

# 2016 ANNUAL BUDGET VOLUME II CITY OF BOULDER, COLORADO

2016 Annual Budget Volume II

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# City of Boulder 2016 -2021 Capital Improvement Program

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## 2016 - 2021 CAPITAL IMPROVEMENT PROGRAM HOW TO USE THIS DOCUMENT

The City of Boulder's 2016–2021 Capital Improvement Program (CIP) contains information on how the city plans to invest available resources into key infrastructure and facilities between 2016 and 2021. This document contains: planned project funding summaries organized by department, project type, and fund; detail sheets for every project and program included in the plan; links to maps illustrating the location of projects throughout the city; and narratives describing the rationale behind project prioritization.

#### **Document Organization**

The 2016-2021 CIP has five main parts:

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

#### Introduction

The Introduction section provides an overview of the 2016-2021 CIP, describes the CIP development process, gives highlights of the CIP, and summarizes factors that influenced the projects included in the plan.

#### **Funding Summaries**

The Funding Summaries section contains analysis of how the 2016-2021 CIP allocates dollars among city departments, project types, and funds. Full financial detail can be found in the tables of this section.

#### Special Highlights

The Special Highlights sections include information on a major area of concerted effort related to capital investment: implementation of Capital Improvement Bond projects. The capital bond section contains a narrative describing associated projects and other highlights. There are also highlights of the effects of the following on the CIP: the September 2013 Flood, the Community, Culture and Safety project, and the Pavement Management Program. .

#### **Department Projects**

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

#### **Appendices**

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

## 2016 - 2021 CAPITAL IMPROVEMENT PROGRAM HOW TO USE THIS DOCUMENT

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

#### **Data Limitations**

The 2016-2021 CIP provides the funding plan (amount needed by year) for each CIP project. That is, the amounts analyzed in the document's summary sections and in each project sheet refer to planned budget allocations (sources) and not expenditures (uses).

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

#### How to Read Project Financial Data

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

- Estimated Total Cost
- Capital Funding Plan
- Unfunded Amount

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

For most projects in the CIP, the *Capital Funding Plan* table shows total allocated dollars to the project prior to 2016 and for each year between 2016 through 2021. However, on-going programs, because they have typically received funding for many years before 2016, do not have information about allocated funding prior to 2016. Ongoing programs generally allocate a set amount of funding per year on a continuing basis. Therefore, programs also do not have total cost information. Both blank fields focus the CIP on the coming six years of planned improvements for each on-going program, and by doing so, the CIP does not expect the on-going program to account for prior improvements or future improvements well beyond the CIP's planning horizon that ends in 2016.

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

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Figure 0-1: Sample Capital Funding Plan Table

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

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City of Boulder
INTRODUCTION
2016–2021 Capital Improvement Program

#### Capital Planning and 2016 - 2021 CIP Summary

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

Boulder has made significant investments to provide its current level of municipal services. The city owns and maintains 382 buildings and structures, 1,800 acres of parkland, 45,498 acres of Open Space and Mountain Parks (OSMP), 305 centerline miles of streets, 159 centerline miles of bike facilities, 79 underpasses, three water treatment facilities, and over 800 miles of water and



Chautauqua Reservoir Construction, 1923. Photo courtesy the Carnegie Branch Library for Local History, Boulder Historical Society Collection.

wastewater piping. The city funds the construction and maintenance of these assets using a wide range of sources, including tax revenues, bond proceeds, and fees. The city continues to look for ways to leverage its funding, through federal, state, and local grants and reimbursements, to maximize funding for CIP projects.

The CIP development process prioritizes the city's numerous needs spread across its 17 different departments, bearing in mind the limits of each funding source, progress on ongoing CIP projects, and funding commitments made by prior CIPs. To create a citywide understanding of which projects are chosen for inclusion

in the CIP, the city developed nine CIP Guiding Principles to shape capital planning decisions made throughout the CIP process. The CIP Guiding Principles also ensure individual department priorities for CIP funding are aligned with city goals. Figure 1-1 lists the CIP Guiding Principles.



#### Figure 1-1: CIP Guiding Principles

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

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



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

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

The city regularly sets aside money in its CIP to save for future projects. This important budget practice leads to better planning by allowing the city to pay for higher dollar projects over time rather than requiring the city to find funding in a single budget year.

The city is spending the majority, over 82 percent, of its 2016 capital funds on capital maintenance and enhancement of its existing assets (See Figure 1–2). Capital enhancements involve upgrades to existing facilities, such as replacement of irrigation systems with updated technologies, materials and equipment that can be more efficient, effective and less costly to operate over time.

