD88)

BASIS OF BEARINGS:

BEARINGS ARE BASED ON THE WEST LINE OF THE NW1/4 OF SECTION 21 AS HAVING A BEARING OF N00°06'56"W FROM THE W1/4 CORNER BEING MONUMENTED WITH A 3" ALUMINUM CAP TO THE W-N1/16 CORNER BEING ALSO MONUMENTED WITH A 3" ALUMINUM CAP AS SHOWN HEREON.

FLOOD ZONE:

THE SUBJECT PROPERTY FALLS WITHIN ZONE "X" DESCRIBED AS AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN; ACCORDING TO FEMA FLOOD INSURANCE RATE MAP 08013C0415F WITH AN EFFECTIVE DATE OF JUNE 2, 1995.

KUM & GO #943 SITE DEVELOPMENT PLAN

SITUATED IN THE NORTHWEST QUARTER OF SECTION 21, TOWNSHIP 1 NORTH,
 RANGE 70 WEST OF THE SIXTH PRINCIPAL MERIDIAN,
 CITY OF BOULDER, COUNTY OF BOULDER, STATE OF COLORADO



VICINITY MAP
NOT TO SCALE



SHEET INDEX		
1	COVER SHEET	C0.0
2	SITE PLAN	C1.1
3	GRADING AND DRAINAGE PLAN	C2.1
4	UTILITY PLAN	C3.1
5	OFFSITE ROADWAY IMPROVEMENTS	C4.1
6	LANDSCAPE PLAN	L1.1
7	PLANT SCHEDULE AND SPECIFICATIONS	L1.2
8	BUILDING ELEVATIONS	A1.1
9	CANOPY ELEVATIONS	A1.2
10	SIGNAGE	A1.3
11	PHOTOMETRICS	SE1.1

REQUESTED VARIANCES:

1. SECTION 9-9-5, "SITE ACCESS CONTROL," TO ALLOW TWO SITE ACCESS POINTS.
2. SECTION 9-9-12, "LANDSCAPING AND SCREENING STANDARDS," FOR MODIFICATIONS TO STREET TREE REQUIREMENTS.
3. SECTION 9-9-14, "PARKING LOT LANDSCAPING STANDARDS," FOR MODIFICATIONS TO INTERIOR PARKING LOT LANDSCAPING REQUIREMENTS.
4. SECTION 9-7-2, "SETBACK STANDARDS," FOR A REAR YARD SETBACK REDUCTION.

ATTACHMENT C

SITE DATA	
PROPOSED LOT SIZE (LOT 1)	±78,311 S.F. ±1.798 ACRES
KUM & GO BUILDING	4,992 S.F. (6.4%)
REQUIRED PARKING	STANDARD 15 STALLS
	ADA 1 STALL
	TOTAL 16 STALLS
PARKING RATIO = 1 CAR/300 S.F.	
PROPOSED PARKING	STANDARD 15 STALLS
	ADA 1 STALLS
	TOTAL 16 STALLS
PARKING RATIO = 1 CAR/300 S.F.	
TYPE OF USE	CONVENIENCE STORE WITH FUEL
HEIGHT	BUILDING - 23'-5.5" TOP OF MASONRY - 9'-0" CANOPY - 19'-6" MIN.
GROSS CANOPY AREA	7,644 SF
FAR (INCLUDING CANOPY)	0.16
LANDSCAPE COVERAGE	29,945 SF (38.2%)
PAVING/HARDSCAPE COVERAGE	43,374 SF (55.4%)
ZONING INFORMATION	
TRANSITIONAL BUSINESS (BT-1)	
MINIMUM LOT AREA (SQUARE FEET)	0
MINIMUM LOT WIDTH (FEET)	NO MINIMUM
SITE AREA PER UNIT (SQUARE FEET)	NO MINIMUM
FRONT YARD SETBACK - BUILDING AND LANDSCAPE (DIAGONAL HIGHWAY)	20 FT
FRONT YARD SETBACK - FUELING PUMP (DIAGONAL HIGHWAY)	25 FT
SIDE YARD SETBACK - BUILDING AND LANDSCAPE (INDEPENDENCE ROAD)	20 FT
SIDE YARD SETBACK - FUELING PUMP (INDEPENDENCE ROAD)	25 FT
REAR YARD SETBACK - BUILDING AND LANDSCAPE (47TH STREET)	15 FT
REAR YARD SETBACK - FUELING PUMP (47TH STREET)	25 FT
MAXIMUM HEIGHT (FEET)	35 FT
MAXIMUM BUILDING COVERAGE	NO MAXIMUM
MAXIMUM IMPERVIOUS COVERAGE	90 %
MAXIMUM FLOOR AREA	NONE SPECIFIED



4690 Table Mountain Drive
 Suite 200
 Golden, CO 80403
 TEL: 303.237.2072
 FAX: 303.237.2608
 www.olssonassociates.com
 CA # 012-1417



6400 Westown Parkway
 West Des Moines, Iowa
 50266
 P: 515-226-0128
 F: 515-223-9873

#943 - BOULDER, COLORADO
 3365 DIAGONAL HWY.

COVER SHEET

KG PROJECT TEAM:
 RDR: JXH
 SDM: RJH
 CPM: TLK

REVISION DESCRIPTION	DATE

DATE: 05-16-2014

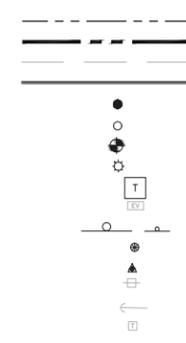
SHEET NUMBER:
C0.0



Know what's below.
 Call before you dig.
 CALL 811 SEVENTY-TWO HOURS
 PRIOR TO DIGGING, GRADING OR
 EXCAVATING FOR THE MARKING OF
 UNDERGROUND MEMBER UTILITIES

THIS PROJECT IS REGISTERED UNDER
 THE LEED GREEN BUILDING
 CERTIFICATION PROGRAM.

DWG: F:\Projects\012-1417\LDVP\Development_Plans\121417_RDWY.dwg USER: abower 121417_AERIAL
 DATE: May 20, 2014 5:21pm XREFS: 121417_TBLK_DP 121417_XBASE 121417_PBASE 121417_AERIAL



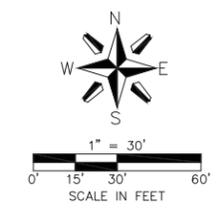
LEGEND

PROPERTY LINE
 BOUNDARY LINE
 EXISTING EDGE OF ASPHALT
 PROPOSED CONCRETE CURB AND GUTTER
 FOUND YELLOW PLASTIC CAP
 PIN AND CAP PLS 38012
 SECTION CORNER
 LIGHT POLE
 TRANSFORMER
 ELECTRIC VAULT
 SIGN
 BOLLARD
 BENCHMARK/CONTROL POINT
 POWER POLE
 GUY WIRE
 TELEPHONE PEDESTAL

TELEPHONE RISER
 TELEPHONE MANHOLE
 TRAFFIC SIGNAL BOX
 TRAFFIC SIGNAL POLE
 STORM SEWER MANHOLE
 EXISTING CURB INLET
 FIRE HYDRANT
 WATER VALVE
 WATER METER
 EXISTING DECIDUOUS TREE
 CLEANOUT
 GREASE INTERCEPTOR LID
 STALL QUANTITY
 FLARED END SECTION
 RIPRAP

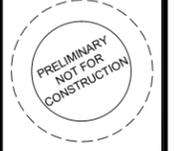
FLAG NOTES:

- ① PROPOSED 4" SOLID WHITE STRIPE
- ② PROPOSED 4" DASHED WHITE STRIPE
- ③ PROPOSED 4" DOUBLE YELLOW STRIPE
- ④ PROPOSED PAVEMENT MARKING SYMBOL
- ⑤ PROPOSED BIKE LANE
- ⑥ PROPOSED CURB AND GUTTER PER CITY OF BOULDER STANDARDS
- ⑦ PROPOSED 5' WIDE SIDEWALK
- ⑧ PROPOSED "LEFT LANE MUST TURN LEFT AT INDEPENDENCE ROAD" SIGN
- ⑨ MATCH EXISTING CURB/GUTTER, SIDEWALK, AND STRIPING



THIS PROJECT IS REGISTERED UNDER THE LEED GREEN BUILDING CERTIFICATION PROGRAM.

MOLSSON ASSOCIATES
 4880 Table Mountain Drive
 Suite 200
 Golden, CO 80403
 TEL: 303.237.2072
 FAX: 303.237.2658
 CA # 012-1417
 www.molssonassociates.com



6400 Westown Parkway
 West Des Moines, Iowa 50266
 P: 515-226-0128
 F: 515-223-9873

#943 - BOULDER, COLORADO
 3365 DIAGONAL HWY.
OFFSITE ROADWAY IMPROVEMENTS

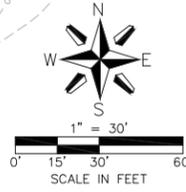
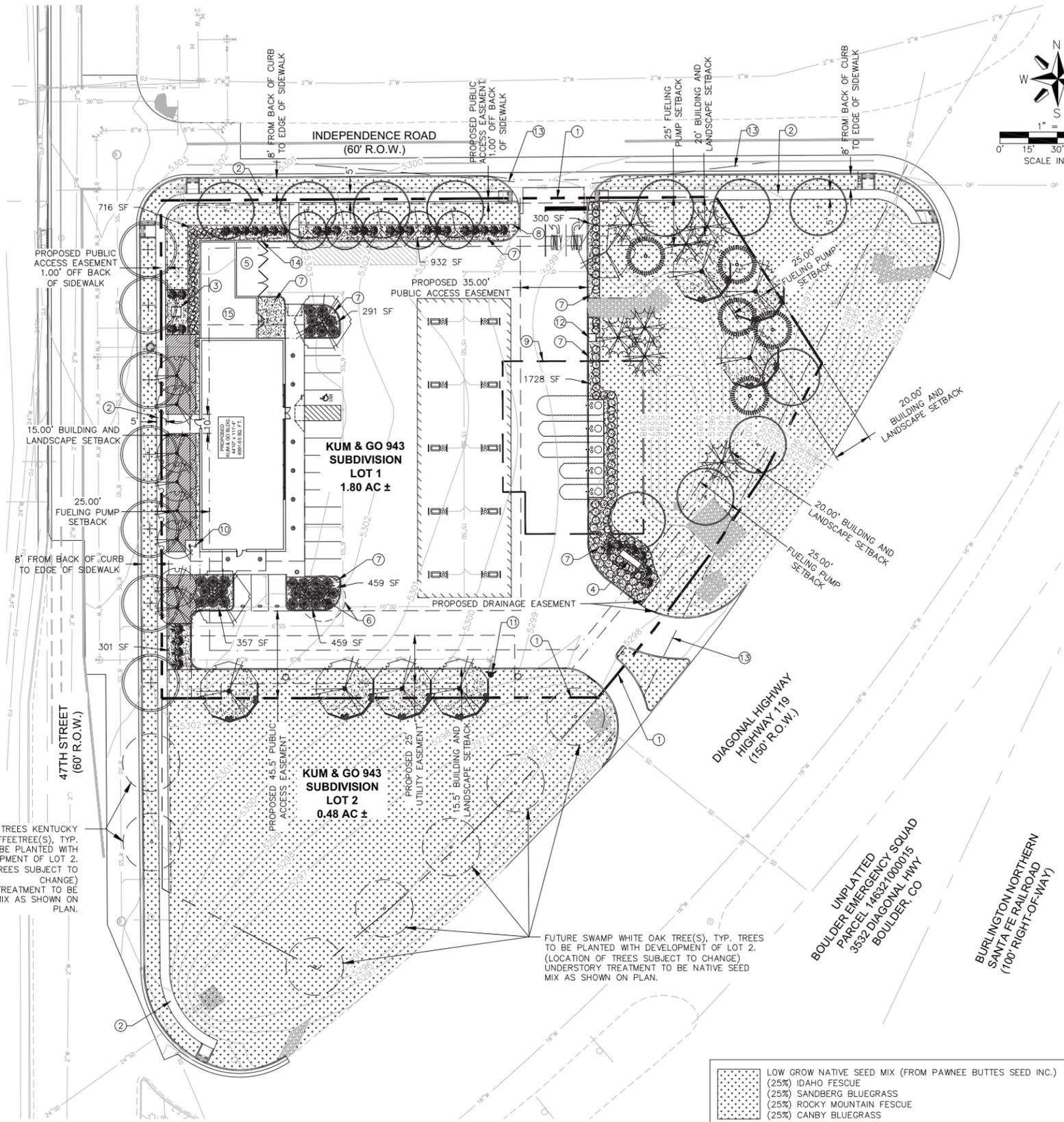
KG PROJECT TEAM:
 RDR: JXH
 SDM: RJH
 CPM: TLK

DATE	REVISION DESCRIPTION	REVISIONS

DATE: 05-16-2014
 SHEET NUMBER:
C4.1

KUM & GO #943 SITE DEVELOPMENT PLAN

SITUATED IN THE NORTHWEST QUARTER OF SECTION 21, TOWNSHIP 1 NORTH,
RANGE 70 WEST OF THE SIXTH PRINCIPAL MERIDIAN,
CITY OF BOULDER, COUNTY OF BOULDER, STATE OF COLORADO



QTY.	SYMBOL	COMMON/SCIENTIFIC NAME	SIZE	NOTES
SHADE TREES				
7		KENTUCKY COFFEETREE GYMNOCLADUS DIOCA	2" CAL.	NURSERY GROWN B&B
11		SWAMP WHITE OAK QUERCUS BICOLOR	2" CAL.	NURSERY GROWN B&B
7		TURKISH FILBERT CORYLUS COLURNA	2" CAL.	NURSERY GROWN B&B
3		SHADEMASTER HONEYLOCUST GLEDTISIA TRIACANTHOS VAR. INERMIS 'SHADEMASTER'	2" CAL.	NURSERY GROWN B&B
EVERGREEN TREES				
7		COLORADO SPRUCE PICEA PUNGENS	6-8' HT	NURSERY GROWN B&B
5		PONDEROSA PINE PINUS PONDEROSA	6-8' HT	NURSERY GROWN B&B
ORNAMENTAL TREES				
9		GINNALA MAPLE ACER TATARICUM SSP. GINNALA	8' CLUMP	NURSERY GROWN B&B
5		WASATCH MAPLE ACER GRANDIDENTATUM	1 1/2" CAL.	NURSERY GROWN TREE FORM
DECIDUOUS SHRUBS				
27		GRO-LOW FRAGRANT SUMAC RHUS AROMATICA 'GRO-LOW'	5 GAL	CONTAINER GROWN
14		ROCKY MTN. SMOOTH SUMAC RHUS GLABRA VAR. CISMONTANA	5 GAL	CONTAINER GROWN
58		THREE-LEAF SUMAC RHUS TRILOBATA	5 GAL	CONTAINER GROWN
EVERGREEN SHRUBS				
38		ARMSTRONG JUNIPER JUNIPERUS CHINENSIS 'ARMSTRONGII'	5 GAL	CONTAINER GROWN
23		BLUE CHIP JUNIPER JUNIPERUS HORIZONTALIS 'BLUE CHIP'	5 GAL	CONTAINER GROWN
GROUNDCOVER / NATIVE GRASSES				
888		CREEPING MAHONIA MAHONIA REPENS	#1 CONT	CONTAINER GROWN 18" SPACING
52		LITTLE BLUESTEM SCHIZACHYRIUM SCOPARIUM	1 GAL	CONTAINER GROWN SEE PLAN

- FLAG NOTES:**
- PROPERTY LINE
 - SIDEWALK
 - TRANSFORMER
 - MONUMENT SIGN
 - TRASH ENCLOSURE
 - FLAGPOLE, FLAG SWING LIMITS
 - FIBER MULCH, TYPICAL
 - STEEL EDGING, TYPICAL
 - TANK OVERDIG LIMITS
 - BIKE RACK
 - FIRE HYDRANT
 - AIR COMPRESSOR
 - SIGHT TRIANGLE
 - SMOKING AREA
 - PROPOSED CONDENSER UNIT ENCLOSURE

LANDSCAPE CALCULATIONS			
Total Lot Size	78,310 SF		
Total Parking Lot Size	34,436 SF		
Total Building Size	4,992 SF		
Total Area Not Covered by Building/Parking Lot	38,883 SF		
MINIMUM OVERALL SITE LANDSCAPING REQUIREMENT: One tree and five shrubs per 1,500 SF of lot area not covered by building or parking.	Requirement	Required	Provided
	Trees	26	26
	Shrubs	130	146
Total # of Parking Stalls	16	16	
Total Interior Parking Lot Landscaped Area	5%	1,944 SF	1,783 SF
Landscaped % of Total Parking Lot Area*		5.0%	4.6%
Interior Parking Lot Landscape Trees	1 per 200 s.f.	10	10
Total Perimeter Parking Lot Landscaped Area			3,065 SF
Total # of Street Trees	Length (LF)		
	47th Street	359	1 per 40'
	Diagonal Highway	359	1 per 40'
	Independence Road	252	1 per 40'
	NE Diagonal	103	1 per 40'
Total Quantity of Plant Material on site	Trees	64	57**
	Shrubs	130	146

GROUNDCOVER LEGEND:

	LOW GROW NATIVE SEED MIX 53,710 SF
	CREEPING MAHONIA 2,020 SF



*NOTE - INTERIOR PARKING LANDSCAPE REQUIREMENT IS DEFICIENT DUE TO PHYSICAL LAYOUT OF PARKING LOT FROM VEHICULAR CIRCULATION REQUIREMENTS. ADDITIONAL SHRUBS AND PERENNIALS HAVE BEEN PLACED ON SITE TO ACCOMMODATE THIS DEFICIENCY.

**NOTE - SEVEN (7) STREET TREES TO BE PROVIDED WITH FUTURE DEVELOPMENT

THIS PROJECT IS REGISTERED UNDER THE LEED GREEN BUILDING CERTIFICATION PROGRAM.

MOLSSON ASSOCIATES
4880 Table Mountain Drive
Suite 200
Golden, CO 80403
TEL: 303.237.2072
FAX: 303.237.2658
www.molssonassociates.com
CA # 012-1417

PRELIMINARY
NOT FOR
CONSTRUCTION



6400 Westown Parkway
West Des Moines, Iowa
50266
P: 515-226-0128
F: 515-223-9873

#943 - BOULDER, COLORADO
3365 DIAGONAL HWY.
LANDSCAPE PLAN

KG PROJECT TEAM:
RDR: JXH
SDM: RJH
CPM: TLK

REVISION DESCRIPTION	DATE

DATE: 05-16-2014

SHEET NUMBER:

L1.1

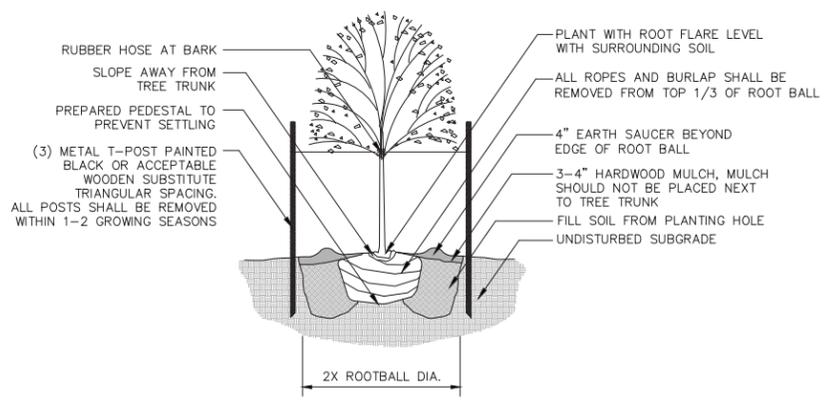
DWG: F:\Projects\012-1417_LDVP\Development Plans\121417_LSC.dwg
DATE: May 20, 2014 5:26pm
USER: abower
XREFS: 121417_PBASE
121417_XBASE
121417_TBLK_DP

GENERAL NOTES

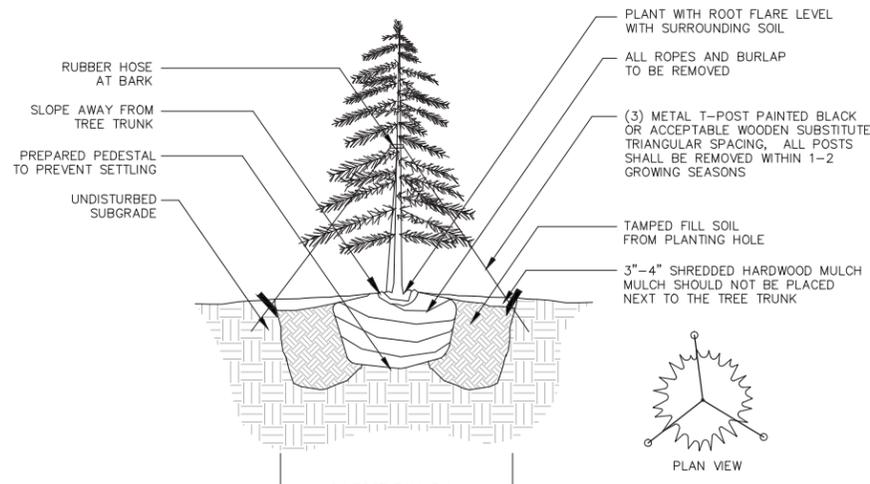
- ALL WORK SHALL BE COORDINATED WITH THE WORK OF OTHER TRADES.
- LOCATE AND FLAG ALL UNDERGROUND UTILITIES PRIOR TO ANY CONSTRUCTION. CONTRACTOR SHALL PROTECT EXISTING OVERHEAD AND UNDERGROUND UTILITIES. ANY DAMAGE TO SUCH SHALL BE REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
- PLANTS AND OTHER MATERIALS ARE QUANTIFIED AND SUMMARIZED FOR THE CONVENIENCE OF THE CITY AND LOCAL GOVERNING BODIES. CONFIRM AND INSTALL SUFFICIENT QUANTITIES TO COMPLETE THE WORK AS DRAWN.
- PLAN IS SUBJECT TO CHANGES BASED ON PLANT SIZE AND MATERIAL AVAILABILITY. ALL CHANGES OR SUBSTITUTIONS MUST BE APPROVED BY THE CITY OF BOULDER, COLORADO AND THE LANDSCAPE ARCHITECT.
- ALL PLANT MATERIAL SHALL BE NURSERY GROWN TO MEET MINIMUM SIZE AS SPECIFIED IN THE AMERICAN STANDARD FOR NURSERY STOCK ESTABLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION (ANLA). THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL NOT MEETING SPECIFICATIONS.
- PLANTING OF TREES, SHRUBS, SODDED AND SEEDED TURFGRASS SHALL BE COMMENCED DURING EITHER THE SPRING (MARCH 15-JUNE 15) OR FALL (SEPTEMBER 1 - OCTOBER 15) PLANTING SEASON AND WITH WATER AVAILABLE FOR IRRIGATION PURPOSES.
- THE LANDSCAPE CONTRACTOR SHALL REMOVE ALL CONSTRUCTION DEBRIS AND MATERIALS INJURIOUS TO PLANT GROWTH FROM PLANTING PITS AND BEDS PRIOR TO BACKFILLING WITH PLANTING MIX.
- BACKFILL ALL PLANTING BEDS TO A MINIMUM 12-INCH DEPTH WITH PLANTING SOIL MIX. PLANTING SOIL MIX SHALL CONSIST OF ONE (1) ORGANIC FERTILIZER, ONE (1) PART PEAT MOSS, AND TWO (2) PARTS CLEAN LOAM PULVERIZED TOPSOIL. THOROUGHLY MIX PLANTING SOIL COMPONENTS PRIOR TO PLACEMENT.
- ALL PLANTING AREAS SHALL CONTAIN FIBER MULCH.
- ALL PERENNIAL BEDS SHALL BE MULCHED WITH SHREDDED HARDWOOD MULCH TO A DEPTH OF 4".
- ALL LANDSCAPE AREAS SHALL BE IRRIGATED WITH A HIGH-EFFICIENCY, AUTOMATIC IRRIGATION SYSTEM ACHIEVING 100% EVEN COVERAGE OF ALL LANDSCAPE AREAS. IRRIGATION SYSTEM SHALL BE DESIGN-BUILT TO MEET ALL CITY REQUIREMENTS. DRIP IRRIGATION SHALL BE USED IN ALL LANDSCAPE BEDS AND SPRAY HEADS SHALL BE USED ON ALL SODDED AREAS.
- STEEL LANDSCAPE EDGING IS TO BE USED ON ALL LANDSCAPE BEDS ABUTTING SODDED AREAS AS NOTED ON LANDSCAPE PLANS.
- LANDSCAPE CONTRACTOR IS TO BE RESPONSIBLE FOR WATERING ALL PLANT MATERIALS UNTIL THE TIME THE PERMANENT IRRIGATION SYSTEM IS FULLY FUNCTIONAL AND ACCEPTANCE OF THE PROJECT HAS TAKEN PLACE. ANY MATERIAL WHICH DIES, OR DEFOLIATES (PRIOR TO ACCEPTANCE OF THE WORK) WILL BE PROMPTLY REMOVED AND REPLACED.
- THE CONTRACTOR WILL COMPLETELY GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR BEGINNING AT THE DATE OF ACCEPTANCE, OR STORE OPENING, WHICHEVER IS GREATER. CONTRACTOR WILL MAKE ALL REPLACEMENTS PROMPTLY (AS PER DIRECTION OF OWNER).
- NO PLANT MATERIAL WITH MATURE GROWTH GREATER THAN 3' IN HEIGHT SHALL BE PLANTED WITHIN POTABLE WATER, SANITARY SEWER, OR NON-POTABLE IRRIGATION EASEMENTS.
- NO SHRUBS SHALL BE PLANTED WITHIN FIVE FEET OR TREES WITHIN TEN FEET OF POTABLE AND NON-POTABLE WATER METERS, FIRE HYDRANTS, SANITARY SEWER MANHOLES, OR POTABLE WATER, SANITARY SEWER, AND NON-POTABLE IRRIGATIONS MAINS AND SERVICES.

SODDING NOTES

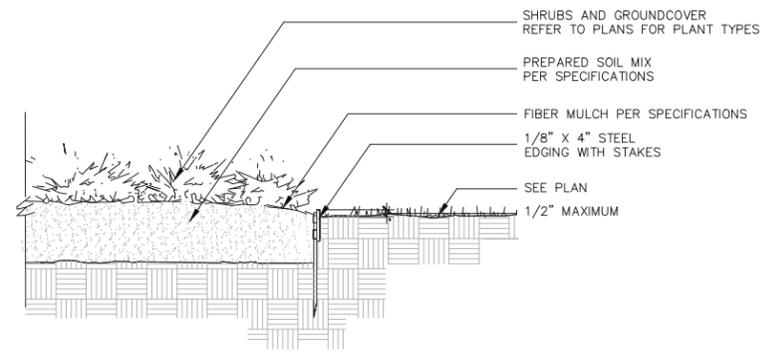
- ALL DISTURBED AREAS SHALL BE SODDED WITH A LOW WATER DEMAND TURF-TYPE TALL FESCUE SOD WITH A MINIMUM OF 3 CULTIVARS. CULTIVARS SHOULD INCLUDE THE FOLLOWING AT A MINIMUM:
 - 20% HARD FESCUE
 - 20% CHEWINGS FESCUE
 - 20% CREEPING RED FESCUE
- ALL LAWN AREAS SHALL RECEIVE A MINIMUM 6-INCH DEPTH OF TOPSOIL COMPACTED TO 85% MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT.
- THE ENTIRE SURFACE TO BE SODDED SHALL BE REASONABLY SMOOTH AND FREE FROM STONES, ROOTS, OR OTHER DEBRIS.
- SOD SHALL BE MACHINE STRIPPED AT A UNIFORM SOIL THICKNESS OF APPROXIMATELY ONE INCH (PLUS OR MINUS 1/4-INCH). THE MEASUREMENT FOR THICKNESS SHALL EXCLUDE TOP GROWTH AND THATCH, AND SHALL BE DETERMINED AT THE TIME OF CUTTING IN THE FIELD. PRECAUTIONS SHALL BE TAKEN TO PREVENT DRYING AND HEATING. SOD DAMAGED BY HEAT AND DRY CONDITIONS, AND SOD CUT MORE THAN 18 HOURS BEFORE BEING INCORPORATED INTO THE WORK SHALL NOT BE USED.
- HANDLING OF SOD SHALL BE DONE IN A MANNER THAT WILL PREVENT TEARING, BREAKING, DRYING AND OTHER DAMAGE. PROTECT EXPOSED ROOTS FROM DEHYDRATION. DO NOT DELIVER MORE SOD THAN CAN BE LAID WITHIN 24 HOURS.
- MOISTEN PREPARED SURFACE IMMEDIATELY PRIOR TO LAYING SOD. WATER THOROUGHLY AND ALLOW SURFACE TO DRY BEFORE INSTALLING SOD. FERTILIZE, HARROW OR RAKE FERTILIZER IN THE TOP 1-1/2-INCHES OF TOPSOIL, AT A UNIFORM RATE OF 18.5 POUNDS PER ACRE.
- SOD SHALL BE CAREFULLY PLACED IN THE DIRECTION PARALLEL WITH THE SLOPE OF THE AREA TO BE SODDED. SOD STRIPS SHALL BE BUTTED TOGETHER BUT NOT OVERLAPPED WITH THE SEAMS STAGGERED ON EACH ROW.
- FERTILIZER TO BE RECOMMENDED BY SOILS ANALYSIS. COMMERCIAL FERTILIZER OF THE GRADE, TYPE, AND FORM SPECIFIED AND SHALL COMPLY WITH THE RULES OF THE STATE OF COLORADO DEPT. OF AGRICULTURE. FERTILIZER SHALL BE IDENTIFIED ACCORDING TO THE PERCENT N, P, K, IN THAT ORDER.
- ALL SOD ON SLOPES GREATER THAN 5:1 SHALL BE STAKED.
- SATURATE SOD WITH FINE WATER SPRAY WITHIN TWO HOURS OF PLANTING. DURING FIRST WEEK AFTER PLANTING, WATER DAILY OR MORE FREQUENTLY AS NECESSARY TO MAINTAIN MOIST SOIL TO A MINIMUM DEPTH OF FOUR INCHES BELOW SOD.
- CONTRACTOR SHALL PROVIDE FULL MAINTENANCE FOR SODDED TURF GRASS FOR A PERIOD OF 30 DAYS AFTER THE DATE OF FINAL ACCEPTANCE OR STORE OPENING, WHICHEVER IS GREATER. AT THE END OF THE MAINTENANCE PERIOD, A HEALTHY, WELL-ROOTED, EVEN-COLORED, VIABLE TURF MUST BE ESTABLISHED. THE TURF GRASS SHALL BE FREE OF WEEDS, OPEN JOINTS, BARE AREAS, AND SURFACE IRREGULARITIES.



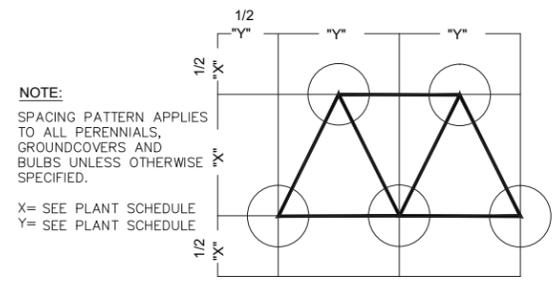
1 DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE



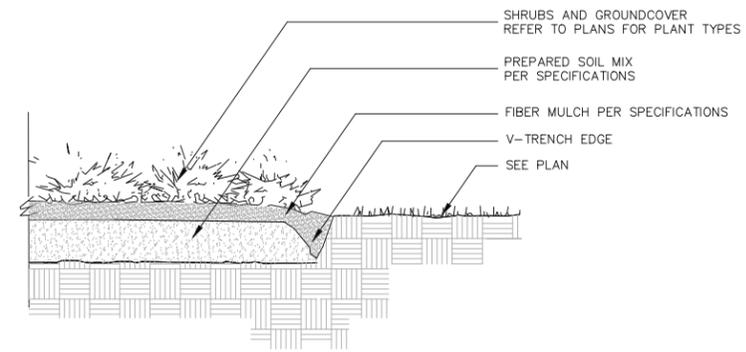
4 EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE



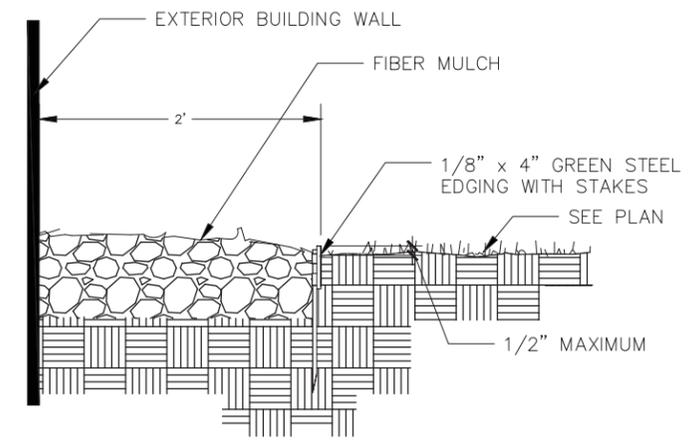
2 STEEL LANDSCAPE EDGING DETAIL
NOT TO SCALE



5 GROUNDCOVER LAYOUT DETAIL
NOT TO SCALE



3 V-TRENCH EDGING DETAIL
NOT TO SCALE



6 MOW STRIP DETAIL
NOT TO SCALE



CALL 811 SEVENTY-TWO HOURS PRIOR TO DIGGING, GRADING OR EXCAVATING FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

THIS PROJECT IS REGISTERED UNDER THE LEED GREEN BUILDING CERTIFICATION PROGRAM.

MOLSSON ASSOCIATES
4690 Table Mountain Drive
Suite 200
Golden, CO 80403
TEL: 303.237.2072
FAX: 303.237.2608
OA # 012-1417
www.molssonassociates.com

PRELIMINARY NOT FOR CONSTRUCTION



6400 Westown Parkway
West Des Moines, Iowa 50266
P: 515-226-0128
F: 515-223-9873

STORE #943 BOULDER, COLORADO
3365 DIAGONAL HWY.
PLANT SCHEDULE AND SPECIFICATIONS

KG PROJECT TEAM:
RDR: JXH
SDM: RJH
CPM: TLK

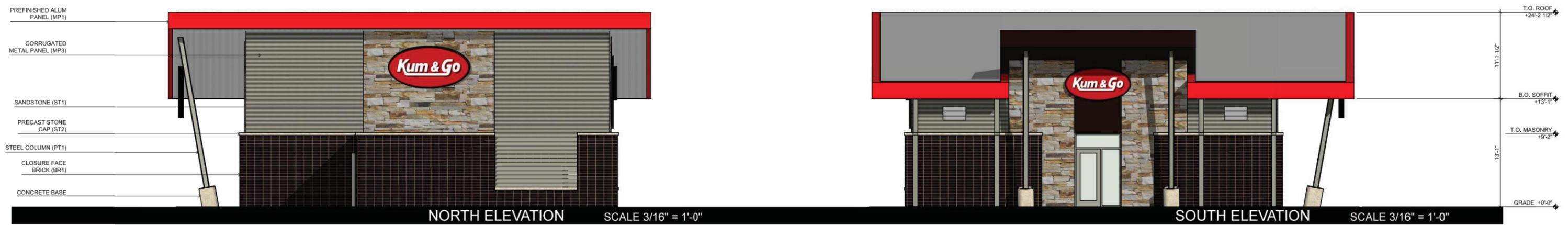
REVISION DESCRIPTION	DATE

DATE: 05-16-14

SHEET NUMBER:

L1.2

DWG: F:\Projects\012-1417_LDVP\Development_Plans\121417_LSC.dwg
 DATE: May 15, 2014 4:48pm
 USER: jstoberl
 XREFS: 121417_PBASE 121417_XBASE 121417_TBLK_DP

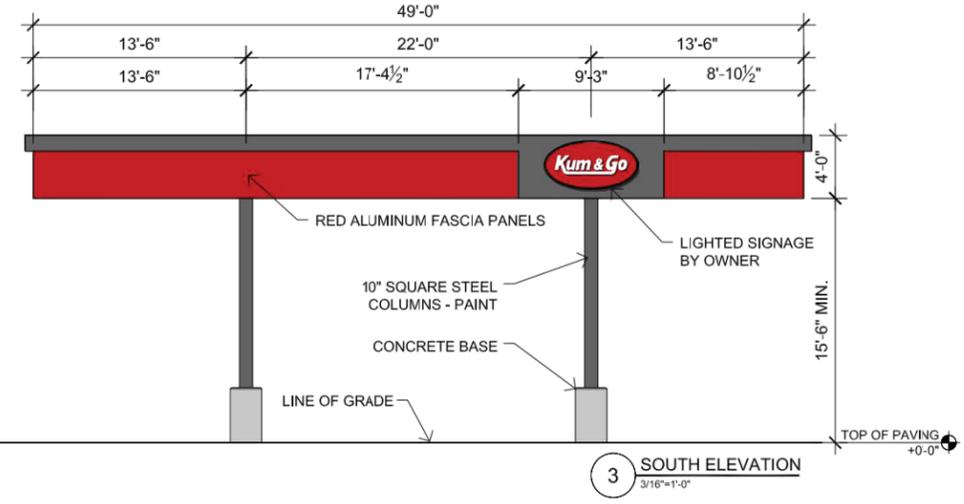
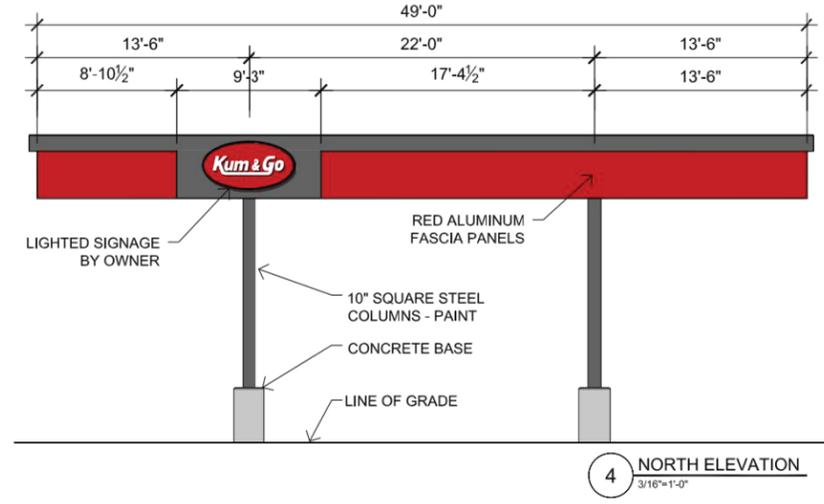
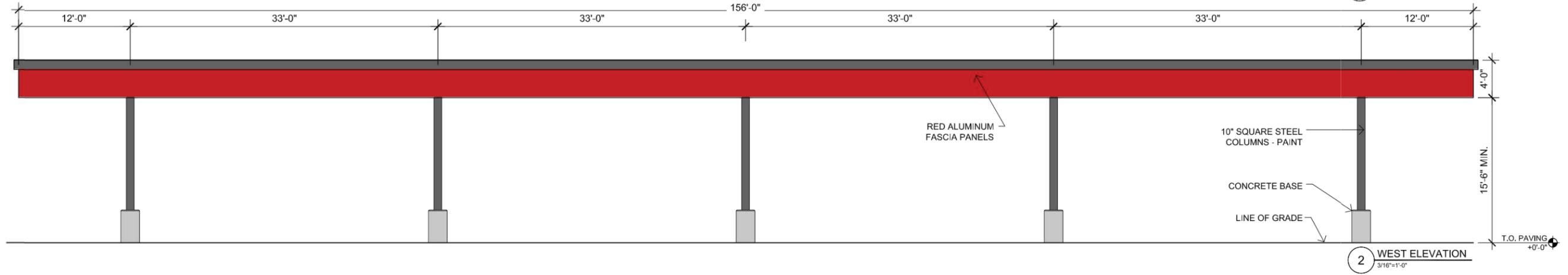
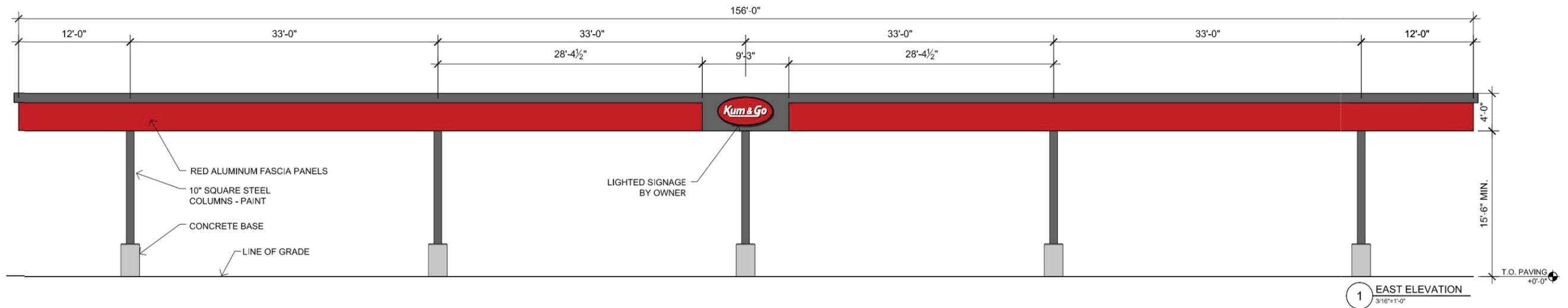


MP1 - ALPOLIC: RED
 MP2 - ALPOLIC: DARK BRONZE
 MP3 - BERRIDGE HR-16: CHAMPAGNE
 ST1 - COLORADO BUFF : STRIP STONE
 ST2 - EDWARDS CAST STONE: BUFF
 BR1 - SIOUX CITY BRICK: EBONITE SATIN
 PT1 - SHERWIN WILLIAMS: SW7052 GRAY AREA
 ALUM - CHAMPAGNE

KUM & GO #943 BOULDER, COLORADO
 SHIFFLER ASSOCIATES ARCHITECTS
 APRIL 1, 2014

THIS PROJECT IS REGISTERED UNDER
 THE LEED GREEN BUILDING
 CERTIFICATION PROGRAM.

DATE: 05-16-2014
 SHEET NUMBER:
A1.1



KUM & GO #943
BOULDER, COLORADO
SHIFFLER ASSOCIATES ARCHITECTS
SEPTEMBER 5, 2013

DATE: 05-16-2014
SHEET NUMBER: A1.2

THIS PROJECT IS REGISTERED UNDER THE LEED GREEN BUILDING CERTIFICATION PROGRAM.

STANDARD OVAL2 1/2"=1'0"



Convert to inches: 3.14 X 1/2 Height X 1/2 Width / 144
3.14 X 1/2 (48) X 1/2 (96) / 144 = 25.12 sq ft.

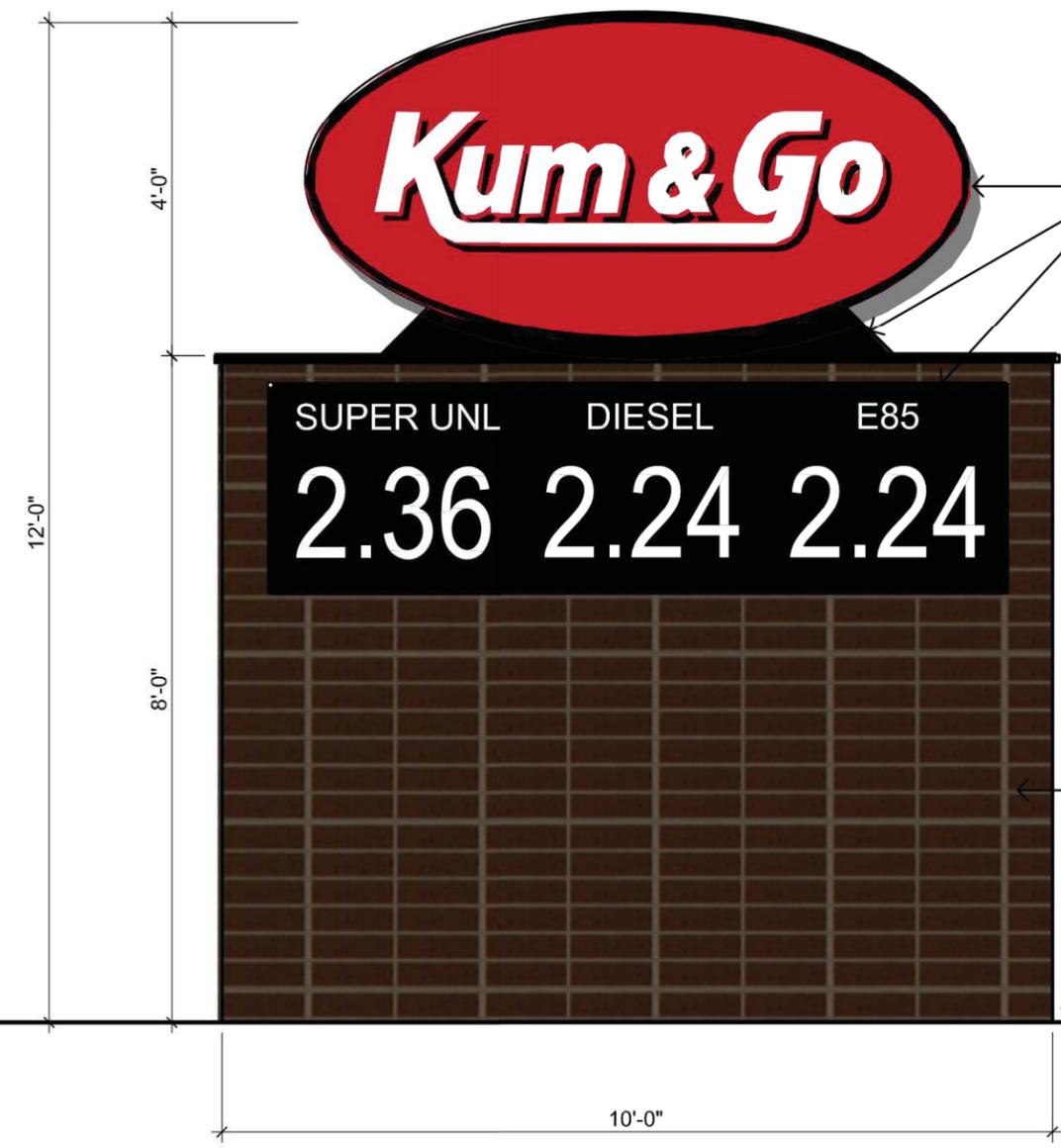
4' x 8' OVAL

STANDARD OVAL 1/2"=1'0"



Convert to inches: 3.14 X 1/2 Height X 1/2 Width / 144
3.14 X 1/2 (60) X 1/2 (120) / 144 = 39.25 sq ft.

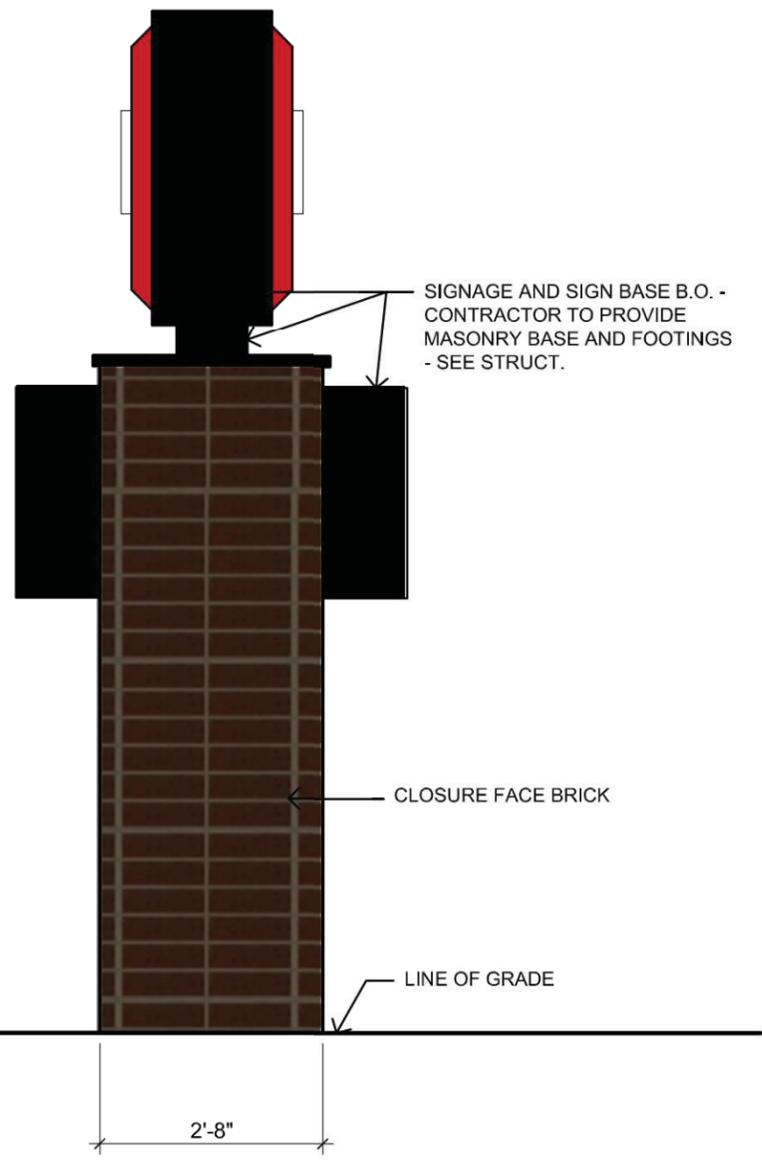
5' x 10' OVAL



SIGNAGE AND SIGN BASE B.O. - CONTRACTOR TO PROVIDE MASONRY BASE AND FOOTINGS - SEE STRUCT.

CLOSURE FACE BRICK

LINE OF GRADE



SIGNAGE AND SIGN BASE B.O. - CONTRACTOR TO PROVIDE MASONRY BASE AND FOOTINGS - SEE STRUCT.

CLOSURE FACE BRICK

LINE OF GRADE

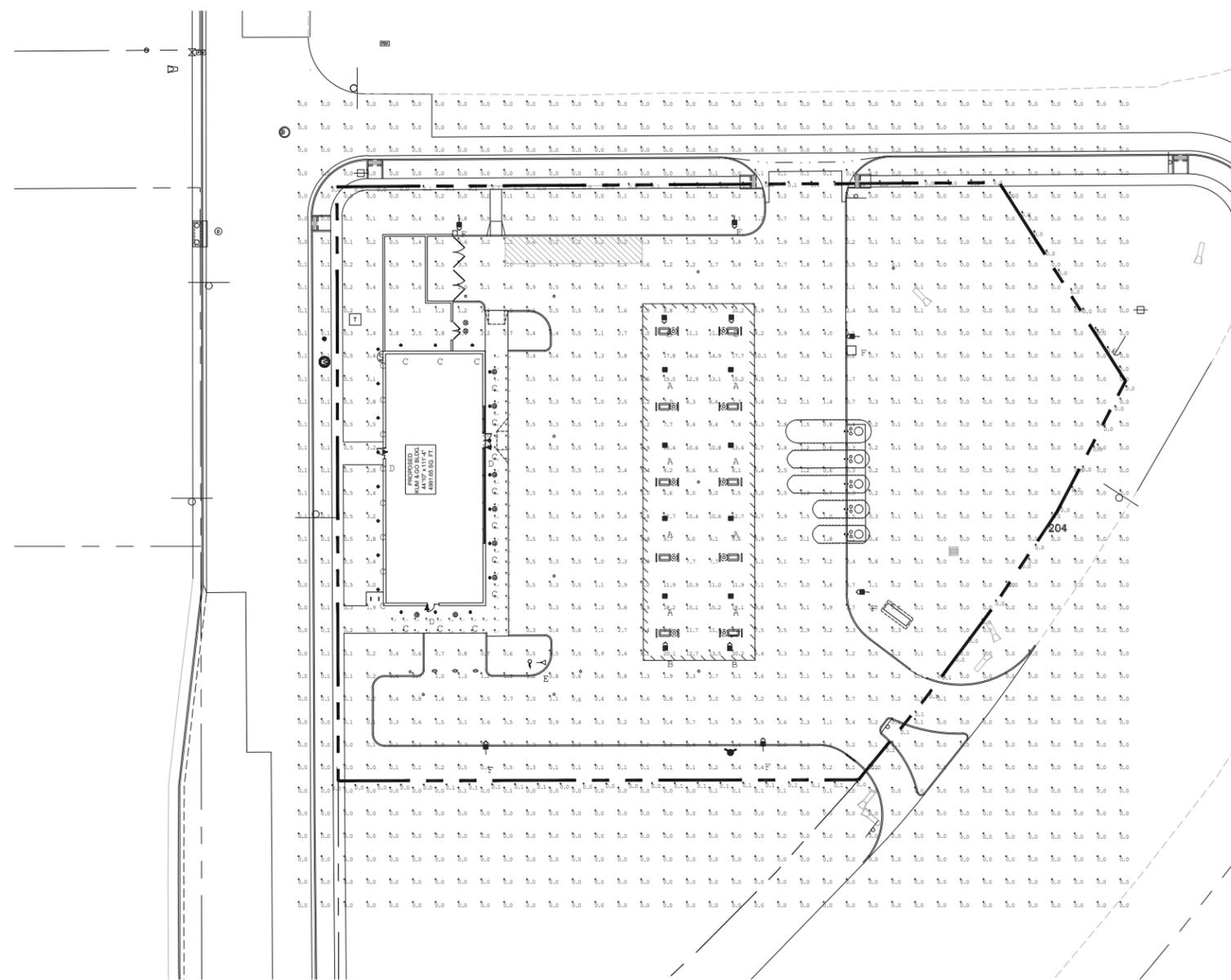
4'X8' OVAL - 25 SQ. FT
2'-6" X 8'-10 1/2" - 22.19 SQ. FT
12" LED GAS PRICE NUMBER

SCALE: 1"=1'-0"

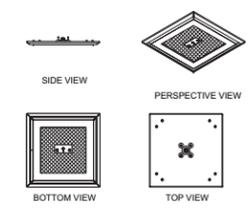
THIS PROJECT IS REGISTERED UNDER THE LEED GREEN BUILDING CERTIFICATION PROGRAM.

DATE: 05-16-2014
SHEET NUMBER: A1.3

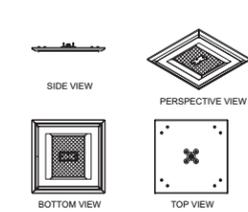
DWG: F:\Projects\012-1417\LDVP\Development\Plans\121417_PHOTO.dwg
 DATE: May 15, 2014 4:41pm
 USER: sbower
 121417_XBASE
 121417_PBASE
 121417_PHOTO
 121417_TBK_DP



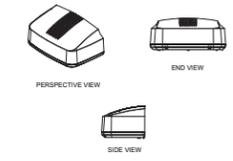
CRS-AC-LED-64
LED Crossover Gold Asymmetric Canopy Light



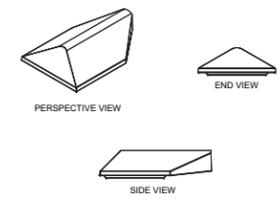
CRS-SC-LED-64
LED Crossover Gold Symmetric Canopy Light



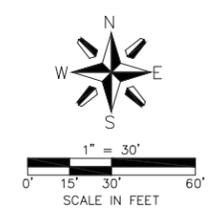
XPWS3
LED Crossover Wall Mount Light



XASU
LED Crossover Area Light



XSL2-S-50
LED Crossover Soffit



Based on the information provided, all dimensions and luminaire locations shown represent recommended positions. The engineer and/or architect must determine the applicability of the layout to existing or future field conditions.

This lighting plan represents illumination levels calculated from laboratory data taken under controlled conditions in accordance with The Illuminating Engineering Society (IES) approved methods. Actual performance of any manufacturer's luminaires may vary due to changes in electrical voltage, tolerance in lamps/LED's and other variable field conditions. Calculations do not include obstructions such as buildings, curbs, landscaping, or any other architectural elements unless noted.

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
BUILDING ENTRANCES	Illuminance	Fc	4.32	4.7	4.0	1.08	1.18
CalcPts	Illuminance	Fc	1.17	20.2	0.0	N.A.	N.A.
DISPENSER VERTICAL READINGS_4	Illuminance	Fc	13.48	26.7	6.2	2.17	4.31
PEDESTRIAN WALKWAYS	Illuminance	Fc	2.80	4.7	0.5	5.60	9.40
PL READINGS	Illuminance	Fc	0.04	0.1	0.0	N.A.	N.A.
PARKING SUMMARY	Illuminance	Fc	0.50	1.3	0.3	1.67	4.33
UNDER CANOPY SUMMARY	Illuminance	Fc	9.66	20.2	4.8	2.01	4.21

Symbol	Qty	Label	Arrangement	Description	LLF	Arr. Lum. Lumens	Arr. Watts	CRI
	6	F	SINGLE	XASU-FT-LED-64-HO-CW-HSS SINGLE ON 16' POLE + 2.5' BASE	1.000	6001	88	70
	1	E	SINGLE	ORM2 WB 400 PSMJ F	1.000	17947	458	65
	3	D	SINGLE	CS N DB CT - BATTERY BACK-UP LIGHTING	1.000	1	84	
	21	C	SINGLE	PDL6K-LED-HO-NW-120-SD	1.000	1041	13	70
	8	A	SINGLE	CRS-SC-LED-64-SS-CW-UE	1.000	8202	75	70
	4	B	SINGLE	CRS-AC-LED-64-SS-CW-UE	1.000	7925	75	70



THIS PROJECT IS REGISTERED UNDER THE LEED GREEN BUILDING CERTIFICATION PROGRAM.

MOLSSON ASSOCIATES
 4890 Table Mountain Drive
 Suite 200
 Golden, CO 80403
 TEL: 303.237.2072
 FAX: 303.237.2658
 CA # 012-1417
 www.molssonassociates.com

PRELIMINARY
NOT FOR
CONSTRUCTION



6400 Westown Parkway
 West Des Moines, Iowa
 50266
 P: 515-226-0128
 F: 515-223-9873

#943 - BOULDER, COLORADO
 3365 DIAGONAL HWY.
 PHOTOMETRIC PLAN

KG PROJECT TEAM:
 RDR: JXH
 SDM: RJH
 CPM: TLK

DATE	REVISION DESCRIPTION

DATE: 05-16-2014

SHEET NUMBER:

SE1.1

**CITY OF BOULDER
PLANNING BOARD AGENDA ITEM**

MEETING DATE: June 19, 2014

AGENDA TITLE: Public hearing and Planning Board recommendation to City Council on the draft TMP Update Plan document

REQUESTING DEPARTMENT:

Tracy Winfree, Director of Public Works for Transportation
Michael Gardner-Sweeney, Transportation Planning and Operations
Coordinator
Kathleen Bracke, GO Boulder Manager
Chris Hagelin, Senior Transportation Planner
Micki Kaplan, Senior Transportation Planner
Marni Ratzel, Senior Transportation Planner
Randall Rutsch, Senior Transportation Planner

EXECUTIVE SUMMARY

This agenda item brings to the Planning Board the draft of the Transportation Master Plan (TMP) reflecting the technical work, input from Boards and advisory committees, and the public engagement process of the last 18 months. The draft TMP is included in [Attachment A](#) and the revised Boulder Valley Comprehensive Plan (BVCP) summary is in [Attachment B](#).

The TMP update process started with a Policy Review Phase showing the policy foundation of the 2008 TMP is sound, though there is need for refinement and for the community to accelerate the rate of change to achieve mode shift targets. The Climate Commitment increases the challenge to meet community goals and increases the need for mode shift and for reducing vehicle miles of travel (VMT). So while the policy direction of the TMP remains sound and has shown significant results, refinements in the five Council identified Focus Areas will help meet the TMP and Climate Commitment goals as well as the city-wide Sustainability Framework goals. This work has been supported by a robust public outreach effort, including traditional approaches as well as a strong push in social media and digital formats. Significant changes reflected in this draft TMP include:

- Integrating the “living lab” approach to test Walk and Bike Innovations to enhance safety and comfort for people of all ages and stages of life;
- Developing new Neighborhood Accessibility (a.k.a. 15 minute neighborhood) and Low Stress Bike Network GIS tools for on-going assessment and continuous improvement of walking and biking systems throughout Boulder;

- Presenting the Renewed Vision for Transit, including service, capital and programmatic elements as well as implementation components and policies for transit investment;
- Continuing to strengthen and build regional partnerships to complete the US36 Bus Rapid Transit (BRT) and bikeway system as well as to advance the regional arterial BRT corridors from RTD’s Northwest Area Mobility Study (NAMS);
- Integrating the Transportation Demand Management (TDM) Toolkit with the Access Management and Parking Strategy (AMPS) work;
- Continuing collaboration with Boulder County and RTD to explore opportunities for community-wide Eco Pass program;
- Integrating the TMP update with city-wide planning initiatives such as Envision East Arapahoe, Civic Area, North Boulder Subcommunity Plan update, and AMPS; and
- Incorporating the Climate Commitment Travel Wise greenhouse gas analysis into the measureable objectives of the TMP with corresponding reductions in the targets for VMT and reduction in single occupant vehicle (SOV) mode share.