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



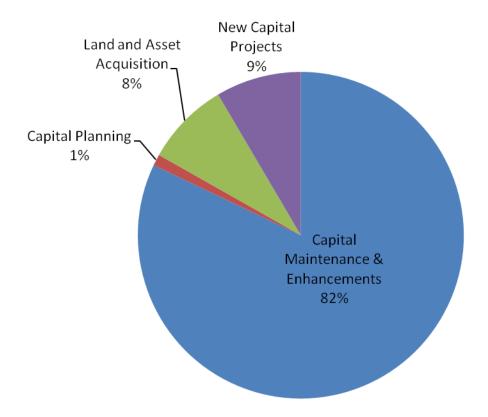


Figure 1–2: 2016 Projects by Category

## **CIP Highlights**

The city anticipates completing a significant number of Capital Projects in 2015 and 2016. These projects benefit the City of Boulder, its residents and visitors by maintaining key infrastructure and functionality, maintaining and improving the transportation network, providing greater safety, maintaining and improving recreational facilities and natural lands, and maximizing the use of technology for greater efficiency and better service delivery. A few examples of these are listed below. Additional details on 2015 accomplishments and highlights of the 2016–2021 CIP are noted in the department overviews.

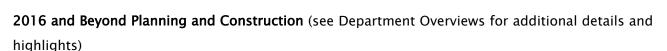
[Please note that Capital Improvement Bond projects are included in this list.]

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

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



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



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





West End Streetscape on 9th Street and Pearl Street.



#### Special Highlight Sections

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

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

### Challenges

Each year, as the CIP is being updated, City Council, advisory boards, and staff consider technical, environmental, and financial challenges that could potentially limit the ability of the city to fund its priority projects. Challenges approximately half way being identified in the 2016-2021 CIP include, continued flood impact and phase. recovery costs, especially in Open Space and Mountain Parks, response to the Emerald Ash Borer threat, funding constraints, construction cost inflation, operational funding,

Flood Impact

and conversion to new financial software.

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

The 2011 Capital Bond is through the implementation



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

The 2016 - 2021 CIP includes a special flood highlight section, which provides additional information related to the impact of the flood on the CIP. For departments still in the midst of recovery efforts or mitigation work, details specific to their departments are included in the Department Overview sections of the CIP.

#### **Emerald Ash Borer Threat**

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

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

Staff has gathered information and worked interdepartmentally with Parks & Recreation, the city's Integrated Pest Management team, Open Space and Mountain Parks, Development Review, and other interested divisions, departments and boards to develop an EAB Management Plan to manage the infestation within the city and potentially slow the spread to nearby communities. This plan will be presented to council in September 2015. The CIP includes a multi-year project and funding has been identified to implement the plan.

#### **Funding Constraints**

Revenue has recovered over the past few years and voter renewal of several expiring taxes has helped to stabilize the long-term outlook, however, a structural gap between needs and resources



still remains. The city will continue to prioritize its needs based on its available resources using the CIP Guiding Principles.

#### Construction Cost Inflation

The *Engineering News Record* Construction Cost Index for Denver and the Colorado Department of Transportation (CDOT) Colorado Construction Cost Index indicate that construction costs are escalating at a rate of 2.2 and 4.5 percent respectively, based on a 5-year rolling average. As yearly variations are common, a five-year rolling average is more indicative of the inflationary trend. Staff closely monitors inflation indices and uses this information to determine expected capital cost escalation over the 6-year CIP. A higher cost escalator will reduce the amount of work that can be done with planned revenues, in particular, over the planning horizon of the CIP.

#### **Operational Funding**

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

#### **Conversion of CIP to Munis**

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

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

#### **Opportunities**

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



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

#### Funding - New Capital Revenue

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

In November 2013, voters approved a temporary sales and use tax for Transportation, and renewed expiring taxes for the purposes of funding open space, transportation and general city needs. This additional and renewed funding provides continued opportunity for capital investment in the city. The 2016–2021 CIP includes a special highlight section on the Pavement Management Program implemented with these new dollars for Transportation.

#### **Strategic Planning for Unfunded Projects**

As the city embarked upon the capital phase of the Comprehensive Financial Strategy (CFS), staff continued to identify a large number of unfunded capital needs across the city. The 2016–2021 CIP includes information on citywide unfunded capital needs, both in department overview sections and in Appendix A to this document.