As with all city master plans, the Transportation Master Plan takes its overall policy direction from the Boulder Valley Comprehensive Plan (BVCP) and with this update is responding to the BVCP Sustainability Framework and the Climate Commitment. The Planning Board has been an active participant in shaping this plan through the multi board workshops that have been part of the integrated planning process.

Staff continues to move forward with the TMP update process with an expanded public outreach process on the draft plan. Social media continues to be a significant engagement tool and a public open house was held on Wed., May 28 at the Boulder Museum of Contemporary Art during the Boulder Farmers’ Market. In addition, staff is actively working on a number of other efforts in collaboration with city-wide planning and sustainability initiatives.

PLANNING BOARD ACTION REQUESTED

Staff requests review and input on the draft TMP update document and BVCP TMP summary with a recommendation to City Council. As this is a draft document, the opportunity remains for modifications to the TMP update document as it moves to the other Boards and Council in late June and early July.

COMMUNITY SUSTAINABILITY ASSESSMENTS AND IMPACTS

Economic: Transportation costs are a significant portion of household expenses and important to business competitiveness and employee retention. Enhancing the travel options available to residents and employees supports more sustainable travel behavior, the movement of goods and people essential to the local economy and retains wealth in the community. Providing regional transit and bike options is a particularly important option for in-commuters as it provides alternatives to long distance single-occupant vehicle (SOV) travel and increases access to jobs for low and moderate income families. Completing the walk, bike and transit systems and supporting their use with effective TDM programs responds to the lifestyle choices and desires of younger workers, particularly those in the “creative class” that are a foundation of the Boulder economy.

Environmental: Achieving the TMP objectives of reducing single occupant vehicle (SOV) travel, reducing congestion and air pollution emissions including greenhouse gases have direct environmental

benefits. Transit has the potential to replace mid and long distance SOV trips and lead to significant greenhouse gas (GHG) emission reductions. Biking and walking are zero emission transportation options reducing GHG pollution, with TDM programs key to reducing the number of trips made by cars.

Social: Enhanced travel options improve access for all community members. Improved transit access is particularly important to seniors, people with low incomes and people with disabilities. Recent research shows that transit riders tend to walk more and be healthier than auto commuters while neighborhood accessibility is an increasing focus related to public health for both children and adults. Increased walking and biking by all segments of the community will contribute to a healthier population. The increased focus on transit, accessibility and TDM will have multiple benefits to the community, including expanding modal choice for those with low-income, older adults and children.

OTHER IMPACTS

- Fiscal: The TMP Update is supported by existing funding from the city's 2013-14 budgets.
- Staff time: Staff resources for this project have been funded and included in the 2013-14 budgets.

BACKGROUND

The TMP exists within the broader context of the Boulder Valley Comprehensive Plan (BVCP), the city's Sustainability Framework and Climate Commitment goals. The resulting transportation system is expected to support the sustainability and quality of life goals set by the community. The TMP was first adopted in 1989 as the city's long-range blueprint for travel and mobility throughout Boulder. As a mature plan, the TMP reflects more than 20 years of consistent policy direction and documented results. This update was initiated with a Policy Review based on the *2012 Transportation Report on Progress* (<https://www-static.bouldercolorado.gov/docs/transportation-report-on-progress-2012-1-201305291118.pdf>), a public phone transportation survey, employee survey, cross departmental interviews, Transportation Advisory Board (TAB) and expert panel input. Based on this review, the city's transportation policy continues to produce positive results and has strong community support but could benefit from refinement. The Policy Review phase results were presented to council in August and September 2012. City Council agreed with these results and directed that the work program be guided by the following:

- Maintain the existing four TMP Focus Areas with the following emphasis:
 - *Complete Streets*, (formerly Multimodal Corridors): rename, address transit system planning, explore bike and pedestrian innovations;
 - *Regional Travel*: continue the existing approach with a focus on US 36, the Northwest Area Mobility Study and other regional connections;
 - *Transportation Demand Management (TDM)*: explore community-wide Eco Pass and develop TDM packages for development review;
 - *Funding*: diversify transportation funding options and explore opportunities for additional funding to support on-going basic operations and maintenance needs as well as capital funding to achieve TMP goals.
- Add "Integrate with Sustainability Initiatives" as a new, fifth Focus Area.
- Add three new measurable objectives of *Safety, Neighborhood Accessibility, and Vehicle Miles Traveled (VMT) Per Capita for residents and in-commuters.*

The resulting work program was approved and supported by City Council in 2013-14 and this direction has been carried through in the work done in the update on the five Focus Areas.

Council received an Information Packet item on progress with the TMP update and other city sustainability efforts on Feb. 18, 2014 and held a study session on the major building blocks of the TMP update on April 29, 2014. The Study Session memo can be found at <https://documents.bouldercolorado.gov/WebLink8/0/doc/125299/Electronic.aspx> and the Study Session summary is on the Council agenda for June 17, 2014 and can be viewed at https://www-static.bouldercolorado.gov/docs/20140617_Final_Packet_Electronic-1-201406121544.pdf.

STAFF ANALYSIS

The draft TMP document represents the summary results of technical work since the beginning of 2013 and continuing through June 2014. The draft TMP document maintains some material from the existing document as well as reflecting all the work done in the update. It has been extensively reorganized to reflect more of an action based plan format, highlighting the five Focus Areas and with the measurable objectives having a more prominent role. Data, funding forecasts and the project costs have been updated to reflect current information.

The TMP document is supported by an extensive set of appendices and supporting materials documenting varying aspects of the technical work and process. These appendices are available on the TMP Web site at www.BoulderTMP.net and include the following:

- 2012 Transportation Master Plan Policy Review
- [Transit State of the System Report](#)
- Renewed Vision for Transit: [Transit Analysis Report](#)
- Transit Modal Plan
- [Communitywide Eco Pass Feasibility Study](#)
- [Complete Streets Open House - December 9, 2013](#)
- [2014 Walk Bike Summit Summary](#)
- [Transportation Master Plan: Summary of Community Engagement](#)

In addition, an updated version of the Map It application will allow users to view and query the existing transportation system, the proposed modal systems and all the individual projects contained in the investment programs of the TMP. As described in the Apr. 29, 2014 Study Session memo, these have been reviewed and updated as part of the update process.

Relationship to the Boulder Valley Comprehensive Plan (BVCP)

1. Is the master plan consistent with the goals, policies, and growth projections of the BVCP?

Since the 1996 TMP, the plan has explicitly been placed under the umbrella of the BVCP. It utilizes the current city population and employment projections to 2035. This plan included extensive involvement by the staff from CP&S, including the Climate Commitment analysis of transportation sector greenhouse gas emissions and potential reductions.

2. Does the master plan outline BVCP service standards and a plan to meet them in the future?

The TMP has helped to define the BVCP urban service standards and fully meets them.

3. Does the master plan describe and assess capital needs and a funding plan for them?

The 2003 TMP established the city wide approach of identifying a Current Funding, Action and Vision investment programs. This plan is based on an updated revenue forecast and a detailed engineering review and cost estimating process for the almost 800 individual projects in the plan.

TMP UPDATE - COMMUNITY OUTREACH

The TMP update community engagement process began in March 2013 with the formation of transit and bike/walk advisory committees made up of community members and agency partners; as well as the Mar. 9, 2013 open house held in conjunction with the Smart Growth America Cool Planning workshop. Numerous events integrating the city-wide planning initiatives have been conducted throughout the TMP update process emphasizing the inter-connections of transportation, land use, urban design, housing, parking/access management, and climate. These events include several public open houses and joint board workshops with TAB, Planning Board, Environmental Advisory Board, and District Boards. The draft summary of the April Joint Board workshop is included at **Attachment C**. The TAB has been the host for the TMP update process and has been engaged with the technical material on a monthly basis for the duration of the process.

For the first time, this planning effort included an extensive social medial presence and the use of new Web based tools such as Inspire Boulder and the Design Your Transit System Tool. The survey associated with Design Your Transit System Tool had more than 1,500 responses. Over 400 community members agreed to be part of the TMP community feedback panel and over 15,000 persons have visited the Inspire Boulder site. These tools have the advantage of reaching different and more diverse populations when combined with the traditional approaches of print media, open houses and board meetings. The “listening and learning” portion of this update reached far more people than previous plans. As was noted in the April 29, 2014 council study session memo, a reinvigorated public outreach effort is underway to share the draft outcomes of the TMP update with the community, including a series of new topics on the Inspire Boulder website. Update materials and the TMP video - <http://vimeo.com/65935689>, are on the TMP update Web page and featured in the *Public Outreach Summary Report* - <https://www-static.bouldercolorado.gov/docs/transportation-master-plan-summary-community-engagement-1-201404241141.pdf>.

BOARD ACTION REQUESTED

The Planning Board is asked to review and comment on the draft TMP update document and BVCP TMP summary, and make a formal recommendation to City Council relative to acceptance of the draft TMP.

NEXT STEPS

The TMP update is still a draft document with opportunity for modification and will be refined based on comments from the Board. The TMP update is scheduled for consideration for acceptance by Council on July 15, 2014.

Attachments:

- A. 2014 Draft Transportation Master Plan
- B. BVCP Revised TMP Summary
- C. April Joint Board Workshop Meeting Summary

DRAFT



City of Boulder

TMP₂₀₁₄ Transportation Master Plan

Approved by City Council Month ##, 2014



The Transportation Master Plan (TMP) is a Web-based Plan.

Since 2003, the City of Boulder has published the TMP on the Internet to inform the public of the City's transportation goals and make the plan more accessible and useful. The TMP web site (www.BoulderTMP.net) contains all the material from this document along with active links to related topics and extensive background material developed through the plan update. As the TMP is intended to be a "living plan," it also contains materials from planning efforts since 2014 and the resulting amendments to the plan.



The Boulder Transportation Master Plan is available online at www.BoulderTMP.net

In addition, the site contains an updated mapping application allowing anyone with a Web browser to explore the existing and planned transportation system.

Included on the TMP Web site are:

- Final products from each work area of the 2014 update process
- Background research material on the policy focus areas
- "Map It!" interactive mapping and project information display function for the existing and planned transportation system
- Selected materials presented at the public forums
- An introductory video to the TMP
- Selected Power Point presentations
- Materials and links to planning efforts since 2014
- Links to related transportation activities and information
- Opportunities to communicate with City staff
- Links to related studies and on-going planning efforts

ACKNOWLEDGEMENTS

City Staff

Tracy Winfree, Director of Public Works for Transportation
Michael Gardner-Sweeney, Transportation Planning/ Operations Coordinator
Kathleen Bracke, GO Boulder Manager
Bill Cowern, Transportation Operations Engineer
Chris Hagelin, Senior Transportation Planner
Cris Jones, Transportation Planner II
Micki Kaplan, Senior Transportation Planner
Marni Ratzel, Senior Transportation Planner
Randall Rutsch, Senior Transportation Planner
Anna Nord, Social Media and Graphics
Kaaren Davis, Administrative Manager
KerriJo Hunt, Administrative Assistant II
Laurel Olsen-Horen, Administrative Assistant
Lesli Ellis, Comprehensive Planning Manager
Brett KenCairn, Senior Environmental Planner
Larry Ferguson, GIS
Mike Banuelos, Public Works Communications
Nick Grossman, Public Works Communications

Transit Technical Advisory Committee

Kai Abelkis, Sustainability Coordinator, Boulder Community Hospital
David Averill, Transit Planning & Infrastructure Manager, Colorado Department of Transportation
Tim Beal, Director Property Management, Boulder Housing Partners
David Cook, Transportation Options Manager, University of Colorado
Audrey DeBarros, Executive Director US 36 Commuting Solutions
Nataly Erving, Senior Service Planner, Regional Transportation District
Jared Hall, Transit/TDM Planner II, Boulder County
Lenna Kottke, Executive Director, Via
Landon Hilliard, Safe Routes To School Administrator, Boulder Valley School District
Genevieve Hutchison, Senior Transportation Planner, Regional Transportation District
Paul Leef, Former Campus Architect & Director, University of Colorado
Scott McCarey, Alternative Transportation Coordinator, Boulder County

Chris Meschuk, Planner, Comprehensive Planning, City of Boulder
Richelle Reilly, Campus Landscape Architect, University of Colorado
Phil Simpson, Campus Planning, University of Colorado
Brandon Smith, Sustainable Transportation Program Manager, University of Colorado Environmental Center
John Tayer, Executive Director, Boulder Chamber of Commerce
Bob Whitson, Executive Director, Boulder Transportation Connections

Walk/Bike Advisory Committee

Kai Abelkis, Boulder Community Hospital
Rachel Arndt, Boulder County Health
Sam Assefa, City of Boulder Community Planning + Sustainability
Amy Breunissen, Boulder Transportation Connections
Ellen Bruex, YMCA-Teen programs
Ian Engle, Center for People w/ Disabilities
Brian Graham, Boulder County Transportation
Jeff Haley, City of Boulder Parks & Recreation Department
Peter Hurst, Boulder Valley School District
Genevieve Hutchinson, RTD-Denver
Betsy Jacobson, Colorado Department of Transportation
Betty Kilsdonk, City of Boulder Senior Services
Mimi Mather, Urban Land Institute/Boulder Mountainbike Alliance
Sue Prant, Community Cycles
Brandon Smith, CU Boulder Environmental Center
David Cook, CU Boulder Parking & Transportation Services
Martha Roskowsky, Bikes Belong
Cindy Smith, City of Boulder Youth & Family Services
Susan Springer, St. John's Episcopal Church
Alice Swett, City of Boulder Youth Advisory Board
John Tayer, Chamber of Commerce
Jason Vogel, Boulder Mountainbike Alliance
James Waddell, Boulder B-cycle
Molly Winter, City of Boulder Downtown & University Hill Management District, Parking Services

City Council; Planning Board

Mayor Matt Appelbaum
Mayor Pro Tem George Karakehian
Macon Cowles
Suzanne Jones
Tim Plass
Andrew Shoemaker
Sam Weaver
Mary Young
Suzy Ageton (past)
KC Becker (past)
Ken Wilson (past)

Transportation Advisory Board

Andria Bilich
Dom Nozzi
Zane Selvans
Daniel Stellar
Jessica Yates (Chair)
Matt Moseley (Past)
David Driscoll (Past Chair)
Matt Moseley (Past)

Planning Board

Bryan Bowen,
Aaron Brockett (Chair)
Leonard May
John Putnam
John Gerstle
Crystal Gray
Elizabeth Payton

Environmental Advisory Board

Tim Hillman
Morgan Lommele
Stephen Morgan
Larissa Read

Consultant Support

Tom Brennan, Project Manager, Nelson\Nygaard
Tim Payne, Near-Term Service Plan Lead, Nelson\Nygaard
Brie Becker, Long-Term Transit Planner and TDM Specialist, Nelson\Nygaard
Oren Eshel, Nelson\Nygaard
Barbara Lewis, President, Catalyst Inc.
Tomoko Delatorre, Nelson\Nygaard
Kevin Ottem, Nelson\Nygaard
Colin Rowan, Nelson\Nygaard
Victor Stover, Nelson\Nygaard
Evan Corey, Nelson\Nygaard



TABLE OF CONTENTS

1	Moving to a Sustainable Transportation System	1-1
	What is a Transportation Master Plan?	1-1
	History and Basis	1-2
	Overall Approach for This Update	1-5
	Community Input	1-6
	Pathways to Success.....	1-8
2	Five Focus Areas	2-1
	Complete Streets	2-1
	Regional Travel.....	2-5
	Transportation Demand Management	2-8
	Funding	2-11
	Integrate with Sustainability Initiatives	2-14
3	Focus on Performance	3-1
	Vision Statement.....	3-1
	TMP Performance Measures and Air Quality/GhG Reduction	3-2
4	People First: Supporting Safe, Informed, Confident Travelers	4-1
	Supporting Culture Change	4-1
	Encouragement	4-2
	Education	4-3
	Enforcement	4-4
	Evaluation	4-5
	Transportation Demand Management (TDM)	4-6
5	Building Improved Access	5-1
	Funding Plans.....	5-1
	Investment Packages	5-2
	Transportation Plan Modal Elements	5-5
	Pedestrian Modal Element.....	5-6
	Bicycle Modal Element	5-8
	Transit Modal Element: A Renewed Vision for Transit	5-10
	Automobile Modal Element.....	5-16
6	Building a Connected Community	6-1
	Integrated Planning Efforts	6-1
	Community Engagement in Decision Making.....	6-3
7	Inspiring a Shared Vision: A Call to Action	7-1
	Next Steps and Tracking Progress	7-1
	Multimodal Corridors - “Complete Streets”	7-2
	Transportation Demand Management	7-3
	Regional Travel.....	7-3
	Sustainability Initiatives.....	7-4
	Funding	7-4
	The Community’s Role in Delivering the Plan.....	7-5



TABLE OF FIGURES

Figure 1-1	Vehicle Miles Traveled	1-5
Figure 1-2	SOV Mode Share	1-5
Figure 2-1	Work Mode Share - 2008-2012	2-2
Figure 2-2	Boulder Walk-Bike Mode Share Comparison	2-2
Figure 2-3	Boulder Local Transit Service Operating Cost and Service Hours	2-3
Figure 2-4	City of Boulder Transit Funding Contributions	2-3
Figure 2-5	Boulder Transit Use	2-4
Figure 2-6	2010 & Projected 2035 Intra-County Daily Trips within Boulder County	2-6
Figure 2-7	2010 & Projected 2035 Employment/Housing Density Growth within Boulder County	2-7
Figure 2-8	Declining Purchasing Power	2-11
Figure 2-9	Transportation Budget	2-13
Figure 3-1	Climate Commitment 2013 Inventory of VMT and GhG Emissions	3-2
Figure 3-2	Transportation Sector VMT and GhG Emissions	3-3
Figure 3-3	Walk Bike Summit Summary Graphic	3-6
Figure 3-4	Proposed Mode Share Targets	3-7
Figure 3-5	Proposed Modal Targets for 2035	3-7
Figure 4-1	The Five Es	4-1
Figure 5-1	Current Funding	5-2
Figure 5-2	Action Plan Funding	5-3
Figure 5-3	Vision Plan Funding	5-4
Figure 5-4	Neighborhood Access Tool	5-7
Figure 5-5	Low-Stress Bicycle Network (Excerpt)	5-9
Figure 5-6	Transit Scenario Analysis Process	5-11
Figure 5-7	Transit Scenario Evaluation Accounts and Metrics	5-11
Figure 5-8	Transit Facilities and Level of Amenities	5-13
Figure 5-9	Boulder Renewed Transit Vision	5-15

Appendices Available on the Web:

- 2012 Transportation Master Plan Policy Review
- [Transit State of the System Report](#)
- Transit Modal Plan
- [Community Wide Ecopass Feasibility Study](#)
- [Complete Streets Open House - December 9, 2013](#)
- [2014 Walk Bike Summit Summary](#)
- [Transportation Master Plan: Summary of Community Engagement](#)
- TMP Action Plan

All images in this document are courtesy of the City of Boulder, unless otherwise noted



What Does This Plan Contain?

Welcome to the City of Boulder's Transportation Master Plan summary document. Developed through an extensive public process, it represents more than twenty years of consistent policy direction to have transportation support the broader community goals identified in the Boulder Valley Comprehensive Plan. This document is meant to be an accessible and usable summary of the City's policies and strategies in transportation.

Policies guiding transportation decisions in Boulder

Modal plans for pedestrians, bicycles, transit, and automobiles

Background on travel behavior and expectations

Strategic actions in the five Policy Focus Areas: Complete Streets, Regional Travel, Transportation Demand Management, Funding, Integrate with Sustainability Initiatives

A Current Funding Investment Program of proposed projects within our funding limitations

An Action Investment Program as a community action framework to move forward with next significant steps to implement TMP vision

The Vision for our ultimate transportation system

Measurable Objectives to establish targets and track progress

An Action Plan for moving from planning to implementation

VISION &

ACTION

1 | MOVING TO A SUSTAINABLE TRANSPORTATION SYSTEM



The Transportation Master Plan (TMP) is Boulder's blueprint for travel and access through 2035.

What is a Transportation Master Plan?

First adopted in 1989, the Transportation Master Plan (TMP) recognized the need to reconcile two seemingly conflicting goals: first to provide mobility and access in the Boulder Valley in a way that is safe and convenient; and second, to preserve what makes Boulder a good place to live by minimizing auto congestion, air pollution, and noise. The TMP policy direction reconciles these goals by increasing travel choices to accommodate increased person trips in non-automotive modes while limiting the increase in single-occupant auto travel.

The TMP is set within the broader context of the Boulder Valley Comprehensive Plan (BVCP) with the resulting transportation system expected to support the sustainability and quality of life goals set by the community. It also has a significant role in achieving the community's current Climate Commitment goal of an 80% reduction in greenhouse gas emissions by 2050. The Sustainability Framework of the 2010 BVCP has been used to evaluate options for the plan and to integrate TMP actions with other city sustainability planning efforts.

The City of Boulder TMP contains goals, policy guidance, and measurable objectives for operating and investing in the transportation system. It also includes an overview of the strategies and investment programs that the city and the community intend to accomplish by the year 2035.

Starting with the 2003 TMP, the plan contains three investment program categories:

- **The current funding or fiscally constrained investment program** shows how the revenue expected from current funding sources would be invested.
- **The action investment program** shows how the city would strategically invest in the next steps of developing a multimodal transportation system if significant additional revenue becomes available.
- **The vision program** tracks the desired build out of the complete multimodal transportation system.

The 2008 Complete Streets investment program, developed to improve connections throughout the community in response to the Regional Transportation District (RTD) FasTracks Program for regional transit improvements, has been integrated into the three standard investment programs.





History and Basis

The first TMP was adopted in 1989 with the challenge to accomplish a 15% mode shift away from the single occupant vehicle. The Boulder community has advanced that goal with more than 20 years of consistent policy direction and documented results.

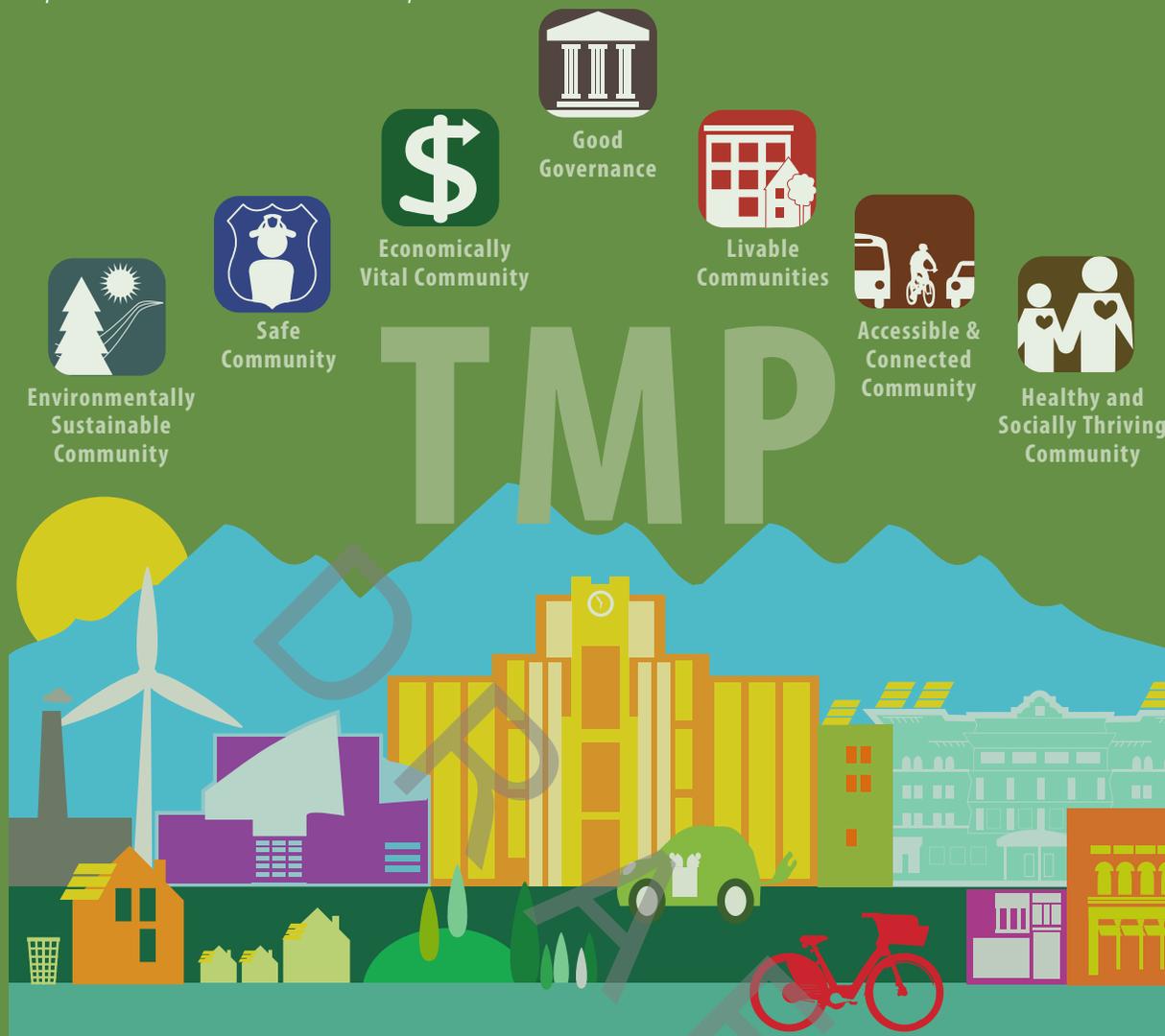
TMP Policy Evolution

This version of the TMP builds on the policies and directions contained in the 1996, 2003, and 2008 versions of the TMP. Key concepts developed through these updates are:

- **Walking is the fundamental way to travel** and connects travel by all other modes. The city will prioritize and support pedestrian travel as the primary mode throughout the community and ensure adequate connections to public transit.
- **The street network is the primary infrastructure uniting the fabric of the community.** It is a key public space and critical asset to community placemaking. It will be well-maintained and improved to maximize the safety and efficiency of the existing system for all modes of travel.
- **The city will maintain and support the current Community Transit Network (CTN)** and incrementally expand the bus system. The bus system will be supported by strategic investment in mobility options for older adults and those with disabilities, the targeted expansion of transit pass programs, land use changes and pedestrian-oriented design, seamless connections to other forms of travel, and high-quality transit stops and stations.

- **Major transportation funding improvements will build complete streets** (including all modes—pedestrian, bicycle, transit, and automobile) and implemented by prioritized multimodal corridor segment. With increasingly limited revenues, the city will make strategic improvements consistent with the priorities of the investment programs.
- **A complete and safe bicycle system will connect destinations within the community and the regional system.** This system will be enhanced to encourage use by all types of riders for a variety of trip purposes.
- **The Transportation Demand Management (TDM) program** builds on existing citywide efforts and the programs developed by partner Transportation Management Organizations (TMOs) and other service providers. TDM efforts should produce continuous improvement in all parts of the community toward the city's transportation and Climate Commitment goals.
- **The Transit Village Area Plan (TVAP)** is a model for comprehensive TDM and parking management programs that minimize traffic impacts while allowing redevelopment to create new neighborhoods that meet the needs and desires of the community.
- **Transportation improvements will emphasize the five policy Focus Areas** endorsed by City Council for additional work and refinement: Complete Streets, Regional Connections, Transportation Demand Management, Funding, and Integration with Sustainability Initiatives.
- **The TMP will contain prioritized investment programs and a list of projects to complete all modal systems.** Cost estimates will be periodically updated to reflect significant increases in the cost of construction materials.

The city's Sustainability Framework uses seven broad categories as desired community outcomes necessary for Boulder's vision of a great community. These categories help the city provide service excellence across departments and build toward an inspired future.



Context of this TMP

This TMP started with a policy review phase, which assessed progress under the plan since 2003 and provided City Council direction on the work areas for the plan. Council supported retaining the previous four Focus Areas (Complete Streets, Regional Travel, Transportation Demand Management, and Funding) while adding a new one for Sustainability. New to the context of this plan is the Sustainability Framework focus of the 2010 Boulder Valley Comprehensive Plan (BVCP). Council provided direction to integrate and coordinate planning efforts across the city under the Sustainability Framework. Consequently, the Framework was used as both an organizing and evaluation structure for this work.

This TMP also recognizes the city's current Climate Commitment of an 80% reduction in greenhouse gas (GhG) emissions by 2050. This target represents the scientific consensus on the reductions needed to avoid significant impacts from climate change and will require aggressive action across all parts of the community. The objectives of the TMP have been adjusted to reflect the expected contributions of the transportation sector toward this goal.

The September 2013 floods occurred mid-way through the development of this plan, highlighting the critical functions the transportation system performs for the community. Boulder was cut off from the region at the height of the storm and some residents of Boulder County were isolated for extended periods. Planning for resiliency both in the response and recovery to increase safety, minimize damage and provide travel options is a renewed focus for the city.

Finally, there are a number of other city planning efforts that will be informed by the TMP and will likely produce results affecting the plan. The TMP is a living document with an amendment process allowing the results of ongoing efforts to be integrated into the plan.



Regional forecasts suggest population will increase 50% by 2035, leading to a significant increase in non-resident employees

What is a Living Plan?

Since 2003, the TMP has been viewed as a living plan that should be updated to remain relevant and consistent with other city efforts. A TMP amendment process was approved by Council in 2006 with some amendments allowed administratively and others requiring Council approval. This allows the plan to remain consistent with other city actions and to most effectively make progress toward the TMP goals. Items that can be accommodated through the amendment process are:

- The TMP should reflect other city planning efforts such as area plans, corridor studies, or other Council decisions that modify and enhance the city's multimodal transportation system. The TMP amendment process ensures that city plans for transportation improvements are coordinated with land use and parking policies, consistent and up-to-date.
- City funding for transportation is largely dependent on sales tax revenue that varies significantly with the economic cycle. Periodic adjustments to revenues and costs provide a realistic basis for programming plan improvements.
- RTD financial support for the Community Transit Network (CTN), which includes the HOP, SKIP, JUMP, BOUND, DASH, STAMPEDE, and BOLT, also varies with sales tax revenue and should be reflected in city financial expectations.
- Growth in population and employment varies from forecasts and is strongly influenced by the economic cycle. The TMP should reflect regional and city growth forecasts.