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



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

#### **Capital Investment Plans & Studies**

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

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

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

#### **Integrated Planning Effort for New Technology**

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



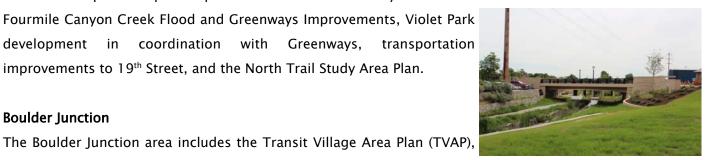
#### Implementation of Subcommunity & Area Plans

#### North Boulder Subcommunity Plan

The North Boulder Subcommunity Plan (NoBo Plan) was adopted by the city in 1995. City Council accepted the 2014 Action Plan that outlines a new generation of action items that further advances the original plan's vision. Much of the planning area has now been developed or is approved for development, and a significant number of Capital Improvements have been made in the area. Proposed Capital Improvements in the next six years include

Fourmile Canyon Creek Flood and Greenways Improvements, Violet Park development in coordination with Greenways, improvements to 19th Street, and the North Trail Study Area Plan.

path along the Boulder Slough between 30th and 3100 Pearl.



adopted by the city in 2008, which covers 160 acres. Implementation of Improvements at Goose Creek at Boulder

#### **Boulder Junction**

the plan is underway, with completion of the Junction Place Bridge at Junction. Goose Creek and the Pearl Parkway Multi-Way Boulevard from 30th to BNSF Railroad tracks on the south side of Pearl. Proposed capital investments in the next six years include construction of a new pocket park at Junction Place and Goose Creek, traffic signal installations, and a multiuse

#### Downtown Boulder

The future vision for downtown Boulder was developed through the Downtown Alliance, and its final report in 1997. While significant private and public investment has occurred since that time, continual investments in the downtown are needed to continue to ensure downtown remains a primary community gathering place, business and commercial center, and tourism attraction. In the next six years, projects in downtown include ongoing parking garage maintenance, repair and replacement of CAGID parking lots, construction of a shared parking facility at Trinity Commons, and improvements and amenities replacement on the mall and along 15th Street south of Canyon.

#### Civic Area Plan

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



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

#### **Projects Recommended for CEAP**

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

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

#### **CIP Process**

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

#### **Planning**

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

The Sustainability Framework ensures that subcommunity and area plans and departmental master plans are aligned with the CIP. Subcommunity and area plans provide more detailed planning for land use, urban design, neighborhood revitalization, and public facility needs for a specific area of the city. Departmental master plans include details about and funding plans for future needs related to services and facilities. The master plans are used by each department during their decision making and prioritization as part of the annual budgeting and CIP processes.





Figure 1-3: Sustainability Framework

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

#### **Project Review**

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

#### **Board Review and City Council Adoption**

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



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

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

#### **CIP Process Changes**

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

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

The city will continue to make improvements to the CIP in future years. Changes planned for the future include updates to the CIP section of the City Plans and Project Handbook, adding project expenditure and schedule information to the document (through data entered into Munis), continuing to incorporate graphical enhancements to improve the on-line view of the information and document, continuing to incorporate robust strategic planning in the process (as described above), and incorporating performance measures into the plan.



#### Figure 1-4: CIP Definition and Criteria

#### Capital Improvement Program Projects

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

#### Criteria for New Capital Project:

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

#### Criteria for Capital Enhancement:

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

#### Criteria for Capital Maintenance:

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

#### Criteria for Land & Asset Acquisition:

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

#### Criteria for Capital Planning Studies:

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

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## **FUNDING SUMMARIES**

2016-2021 Capital Improvement Program

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

- Total project cost
- Planned funding allocation in each year 2016-2021 and the six-year total
- Prior funded amount
- Unfunded amount

The Funding Summaries focus on estimated budget needs (sources) for all projects. The CIP this year shows limited instances of planned or actual expenditures at a project, department, or fund level. In practice, as projects are planned, designed, and constructed, during any given year, appropriated project sources almost always differ from project expenditures. In some circumstances, such as a large project that requires many years of accumulated funds before design or construction can commence, expenditures may significantly lag appropriations. Figure 2–1 shows total CIP funding for 2016–2021. Funding varies year over year depending on specific project plans. For example, 2018 includes the Carter Lake Pipeline project which carries a significant cost.