- The RTD Northwest Area Mobility Study (NAMS) is the initial step in potential arterial bus rapid transit service in Boulder County. Additional studies and funding are needed to make these significant investments to improve regional access, reshape our community, and increase job access.
- The results of evaluating our transportation policies to identify areas that are not working or need improvement and to refine the policy direction.

Population and Employment Growth

Growth in population and employment in the Boulder Valley has been significantly less than that forecasted for the 2003 Transportation Master Plan. At that time the city was challenging the 2000 Census counts and city forecasts called for a 2025 population of about 148,000 and employment of 165,000 for the Boulder Valley. Two significant recessions in the 2000s reduced both business growth and relocation activities. Current estimates are a Boulder Valley population of 114,345 and employment of 99,668. Based on current zoning, the city forecasts the 2035 Boulder Valley population to be 125,477 and employment to be 122,144. During this same time period, State forecasts expect the regional population to increase almost 50%. As employment in the Boulder Valley is expected to increase at more than twice the rate of residential growth, these forecasts suggest a significant increase in non-resident employees.

Overall Approach for This Update

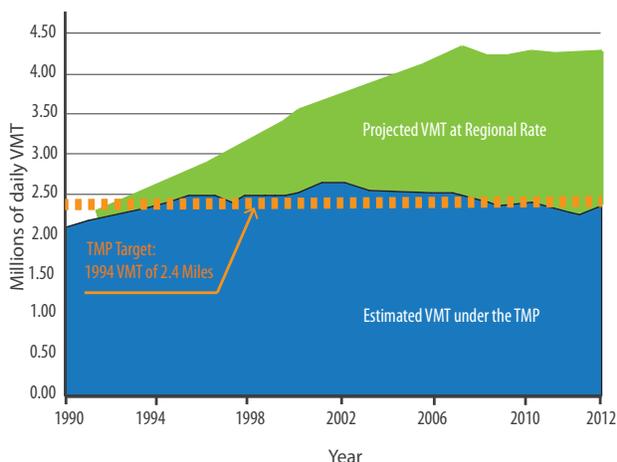
The Boulder community has achieved the 2003 TMP headline objective of “no long-term growth in vehicle travel.” But the policy review identified the need to accelerate mode shift to meet community goals. Council provided direction on the areas for work and refinement.

Policy Review Phase and Findings

The policy review included a public phone transportation survey, employee survey, cross-departmental interviews, Transportation Advisory Board (TAB) comments, and expert panel input. It concluded that the city’s transportation policy continues to produce positive results and has strong community support but would benefit from refinement. The policy review results were presented to Council in August and September 2012. Council agreed with these conclusions and directed that the work program be guided by the following:

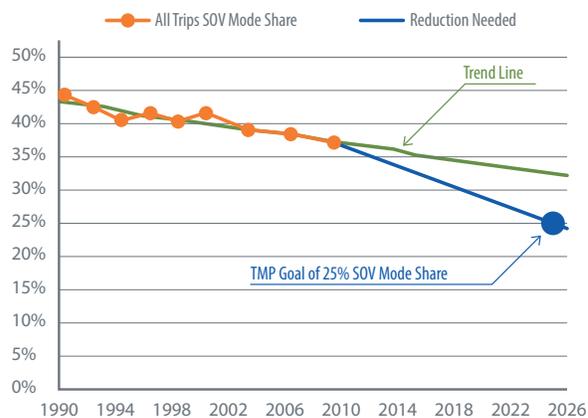
- Maintain the existing four TMP Focus Areas with the following emphasis:
 - *Complete Streets*, (formerly Multimodal Corridors): rename, address transit system planning, explore bike and pedestrian innovations
 - *Regional Travel*: continue the existing approach with a focus on US 36, the Northwest Area Mobility Study, and other regional connections
 - *Transportation Demand Management (TDM)*: explore community-wide Eco Pass program and improve TDM Plan process and toolkit for development review

**Figure 1-1
Vehicle Miles Traveled**



**Figure 1-2
SOV Mode Share**

Boulder Resident Trips



Source: City of Boulder Modal Shift Reports (Travel Diary of Boulder Residents)

- *Funding*: diversify transportation funding options and explore opportunities for additional funding to support on-going basic operations and maintenance needs as well as capital funding to achieve TMP goals
- Add “Integrate with Sustainability Initiatives” as a new Focus Area
- Add three new measurable objectives: Safety, Neighborhood Accessibility, and Vehicle Miles Traveled (VMT) per Capita for residents and non-resident employees

A Strong Foundation Built on Success

The Boulder community has achieved the 2003 TMP headline objective of “no long-term growth in vehicle travel.” This is reflected in the estimate of Boulder Valley vehicle miles of travel (VMT) shown in Figure 1-1 compared to the trend of the region.

Despite this success, a key finding from the policy review was the need to accelerate the rate of change in mode shift if the city is to meet the existing TMP objectives. Figure 1-2 shows the trend line moving in the right direction but at a rate missing the 2025 target of 25% single occupant vehicle (SOV) mode share.

The city’s Climate Commitment goal will require the need for additional mode shift and reduction in vehicle miles traveled as well as moving to cleaner fuels for transportation.



2014 WalkBike Summit

Community Input

This TMP is based on an extensive “listening and learning” phase with the community. Comments and ideas were collected from community events, advisory panels, in schools and from a variety of on-line and social media tools.

What Did the Community Say?

This TMP started with an extensive listening and learning phase based in the community. Outreach included advisory committees, Transportation Advisory Board meetings, the 2014 Walk Bike Summit, open houses, store front workshops and an active social media effort reaching a broad cross section of the community. All of these outreach activities are documented in the Summary of Community Engagement document.

The following themes were heard during the listening and learning phase:

- **Make health a central message.** Health speaks to motivating people to choose biking and walking. Look holistically at bike and walk mode share goals, including the benefits and contributions for public health, land use, and recreation.
- **Collaborate with community partners** including Boulder County Public Health and Transportation Departments, CU Boulder, Boulder Valley School District, and city departments such as Parks & Recreation to promote walking and biking.
- **Improve north-south bike corridors** with options for both on-street and off-street travel.
- **Expand the Community Transit Network (CTN) type service.** Giving priority for transit and transit service expansion along key local and regional corridors is important to advancing the CTN.

- **Parking management is key** to meeting TMP goals. Parking strategies are essential for compact, multimodal mixed use centers and neighborhoods.
- **Focus on connecting to the regional transportation system.** With a growing share of non-resident workers, work with regional partners and adjacent communities provide fast and efficient transit for commuters. An assertive stance from Boulder and Boulder County, strong partnerships, new fare tools, enhanced partnerships with RTD, and new funding are required to improve transit, add ridesharing services, and engage non-resident employees.
- **The introduction of “fully-featured” US 36 BRT service is an opportunity** to generate momentum for extending the BRT/transit lane enhancements into the city (e.g., on Broadway) and along other important regional corridors.
- **TMP outcomes need to align with the developing Climate Commitment goal** to reach a minimum of 80% reduction in greenhouse gas emissions below 1990 levels by 2050. Success will require much greater integration of transportation and land use policies as well as the development of new initiatives to change both personal vehicles and the transit fleet to low/no carbon energy sources.
- **Giving more workers the opportunity to live and work in compact, walkable neighborhoods** and mixed-use districts is an equally essential outcome to improving regional transit. This theme is particularly relevant to the concurrent work efforts on a Comprehensive Housing Strategy, Sustainable Streets and Centers, and the Neighborhood Access analysis.

- **Boulder’s land use policies and patterns are key factors** influencing the motivation for people to bike, walk and access transit more. Improvements in these areas must be integrated with the TMP goals to support changes in travel behavior.
- **Boulder needs to plan for changing demographics** and deliver a “golden menu” of options to meet the demands of a community that is growing older while recognizing a younger generation of people that are becoming less inclined to rely on automobiles.
- **Real-time arrival information** and improved passenger information are the most requested improvements and are needed to meet passenger expectations.
- **Implement new local transit connections** to reduce the need for transfers, improve frequency, and increase service span.
- **Improve transit access to schools** to reduce vehicle miles traveled (VMT) and congestion in school areas. Open enrollment at Boulder Valley School District poses a particularly daunting challenge as parents are choosing to drive farther to ensure their children have access to desired educational opportunities.



Whittier Elementary Great Neighborhoods Presentation: Growing Up Boulder
 Photo Credit Lynn M Lickteig

Pathways to Success

Five Focus Areas were identified as areas having opportunities for refinement and enhancement to help the community achieve its Transportation and Climate Commitment goals. These areas are interrelated and need to be mutually supporting to have the greatest benefit.

Five Focus Areas

Complete Streets

Multimodal corridors are the major transportation facilities that provide intra-city access and connect to the regional transportation system. The 1996 TMP identified these corridors and called for improving all modes of travel along them, a concept now widely known as Complete Streets. These corridors carry a majority of the trips in the community and link important activity, employment and commercial centers. Maximizing their efficient trip carrying capacity requires improving the relationship between the multimodal transportation system, land use, and urban design. Complete streets are developed as community assets that bring people together.



Regional Travel

Improved regional connections are needed to support the growing population of employees working in Boulder but living elsewhere. Such improvements depend on collaborative efforts with other communities and agencies to bring planning and funding resources to each regional corridor.



Transportation Demand Management (TDM)

Boulder is a developed community and will not grow outward due to its open space policies, placing more person travel on the existing roadways. Improved management and utilization of the existing system is a primary strategy for providing travel options due to the limited ability to add roadways and the need to limit community and environmental impacts. TDM together with parking management is the most cost effective strategy for maintaining the function of the transportation system and provides a variety of programs such as RTD's Eco Pass, rideshare options, telework, bikeshare, carshare, and traveler information systems.



Funding

Providing transportation facilities and programs requires public funding, yet every TMP has only been partially funded. Since 2003, declines in city sales tax revenue and unprecedented increases in the cost of construction materials have increased the portion of the plan that is unfunded. Fortunately, a 16-year increase in revenue was approved by the voters in 2013 to largely support maintenance of the existing system. But job and population growth increases the demand for travel and requires additional investment in providing person travel options while maintaining the community's quality of life.



Integrate with Sustainability Initiatives

The BVCP Sustainability Framework is now the organizing structure for all city planning efforts. Consequently, integration and collaboration across the city organization is the expectation of the TMP. The entire city organization is expected to implement the goals and policies of the TMP while the TMP implements other aspects of city goals like Climate Commitment and economic vitality. The Sustainability Framework provided the evaluation matrix to assess proposals for the TMP.



2 | FIVE FOCUS AREAS

These areas were identified by City Council for enhancement to move the community toward its Transportation and Climate Action goals.

“Great streets are an important element of creating community and need to be shaped, comfortable, connected, safe, and memorable.”

- Victor Dover



Complete Streets

Complete Streets accommodate all modes of transportation by planning, designing, and building facilities for pedestrians, bicyclists, transit riders and vehicle drivers.



The Complete Streets focus in this plan is on Pedestrian and Bicycle Innovations and a Renewed Vision for Transit.

Bicycle and Pedestrian Innovations

This section seeks to broaden the safety and appeal of bicycling and walking in Boulder. An emphasis is placed on fine-tuning the existing system through targeted enhancements to support cyclists and pedestrians of all ages and abilities. Women, older adults and children are the targeted audience for these enhancements. Engineering improvements coupled with strategies to encourage, educate, enforce, and evaluate bicycling and walking are the “Five E’s” that comprise a comprehensive approach to increasing the walk and bike mode share.

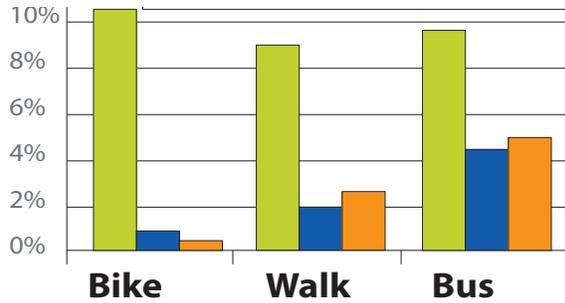


Boulder’s compact size and the city’s long-standing leadership in offering travel choices means a large share of people in Boulder commute to work by walking, biking, and transit. Boulder residents use these modes at higher rates than the rest of the Denver Metro Region and the nation. Boulder also compares well to peer communities in the US.



Figure 2-1
Work Mode Share - 2008-2012

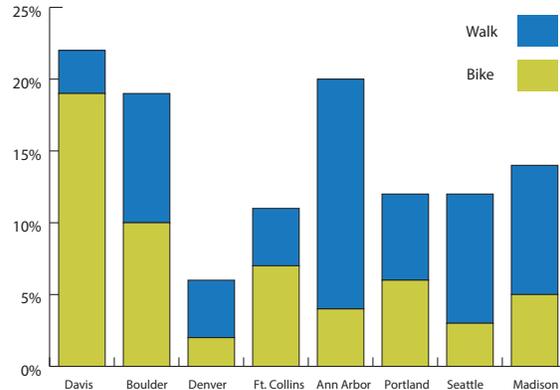
5 Year Average | American Community Survey



Since 1990, Boulder has been working to build a great transportation system that supports walking and biking. These efforts, coupled with programs to promote safe use of the system, have earned the community national recognition for walking and biking. Achieving our TMP and Climate Commitment goals requires increasing walking and biking trips even more.

Figure 2-2
Boulder Walk-Bike Mode Share Comparison

5 Year Average | American Community Survey



Living Lab/Innovations

As part of this TMP update, the city introduced new bicycle facility treatments around town through a Living Labs program. These are temporary installations that offer the community a real world environment to test new bike treatments and determine if they are appropriate for Boulder. The aim is to enhance the on-street bike system and improve comfort and confidence for people who want to bike but don't feel comfortable or confident sharing the roadway with motor vehicle traffic. The city has used a low-stress bike network analysis tool to identify areas where new treatments may address the concerns of these potential bicyclists.

The Boulder Walks program is a companion effort that includes walk audits and walkabouts with neighborhood residents and city staff. Walk audits are a new tool to assess the qualitative aspects of walking and to identify design elements that support a walk-friendly community. Walkabouts are intended to help residents identify unique and interesting pedestrian aspects of their neighborhood and result in walking maps containing these to encourage walking. A Neighborhood Access tool has been used to map the walking access people have to locations and businesses needed to meet daily needs.

Bike 2.0 means accommodating riders from 8 to 80 years of age—especially women, older adults, and families with children

Boulder residents are more likely to ride a bike than in other US cities; biking to work at a rate 20 times the national average. However, those currently riding follow national trends. The 2012 Boulder Travel Diary shows there are twice as many men as women commuting by bike, while half of all trips completed by women are made by SOV or to transport children compared to just one-third of trips by men. Therefore, a primary goal of this TMP is to increase trips by older adults, women, and families with children. Many are likely "interested but concerned" riders who like riding a bike but don't feel comfortable or confident sharing the roadway with motor vehicles.

Throughout the listening and learning phase of the TMP update, staff also heard that more work is needed to create a bike culture in Boulder that goes beyond sport cycling. The city also learned the community desires to strengthen the coalition of community-based organizations in support of walk-friendly community design.





Transit

Renewed Vision for Transit

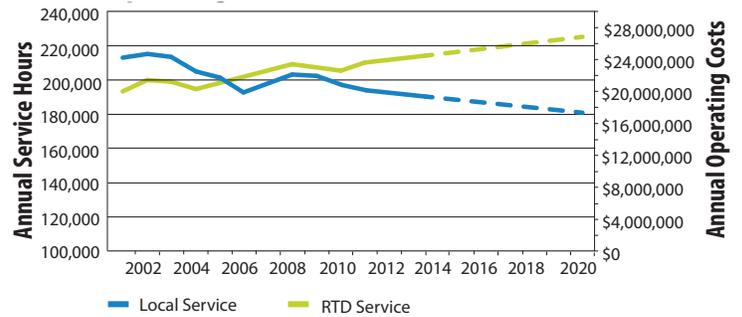
Since the community-designed HOP service started in 1994, Boulder has worked to integrate high quality transit service as a travel choice for all members of the community. Increasing the ease and attractiveness of transit use is key to long term sustainability and mobility.

Why a Renewed Vision for Transit?

While the city made significant progress in transit service in the 1990s, that progress stalled in the 2000s. Transit ridership has stagnated over the past decade, likely due to the decline in funding for local transit service in Boulder. During this time, RTD has cut service in Boulder by 20,500 hours, the equivalent of the DASH route. Yet additional service is needed to increase ridership and address the 80% of non-resident Boulder employees that drive alone to work. Capturing this market is critical to meeting the community's sustainability, climate, and mode share goals. The Transit [State of the System Report \(SoS\)](#), completed as part of the transit planning element of the TMP, identified significant opportunities to improve access and connections to transit, serve East Boulder and other transition areas such as East Arapahoe as they redevelop, and serve the growing areas of Boulder Junction and CU East Campus.

The city plays an active role in ensuring its residents and workers have access to quality public transit. The city operates the HOP route under contract with Via and "buys up" service hours from RTD to increase service frequency on local routes. Buy ups from the city and county help support the seven existing CTN routes. The city is also very active in developing partnerships to enhance regional transit. Figure 2-4 shows the distribution of the \$1.7 million the city spent on transit in 2012. During the same year, RTD spent \$22 million on local transit operations in Boulder and an additional \$21 million on regional service connecting Boulder to other communities. The city leverages its transportation resources through cost sharing agreements with the University of Colorado and RTD to help fund the HOP.

Figure 2-3
Boulder Local Transit Service Operating Cost and Service Hours



Source: City of Boulder

Figure 2-4
City of Boulder Transit Funding Contributions

Cost Category	FY 2012 Budget
HOP	\$722,797
JUMP & BOUND Buy-Up	\$409,719
Paratransit	\$228,568
Overhead, Advertising, Misc. Capital Expenses	\$262,796
Personnel	\$96,000
Total	\$1,719,880

Source: City of Boulder

The HOP celebrates 20 years of service in October 2014 as the first Community Transit Network route. It is a community-scaled bus with large windows, unique branding, and perimeter seating to encourage community interaction. The Renewed Vision for Transit builds on the success of the CTN.





State of the System

The [State of the System Report](#) provides in-depth information about land use, travel demand, and transit service and use patterns in Boulder today. It also looks at leading transit innovations in the U.S. and abroad.

Key findings from the State of the System Report include:

- **Community Transit Network (CTN)** routes are among the most cost-effective and productive transit routes serving Boulder County, particularly those operating largely in Boulder.
- **Ridership is approaching a 10-year high**, even as service hours on local routes have fallen by 9% since 2003.
- **There is a growing gap in funding for transit** due to a 40% decline in purchasing power since 2002 and stagnant sales tax revenue over the past ten years.
- **The city's transportation demand management system works**—surveys show that people with an Eco Pass are 4 to 7 times more likely to ride transit.
- **The in-commute is growing** due to high housing costs and limited availability of housing in Boulder combined with a strong and growing job base.
- **Planned development in East Boulder** offers significant opportunity for transit investment, including Boulder Junction, Boulder Community Health Foothills Campus, CU East Campus, and Gunbarrel.
- **Significant investments will be needed to develop an interconnected, multimodal street network in East Boulder** that enables safe and efficient access to transit for pedestrians and bicyclists.
- **Changing demographics are shaping transit needs**, including Millennials, Generation X, and aging Baby Boomers.
- **US 36 BRT is an opportunity to improve regional mobility.** The Northwest Area Mobility Study (NAMS) has prioritized three additional arterial BRT corridors connecting Boulder with surrounding communities.
- **Partnerships will be critical to accomplishing the Renewed Vision for Transit**, including Boulder County, RTD, CU, and others.



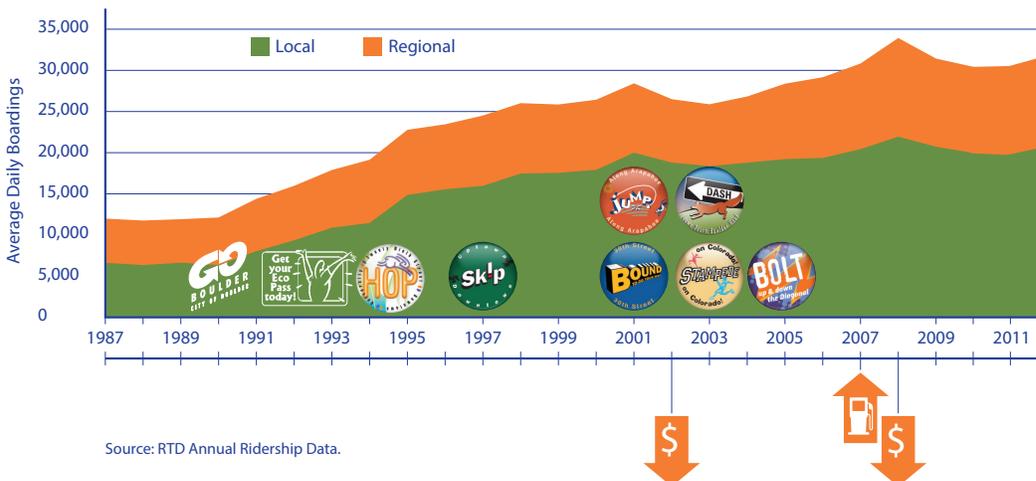
The State of the System Report was a first step in developing the Renewed Vision for Transit in Boulder. Image from Nelson\Nygaard

Boulder residents ride transit more than twice the national average.

Transit ridership increased about 300% with the implementation of the high-frequency Community Transit Network. However, funding reductions threaten this progress. Thirty local and regional routes provide 32,000 daily transit trips into and from Boulder. Boulder's Community Transit Network routes, including the HOP and the SKIP, are the most productive and cost-effective routes operating in Boulder. Without transit, Boulder residents and workers would drive approximately 250,000 more miles each day and create over 100 additional metric tons of greenhouse gas emissions. Analysis conducted during the TMP also shows benefits for the "green dividend," reflecting dollars that do not leave the community in fuel costs. Transit use by Boulder residents and workers retains approximately \$7 million annually that can be spent locally.

Figure 2-5
Boulder Transit Use

Logos represent developments in Boulder transit



Source: RTD Annual Ridership Data.

Greening the Transit Fleet

In addition to expanding the use of transit, the transit fleet will also need to be gradually upgraded to reduce the greenhouse gas emissions from what are currently entirely diesel powered buses. To achieve the city's climate goals, the majority of transit will need to take place with low-carbon energy vehicles by 2035, with all transit vehicles using clean energy technology by 2050.



Recent Progress in Regional Partnerships

- The US 36 corridor is under construction and reflects consistent work by the city since the mid-1990s to provide actively managed High Occupancy Toll (HOT) lanes for transit and a continuous regional bike facility. The project includes a dedicated lane prioritized for bus rapid transit (BRT), providing greatly enhanced travel times and an 18-mile regional commuter bike facility along the corridor.
- With support from the city, Boulder County has had significant success in improving transit connections between communities in the county. These efforts include the BOLT and DASH transit services and the community Eco Pass programs for Nederland, Lyons and Longmont.
- Colorado Department of Transportation (CDOT) improvements on east Arapahoe (SH 7) and the Diagonal (SH 119) have been multimodal and include bus priority treatments to improve transit travel time.
- The city and its regional partners have also completed major improvements at the Broadway/ Euclid intersection including a new underpass and transit stops. Funding for this project came from five partners.
- The Boulder Junction (Boulder Transit Village) transit facility called for in the 2003 TMP is under construction as a partnership between the city, RTD and private developers.
- The city and other Boulder County communities have agreed on the results of the RTD Northwest Area Mobility Study and are supporting efforts to fund the next steps of work toward implementing arterial BRT. The corridors connecting to Boulder are the Diagonal (SH 119), Arapahoe (SH 7) and South Boulder Road.

Regional Travel

With significant population growth expected to the east and employment growth in Boulder, regional travel is projected to show the largest increase over the next 25 years.



Population growth to the east and new employment, education, and entertainment opportunities in Boulder will increase the regional travel to and through Boulder. If our businesses are to successfully attract and retain employees and customers, we must provide a range of regional travel options to address congestion and mobility needs.

Transportation modeling by Boulder County shows the greatest increase in future congestion occurring on the limited number of regional facilities connecting Boulder with neighboring communities. While the city has an investment program to fund facilities and programs within the city, very little additional investment is programmed for the regional facilities beyond the US 36 improvements. Without some change, a significant increase in regional travel will occur on facilities that look much like they are today. While travel by Boulder residents within the city is broadly multimodal, regional travel is still highly dependent on single occupant vehicles (SOVs). If future regional travel depends on SOVs, the regional facilities will have increasing congestion. Based on the collaborative model of US 36, the City of Boulder can play an important role in facilitating regional action to provide and fund convenient travel choices. Due to the distances of regional trips, future travel will need to be balanced among automobiles, transit, and strategies such as carpools, vanpools and first and final mile connections for transit riders. As with the US 36 corridor, regional corridors will require long-term regional partnerships to produce solutions that include and integrate multiple travel options.



Figure 2-6
**2010 & Projected 2035 Intra-County Daily Trips
within Boulder County**

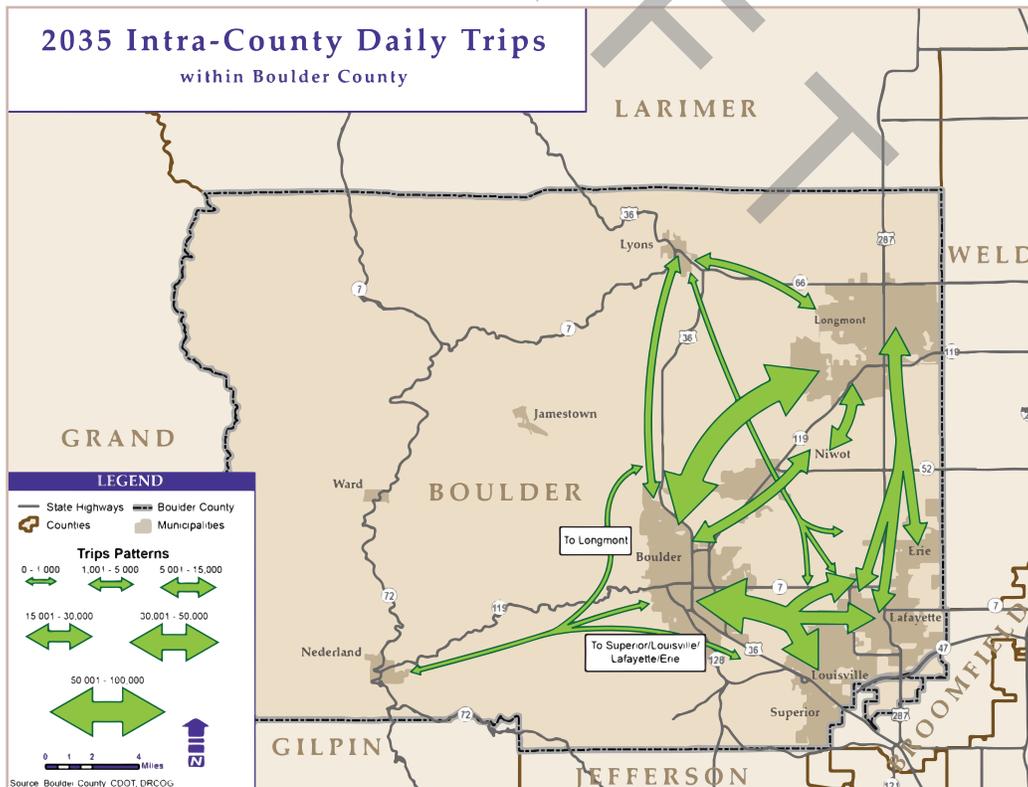
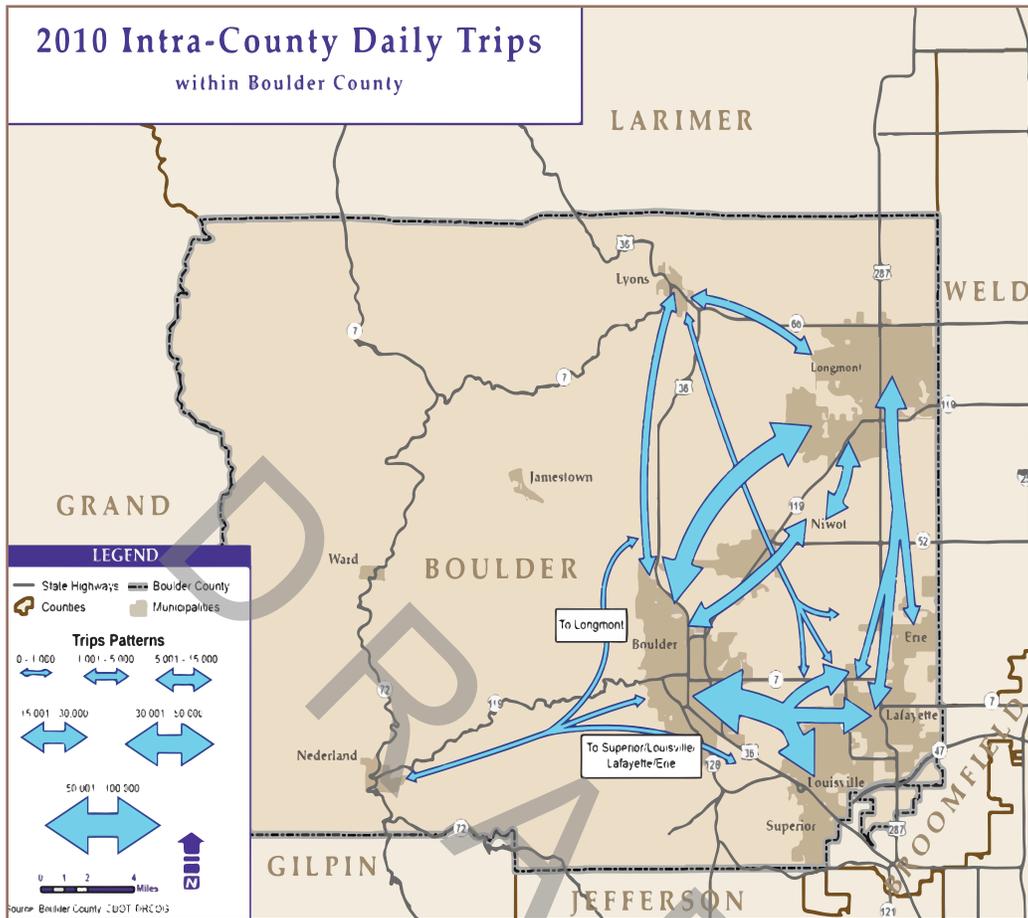
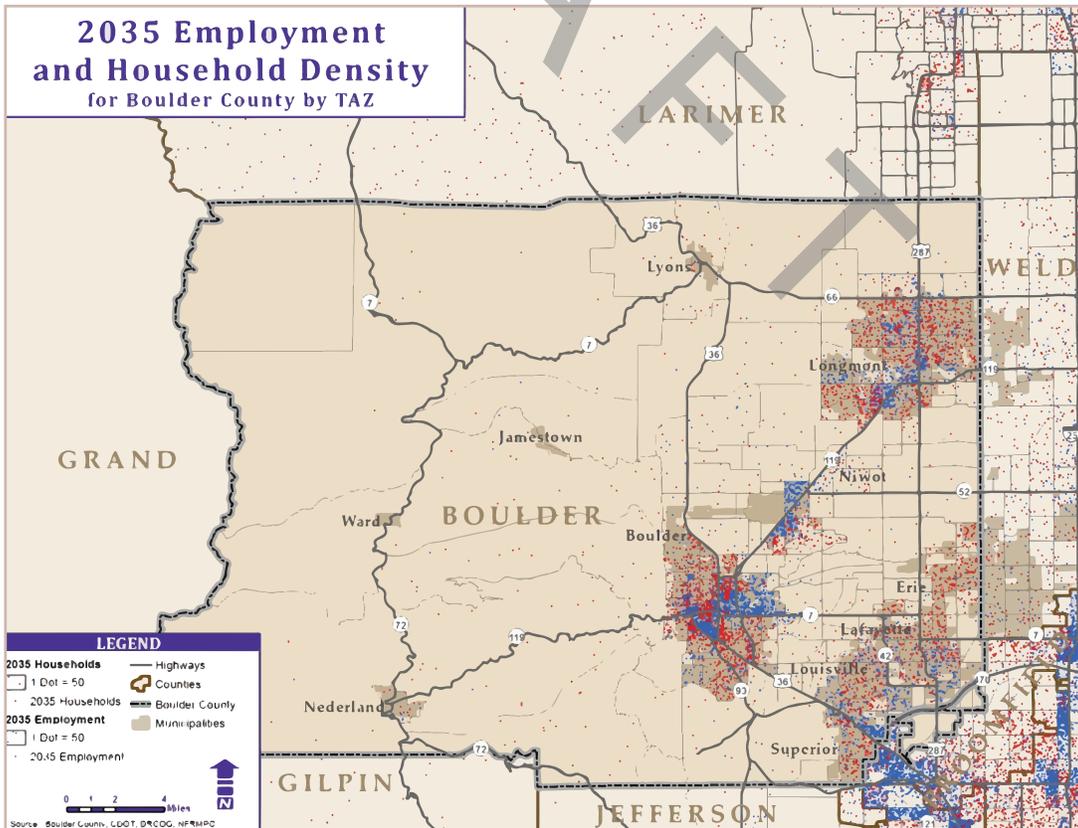
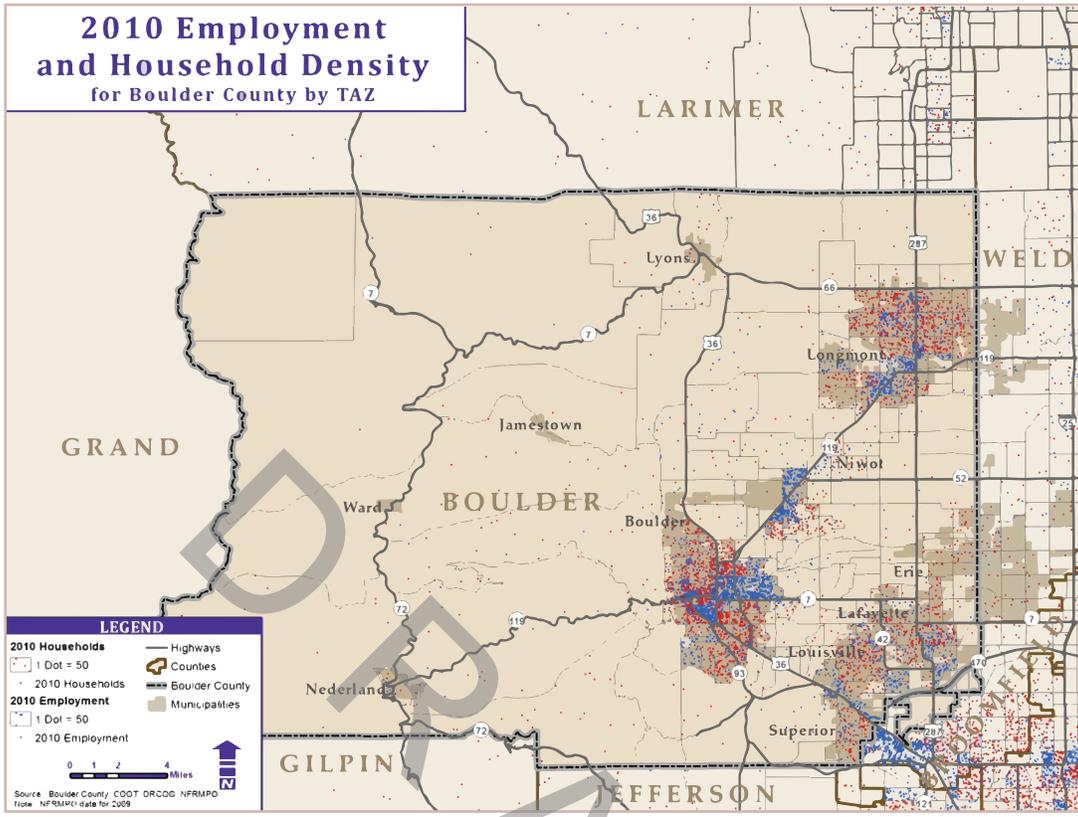


Figure 2-7
2010 & Projected 2035 Employment/Housing Density Growth
within Boulder County





Transportation Demand Management

Transportation Demand Management (TDM) strategies offer people travel choices and options while improving the efficiency of the existing system in a cost-effective way.



TDM is a major component in the effort to achieve Boulder's transportation, sustainability and GhG reduction objectives. Over the past few years, the business community has become more proactive in providing travel choices for their employees through programs like RTD's Eco Pass, employer shuttles BikeShare, and bike amenities. TDM includes the following benefits:

- Improved access and mobility for the community
- Enhanced employer access to employees
- Increased customer parking availability at peak times
- Tax benefits
- Cost savings to employers and employees through tax benefits
- Decreased congestion, GhG emissions, and air pollution

The city must build on its partnerships with businesses and non-profits to both achieve the transportation objectives and to continue as an attractive and vital employment and commercial center. For example, Boulder Transportation Connections (BTC) is a local transportation management organization that works in partnership with the city to provide targeted employer outreach, TDM program implementation, and evaluation of TDM plans. BTC is also responsible implementing DRCOG's regional Way to GO marketing and outreach program focusing on ridesharing, telework and vanpooling. Other key local and regional partners include 36 Commuting Solutions, Boulder B-Cycle, eGo Carsharing, and Community Cycles.



What is Transportation Demand Management?

TDM promotes more efficient use of the existing transportation system by influencing the time, route, or mode selected for a given trip. TDM strategies increase travel choices with the aim of balancing transportation system capacity and demand. Examples include:

- Incentives such as Eco Passes and pre-tax transit benefits
- Providing appropriate price signals such as unbundled, managed, and paid parking
- Modal strategies such as ridesharing, carsharing, vanpools, and teleworking
- First- and Final-Mile solutions such as bikesharing
- Design improvements such as long-term bicycle parking and preferential parking for ridesharing

TDM works best with a sufficient mix and density of land uses, urban design integrated with transportation and multiple and seamless choices between modes of travel. Boulder's downtown and Boulder Junction are models of how integrated land use, parking management, access to transportation options, and TDM strategies can limit the increase in vehicle trips from development.

For new residential and commercial developments, TDM plans are used to mitigate impacts on the transportation system by implementing strategies to reduce vehicle trips and increase multi-modal access. In conjunction with the Access Management and Parking Strategy (AMPS), a revised Transportation Options Toolkit is being developed to improve the effectiveness, enforcement and evaluation of TDM plans.





Where Does TDM Work Best?

Three ingredients work together to provide the fertile ground necessary for a Transportation Demand Management plan to be effective in providing individuals with transportation choices. These ingredients include: ((1) land use with a sufficient mix and density of land uses in the right places, (2) placemaking and attractive urban design which integrates with our transportation system, and (3) a comprehensive transportation system that provides multiple choices and is seamless between modes of travel. The Transit Village Area Plan, which guides development at Boulder Junction, shows that integrated land use, transportation, and TDM planning built on the base of managed parking can allow significant development while minimizing the increase in auto trips.

In Boulder Junction, two overlapping taxing districts provide sustainable funding to implement parking management and TDM programs to meet the area's Trip Generation Allowance. Within Boulder Junction, 55% of all trips must be made without use of the single occupant vehicle. To meet this requirement, the Parking Access district provides the means to manage parking and build shared structured parking over time. The TDM Access district funds will provide all residents and employees of Boulder Junction with RTD Eco Passes, free carshare memberships and discounted annual Boulder B-Cycle memberships. Boulder Transportation Connections will work with the city to implement and monitor the Access District and identify ways to replicate this model in existing and new districts.





Funding

The city's transportation budget is formulated within the policy context of the TMP and is based on implementing a balanced, sustainable, multi-modal transportation system.



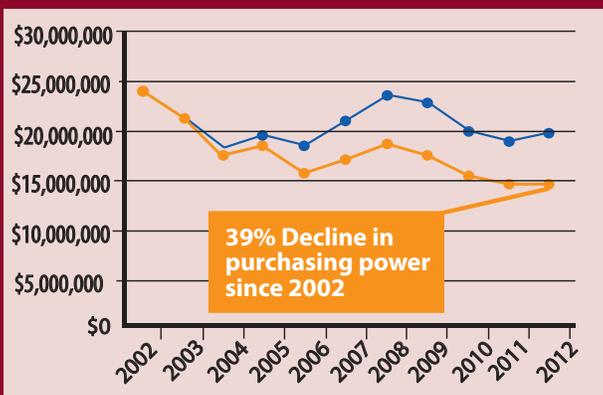
For funding the transportation system, the TMP recommends that the city:

- Adequately preserve the existing infrastructure
- Strive to increase safety
- Maximize the efficiency of our existing system (roadway, transit, bicycle, and pedestrian)
- Enhance mobility through investments in the completion of the multimodal system (pedestrian, bicycle, and transit)

With limited resources, investments are first focused on maintaining the existing infrastructure with remaining resources allocated to enhancements. The TMP contains a complete streets investment strategy focused on the system of ten corridors that constitute the designated multimodal corridor grid. The TMP allocates investment for enhancements in the modal systems based on prioritized multimodal corridor segments.

Under the established funding priorities and investment programs, maintenance, operations, and safety activities receive the majority of transportation funds. As the roadway system is the largest and most complete of the modal systems, it requires the majority of maintenance and operation funds in each investment program. The next funding priority after maintenance and safety is improving mobility through complete street enhancements and efficiency improvements. Since 1996, the projects needed to complete each system have been identified in the TMP. While the street system largely exists today, other systems such as transit and bicycle are only partially developed and consequently require greater investment to reach completion. System completion includes a grid-based high-frequency transit system and a grid-based bicycle system of primary and secondary corridors intended to accommodate all levels of users.

Figure 2-8
Declining Purchasing Power





Broadway Euclid Complete Streets Capital Project

Since the 1996 TMP, the plan has recommended that the city move toward a preferred maintenance practice of life cycle replacement. In 2013, following several years of work with the community and technical evaluation of potential funding sources, Council placed two sales tax measures for transportation on the November 2013 ballot. These measures were approved by Boulder voters, redirecting two different increments of expiring sales tax revenue to transportation, providing a total of 16 years of additional funding. With the passage of both measures, a majority of the funding over the 16 years will be used to address the maintenance backlog of the 2000s. This funding will:

- Fund the backlog of operations and maintenance projects for the city's transportation system
- Operate and maintain basic service levels for roadway pavement, sidewalks, bike lanes, off-street paths, snow removal, and street sweeping
- Provide core system enhancements and maintain transit service hours

Investment Policies



The city shall generally give priority to transportation investments as follows:*

- **Highest priority** - system operations, maintenance and travel safety;
- **Next priority** – operational efficiency improvements and enhancement of the transit, pedestrian and bicycle system;
- **Next lowest priority** - quality of life, such as sound walls and traffic mitigation; and
- **Lowest priority** - auto capacity additions (new lanes and interchanges).

* *Within each priority level, all items are given equal weight.*

Investment in modal enhancements will be integrated between all modes, focused in the designated multimodal corridors, and prioritized by the ranked multimodal corridor segments.

As the street network is the primary infrastructure for all modes, it will be managed and expanded to balance its use by all the modes. Roadway capacity will not be added at the expense of the non-auto modes.

The city's transportation system includes all the modes and the resources needed for the sustainable operation of the system.

Any consideration of the share of system funding allocated to future growth will be based on this system.



Transportation Revenues and the New Fiscal Reality

Revenues to support the city's transportation programs and investments come from a variety of sources, with by far the largest share coming from the dedicated transportation sales tax of six-tenths of a cent on a dollar. This tax was approved by the voters in 1967 and provides about 63% of funding for transportation. Since 2000, city sales tax revenues have had two periods of decline. These reductions and increases in construction material costs, means the city lost about 38% of its purchasing power in real dollar terms. The Nov. 2013 1.5 tenths of a cent increase to the sales and use tax approved by voters provides 16 years of funding—primarily operation and maintenance of the existing multimodal system with limited capacity to improve the system. Council has stated a desire to eventually transition transportation funding to more user-fee based sources and the city will continue to explore potential user-fee based transportation funding mechanisms. Without additional long-term funding, increasing costs in materials and energy suggest that operations and maintenance could consume the entire transportation budget.

Figure 2-9
Transportation Budget

Operating vs. Capital





East Arapahoe Interdepartmental Walking Tour



North Boulder – Victor Dover Interdepartmental Walking Tour



CU East Campus Joint Open House

Integrate with Sustainability Initiatives



This new focus area emphasizes city-wide integration under the city’s Sustainability Framework to build resiliency and long term community health.

The 2013 Cool Planning workshop by Smart Growth America at the start of the planning process provided a unique forum for inter-department creative collaboration. The results of the workshop and on-going cross-department collaborations are being used in multiple city planning efforts. An integrated management structure for the TMP and other planning efforts has been established along with a number of joint working teams. Transportation staff will continue to participate in sustainability planning efforts across the organization, including the current Envision East Arapahoe project, Access Management and Parking Strategy (AMPS), the North Boulder Community Plan, and the Comprehensive Housing Strategy.

Transportation is a major component in meeting the city’s Climate Commitment goal and a major work effort under Climate Commitment. This work developed a comprehensive inventory of transportation emissions and analyzed the potential for greenhouse gas emission reductions. The results of this work are contained in the next chapter and highlight the need for a multifaceted strategy in greenhouse gas (GhG) reduction. The challenge of the 80% reduction goal requires that the community increases mode shift, transitions to cleaner fuel sources for both the personal vehicle and transit fleets, houses more of our workers, and creates mixed use neighborhoods where more destinations are closer together and can be reached by walking. In addition to GhG reductions, these strategies will have multiple co-benefits under the Sustainability Framework.

The Sept. 2013 flood highlighted the importance of the transportation system to the community. Individuals and portions of Boulder County were isolated for extended periods and evacuees without cars needed to rely on other modes for moving around Boulder. The accessibility of major destinations in Boulder by the Community Transit Network and transit passes distributed through relief efforts were a major asset to residents displaced by the flood. Other residents found that the bike system recovered quickly and that bikes offered a travel option where roads were damaged or closed. The multimodal transportation system is one aspect of resilience and is an asset of the community in resilience planning efforts.

Another aspect of recent research and inter-departmental collaboration is the need for increased integration of land use and transportation planning. The Envision East Arapahoe project is seen as the first of numerous corridor planning efforts that will integrate land use, transportation and TDM strategies to support city goals in Transportation, climate, and community placemaking. This results in an iterative cycle for continuous improvement and coordination among transportation and land use planning, economic vitality, environmental and public health, and a wide array of community livability goals.

3 | FOCUS ON PERFORMANCE

The TMP goals, policies and measurable objectives are intended to reflect how the transportation system responds to the Boulder Valley Comprehensive Plan and the community's vision for sustainable transportation in Boulder.

This chapter contains the TMP goals and the measurable objectives for the year 2035. While the objectives reflect important aspects of the plan's goals, it is important to recognize that no set of objectives completely represents the ultimate goals of the TMP in building the sustainable community described in the BVCP and its Sustainability Framework. The measurable objectives discussed below would meet aspects of these broad community goals. However, they can only be achieved through significant investment and policy actions on the part of the city, its citizens, and private sector and agency partners. The city and its community partners will continue to track progress for all of these objectives and use the results to adjust and refine future plans and investment decisions with a focus on continuous improvement. The city intends to publish the [Transportation Report on Progress](#) every two years as one way to monitor progress in meeting the community's vision for transportation and help guide the course for a transportation system to serve people of today as well as future generations.

Vision Statement

While the TMP has long contained goals and principles, there has not been a concise vision statement for the transportation system desired by the community. The following statement was developed through the integrated and coordinated planning efforts of this TMP and reflects 25 years of experience with shifting single occupant auto trips.

VISION

“Create and maintain a safe and efficient transportation system meeting the sustainability goals of the community to accommodate increased person trips by providing travel choices and reducing the share of single occupant auto trips.”

The 2014 TMP retains the goals from the 2008 TMP:

- An **integrated, multimodal transportation system** emphasizing the role of the pedestrian mode as the primary mode of travel.
- A transportation system **supportive of community goals**.
- **Sufficient, timely, and equitable financing mechanisms** for transportation.
- **Public participation and regional coordination** in transportation planning.
- A transportation system **supportive of desired land use patterns and functional, attractive urban design**.

The 2035 TMP objectives described on the following pages are enhanced to better reflect the policy direction of the city, particularly the Climate Commitment reduction of greenhouse gas emissions.



TMP Performance Measures and Air Quality/GhG Reduction

Part of this plan involves collaboration with the city's Climate Commitment analysis to quantify the GhG emissions generated through the transportation sector and identify strategies making a significant contribution to the current 80% GhG reduction target. The core objective is to establish an ambitious but achievable objective for transportation GhG reduction.

A multi-departmental and consultant team conducted this analysis and the strategy development process based on the 2014 goal of an 80% reduction in GhG emissions by 2050. The steps of the analysis process were:

- Quantify VMT and GhG emissions from seven leading transportation sectors.
- Factor up travel expectations to 2035 based on population and employment forecasts.
- Project the VMT reduction potential of the range of travel demand management (park-

ing and access management) and travel mode change actions (bike/walk promotion, transit system development, other travel share programs).

- Evaluate heavy vehicle, including transit, emissions of GhG and different clean vehicle options.
- Quantify the anticipated GhG reductions created by federally-mandated improvements in light-duty vehicles (CAFÉ standards).
- Identify the additional reductions needed from innovations like energy efficiency, fuel source switching, land use change and additional TDM programs like expanded parking management.

The inventory results of this analysis are shown in Figure 3-1.

Figure 3-1

Climate Commitment 2013 Inventory of VMT and GhG Emissions

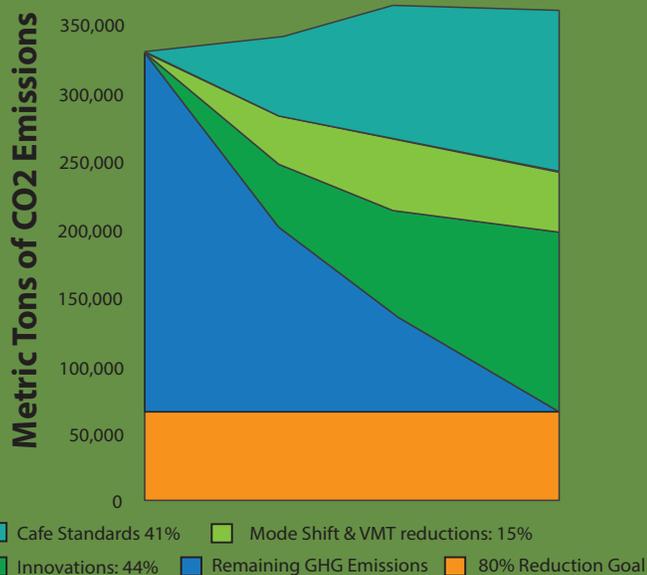
Transportation Sector	Annual VMT	% VMT	Annual GhG (MT)	% GhG
Resident	323,769,600	51%	118,809	38%
Non-Resident Employee	192,192,000	30%	70,526	23%
Student	70,200,000	11%	25,760	8%
Visitor	25,550,000	4%	9,376	3%
Transit	10,435,000	2%	31,110	10%
Freight	18,250,000	3%	52,980	17%
Boulder Personal Aircraft			2,188	0.7%
Annual GhG (Metric Tons)			310,749	100%

Source: Climate Commitment Analysis, 2013

Findings of this analysis show that Boulder residents are responsible for the majority of transportation-related GhG emissions, either from auto vehicle use or from freight deliveries. Average vehicle emissions are similar to national averages, as the high share of efficient hybrid vehicles is offset by a high number of SUVs. Freight and transit also have a disproportional share of GhG emissions relative to their VMT, due to their diesel engines and heavy weight.

The results of the Climate Commitment analysis are reflected in the expectations for GhG reduction provided in the chart below. A growing number of cleaner fuel options are available for the transit fleet, including electric vehicles, and the potential for reductions from these options has been analyzed. Electric personal vehicles are among the options available for the innovations wedge, which also includes land use changes to make long trips into short ones that can be walked or biked. These changes will also have many co-benefits to the community under the categories of the Sustainability Framework, including community livability, economic vitality, and a wide array of environmental benefits. A detailed description of the Climate Commitment analysis and an extensive set of policy options for promoting fuel source change for the transportation fleet are contained in the Climate Commitment technical appendix. A related sensitivity analysis conducted as part of the transit planning shows that both the community Eco Pass and expanded managed parking have the potential to significantly increase transit ridership and decrease VMT.

**Figure 3-2
Transportation Sector VMT
and GhG Emissions**



Source: Climate Commitment Analysis, 2013



TMP GOALS AND OBJECTIVES

Previous versions of the TMP contained goals, objectives, and an extensive set of policy statements. As many of the policies from previous plans have been incorporated into city design standards and practices, these policies continue as a given for the city. The smaller set of policies contained in this plan focuses on areas where continued progress is needed. Modal specific policies are contained in Chapter 5.

Objectives are those measurable things that reflect our goals. These objectives are expanded to more fully reflect the desired transportation system with the last three objectives being new to this plan. These objectives represent targets for 2035 that have been modified to reflect the city's Climate Commitment target of an 80% reduction in GhG emissions by 2050. The strategies and programs to achieve this objective are summarized in Chapter 7 and are contained in the detailed action plans provided in the supporting appendices.

Reduce vehicle miles of travel (VMT) in the Boulder Valley by 20% by 2035

Modeling of changes in travel behavior and research conducted in other communities suggests that strategies in the transportation sector can produce a 20 to 40% reduction in VMT with the corresponding reduction in GhG emissions. Given Boulder residents already have made significant mode shifts and the difficulty in moving regional trips from the single occupant auto, the Climate Commitment analysis suggests that an aggressive program aimed at mode shift could reduce total VMT by approximately 20 percent.

Reduce single-occupant vehicle travel to 20% of all trips for residents and to 60% of work trips for non-residents

As discussed for the previous objective, a reduction in anticipated VMT requires an increase in non-single occupant auto (SOV) travel. Boulder residents already have high non-SOV mode shares yet residents would need to increase use of walk, bike, multiple-occupant vehicles, and transit modes. The Climate Commitment analysis anticipates reducing resident SOV mode share to 20% of all trips and non-resident employee SOV mode share to 60% of all trips by 2035. For the majority of non-resident employees, this will require increased use of transit, carpools, and vanpools. Incremental targets will be established for intermediate years for some of the non-SOV mode shares such as biking, walking, and transit to help track progress toward the 2035 targets.

Additional strategies and investments in transit service, walkable neighborhoods, first- and last-mile walk and bike connections to transit, and TDM strategies including parking management will also be needed to support these shifts.

Achieve a 16% reduction in GhG emissions and continued reduction in mobile source emissions of other air pollutants

Air pollution has a variety of direct health effects and motor vehicles are significant sources. Regulation by the Environmental Protection Agency (EPA) under the Federal Clean Air Act has caused cars to become 90% cleaner with technological change being the biggest driver of emission reductions. Yet the region remains in violation of national ozone standards. While the city does not have a regulatory role in reducing vehicle emissions, reductions in VMT and shifts to non-auto trips also produce a direct reduction in pollution. The city's new Climate Commitment GhG reduction goal adds a new dimension to this objective and will be monitored through the Climate Commitment inventory process.

No more than 20% of roadways congested at Level of Service (LOS) F

This objective recognizes that the roadway system is used by all modes and the safe and efficient functioning of the roadway system is in everyone's best interest. Evaluating congestion across all modes and across the transportation system allows for informed and systematic trade-offs. This perspective is reflected in the city's approach to operating the signal system, where the goal is to minimize the overall delay for all users of signalized intersections, while maintaining acceptable service and safe conditions for all modes and movements. This approach reduces delay to the pedestrian in service of maximizing vehicle movements and allows for the consideration of transit priority. This objective is evaluated on the basis of counts and modeling for the city's signalized intersections. The analysis will now include person delay at these intersections. A multimodal level of service will be added as technology improvements allow for reasonable data collection.

Maintaining the efficient operation of the roadway system for all users—pedestrians, bicyclists, transit, and autos—while not adding vehicle capacity is a continuing priority of the TMP.

Expand fiscally viable transportation alternatives for all Boulder residents and employees, including the elderly and those with disabilities

This objective recognizes the aging of the population and the increasing diversity of transportation needs. Close to a third of the population does not drive due to age or infirmity and transit access is a key aspect of mobility for this population. Expanding access to transit and special transit services is the best measure for this objective. This objective has been tracked based on the city's contributions to Via, the area's provider of specialized transit service, and the number of Eco Passes available to the community. The city should continue to expand funding to Via to keep pace with the growing population of older adults and persons with disabilities in Boulder, while supporting Via's programs to increase efficiencies and service enhancements to the elderly and disabled community.

The city will continue to report the percent of Boulder's population that has access to high quality transit service, enhanced by using the actual walk distance to the stop and the quality of the available transit service.



Increase transportation alternatives commensurate with the rate of employee growth

The city intends to expand transportation options to employment areas, reflecting the reality that many of the city's employment centers are in the east and have an auto-focused development pattern. Redevelopment of these areas and the completion of their modal connections is one of the challenges and opportunities to reaching the city's transportation and GhG goals.

This measure has been reported as the change in transit service hours and miles of bike facilities relative to employment change. However, using the Neighborhood Access Tool and transit service levels, the portion of employees having access to high quality transit can be evaluated. Other measures that can be mapped and reported would be:

- The change in intersection density (to reflect the change to a finer, more pedestrian-friendly grid)
- Land use and zoning change from single to mixed-use
- Areas with TDM programs and with managed parking

Continuous improvement in safety for all modes of travel

Safety has always been a priority under the TMP, with safety being its first investment priority. The [2012 Safe Streets Boulder Report](#) was the result of several years of staff work to allow for the review and analysis of pedestrian and cycling crashes from the city's comprehensive database of crashes. Bike and pedestrian accidents involve a high rate of injury so preventing these types of accidents is particularly important.

The federal government has recently established a goal of eliminating fatalities on the highway system. Reflecting this, the city's ultimate goal is to strive toward zero serious injury and fatal accidents. Draft measures to track progress include total crashes, injury crashes and fatal crashes by mode, expressed as a rate to reflect usage and allow benchmarking to local, regional, and national cities.

Increase Pedestrian, Bike, and Bus Mode Share

Reducing single occupant vehicle travel (SOV) to 20% of all trips for Boulder residents requires a corresponding increase in walking, biking, and transit. The individual mode share targets in the table below reflect the capacities and strategies expected for each mode.



Figure 3-4

Proposed Mode Share Targets

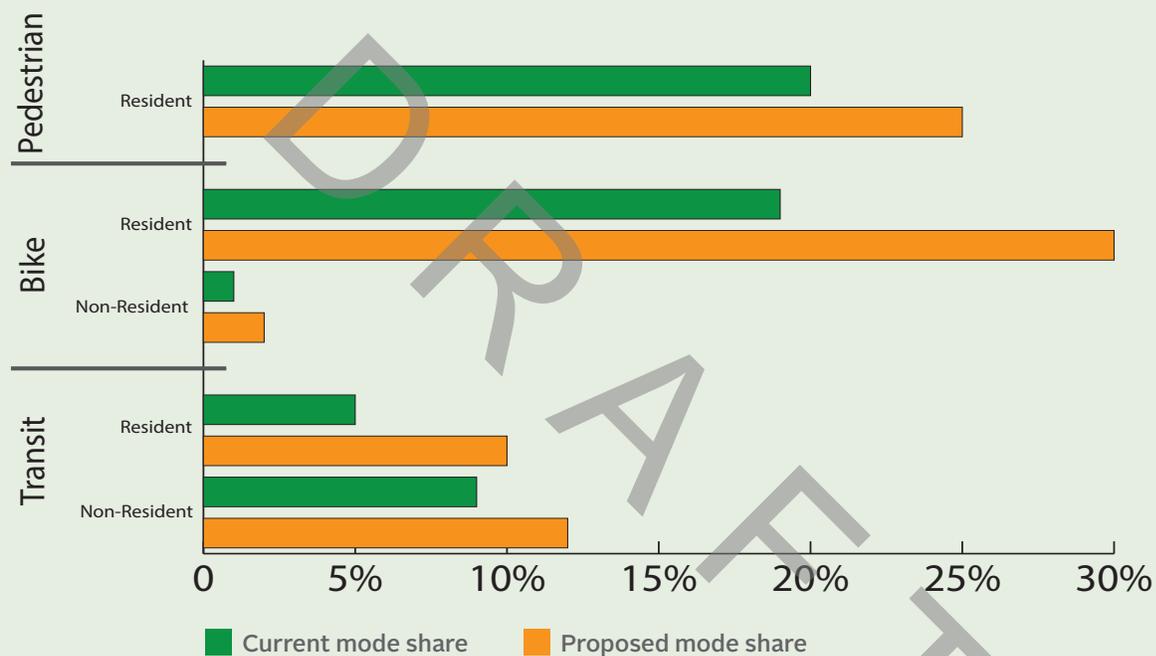


Figure 3-5

Proposed Modal Targets for 2035

	Boulder's Current Mode Share		2020 Targets Established for Resident Trips in the Previous TMP	New Proposed 2035 Mode Share Targets	
	Resident Trips	Non-Resident Trips		Resident Trips	Non-Resident Trips
Ped	20%	0%	24%	25%	0%
Bike	19%	1%	15%	30%	2%
Transit	5%	9%	7%	10%	12%
SOV	36%	80%	25%	20%	60%
MOV	20%	10%	29%	15%	26%

Current Mode Share estimates are derived from the 2012 Travel Diary Survey. The Boulder Valley Employee Survey was also used to establish current mode share.