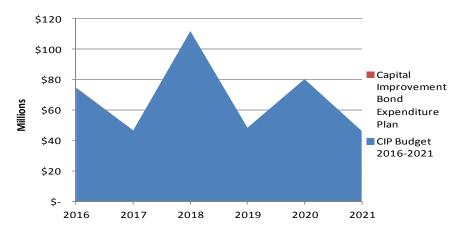


Figure 2-1: Total Projected CIP Funding by Year<sup>1</sup>

Notes:

<sup>1</sup> The Red area is the 2016 portion of the 2011 Capital Improvement Bond funds. These bonds were sold and funding appropriated in 2012. The blue area is planned allocations of 2016-2021 funding for all other projects.



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

City of Boulder

## FUNDING BY DEPARTMENT

2016-2021 Capital Improvement Program

The following city departments are participating in the 2016–2021 CIP:

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

The Public Works divisions of Utilities and Transportation have the greatest allocations of resources in the 2016–2021 CIP. Major renovations to stormwater, water and wastewater facilities are primarily responsible for the large spikes in allocations during 2018 and 2020.

Many departments have dedicated revenue sources that keep their CIP funding relatively constant. For example, both Open Space & Mountain Parks and Parks & Recreation have dedicated revenue sources, and their CIP funding remains relatively constant throughout 2016–2020.

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



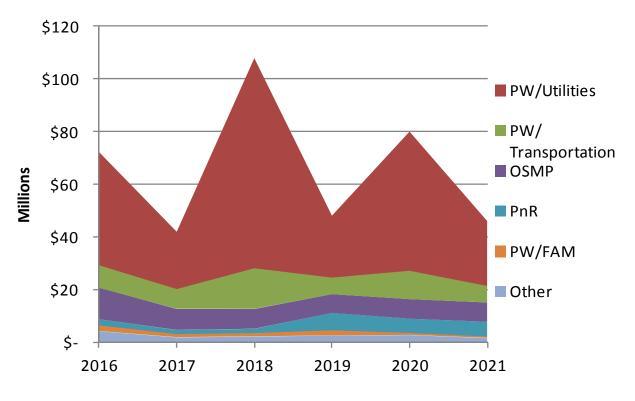


Figure 2-2: 2016-2021 Funding by Department

Other includes DUHMD/PS, Information Technology, and Police

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

		Estimated Total	2016 Approved	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded
		Cost							Amount
DUHMD	Department Total	\$ 4,434,765	\$ 2,156,565	\$ 678,200	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ -
INFORMATION TECHNOLOGY	Department Total	\$ 8,310,962	\$ 841,220	\$ 964,254	\$ 1,573,472	\$ 1,885,671	\$ 2,088,024	\$ 958,321	\$ -
OPEN SPACE & MOUNTAIN PARKS	Department Total	\$ 49,060,930	\$ 11,900,930	\$ 7,945,000	\$ 7,455,000	\$ 7,080,000	\$ 7,390,000	\$ 7,290,000	\$ -
PARKS & RECREATION	Department Total	\$ 32,872,000	\$ 4,458,000	\$ 5,920,000	\$ 5,217,000	\$ 6,500,000	\$ 5,277,000	\$ 5,500,000	\$ -
POLICE	Department Total	\$ 950,000	\$ 950,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PW/FACILITIES & ASSET MNGMT	Department Total	\$ 9,647,000	\$ 2,307,000	\$ 1,475,000	\$ 1,535,000	\$ 2,318,000	\$ 1,128,000	\$ 884,000	\$ -
PW/STORMWATER & FLOOD UTILITY	Department Total	\$ 61,417,767	\$ 5,209,921	\$ 7,119,924	\$ 33,256,596	\$ 5,028,682	\$ 5,673,278	\$ 5,129,366	\$ -
PW/TRANSPORTATION	Department Total	\$ 56,338,000	\$ 8,774,500	\$ 7,788,500	\$ 15,692,500	\$ 6,527,500	\$ 11,027,500	\$ 6,527,500	\$ -
PW/WASTEWATER UTILITY	Department Total	\$ 58,052,128	\$ 4,355,600	\$ 5,987,421	\$ 5,571,420	\$ 7,335,868	\$ 27,559,276	\$ 7,242,543	\$ -
PW/WATER UTILITY	Department Total	\$ 126,449,771	\$ 33,449,251	\$ 8,679,585	\$ 41,107,592	\$ 11,196,676	\$ 19,698,521	\$ 12,318,146	\$ -
Total		\$ 407,533,323	\$ 74,402,987	\$ 46,557,884	\$ 111,808,580	\$ 48,272,397	\$ 80,241,599	\$ 46,249,876	\$ -