4 | PEOPLE FIRST: SUPPORTING SAFE, INFORMED, CONFIDENT TRAVELERS

Traditional transportation activities focus on the design and construction of facilities—yet travel behavior and mode choice are determined by a broader set of factors. The City of Boulder enhances the safety and appeal of non-automotive transportation options by embracing a comprehensive approach utilizing the Five E's illustrated in the adjacent figure.

Providing places for people to walk, bike, and access transit through engineering treatments is important and these access improvements are detailed in Chapter 5. But, we know that getting people on bikes and walking also requires a social and cultural shift. People need to be supported through encouragement, education, and enforcement programs. And continued improvement and success in achieving our goals requires monitoring and evaluation.

Supporting Culture Change

People bike and walk along routes that are enjoyable, feel safe, and connect to the places they want to go in a reasonable distance. But a community where people

Figure 4-1
The Five Es



leave their car at home and choose walking, biking, and transit means changing ingrained habits. Enhancing programmatic efforts to create a culture of cycling and walking as sustainable travel options for getting around town by people of all ages in all stages of their life is a priority for meeting our transportation and Climate Commitment goals. This section of the plan shares information about how Boulder informs, incentivizes and inspires people to choose active transportation options.

As described in Chapter 2, Transportation Demand Management is the Focus Area that includes all the E's except for Engineering.



2014 Winter Bike to Work Day
Image from Tanya Dueri

Encouragement

Promoting active transportation creates awareness of travel options, the first step in shifting behavior.

The city promotes walking, bicycling, and transit through a variety of encouragement and TDM programs. Encouragement programs are designed to disseminate information on non-auto options, including the benefits of active transportation options. This section highlights current and new initiatives that encourage walking, bicycling, transit and ride sharing.

Walking

The city introduced the Boulder Walks program to celebrate walking, highlight historic and cultural resources, and emphasize the health and community benefits of walking. Walkabouts bring together community members to promote walking as a great option for transportation. Walking route maps are developed to encourage visitors and locals to explore Boulder's unique neighborhoods.

Biking

Boulder celebrates Bike Month, Bike to Work Days in the summer and winter, and Bike to School Day with events and programs for different skill levels. Priority TMP initiatives include:

- **Continue expanding the city-wide bike sharing system** that the City of Boulder and the non-profit Boulder B-cycle launched in 2011, serving residents, employees and visitors.
- **Promote and support community-based social rides and events** to broaden the appeal of cycling as a fun, viable transportation option for people of all ages and abilities. The Bike 2.0 focus is to encourage more women, older adults, and families with children to bicycle more often.



Transit

The CTN system's visually attractive buses and friendly and helpful drivers help make using transit in Boulder a positive experience. TMP community outreach efforts, including the interactive Design Your Transit System tool, solicited community input on enhancements that would encourage Boulder residents and employees to use transit more often. Resulting TMP priorities include:

- **Provide access to real-time transit information** to reduce time spent waiting time for the bus. The city will take a leadership role, working with partners and RTD to provide real-time information displays at transit centers and high-ridership stops and system-wide on phones and mobile device applications, by making bus location data available to application developers.
- **Expand transit-bicycle Integration** to enable bikes to serve more first- and last-mile connections on either or both ends of a transit trip. The city should partner with Boulder County to expand bike-transit commuting options, including secure bike parking facilities and increased on-board bike capacity.

Ridesharing and Vanpooling

The single occupant auto represents the most underutilized aspect of the transportation system, with three out of four seats generally empty. Carpool programs and various new ride-sharing applications encourage filling these empty seats. The city promotes regional and school district car pool and vanpool programs.

Education

Education efforts are fundamental to creating safer and more courteous shared roads and pathways and to increase the comfort of using all modes.

The city works with community partners to educate users on their rights and responsibilities when traveling throughout Boulder. Safety education materials on the rules of the road and paths, including maps of where cyclists cannot ride, are available to the community and distributed during CU-Boulder orientation. Safe Routes to School programs are offered in most elementary and middle schools. Several community-based organizations and clubs offer children and youth opportunities to learn cycling skills outside of school. More recently, the Heads Up Boulder campaign educates users on crosswalk safety and rules of the road. Additional efforts are proposed to address conflicts in the use of public roadways and pathways.

Pedestrian

Concern for pedestrian safety along multi-use paths was identified during the listening and learning phase of this plan. The city is launching an **etiquette campaign** to raise awareness of multi-use path rights and responsibilities. **Additional crosswalk safety education** programs are planned for middle school students and the city is working collaboratively with CU to improve pedestrian safety on campus and throughout the city.

Bike

In addition to the pedestrian efforts described above, bicyclists will benefit from transportation-related ordinance revisions that clarify the rights and responsibilities of right-turning motorists on roadways with on-street bicycle lanes. Outreach through agency partners and local bike shops will help cyclists understand their rights and responsibilities. The city will host a Bicycle Education Coalition to establish a consortium of agency partners and local organizations to guide and identify future priority initiatives. Initial initiatives include hosting bicycle commuting 101 and “train the trainer” cycling instructor courses. The city also supports a Bicycle Ambassador program and the fall Lighten Up Boulder bike light campaign to highlight the danger of riding at night without proper lighting.

Transit

The city and Boulder County currently publish a Boulder County transit map. In addition, the city publishes route-specific information and maps for the CTN routes on its web site and offers education sessions

for employees and others by supporting US 36 Commuting Solutions and Boulder Transportation Connections.

Capturing long-distance regional trips on transit is a key strategy in meeting the city's Climate Commitment goal for reducing GhG emissions. Attracting potential customers to transit will require both general and targeted education and outreach programs:

- **General public information campaigns** should highlight the community and individual benefits of transit, including environmental, health, and economic.
- **Individualized marketing programs for targeted groups** such as commuters, students, and older adults have been successful at both the neighborhood and business scale. Boulder should focus resources in this area on targeting new residents and employees, including new non-resident employees, and marketing new services such as US 36 Bus Rapid Transit.

Auto

Developing technology is rapidly leading toward an Intelligent Transportation System (ITS). The city already deploys real-time camera monitoring of major construction projects and operates the Cone Zone hot line and Web site for construction delay information. The city intends to expand real-time monitoring and traveler information as the communication technology allows.



The Heads Up program aims to reduce collisions between motor vehicles and bicyclists and pedestrians.



YSI afterschool program

Enforcement

Enforcement is a critical element in changing behavior where safety is a primary concern.

Enforcement is a critical element in changing behavior as safety is a primary concern. The Safe Streets Boulder report identifies locations where motor vehicle crashes involving a bicyclist or pedestrian occur most frequently. This analysis guides targeted enforcement at these locations to improve safety by reducing conflicts and traffic-related crashes. The Boulder Police Department periodically launches targeted enforcement campaigns at key intersections and crossings. These are timed to follow the roll-out of the Heads Up Boulder and other education campaigns. Enforcement is most effective if it is coordinated with education efforts. The city's communication team also ensures that the enforcement efforts are publicized to maximize their effectiveness.

Improve Pedestrian and Bicycle Safety

The Transportation Division and Boulder Police Department will continue to conduct targeted enforcement of crosswalk-related ordinances and at the locations with the most crashes and close calls involving a bicyclist or pedestrian. A priority is to strengthen our partnership with CU-Boulder Transportation and Police through programmatic efforts that support enforcement activities.

Enforcement



City of Boulder Bike Patrol Officers
Image from City of Boulder Police Department

Evaluation

The city's evaluation program collects travel data from a number of local and national sources. This data is evaluated in an integrated way to identify trends over time and between data sources.

Since the first TMP in 1989, the city has conducted surveys focused on mode share and following the 1996 TMP, the city has maintained a Transportation Metrics program to monitor and assess progress under the TMP policy direction. This program includes a number of surveys, count activities for vehicles, bicycles, and pedestrians and travel time surveys. One product of this program is the [Transportation Report on Progress](#) which compiles the results from all these data sources. The major surveys included in this report are described below.

- The **American Community Survey (ACS)** is conducted by the U.S. Census Bureau every year to produce annual estimates on population, housing, journey to work, and a variety of other demographic data. The survey asks “How did this person usually get to work in the last week?” Since the ACS methodology is consistent across the country this data is used to compare Boulder to other peer cities, the region and the nation.
- The **Travel Diary** is used to examine long term trends in resident travel behavior. The Travel Diary has been conducted since 1990 and looks at all trips taken by respondents during a given day.

Participants in the Travel Diary Study are asked to keep a log or “diary” of their travel for one randomly assigned day during the third week of September. For the Diary a trip is defined as any “one-way travel from one point to another that takes you farther than one city block (about 200 yards) from the original location.”

- The **Boulder Valley Employee Survey (BVES)** is used to understand the travel behavior of Boulder employees, including both residents and non-residents. The survey collects data on the work commute trip, trips taken during the day and commute benefits provided by employers. The BVES work trip data for residents has been very similar to the ACS findings.

The city is continuously looking for ways to improve these surveys and other data collection methods and is researching new ways to collect travel behavior data from residents, students, employees and non-resident employees. One potential step is to take advantage of the data collected by GPS devices and smart phones to track the origin and destination of trips. Many of the fitness apps used to track workouts already can supply a rich data set of travel and potentially can be modified to track travel in vehicles and on transit as well. The Transportation Metrics program will continue to evolve to inform the city's transportation planning efforts and to evaluate progress relative to the community's goals and objectives.

Evaluation



Living Laboratory Pre-Evaluation: University Ave.

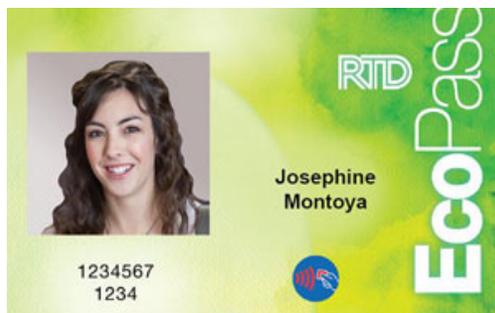
Transportation Demand Management (TDM)

In addition to including encouragement and education efforts, transportation demand management (TDM) programs focus on the demand side of travel and seek to level the field relative to the many embedded subsidies for auto use. Consequently, these programs often have a financial component, with managed parking being the foundation of successful TDM efforts. The financial aspect, whether through incentives or disincentives, is one of the most powerful influences on travel behavior.

Incentives: Make it Easy

The city has a long history of providing incentives to use the non-automotive modes. The most effective incentive developed by the city and RTD is the Eco Pass—an annual, universal transit pass. Not only is the Eco Pass deeply discounted when an employer buys it for all employees or a group of neighbors join together, but the city also provides rebates for first-time commercial participants and an on-going subsidy to neighborhood programs. This type of pass also removes the out-of-pocket cost of using transit and the hassle of paying cash fares. A sensitivity analysis conducted as part of the transit planning effort shows that the Eco Pass is one of the most cost effective tools for increasing transit ridership; Eco Pass holders also walk and bicycle more.

An expanded community-wide Eco Pass program could make discounted transit passes available to residents and/or employees city or county-wide.



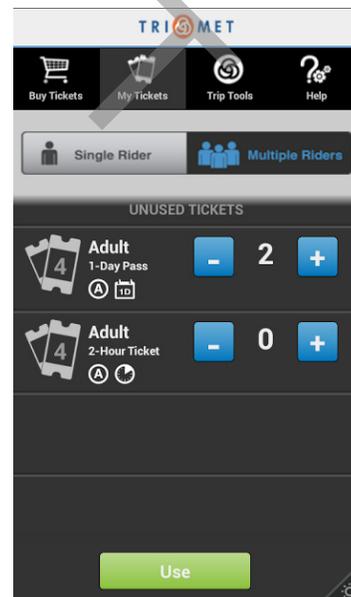
A recently-completed feasibility study examined options for extending the program to residents and/or employees within the City of Boulder or County-wide. The study showed that much of the cost of a community Eco Pass is already being spent in the different pass programs. Image from Boulder County

The program is currently limited to university students, employees/residents of participating businesses or neighborhoods but there are still almost 70,000 annual transit passes in the community. The city will continue the current work with Boulder County and RTD to expand the Eco Pass program.

Disincentives: Get the price right

Price signals are a strong influence on behavior and the majority of existing price signals encourage the SOV trip. Studies have calculated that the auto driver only pays for 10 to 60% of the true cost of an auto trip. One of the largest hidden costs is “free parking” and paying for parking is one of the biggest factors in mode choice. The city has developed the “SUMP” principles—shared, unbundled, managed, and paid parking—to minimize the amount of required parking, increase parking efficiency, and support mode shift. Minimizing required parking promotes high quality urban design, placemaking and the pedestrian oriented place that support community.

Wider application of the SUMP principles will help remove an incentive to auto use and will support a wide variety of community sustainability, built form, and transportation goals.



The TriMet mobile ticketing application in Portland (OR) makes it easier for regular and occasional riders to pay for transit and is integrated with trip planning tools including real-time arrival information.

5 | BUILDING IMPROVED ACCESS

Investing to maintain and complete the walking, biking, transit, and roadway systems is a key strategy for accommodating increasing trips and providing travel choices in Boulder.

Funding Plans

Enhancing the System

While the city's investment strategy focuses on first maintaining and operating the existing transportation system, the remaining funds are used for capital improvements or enhancements to build toward the complete streets vision. Using the policy direction and investment priorities of the TMP, every year the city prepares a capital improvements program (CIP) as the near-term investment program of the city. The CIP is reviewed by boards and adopted by council annually, with the first year being approved in the city budget by council for the coming year. The remaining four years of the CIP represent the anticipated investment program to allow for project planning and coordination. Each subsequent year will be approved and adopted into the city's budget by City Council and the CIP extended to cover the investment program for the coming five years.

Funding Reduction Priorities

While the Current Funding investment program is based on the best available forecast of revenues to 2035, experience since 2001 shows that revenue may not meet this forecast. Twice since 2001 there have been significant declines in sales tax revenue, resulting in a strategy for reducing transportation spending while maintaining integrity with program objectives. The principles of this strategy have been applied to the 2003 through 2009 transportation budgets and will be used in the event of further revenue reductions. These principles are:

- **Maintain the integrity of the Transportation Prioritization approach** previously developed by City Council in 2000 in priority order:
 1. *Maintenance and Operations*—limited/strategic reductions
 2. *Scale back expansion of the multimodal system*—focus reductions on projects which increase maintenance responsibilities
 3. *Neighborhood enhancements*—defer additional capital investments
- **Achieve sustainable reductions** over time, rather than one-time reductions
- **Continue efficiency improvements**, such as reducing service in technical support categories where appropriate
- **Maintain leveraged funded projects**

Investment Policies

The city shall generally give priority to transportation investments as follows*:

- **Highest priority**—system operations, maintenance and travel safety
- **Next priority**—operational efficiency improvements and enhancement of the transit, pedestrian and bicycle system
- **Next lowest priority**—quality of life, such as sound walls and traffic mitigation
- **Lowest priority**—auto capacity additions (new lanes and interchanges).

* Note that within each priority level, all items are given equal weight.

Investment in modal enhancements will be integrated between all modes, focused in the designated multimodal corridors, and prioritized by the ranked multimodal corridor segments.

As the street network is the primary infrastructure for all modes, it will be managed and expanded to balance its use by all the modes. Roadway capacity will not be added at the expense of the non-auto modes.

The city's transportation system includes all the modes and the resources needed for the sustainable operation of the system. Any consideration of the share of system funding allocated to future growth will be based on this system.



Investment Packages

The TMP investment programs are based on three levels of funding: Current Funding, Action, and Vision. Any investment above Current Funding would depend on additional funding, though these funds are not limited to the city’s Transportation Fund. Partnerships resulting from collaborative planning efforts and grant programs are potential funding sources.

The following investment programs implement the policy direction of the TMP at each funding level. While the 1996 TMP outlined the complete multimodal vision for Boulder, it was not fiscally constrained and the changing revenue picture resulted in the need to prioritize transportation spending in 2000. Starting with the 2003 plan, transportation investment has been prioritized through three investment programs. In each of these programs, funding of transportation operations, maintenance, and safety is the highest order. The priority of investment was established in the 1996 TMP and has allowed Boulder to maintain and operate its transportation system at a high level of service.

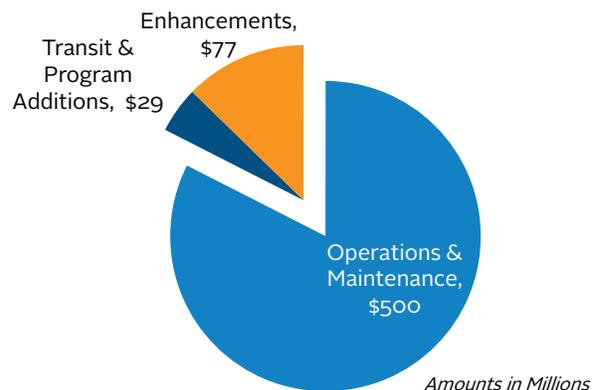
The following investment programs reflect cost increases since 2003 and include the enhanced maintenance supported by the 2013 sales tax increase. These maintenance costs reflect a high level of understanding of pavement condition as every street has been evaluated and included in a pavement management system. The level of capital improvement investment is dependent on the funds remaining after these maintenance priorities are funded.

Current Funding

The Current Funding investment program reflects investments limited to the funds expected from existing revenue sources. Including the 16 years of sales tax increase for transportation approved in 2013, this funding is estimated at \$635 million through 2035. Over 80% of these funds are for maintenance of the existing transportation system. The Current Funding investment program will:

- Prioritize safety and maintenance/operations for the transportation system. With the additional 2013 sales tax revenue, we are able to recover from the maintenance deficit of the 2000’s and return street pavement conditions to recommended levels as well as prioritize sidewalk repairs
- Enhance programmatic support for all modes such as the sidewalk missing links program, small bike connections, Transportation Demand Management efforts and Transit support
- Provide programmatic support for the Bike & Walk Innovations element to support the “five Es”
- Add funding for major reconstruction, recognizing that as city facilities age there will be the need for increased reconstruction activity
- Increase funding of Via to provide needed transportation service for the growing population of older adults and persons with disabilities
- Include funds that can be leveraged as match amounts for various grant programs
- Provide funding for corridor studies for integrated land use, transportation, and TDM planning

**Figure 5-1
Current Funding**



- Prioritize the limited capital improvement funds in high demand city and regional travel corridors
- Provide funding for service buy-ups on the current, high-frequency CTN bus service
- Increase transit investment to implement some of the high-priority programmatic items in the Renewed Vision for Transit
- Preserve the existing Eco Pass program (RTD's bus pass program) and TDM efforts to promote and encourage alternatives to driving alone

Action Investment Program

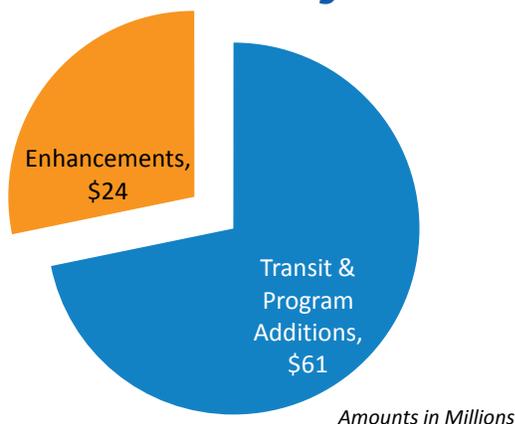
The Action investment program represents the next strategic set of investments toward reaching the community's transportation goals if additional funding becomes available. Pursuing and funding the Action investment program would add approximately two corridor segments that would be developed into multimodal environments. These improvements will increase safety, mobility, access and efficiency for all modes. Intersection improvements will reduce congestion at these locations, pedestrians and bicyclists will have access to completed facilities and transit, and transit service is expanded in line with the Renewed Vision for Transit. The combination of multimodal transportation investment and expected land use changes have the potential to create in other parts of the community the kind of vibrant, interesting, and pedestrian-friendly environments that characterize the downtown.

The Action program assumes that an additional \$85 million becomes available through various funding sources over the life of the plan. While increases are proposed for the expansion of the bus pass program and travel demand efforts, a significant portion of the

additional funds are targeted toward transit expansion and the needed capital improvements to support walk and bike access to transit in those multimodal transportation corridors. In addition to the items in the Current Funding program, the Action investment program would:

- Expand the Eco Pass program to a community-wide program covering Boulder residents and employees
- Make multimodal investments by priority corridor segment in additional corridors compared to the Current Funding program
- Advance the vision from the 15-minute neighborhood analysis and Boulder Walks program for pedestrian environment policies and enhancements
- Implement 2.0 bicycle network priority corridor and location-specific enhancements in support of a more complete, integrated and connected low-stress bicycle network
- Add additional CTN-type service on priority corridors per the Renewed Vision for Transit
- Support partnerships for quiet zone improvements at railroad crossings in the Boulder Valley
- Increase regional emphasis by expanding actions to support the Renewed Vision for Transit, supporting high-value transit service expansion and facilities both within Boulder and on SH 119 and SH 7
- Expand support for public/private partnerships such as Business Improvement Districts (BIDs) and Transportation Management Organizations (TMOs) to provide TDM services
- Provide additional funding for Via to expand needed transportation opportunities for older adults and people with disabilities
- Increase operations and maintenance funding proportional to the construction of new projects
- Provide real-time roadway system, transit, and ride share information and services
- Offer first- and last-mile enhancements including mobility hubs

Figure 5-2
Action Plan Funding

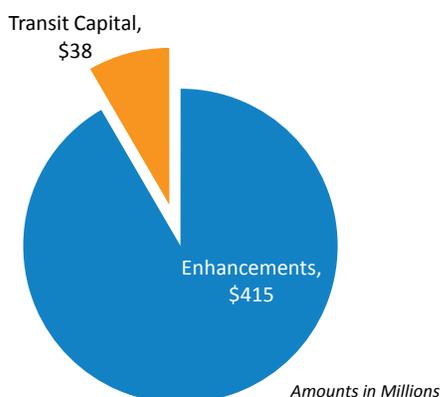


Vision

The Vision investment program reflects the 1996 TMP in representing the complete multimodal system desired by the community. It is fiscally unconstrained and will take longer than 2035 to support financially as it has an additional estimated project cost of \$477 million, more than \$400 million over revenues expected to be available for enhancements by 2035. This cost reflects refined financial assumptions of city financial participation in the projects to be funded by future development. This program includes the strategic initiatives of the Current Funding and Action investment programs and also would:

- Increase maintenance and operations funding to a life-cycle replacement level where we fully maintain and reconstruct our facilities
- Complete the modal enhancement investments in all the multimodal corridors
- Maintain city funding for high-frequency local transit service to reflect expected cost increases
- Complete the Renewed Vision for Transit providing additional services including enhanced and BRT routes in Boulder.
- Complete the mobility hubs and transit center improvements from the Renewed Vision for Transit
- Complete the regional BRT on South Boulder Road as envisioned in the RTD NAMS work
- Complete remaining bicycle and pedestrian system enhancements in support of a 2.0 bike network of low-stress bicycle routes and walk friendly built environment
- Expand parking management to other areas of the community
- Complete all roadway improvements

Figure 5-3
Vision Plan Funding



Funding for Investments Beyond the Current Funding Program

To accomplish the additional investments beyond the Current Funding investment program, additional funding will be required. The Action investment program amount equals approximately \$4.5 million of additional funding annually. One source of funds that staff will continue to pursue is federal and state grants. Historically the city has been able to receive about \$2 million per year in these grants. However, these funds are becoming more limited and are unlikely to contribute significantly to the Action program. Consequently, a significant source of new revenue will be needed to fund this program. Council has directed that staff continue to explore expanded funding sources, particular ones that more closely relate transportation use and cost. Examples of funding sources that might be considered to help fund the Action investment program include:

- An increase in sales tax
- An employee head tax
- A tax on greenhouse gas emissions per metric ton of CO₂ equivalent
- A VMT fee for Boulder residents and non-resident employees
- Some combination of these or other sources such as a Transportation Utility Fee

The declining ability of the city to fund enhancements to the transportation system is demonstrated by the changes in the Transportation budget. From 1980 to the proposed 2015 budget, the portion of funding available for enhancements has decreased from being more than half of the transportation budget to 22 percent. Some of this change is due to the increased maintenance needed on a larger system and reductions in enhancements consistent with the TMP priority to maintain the system. Roadway maintenance is by far the largest expense. Even the additional funding from the 2013 sales tax approval, the ability to make capital investment in the transportation system has clearly fallen short of the amount needed to achieve our transportation goals and objectives. The trend of diminishing capital investment will likely continue. Work prepared for the Blue Ribbon Commission in 2007 shows that with increasing costs for operations and maintenance, these functions could consume the entire transportation budget within a few years. The 2013 sales tax increase for transportation will help delay this event, but without a new long-term and stable revenue source, the ability to invest in enhancements will decline over time.

Transportation Plan Modal Elements

An over-arching concept that is reflected in the practical application of the TMP investment philosophy is the development of complete streets. This concept is widely used to describe streets that are designed for the safety and comfort of all road users and accommodate travel by automobile, foot, bicycle, and transit, regardless of age and ability. Such streets are welcoming to people in wheelchairs or pushing a stroller and consequently for everyone else. They also provide safe and easy connections between all modes. The TMP identifies the pedestrian as the primary mode and walking is an element of most trips. So in practice, in any capital construction project, the city aims to complete and enhance all the modal systems and improve the connections between them. Each of the modal elements and plans are included in this process.

The TMP contains policies and detailed plans for each mode of travel, reflecting the vision of a balanced and completed transportation system. The elements of each modal plan are included in a geographic information system containing information on each individual project.

The 1996 Transportation Master Plan identified a vision for the buildout of Boulder's transportation system. This vision continues to address all modes of transportation including pedestrian, bicycle, transit, and automobile. Through a review of the improvements completed since 2003 and an analysis of the modal improvement plans, the TMP modal elements have been refined and each project's description and costs updated for this plan. All proposed projects can be viewed using a geographic database available through the TMP web site. Maps illustrating the modal elements are also provided through the TMP web site.



Broadway Euclid Complete Streets Project



Pedestrian Modal Element

Pedestrian travel is the real measure of the accessibility of the transportation system. Walking is the original mode of travel and is essential to all other modes.

Boulder Walk: Pearl Street Walk Audit

Whether one is walking from a parked car to the front door of a business or from a transit stop to home, the pedestrian portion of every trip helps determine the enjoyment, safety, and convenience of that trip. The pedestrian system provides the connections between the different modes and is critical to supporting the transit system. The lack of a pedestrian system is also identified as a major obstacle to “active living,” with the resulting increase in obesity and related health issues nationwide.

To encourage more walking, the pedestrian element:

- **Provides a continuous network** so that pedestrians are not stranded short of their destination or forced into difficult or potentially dangerous situations
- **Ensures a safe walking environment** through adequate maintenance, snow removal, vegetation trimming, and lighting
- **Creates a pedestrian-oriented environment** through high-quality urban design and pedestrian amenities
- **Provides routine education and enforcement** on the rights and responsibilities of pedestrians, bicyclists, and vehicle drivers

The pedestrian element address key improvements needed to complete the missing links connecting popular destinations and providing linkages between home, shopping, work, and transit, creating a complete neighborhood. With the proposed pedestrian improvements, XX new underpasses, XX enhanced pedestrian crossings, and an additional XX miles of new pedestrian facilities will be added to complete the pedestrian system under the Vision program. This last figure does not include multi-use paths, which have been included in the count of bicycle facility miles.

Pedestrian Policies

The city will:

- **Develop a high-quality pedestrian environment** as the foundation for the desired multimodal transportation system
- **Uphold the standard for pedestrian mobility and accessibility** so that a wheelchair user can move safely and conveniently through the transportation system
- **Support a high-quality pedestrian environment** including the ability to travel safely and conveniently along the street and to have reasonable crossing opportunities; to travel through a comfortable and interesting environment provided by high-quality urban design; and to have appropriate pedestrian amenities such as benches, shade, and water fountains
- **Identify alternative means of meeting defined pedestrian needs where applicable**—if the need can be met safely within the traveled way of a rural residential street or access lane, then sidewalks may not need to be developed



Boulder Journey School
Walking & Transit Field Trip

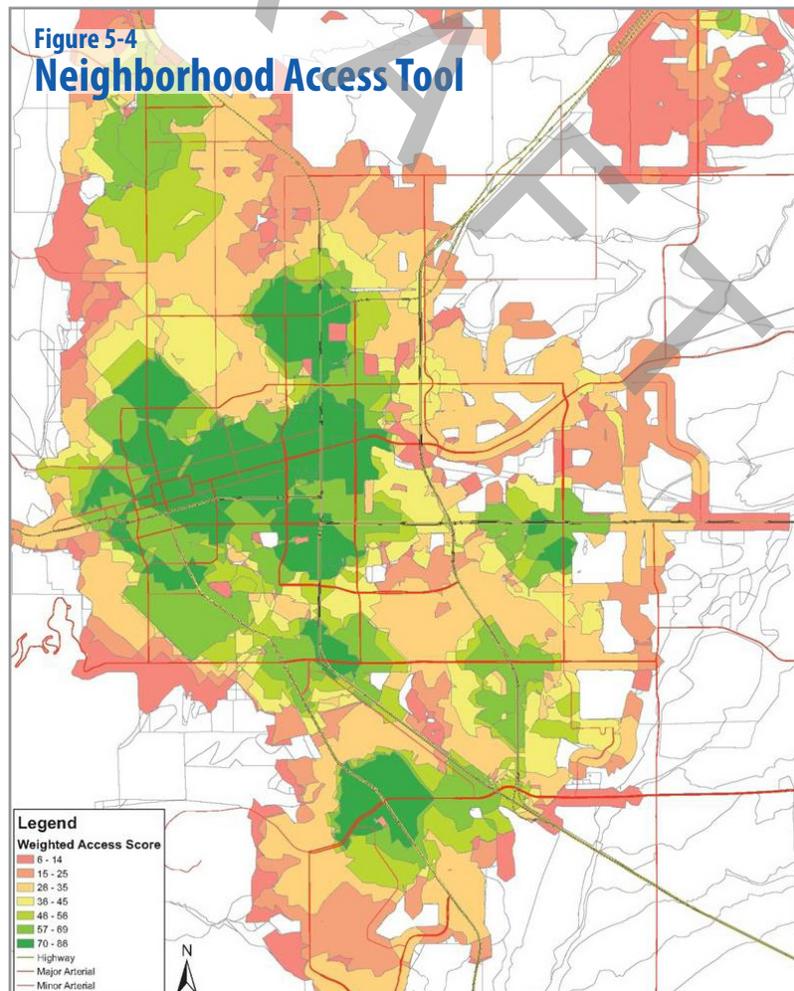
Walk Audits & Walkabouts

As part of the Living Laboratory, the Boulder Walk program was established to engage neighborhoods and explore what makes a good pedestrian environment. Community Walkabouts and Walk Audits are used to identify design elements supporting a

Neighborhood Access Tool

The Neighborhood Access Tool characterizes the people's ability to walk to locations and businesses to meet daily needs. It is a new tool that illustrates aspects of the 15-minute neighborhood by displaying the area that can reach a given attractor in a 15-minute walk (walk shed). These walk sheds are aggregated

to display the number of attractors available from a given location. The distance that one can walk in a given time depends on the quality of available pedestrian facilities. Information from the Walk Audits can be incorporated into the Neighborhood Access Tool.





Bicycle Modal Element

Bicycling is a symbol of the healthy and active community and lifestyle found in Boulder. Boulder already has high bicycle use compared to most U.S. communities.

With growing public health concerns about obesity and air quality, increased bicycling remains one of the most effective ways to travel while achieving personal health and air quality benefits. With an average trip length of about four miles, many of the trips made by Boulder residents could be accomplished by bike.

The bicycle element is based on developing a continuous bicycle network of cross-town corridors allowing for safe and convenient bicycle travel for all members of the community. While these corridors may be composed of a variety of facility types, continuous corridors avoid the missing links that disrupt bicycle travel and put bicyclists in unexpected, difficult, and potentially dangerous situations. The bicycle element also recognizes that bicycle users range from the experienced commuter who is comfortable in traffic to children who cannot safely use a busy street. Consequently, a system of off-street multi-use paths provides an alternative to the street system and the Bike 2.0 innovation efforts aim to make more of the system appealing to all users.

The long-range bicycle network for the city of Boulder is comprehensive and will provide both on- and off-street connections throughout the city. With the completion of the bicycle element, an additional 95 miles of bicycle lanes, routes, and shoulders will be added. In addition, 79 enhanced crossings and underpasses will be added to the bicycle network. These facilities will provide safe connections and the opportunity for bike travel throughout the city for all levels of riders.

Living Lab/Innovations

The Living Labs are temporary installations that offer the community the opportunity to test new bike treatments and determine if they are appropriate for Boulder. The aim is to enhance the on-street bike system to improve comfort and confidence for people who want to bike but don't feel comfortable or confident sharing the roadway with motor vehicle traffic.

Bicycle Policies

The city will:

- **Complete a grid-based system** of primary and secondary bicycle corridors to provide bicycle access to all major destinations and all parts of the community
- **Coordinate** with Boulder County, CU, the Boulder Urban Renewal Authority, neighborhood plans, the city Parks and Recreation Department, the Open Space and Mountain Parks Department, and other government entities and plans to ensure that all city and county projects connect with and/or help to complete the corridor network
- **Work with property owners, developers, the Boulder Valley School District, the city Parks and Recreation Department, and CU** to ensure that commercial, public, and mixed-use and multi-unit residential sites provide direct, safe, and convenient internal bicycle circulation and parking oriented along the line of sight from external connections to areas near building entrances and other on-site destinations
- **Combine education and enforcement efforts** to help instill safe and courteous use of the shared public roadway, with a focus on better educating students on how to properly share the road with bicyclists, pedestrians, and transit users

A 'Try-It' approach

The Living Laboratory approach offers a real-world environment for community members to interact with temporary installations, provide input, and envision other locations for these treatments. Before, during, and after studies of the impacts to travel behavior are part of the evaluation process. The interactive format of the Living Laboratory allows cyclists and pedestrians to experience and comment on how bikeway treatments and the built environment address their need for improved mobility, comfort and safety with the aim of increasing the use of these systems.

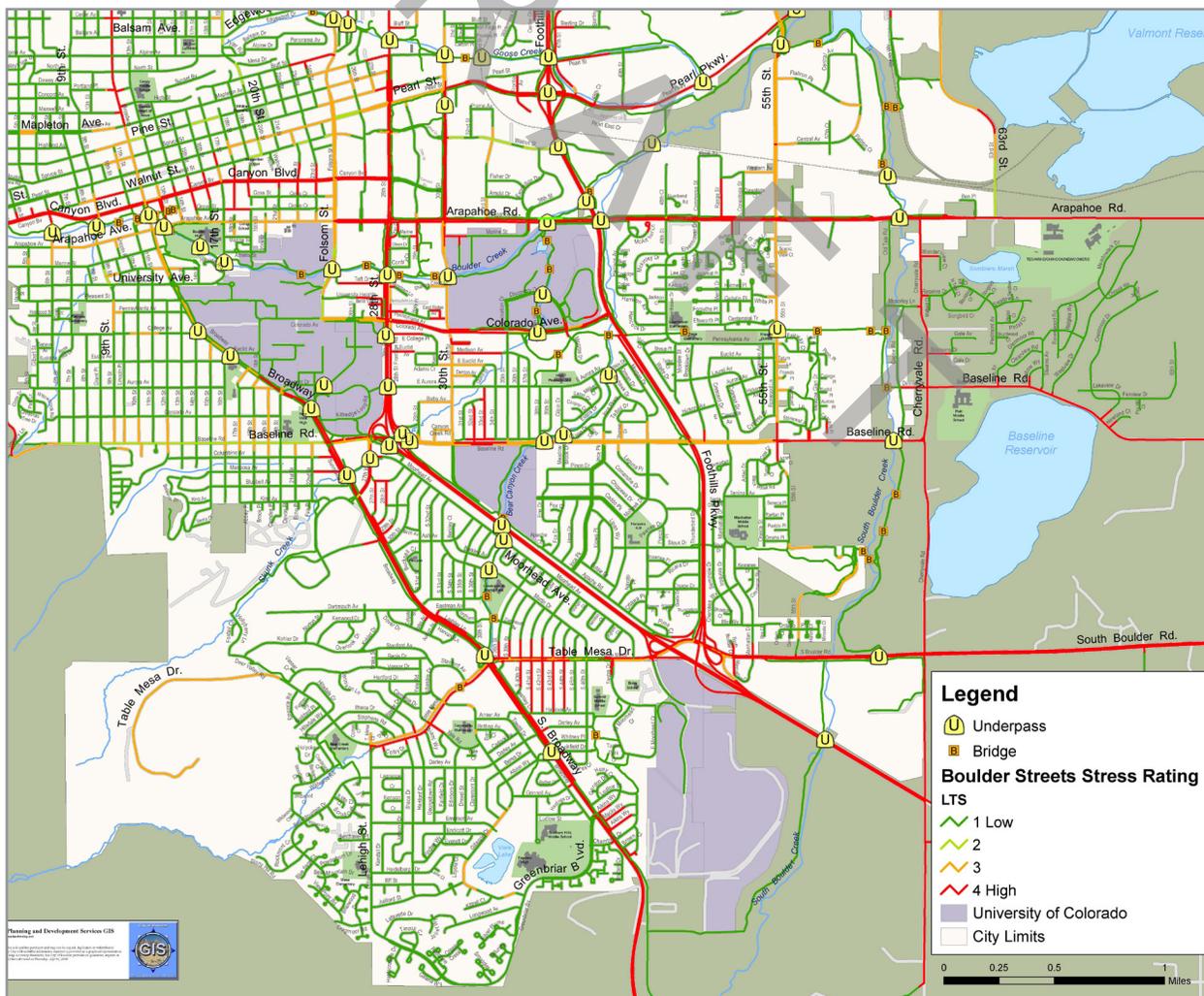
Low-Stress Bicycle Network

One aspect of the Living Laboratory approach is developing an integrated and connected low-stress network of protected bike lanes and other innovative bicycle treatments. The low-stress analysis evaluates the stress level of the city's existing bicycle network to identify barriers and opportunities for system enhancements.

This programmatic approach will be used to fine-tune the network and identify improved bicycle facilities

for a more complete low-stress bicycle network. The city will develop Bicycle Facility Installation Guidelines to create a "2.0 bicycle network" of a complete and connected low-stress network. The Guidelines will be informed by the evaluation of the installed treatments and be similar to the city's Pedestrian Crossing Treatment Installation Guidelines. The 2.0 bicycle network of planned improvements will attract a broader population of people as confident and comfortable cyclists.

Figure 5-5
Low-Stress Bicycle Network (Excerpt)



Transit Modal Element: A Renewed Vision for Transit

The Renewed Vision for Transit consists of four elements—Service, Capital, Policies and Programs, and Implementation—that respond to the key trends and opportunities facing transit in Boulder. This section focuses on the service and capital elements while the policies and program elements are integrated into the overall TMP and appendices.

Service

Boulder's Community Transit Network (CTN) provides transit service with broad appeal and high levels of ridership. The solid blue lines in the Renewed Transit Vision map show the proposed future expansion of CTN service to build-out a high-frequency grid within Boulder and put CTN service within reach of more residents and jobs.

Bus Rapid Transit (BRT) will provide fast service and high-quality amenities on the major corridors connecting Boulder and other communities, as shown in the Renewed Transit Vision map. These regional connections provide an opportunity to attract more of the growing number of workers commuting to Boulder from outside the city, 80% of whom currently drive alone, to use transit.

- **US 36 Bus Rapid Transit (BRT)** is scheduled to open in early 2016, with trips serving Downtown Boulder or the Boulder Junction transit center in East Boulder. An important action for the city is to work with RTD and other partners to ensure a minimum of 15-minute peak and 30-minute off-peak service to Boulder Junction with no reduction in service to Downtown Boulder. In addition, local service will be redesigned to serve Boulder Junction and carry passengers to/ from other destinations in the city.
- **SH 119 (Diagonal), SH 7 (Arapahoe), and South Boulder Road** are corridors prioritized for "regional arterial BRT" service through the Northwest Area Mobility Study (NAMS) initiative, which studied the feasibility of new BRT service along major corridors northwest of Denver. Two of the top three NAMS corridors, SH 119 (#1) and SH 7 (#3) terminate in Boulder. The city will have an important role defining the level of transit priority and travel speed provided and the physical design of the BRT running way and stations. As shown in the Renewed Transit Vision map, Broadway

Community Transit Network (CTN)

The Community Transit Network (CTN) includes seven bus routes, which are among the most cost-effective and productive transit routes in Boulder County. Key CTN design principles include:

- Frequent service (every 10 minutes) so that no schedule is needed
- Community-oriented buses with large windows and unique branding
- Perimeter seating to encourage social interaction



Current CTN routes are the HOP, SKIP, JUMP, BOUND, STAMPEDE, DASH, and BOLT.
Image from Nelson\Nygaard

Bus Rapid Transit (BRT)

Bus Rapid Transit (BRT) is a form of bus service that provides many of the advantages of rail service—capacity, speed, and quality—at a fraction of the cost.

Key features of BRT include:

- Exclusive lanes or queue jumps and coordinated traffic signals with transit priority provide fast travel times. These features are important even along arterial streets and through urban centers to realize the full travel time benefit of BRT.
- High-end, stylized vehicles offer the look, feel, and increased capacity of light rail vehicles, including multiple boarding doors.
- Highly developed station areas with real-time information and off-board fare payment streamline passenger boarding.



The Emerald Express (EmX) in Eugene (OR) uses transitways and dedicated lanes to bypass congestion as well as operating in mixed-traffic travel lanes with queue jumps and transit signal priority.
Image from Nelson\Nygaard

Street, Canyon Blvd., and 28th Street are the recommended local segments for the NAMS/Rapid Transit corridors. The potential for community BRT is also identified in the Renewed Vision for Transit.

Transit Scenario Analysis

The Renewed Vision for Transit was grounded in an extensive analysis of transit system scenarios for service and capital improvements in Boulder and surrounding communities.

An iterative scenario evaluation process provided the opportunity to test various levels and types of future transit investment under projected 2035 land use conditions. The figure below illustrates the analysis

process and how it helped obtain input from the community and led to the Renewed Vision for Transit.

Three transit scenarios that were developed to test different approaches to transit investment. The bottom figure shows the four evaluation “accounts” and supporting measures that are tied to Boulder’s Sustainability Framework and were used to evaluate the scenarios. These metrics helped city staff, the Transit Technical Advisory Committee and the Transportation Advisory Board assess tradeoffs between the scenarios and distill elements of the three transit scenarios into the preferred transit vision described in this section.

A detailed report on the [Transit Scenario Analysis](#) is included in the TMP Appendices.

Figure 5-6
Transit Scenario Analysis Process

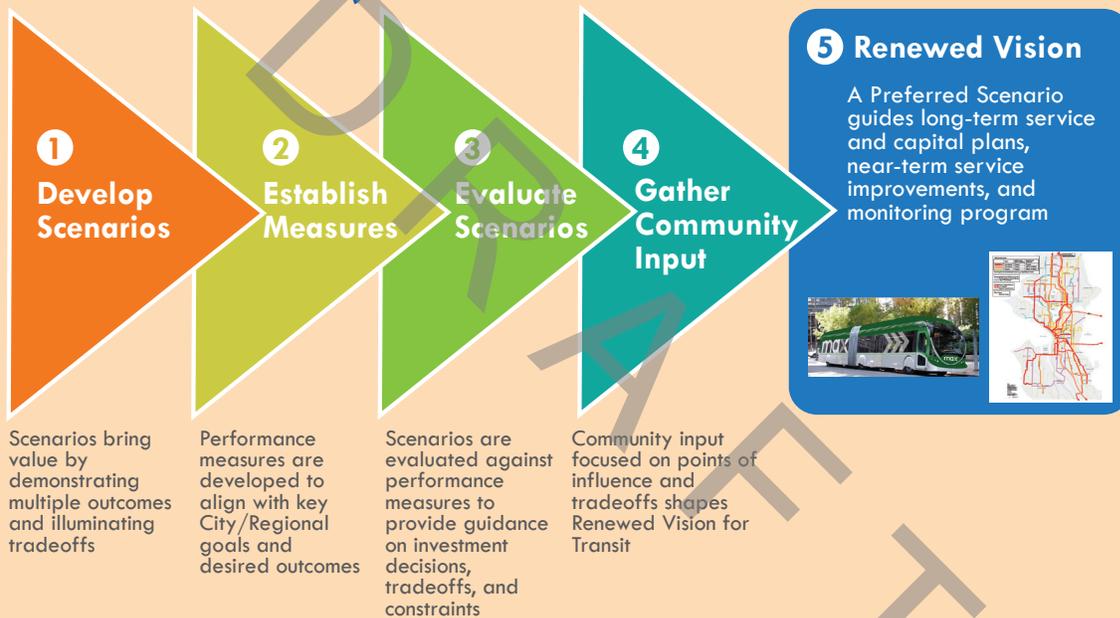


Figure 5-7
Transit Scenario Evaluation Accounts and Metrics



Capital

Corridor Investments

Capital investments in transit corridors help Boulder realize travel time and operating efficiency benefits for Rapid Transit and CTN service.

Bus Rapid Transit corridors would have the highest level of capital investment and could include:

- **Exclusive lanes, queue jumps, and/or transit signal priority** along most of the corridor.
- **Articulated, highly-stylized vehicles** with multiple doors and off-board fare payment for fast boarding.

CTN corridors would have a more moderate level of capital investment and could include:

- **Queue jumps and/or transit-only lanes** in key congested locations.



Cleveland's investment in the HealthLine BRT not only reduced commute times, improved air quality, and helped revitalize a neglected corridor, but also leveraged over \$3 billion in new construction and \$2.4 billion in building rehabilitation.

Image from Nelson\Nygaard

Transit Policies

The city will:

Service

- **Maintain and improve the integrity of the Community Transit Network (CTN) system**, including frequent and direct service, discrete branding, etc.
- **Incrementally improve and expand the high-frequency CTN** throughout Boulder County as funding allows.
- **Prioritize city operating subsidies to meet or surpass Boulder's minimum service level standards for the CTN** (10-minute peak and 15-minute off-peak headways, as defined in the TMP Transit Modal Element), particularly when routes serving the CTN exceed RTD's maximum passenger loading standards.
- **Manage arterial transit streets to provide priority to transit vehicles** carrying high average passenger loads while considering cross-street pedestrian and traffic demand
- **Work with RTD to develop performance agreements** that ensure service hours gained through city-funded transit investments will be reinvested in routes that serve Boulder, particularly the CTN
- **Work with RTD and partners to establish a high level of US 36 BRT service to Boulder Junction and Downtown Boulder** and ensure no reduction in US 36 service to Downtown Boulder
- **Enhance connections between the following major developing activity centers:** CU Main and East Campuses and the Boulder Junction and Table Mesa transit centers
- **Increase funding to Via** over time to enhance service to older adults and persons with disabilities, including support for programs that provide efficiencies and service enhancements to the paratransit system

Capital

- **Design and implement bus priority** (speed and reliability) improvements for CTN routes
- **Support implementation of arterial Bus Rapid Transit service in Boulder County**, as prioritized through the Northwest Area Mobility Study (NAMS) process
- **Collaborate with RTD, Via, and other partners to transition the transit fleet to "clean," low-carbon emissions fuel/energy sources** through vehicle acquisition for new services and fleet replacement
- **Design major transit centers and mobility hubs** to provide high-quality bus and multimodal connections
- **Provide funding for transit stop improvements**, prioritized based on a tiered facility investment hierarchy linked to the level of current and/or projected ridership

Policies and Programs

- **Make real-time transit information available** at major transit centers/facilities and accessible over the web and on mobile devices by working with RTD and other partners
- **Expand the Eco Pass transit pass program** and other TDM programs. See TDM Action Plan.
- **Promote urban design and development that supports walking, cycling, and safe access to transit.** Encourage affordable housing and transit demand generating land uses along existing or planned CTN and BRT corridors
- **Expand and support first- and last-mile programs** with local and regional partners.
- **Support development of technology and standards** that enable current and evolving shared mobility applications in Boulder. See TDM Action Plan.

- **Standard buses with unique naming and branding** for high passenger recognition, wide boarding doors, and large windows.

Facilities

The location, design, and operations of transit facilities provide the first impressions of transit for current and potential riders. Figure 5-8 identifies the level and type of amenities at each type of facility. Figure 5-9 shows the locations of existing, funded, and future major transit facilities.

- **Transit Center (TC)** improvements are planned and funded at the current Table Mesa Park & Ride, the existing Downtown Boulder TC, and at the new transit center opening at Boulder Junction in conjunction with the opening of the US 36 BRT. Routes that end at Boulder Junction will use the underground transit center facility, while routes continuing to other destinations will pick up and drop off passengers at the street level. A future transit center in North Boulder is recommended to improve local and regional transit connections.

**Figure 5-8
Transit Facilities and Level of Amenities**

Facility Type		Facility Location	20-Year Plan Improvements
Transit Center <i>(Includes Park & Ride)</i>	Existing	Boulder Transit Center	Multimodal Hub and BRT/high amenity bus stop features plus: <ul style="list-style-type: none"> ▪ Real-time passenger information displays ▪ Comprehensive multimodal wayfinding and highly legible bicycle and pedestrian network integration ▪ Bike share stations
	Existing	Table Mesa Park & Ride	
	Planned/Funded	Boulder Junction	
	Future	North Boulder Transit Center	
Multimodal Hub	Future	Multiple locations (see Figure 5-9)	BRT/high amenity bus stop features plus: <ul style="list-style-type: none"> ▪ Real-time passenger information ▪ Transit wayfinding ▪ High quality bike parking (preferably secure) ▪ Bicycle network integration ▪ Placemaking features (street furniture, public spaces)
BRT Stop	Future	Multiple locations	High amenity bus stop features plus: <ul style="list-style-type: none"> ▪ High capacity shelters and seating at all stations ▪ Level boarding platforms ▪ Transit information for all routes serving area ▪ Real-time bus arrival information ▪ Off-board fare payment (where route appropriate) ▪ Stop and area lighting ▪ Passenger/disabled waiting beacon (after dark) ▪ Curb bulbs where appropriate ▪ Fully improved intersections including curb ramps ▪ Bicycle parking (covered if possible) ▪ Pedestrian improvements within ½-mile radius of stop
Bus Stop <i>(Prioritized for CTN and by level of boarding activity)</i>	High Amenity	Multiple locations	Basic and moderate stop amenities, plus: <ul style="list-style-type: none"> ▪ Shelter with transit information ▪ Crossing markings and pedestrian signals (sufficient crossing time; based on roadway width, design speed) ▪ Bicycle parking
	Moderate Amenity		Basic amenities plus: <ul style="list-style-type: none"> ▪ Seat or bench
	Basic Stop	Standard	<ul style="list-style-type: none"> ▪ Stop pole and sign with stop identifier ▪ ADA accessible bus pad with sidewalks and curb ramps

- **Mobility Hubs** are designed to facilitate safe multimodal access and connections at the intersection of frequent transit lines, e.g., CTN or Rapid Transit, or at locally or regionally significant activity centers with high transit demand. Mobility Hub elements are described in more detail below. Figure 5-9 shows recommended Mobility Hub locations.

- **Bus stops** for BRT/Rapid Transit services would have high-capacity shelters and the highest-level of stop amenities, including real-time information displays and bicycle parking; see Figure 5-8 for examples.

Mobility Hubs

The goal of a Mobility Hub is to provide seamless mobility with a full integration of the transit network with pedestrian and bicycle facilities, car/ridesharing, and context-appropriate parking supply. Mobility Hubs emphasize excellent pedestrian infrastructure within a quarter to half-mile walkshed and connections to the bicycle network. Mobility Hubs are context-sensitive solutions that are adaptable to a variety of locations. Each location requires a unique design, but most include the features identified in the bullets and graphic below:

- Accessible, universal design that allows people of all physical abilities easy access to the transit stop/station
- Congregation of multiple shared mobility services, including bike share stations, car share vehicles and loading space for other private or public mobility services
- Integrated technology, including mobility kiosks, reader boards to assist travelers with mobility planning, shared payment opportunities, and opportunity for other evolving applications
- Active street environments safe for a variety of users
- Secure, covered bicycle parking and access to the bicycle transportation network
- “Placemaking” elements, such as public art and public seating, that invite social interaction and vibrant business opportunity
- Context-appropriate parking



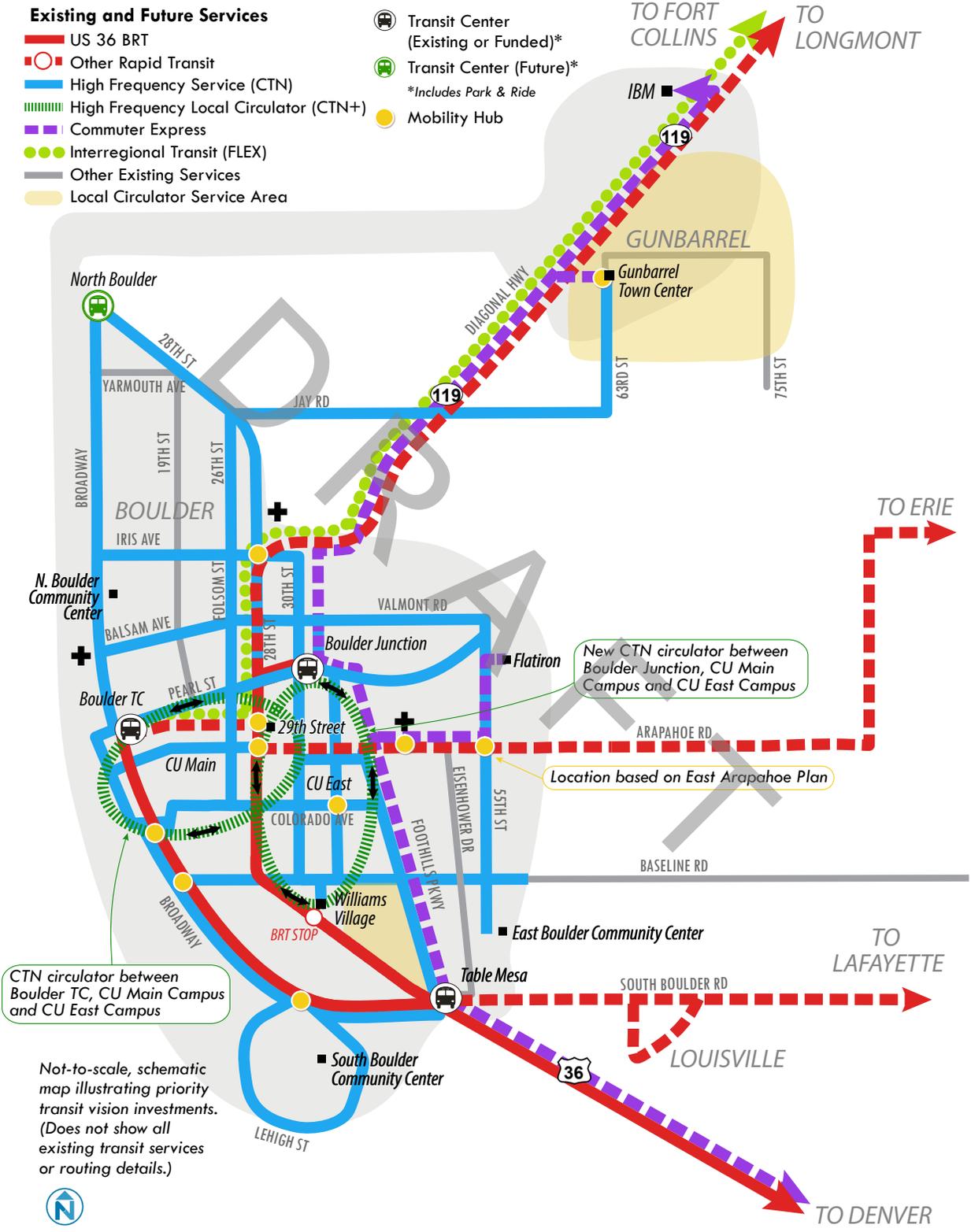
- 1 Enhanced bus stops with real-time information
- 2 Designated bus lanes and priority signals

- 3 Secure bike parking
- 4 Bike parking
- 5 Off-street bike path

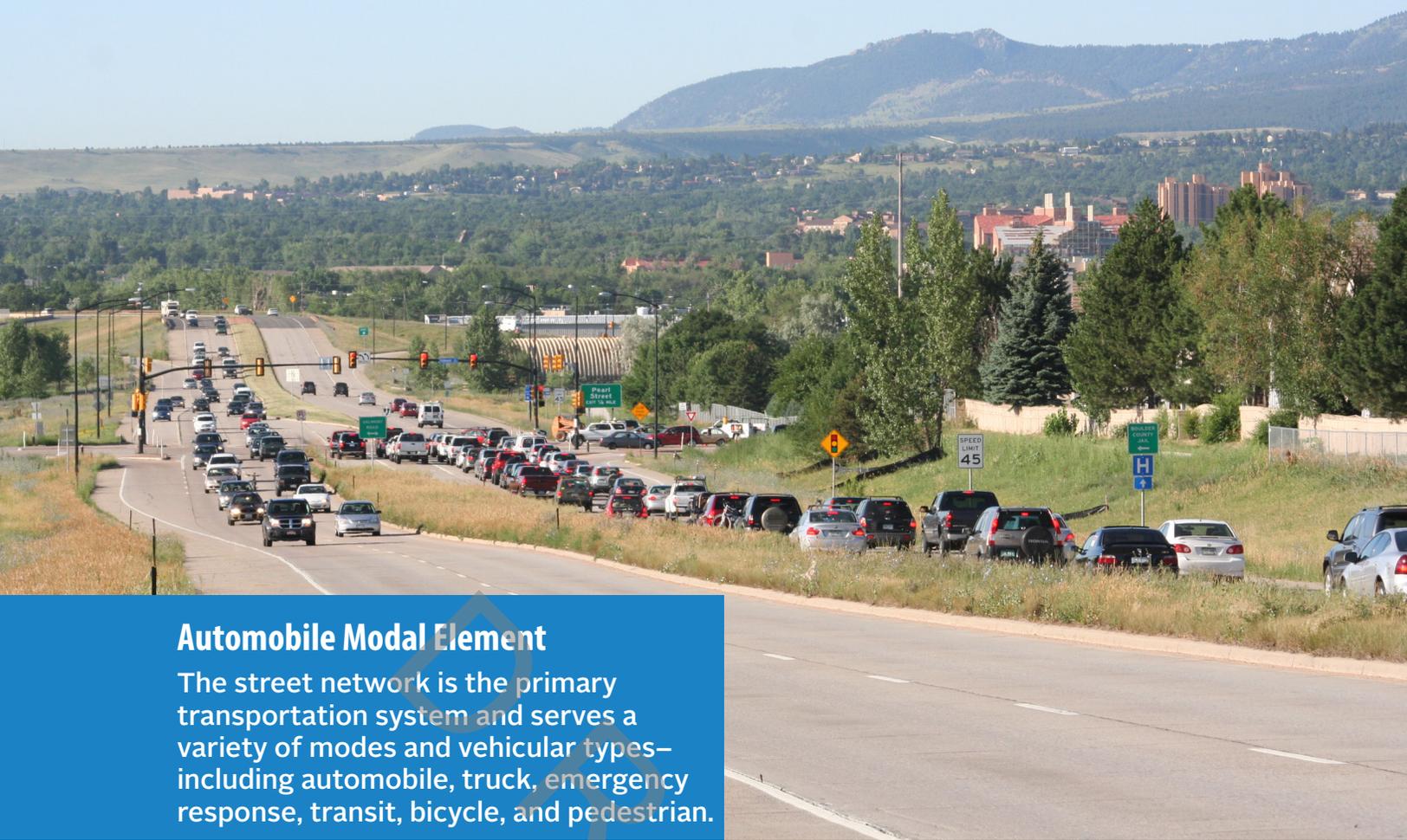
- 6 Car sharing
- 7 Transit and community information kiosk
- 8 Public art

Figure 5-9 Boulder Renewed Transit Vision

Schematic of Priority Transit Corridors



Note: This map does not directly illustrate all services or routing details currently in place. A map of the existing transit system can be found on the City of Boulder [website](#).



Automobile Modal Element

The street network is the primary transportation system and serves a variety of modes and vehicular types—including automobile, truck, emergency response, transit, bicycle, and pedestrian.

Boulder's street system is largely built out and constrained by Boulder being a mature community, so the emphasis in the automobile modal element is to operate the system as safely and efficiently as possible. A limited number of intersection improvements are planned to increase efficiency, remove bottlenecks, and address multimodal congestion at these locations. The intersection operational improvements are designed to balance traffic flow with impacts to the other modes. These projects generally include additional left- or right-turn lanes along with raised crossings and refuge islands to improve safety for pedestrians. Traffic flow improvements also include the installation of new signals and improved signal timing and progression of existing signals.

Additional emphasis is needed on repair and replacement of street sections that have reached the end of their expected life. Boulder is committed to replacing high-volume streets and intersections in concrete, providing a smoother travel surface, greatly extending their expected life and significantly reducing long-term maintenance costs. The recent street reconstruction projects on Table Mesa and Broadway are examples of this emphasis. Additional funding for these kinds of capital replacement projects have been included in the proposed investment programs of the plan.

Maintenance and care of the street system includes all the public infrastructure in the right of way. This

includes the storm water system, curbs and gutters that carry flood flows, and street trees and other public fixtures. Multiple city departments are involved in maintaining and improving the public right of ways to make them more sustainable, resilient and an asset to the community.

The street system is defined by a Street Functional Classification, consisting of a hierarchy of streets from the local streets to collector streets to freeways. These functional classifications establish a common understanding of the use of the street and its character and regulate access from adjacent properties.

Access Management and Parking Strategies

Parking management is the foundation of TDM efforts and the most effective tool in promoting mode shift. The city has started a multi-year effort to reconsider all aspects of parking in the community. This effort should align parking policies and expectations with the community's transportation, Climate Commitment and sustainability goals. Results from this effort will be integrated into the TMP as they are produced.

Roadway Policies

The city will:

- **Develop and manage its street network** in a manner that places reliance on improving the efficiency of the existing system before expanding that system
- **Pursue development of a highly-connected and continuous road system** based on a grid pattern allowing for convenient and efficient travel by all modes

6 | BUILDING A CONNECTED COMMUNITY

Strong relationships across the city organization and with our community agency partners created the foundation of the 2014 TMP and guided the collaborative planning process and community engagement strategies. This foundation connects the TMP with the city's Sustainability Framework and reflects the broad range of Boulder's community values.

Integrated Planning Efforts

Various foundational relationships formed the project management structure for the TMP as well as guided the collaborative planning process and community engagement strategies within the context of the city's Sustainability Framework reflecting the broad community values.

Throughout the TMP process, the city worked with our city and community partners to integrate our transportation and land use planning processes with a wide variety of initiatives, including:

- Two technical advisory committees guided the development of the walk and bike innovations as well as the Renewed Vision for Transit as part of the TMP's Complete Streets Focus Area. Our goal is to continue working with our community partners in on-going collaboration to advance the walk, bike, and transit strategies developed by these innovative and dedicated contributors.
- Engaging with Growing Up Boulder, Boulder Valley School District, and CU to develop and test new ideas to serve future generations of Boulder's travelers.
- A new GIS-based neighborhood accessibility tool developed by Transportation, Community Planning & Sustainability, and IT to evaluate existing conditions and future opportunities to create walkable "15-minute neighborhoods" for people of all ages and abilities throughout Boulder. This tool will help to inform the next Boulder Valley Comprehensive Plan update.
- Sensitivity testing of transit scenarios with parking management and Eco Pass programs show great

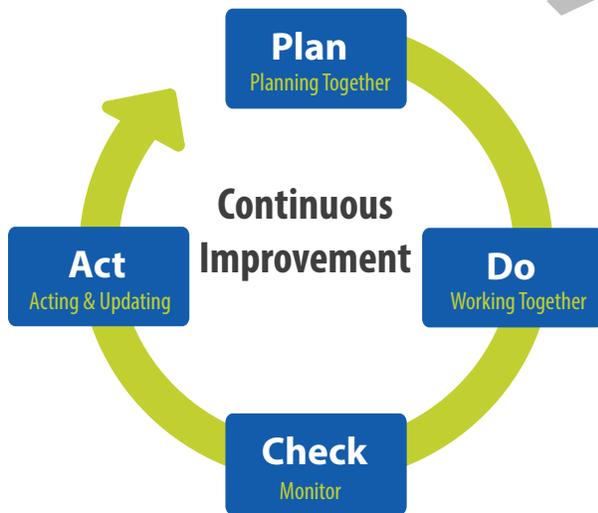
2014 WalkBike Summit



results from leveraging multimodal travel options with the built environment.

- Collaboration among the technical teams for the TMP and the Climate Commitment to develop tools for assessing the transportation related greenhouse gas emissions and to shape refinements to the TMP's measurable objectives—helping Boulder on the path to achieving the desired goal of reducing GhG emissions by 80% below 1990 levels by 2050.
- Teams from throughout the city organization are working on the Access Management & Parking Strategy in collaboration with the TMP's Transportation Demand Management focus area.
- Conducted a variety of joint board workshops with the Transportation Advisory Board, Planning Board, Environmental Advisory Board, and District Boards to discuss TMP, AMPS, Climate Commitment, Sustainable Streets + Centers, and Envision East Arapahoe.

- The TMP supports RTD's Northwest Area Mobility Study (NAMS) to advance arterial Bus Rapid Transit service along the Diagonal/SH 119, East Arapahoe/SH 7, and South Boulder Road.
- The TMP and RTD's NAMS recommendations will help guide the new Envision East Arapahoe corridor plan providing an opportunity for on-going integrated land use and transportation planning.
- North Boulder plan update, Civic Area, corridor plans, Eco Districts, and the upcoming Boulder Valley Comprehensive Plan update are additional opportunities for on-going integration of land use, urban design, and transportation to link together to create great streets and great places for the Boulder community.



Model for Collaborating on Integrated Sustainable Planning Initiatives

Partnerships

The TMP was developed through both internal and external partnerships:

- Transportation connections across all areas of the city organization and the internal partnerships and spirit of collaboration serve the day-to-day development and implementation of the TMP policies, strategies, and action items: Public Works, Transportation, Community Planning & Sustainability, Housing, Parking Services, Parks, IT, Police, and city Administration.
- External existing partners include: Boulder County, Regional Transportation District (RTD), Via, Boulder Valley School District, University of Colorado (CU), CDOT, DRCOG plus Growing Up Boulder, Boulder Chamber of Commerce, Boulder Transportation Connections, Community Cycles, 36 Commuting Solutions, neighboring cities along the US 36 corridor, plus Longmont, Loveland, Fort Collins/Transfort and the North Front Range Metropolitan Planning Organization.

Community Engagement in Decision Making

The TMP is the community's plan—intended to achieve a broad range of sustainability and resiliency goals based on community values and reflecting the role of the transportation system to connect people and places.

Connecting people and places goes beyond the traditional physical connections we tend to think of in transportation—streets, bikeways, sidewalks, multiuse paths, and buses. It includes bringing people together through communication channels of all shapes and sizes—in-person and using social media—to reach the broad and diverse community that is Boulder.

Throughout the TMP planning process, staff, consultants, policy makers, agency partners, business leaders, community members, and Board and City Council members have helped shape the work in each of the TMP Focus Areas through community meetings, store front workshops, on-line feedback applications, youth programs, open houses, and other public events large and small.

The ideas from people of all ages and stages of life have guided the TMP and their feedback supports advancing integrated policies linking transportation, land use, parking, urban design/placemaking, housing, health, safety, economic vitality, environment, and good governance—reflecting the wide range of Boulder's sustainability and resiliency values.

The TMP process is an opportunity to renew and refine the transportation related policies, strategies, action items, and investments priorities to support these community values over time—guiding the present and the future for Boulder's access and mobility goals.

Moving forward, the TMP serves as a living document and helps to inform and be informed by on-going planning initiatives happening locally and regionally as well as at the state and national levels.

The TMP will help to inform—and be informed by—the Boulder Valley Comprehensive Plan update as well as future corridor plans such as Envision East Arapahoe and the overarching Access Management & Parking Strategy initiative.

New tools created as part of the TMP Update—such as the neighborhood accessibility and low-stress bike network GIS mapping tools—will be used on an on-going basis to identify opportunities for infrastructure investment and ways to enhance the mix of available land uses within easy walking and bicycling distances from Boulder neighborhoods.

The TMP will continue to guide the community's long-term transportation vision, action strategies, and day-to-day decisions for many years to come.

The TMP can be amended and refined over time to keep pace with the changing needs and desires of the Boulder community. The array of TMP measurable objectives will be monitored every two years and shared with the community in future "Report on Progress" updates. These results will help the city and the Boulder community to gauge our progress and adjust our course as needed over time.

On-going community engagement is the cornerstone of Boulder's success in envisioning and creating a world-class transportation system to serve people today, tomorrow, and for generations to come.



TMP Community Storefront Workshops and Public Open Houses



7 | INSPIRING A SHARED VISION: A CALL TO ACTION

Moving from the planning stage to the action and implementation stage is key to reaching the desired outcomes of the TMP. Success will depend on collaborative partnerships with agency partners such as Boulder County, Via, RTD, Boulder Valley School District and the University of Colorado.

Next Steps and Tracking Progress

Throughout the TMP process, action items have been developed to advance each of the Focus Areas. Each of these items identify the stakeholders and partnerships that will be needed to move the action item forward. Many of them involve the city, partner agencies, and community groups. A summary of these implementation steps is included here while the Action Plan appendix contains the detailed recommended action items. In the Action Plan, these action items are identified for immediate (2014-2016), near-term (2017-2020), and long-term (2021-2035) implementation in each Focus Area. As this is a comprehensive list and likely exceeds the resources available to the city and partner agencies, each action item is also classified by TMP Investment Program. The city priorities will be refined through the annual budget process and work programs and will be adjusted for the progress of related planning efforts such as Envision East Arapahoe, the Access Management and Parking Strategies, Comprehensive Housing Strategies, and various corridor studies.



2014 Winter Bike to Work Day
Image from Tanya Dueri



Multimodal Corridors - "Complete Streets"

- **Focus on roadway enhancement and street corridor projects** that also address safety issues identified through the city's Hazard Elimination Program
- **Continue to implement efficiency improvements** to the overall system through real-time traffic information, traffic flow improvements at key intersections, corridor timing plans, and other efforts
- **Continue to prioritize, design, and construct complete streets for all modes**
- **Continue to pursue lower-cost pedestrian and bicycle facility enhancements** (such as pedestrian crossings, access ramps, bike lanes, and missing links) through the dedicated pedestrian and bike facilities funds
- **Continue the Living Lab program** and increase the emphasis on the other four E's to increase use of the bike system by all types of riders
- **Expand the living laboratory philosophy** to walking, transit, and TDM to increase use and effectiveness of these systems
- **Coordinate transportation planning and investments with anticipated changes in land use** through corridor studies to maximize their effectiveness and support community desires for high quality design and placemaking
- **Maintain and expand the existing CTN transit service** within the community following the Renewed Vision for Transit as funding allows
- **Work with regional partners to implement high quality BRT service** to surrounding communities on US 36 and the identified NAMS regional corridors
- **Pursue implementation of providing real-time transit information** at major bus stops and directly to transit passengers
- **Implement mobility hubs** and other solutions to expand options for addressing the first- and last-mile portion of transit trips
- **Enhance transportation data collection and system status reporting** as new data collection and distribution technology becomes available, working toward the vision of a complete mobility planning and payment system being available on any personal electronic device



Regional Travel

- **Continue to support and participate in coalitions to create multimodal plans and funding for implementing BRT** on the identified NAMS corridors of the Diagonal (SH 119), Arapahoe (SH 7), and South Boulder Road
- **Maintain the city's role in supporting the locally preferred improvements and high-quality BRT on the US 36 corridor** by active participation in the US 36 Mayors and Commissioners Coalition
- **Provide separate bike facilities on regional corridors** to link communities and integrate these connections into the local bike system
- **Increase collaborative planning and funding activities** with partner agencies, including Boulder County, Boulder Valley School District, the University of Colorado and the Boulder Chamber
- **Increase the city's activities to create effective regional partnerships** and influence policy at the regional agencies of the Denver Regional Council of Governments, RTD, and the Colorado Department of Transportation



Transportation Demand Management

- **Continue to work with Boulder County and RTD on the development of a Community-wide Eco Pass program** and to expand the existing pass programs
- **Continue to support and coordinate activities with the existing transportation management organizations**, such as Boulder Transportation Connections and US 36 Commuting Solutions, and DRCOG's regional Way to GO TDM program
- **Continue to support and coordinate activities with partner community organizations** providing options in transportation, including Via, E-Go Car share, Boulder B-cycle, and Community Cycles
- **Continue the AMPS process to align parking utilization and requirements to city sustainability goals** and broaden parking management as the foundation of TDM activities
- **Refine the TDM Toolkit for development review with partner organizations** to produce more consistent and substantial reductions in SOV use through TDM programs appropriate to the location of the development




Funding

- **Develop the annual transportation budget and CIP** to reflect the spending priorities of the TMP
- **Actively pursue outside funding** from federal, state and private sources to leverage city dollars in implementing the investment programs of the TMP
- **Continue discussions with businesses, community groups, and Council to develop a use-based proposal** to diversify and increase transportation funding well before the 2013 transportation sales tax expires in 2030




Sustainability Initiatives

- **Continue cross-departmental coordination and collaboration** on integrated sustainability planning efforts
- **Maintain the GhG inventory system** developed through the Climate Commitment work and include GhG reduction strategies in transportation planning and construction activities
- **Carry out a series of corridor studies** to undertake land use/transportation/TDM planning to make these areas more supportive of city goals. Initial corridors identified for study include Canyon, east Arapahoe, Colorado, and 30th Street



The Community's Role in Delivering the Plan

As described throughout this document, the TMP has been developed and envisioned by the Boulder community. It is intended to represent and fulfill the role of transportation in the community's overall goals of protecting the environment, providing a high quality of life to all members of the community, and becoming a more sustainable and resilient community. These goals are expressed in the Boulder Valley Comprehensive Plan, its Sustainability Framework and the city's efforts to integrate its planning and sustainability efforts across the city organization.



While all city departments have a role in implementing the vision of the TMP, this planning process clearly shows achieving the community's goals in transportation, climate commitment and sustainability requires the efforts of partner agencies and community members. The TMP update process started with a policy review identify the need to accelerate mode shift to reach transportation goals. The Climate Commitment analysis conducted as part of this plan shows the potential and need to reduce both vehicle miles of travel (VMT) and single occupant mode use by an additional 20 percent. Accomplishing many of the Action Plan items identified in the TMP will require sustained collaboration and long-term efforts as they are not under the control of the city. The TMP also exists in a more fluid and dynamic environment, where other planning efforts will inform the plan and where technological and social change will challenge many long held assumptions. Everyone has a role responding to these changes to help reach our community goals.



Achieving the new VMT and mode shift targets will be challenging but also offer a host of co-benefits to the community and individuals. Increased walking and biking have significant health benefits and can be established as habits in children—with life-long benefits. Creating more diverse, mixed use neighborhoods will allow more trips to be short and attractive for walking or biking. Increased walk and bike use builds community and supports local businesses. As households need to spend a smaller amount of their budget on transportation costs, they can direct these savings into other areas such as housing and local businesses. And as the major public space connecting the community, streets can increasingly be used for a balance of travel, placemaking and as a community amenity. Boulder has a long history of intentionally planning for change and creatively approaching its challenges— which needs to continue as we implement the TMP.



Transportation

Since 1989, the Transportation Master Plan (TMP) has placed transportation plans and programs within the context of the broader community goals to protect the natural environment, increase sustainability and resiliency, and to enhance Boulder's quality of life. The TMP recognizes that Boulder is unlikely to build significant additional road capacity due to environmental, financial and community constraints. The plan maintains the following goals:

- A transportation system supportive of community goals;
- An integrated, multimodal transportation system emphasizing the role of the pedestrian mode as the primary mode of travel;
- Sufficient, timely and equitable financing mechanisms for transportation;
- Public participation and regional coordination in transportation planning; and
- A transportation system supportive of desired land use patterns and functional, attractive urban design.

These goals are measured according to nine objectives. The six existing objectives are enhanced and the three new objectives are added to the plan. These objectives are:

- Reduce vehicle miles of travel (VMT) in the Boulder Valley 20% by 2035;
- Reduce single-occupant vehicle travel to 20% of all trips for residents and to 60% of work trips for non-residents;
- Achieve a 16% reduction in GhG emissions and continued reduction in mobile source emissions of other air pollutants;
- No more than 20% of roadways congested (at Level of Service - LOS F);
- Expand fiscally viable transportation alternatives for all Boulder residents and employees, including the elderly and those with disabilities;
- Increase transportation alternatives commensurate with the rate of employee growth;
- Continuous improvement in safety for all modes of travel;
- Increase the share of residents living in complete neighborhoods to 80%; and,
- Reduce daily resident VMT to 7.3 miles per capita and non-resident one-way commute VMT to 11.4 miles per capita.

The 2014 update to the TMP identifies five focus areas for strategic action: multimodal corridors, regional travel, transportation demand management (TDM), funding and Integrating with Sustainability. The 2014 update reflects the work of the Climate Commitment transportation sector greenhouse gas analysis. The resulting measurable objectives reflect the challenging expectations for additional reductions in vehicle miles of travel and single occupant mode share. , The plan provides a Renewed Vision for Transit to significantly increase transit use, commits to the development of a more inclusive bike system, and reflects changing financial conditions and updates to the investment programs.

**City of Boulder
Joint Board Workshop
April 23, 2014**

Transportation Advisory Board, Planning Board, Environmental Advisory Board, and District Boards

Event Summary – Meeting Notes

City of Boulder staff from Transportation, Community Planning & Sustainability, and Downtown and University Hill Management Division/Parking Services hosted a “Joint Board Workshop” with members of the Transportation Advisory Board, Environmental Advisory Board, Planning Board, and District Boards on Wednesday, April 23rd from 5:00 – 8:00 p.m. at Sanitas Brewing Company. The event included a walking tour of Boulder Junction. The workshop was facilitated by Heidi Brinkman, BCI Consultants.

Attendance at the workshop included over 50 members representing each of these city Boards as well as city staff from a variety of departments.

The Workshop topics included the city’s Transportation Master Plan update, Climate Commitment, and Access and Management Parking Strategy, and focused on inter-related themes among all of these projects/plans.

The purpose of the workshop was to provide an opportunity to build relationships and understanding among board members and staff. Participants reviewed display boards and a presentation from staff regarding these intersecting topics related to climate, transportation, and parking/access management.

Feedback received from this workshop is being used to inform each of these plans/projects as they move forward through the integrated planning processes.

The following is a synopsis of the notes from the “table top” discussions among all of the workshop participants.

For more information and if you have questions/suggestions regarding the joint board workshop, please contact: Kathleen Bracke, GO Boulder Manager, City of Boulder Public Works - Transportation, e-mail: brackek@bouldercolorado.gov and phone: (303) 441-4155.

JOINT BOARD WORKSHOP
HIGHLIGHTS FROM TABLE TOP DISCUSSIONS
April 23, 2014

Workshop participants participated in table top discussions to respond to the following questions:

1. Are we on the right track with the proposed elements of the Transportation Master Plan (TMP) Update, is anything missing?
2. Are we on the right track with the proposed work program for Access Management and Parking Strategy (AMPS)? Is anything missing?
3. For transportation to achieve the deep GHG reductions per the city's Climate Commitment goal, as well as the broader sustainability goals, we need to reduce vehicle miles traveled (VMT) in Boulder by as much as 20%.
 - a. How can the work of Boards support, contribute, and advance these efforts?
 - b. What resources, support or information do you need?

Table Notes:

Question #1: Are we on the right track with the proposed elements of the Transportation Master Plan (TMP) Update, is anything missing?

Table 1

Good:

- 1) Creates programs
- 2) Builds facilities

Missing:

- 1) More bold in user fee
- 2) Land use reform
- 3) Bold plan for road diet / traffic calming

Missing:

- 1) Regional connections
- 2) Safety (Homeless on walk/bike path at night)

Missing (interested/concerned):

- 1) Mileage based fees- (Need to clarify what we want to deter. More discussion of infrastructure for low carbon transport).

Concern:

- 1) Economic pinch strategies may aggravate gentrification

Missing:

- 1) Density – Need greater density to support many objectives.
 - More housing and mixed use along “ramp up” transit corridor – critical role of land use (fewer and shorter trips)
 - How to ramp up commercial develop “right” minimizing impacts
 - How to work with pre-developed suburban neighborhoods
 - Need to work on regional transportation funding

Good:

- 1) Addressing diversity
- 2) Transit high quality
- 3) Tools for assessing progress
 - a. Accessibility
- 4) Pursuit of city-wide ecopass
 - a. Power of the herd
- 5) Normalize bike & transit
- 6) B-Cycle program – consider more promotion

More of:

- 1) Community partnerships, e.g. Community Cycles
- 2) “Concerned” bicyclists need calmer streets
- 3) More granularity on bike data
- 4) Connections for regional transit
- 5) Especially south bound – Express for Fed & employees
- 6) Consider “Enhanced Transit Service”
 - a. Buy ups for certain routes

Table 2

Missing:

- 1) Ensure TMP addresses elderly, disabled persons & children
- 2) Congestion around schools with cars & parents
- 3) Consider additional: Performance metrics system
It could be better. For example, look at total commute time/commute cost.
 - a. Capable of incorporating l.vge/multimodal & more comprehensive than our current metrics
 - b. 20 minute neighborhood, good
- 4) Mom’s / families with little children – making it safe for walking & biking is the right approach & transportation network.
- 5) Ensure way finding systems are intuitive – Universal symbology / icons
- 6) Better intersection control for bikes
- 7) Safety as a priority with transportation system
- 8) Wants more bold action on reducing demands of road network/ reduce road capacity
- 9) Consider some non-auto/bike/ped corridors (ie 19th St.)
- 10) Conceptually TMP heading in right due
- 11) Let’s make the TMP more bold. Let’s make the tough choices! Definitely.

- 12) The City is challenged in making the tough choices – not bold enough. Show leadership.
- 13) Let's incorporate more outside USA models
- 14) Let's do everything equally for everyone. We need to prioritize.
- 15) Demand destruction (both parking / road capacity)

Table 3

- 1) Does it address changing lifestyle?
 - a. Internet impacts... capture sales tax for transit?
- 2) Little or no land use component, i.e. zoning for walkability
- 3) More discussion around finding a middle ground “car – light”
- 4) Use more examples of successful programs in other cities – implementation & test programs
- 5) More examples on our community – less about regional transit (Uni Hill, Downtown, Boulder Junction)
- 6) Walkability – Look at 5 minute neighborhoods

Table 4

- 1) Data collection & analysis in general on mode share splits – explain & refine methodologies
- 2) The way we collect, qualify & share data
- 3) TMP not on track to meet 25% _____ goal not phrased/messaged with this as key
- 4) Living lab should include transit too
- 5) Need to work with RTD
- 6) Better integration with land use/ Change land use with transit connection
- 7) Where people live and work influence transit
- 8) Possible land use changes should go hand in hand with possible transit service change investments.
- 9) Community driven planning that reflects values is important & necessary to make hard choices moving forward.
- 10) Community wide ecopass is intergral
- 11) Explore zoning requirements for parking spaces- move toward innovations that reduce parking in favor of car/bike share & other TDM.

Table 5

- 1) Bigger push for B-cycle citywide
- 2) Building Blocks
 - a. Eco Pass – Community wide
 - b. TDM Tool kit for new development
 - c. Walk/Bike innovations approach
 - d. Transit service – Regional/Local balance
- 3) Bike lane improvements on track
- 4) Mass Transit missing mark on getting around town locally – 45 minutes for local trips
- 5) Street car along Pearl St. – innovations
- 6) Making it harder to drive is a solution people will still drive & sit in traffic

- 7) Parking data on inventory & utilization needs work – concern for including private parking spaces in data surveys
- 8) Wi-fi on buses would encourage this commute option – useful time
- 9) Parking management: Could be problematic to economic success of development if units aren't leased due to services (not enough parking)
- 10) Boulder compared to much higher density cities verses peer cities of our size & density

Table 6

- 1) Open enrollment
- 2) Incentivize local
- 3) Data?
- 4) Identify problems to local travel
- 5) Spatial & demographic
 - a. Integrate urban design and land use in to TMP update
 - b. Aging population
 - c. Map the gaps, thru work to fill them
- 6) Beyond roads & bike paths
 - a. Showers at work
 - b. Errands
 - c. B-Cycle, eGo
 - d. Burley's
- 7) Holistic community vision development & neighborhoods
 - a. Comprehensive plan
- 8) Invert process: workshops then TMP update
 - a. Keep watching model cities & technologies

Question #2: Are we on the right track with the proposed work program for AMPS? Is anything missing?

Table 1

1. Look at pricing structure for parking
2. Downtown May be well poised for increased parking prices but other areas are more challenging.
3. Ramp up period in Boulder Junction is paradigm shift in parking pricing; ramp up over time.
4. Metered parking options need more innovations including validated parking option.
5. How does AMPS support creating new areas and the businesses?
6. Create new districts in North Boulder Business District with shared parking - west side has potential; East Arapahoe with new nodes and parking districts.
7. Make Neighborhood parking permit expansion more easy/flexible for residents to help facilitate
8. Raise price of NPP

Table 2

1. Look at EV Infrastructure (or other alt fuels)
2. More proactive about neighborhood parking to address concerns over spillover

3. Ramp up code enforcement
4. What is good:
 - a. Convert parking minimum to maximum
 - b. Target places that support:
 - + Density
 - + Mixed use
 - + Transit
 - c. District Concept : expand to Boulder Junction and East Arapahoe
5. More of:
 - a. Unbundling
 - b. Shared
 - c. Priced parking
6. Technology – more info on parking availability
7. “Parking cash out
8. TMP should be about **Accessibility** not **Mobility**
9. Accessibility comes from better proximity
10. More lower speed roads

Table 3

1. Need to consider aging population and their parking needs
2. Large surface lots not owned by the city
 - incentivize developers to change for community good
3. Apply technology and market innovations to whole city; pay attention to innovations; social media
4. Maximizing existing resources, i.e. sharing of parking lots
5. Parking beyond cars – bike trailers, strollers, electric cars

Table 4

1. Unclear to me what we are trying to do with AMPS
2. Consider parking pricing and unbundling
3. Political spine is missing to make changes
4. Consider constraining and reducing convenience of parking
5. Study and plan for location of electric vehicle charging stations
6. Ensure AMPS work program influences land use code; need overlay districts
7. Be bold with AMPS
8. The integration between departments is good. (ie. Transportation, CP&S and Parking Services)

Table 5

1. Need more public/private parking arrangements like St. Julien
2. Parking supply/demand within CAGID District and new developments like Walnut – need better analysis to see if requirement balance works.
3. Out of downtown parking to support future re/developments?
4. Risky for developers to minimize parking?
5. Will traffic congestion result in less people traveling / visiting / spending money in Boulder?
6. Access overall - improve marketing of parking options

7. Need shift in mentality from suburban to urban
8. “In Denver, parking in garage is norm and expected but in Boulder, I will circle for a space on street”

Table 6

1. More “last mile” focus
2. Use parking structures more effectively
3. Institute flexible pricing
4. Add more variety to provide alternative mode access and link affordability with life style
5. Consider conomic issues related to below grade parking
 - ground water issues
 - city incentives
6. Business “culture” change, more people in less space

Question #3: For transportation to achieve the deep GHG reductions per the city’s Climate Commitment goal, as well as the broader sustainability goals, we need to reduce vehicle miles traveled (VMT) in Boulder by as much as 20%.

- a. How can the work of Boards support, contribute, and advance these efforts?
- b. What resources, support or information do you need?

Group 1

1. More timely communication
2. Higher density to more amenities, business and residential closer together. Mixed-use infill development
3. Safer bike routes
4. Incentivize employers to encourage eco-passes. Dis-incentivize employer purchased parking for employee
5. Neighborhood focused solutions with community buy in
6. Education: Residents need more information about options
7. Reduce opportunities for open enrollment (schools)

Group 2

1. Per person (not city wide) metric of GHG is key measurement
 - o the city’s GHG isn’t the solution but more global
2. Demonstrate how a city can make a difference to achieve GHG reductions as a model to follow is important
3. If you get new people moving in...
 - a. Looking at areas in town and analyzing/tracking the reduction trends we seek → use as model/pilot to guide future developments
 - b. Data collection/analysis on/development basis as well as per capita and citywide
4. 10-15% of our population is living/achieving our 2050 goals in terms of their foot print
5. Technology may not be the limiting factor
6. Aggressive policies to guide the market to run in standards that will achieve a new status quo and create the behaviors we want to achieve

Group 3

- GOOD
 - Boulder Junction putting in place parking management
- REFORM:
 - TMP include Land Use
 - TAB needs permission to talk about Land Use reform
 - Need more information on environmental impacts of the transportation choices (not just GHG)
 - Need to incorporate transportation issues in Comp Plan (can't have too many boards managing Land Use)
- NEED:
 - Increase housing and accessory units/micro units
 - "Theory of the Whole" – to see the inter relationships that maximize low GHG development
 - Placemaking vs. traditional zoning
 - More priced parking
 - Price or toll roads (requires state authority)
 - Look to European cities
 - Don't add more corridor capacity

Group 4

1. Look at other peer cities – bolder goal for Boulder (see Freiburg, Germany)
2. Boards can help Council and staff
 - a. Support council/push council
 - b. Advocate roll/advise council
3. One-to-one meetings with council
 - a. Personal advocacy with council and legislative agenda
4. Go to council with consistent coherent and concrete changes
5. Boards can lead
6. Joint board meetings are great
 - a. Helps advance understanding and integration
7. Would like more information on demographics by transportation choices (bus, bike, walk)

Group 5

- Education and policy to influence change
 - \$0.10 bag fee = 70% reduction in bag use
 - Incentivize behavior to make change
- Adding services where people live (20 minute neighborhood)
- Build up nodes to increase services/density
- Incentivize grocery businesses to open small neighborhood markets
- Missed opportunity to not capitalize on property value increases with transfer tax fees that are invested back into community services
- Stamford, CT Housing sale =5% tax

Group 6

- Bring more basic services to the neighborhood (20 min. neighborhood)
- Ask neighborhoods what they need
- Redevelopment and infill for density

- Block parties to get messaging about 20% reduction in GHG