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

		Est Cos		20	16 Approved	201	7 Projected	201	18 Projected	201	19 Projected	202	0 Projected	202	21 Projected	Unfunded Amount	d
DUHMD	Department Total	\$	4,434,765	\$	2,156,565	\$	678,200	\$	400,000	\$	400,000	\$	400,000	\$	400,000	\$	-
CIP-CAPITAL MAINTENANCE	Subtotal	\$	3,009,000	\$	730,800	\$	678,200	\$	400,000	\$	400,000	\$	400,000	\$	400,000	\$	-
	Downtown 14th St Prkg Lot	\$	150,000	\$	25,000	\$	25,000	\$	25,000	\$	25,000	\$	25,000	\$	25,000	\$	-
	Downtown Parking Garage	\$	609,000	\$	330,800	\$	278,200	\$	-	\$	-	\$	-	\$	-	\$	-
	Downtown Parking Garage Major	\$	1,500,000	\$	250,000	\$	250,000	\$	250,000	\$	250,000	\$	250,000	\$	250,000	\$	-
	Downtown Pearl St Mall Amenity	\$	750,000	\$	125,000	\$	125,000	\$	125,000	\$	125,000	\$	125,000	\$	125,000	\$	-
CIP-NEW FACILITY/INFRASTRUCTURE	Subtotal	\$	1,425,765	\$	1,425,765	\$	-	\$		\$		\$	-	\$		\$	-
	CAGID Trinity Commons	\$	1,425,765	\$	1,425,765	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-

				201	6 Approved	201	7 Projected	20	18 Projected	201	19 Projected	202	20 Projected	202	•		
		Cos	st													Amount	
INFORMATION TECHNOLOGY	Department Total	\$	8,310,962	\$	841,220	\$	964,254	\$	1,573,472	\$	1,885,671	\$	2,088,024	\$	958,321	\$	-
CIP-CAPITAL MAINTENANCE	Subtotal	\$	8,310,962	\$	841,220	\$	964,254	\$	1,573,472	\$	1,885,671	\$	2,088,024	\$	958,321	\$	-
	Data Backup and Disaster	\$	122,234	\$	-	\$	41,895	\$	80,339	\$	-	\$	-	\$	-	\$	-
	Database Hardware Replacement	\$	108,987	\$	10,500	\$	-	\$	-	\$	31,482	\$	53,604	\$	13,401	\$	-
	End User Device Replacement	\$	4,847,207	\$	703,638	\$	702,115	\$	1,174,388	\$	751,182	\$	745,731	\$	770,153	\$	-
	Network Hardware Replacement	\$	2,409,400	\$	111,090	\$	219,232	\$	241,423	\$	1,034,092	\$	630,026	\$	173,537	\$	-
	Security Administration	\$	49,798	\$	8,117	\$	1,012	\$	-	\$	33,058	\$	6,381	\$	1,230	\$	-
	Server Hardware Replacement	\$	773,336	\$	7,875	\$	-	\$	77,322	\$	35,857	\$	652,282	\$	-	\$	-

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

		Esti Cos		201	6 Approved	201	17 Projected	20	18 Projected	201	19 Projected	202	20 Projected	202	1 Projected	Unfunded Amount
OPEN SPACE & MOUNTAIN PARKS	Department Total	\$	49,060,930	\$	11,900,930	\$	7,945,000	\$	7,455,000	\$	7,080,000	\$	7,390,000	\$	7,290,000	\$
CIP-CAPITAL ENHANCEMENT	Subtotal	\$	11,324,600	\$	4,074,600	\$	1,975,000	\$	1,475,000	\$	1,100,000	\$	1,400,000	\$	1,300,000	\$
	Boulder Crk Above 95th	\$	500,000	\$	500,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$
	ETSA - Plan and Implementation	\$	650,000	\$	-	\$	-	\$	200,000	\$	50,000	\$	200,000	\$	200,000	\$
	Facility Modifications-Space	\$	900,000	\$	200,000	\$	200,000	\$	200,000	\$	100,000	\$	100,000	\$	100,000	\$
	Flood Eng. Trails	\$	572,600	\$	572,600	\$	-	\$	-	\$	-	\$	-	\$	-	\$
	Goodhue Ditch Fish Passage	\$	300,000	\$	-	\$	300,000	\$	-	\$	-	\$	-	\$	-	\$
	NTSA - Plan and Implementation	\$	700,000	\$	100,000	\$	200,000	\$	200,000	\$	100,000	\$	50,000	\$	50,000	\$
	OSMP Innovations	\$	550,000	\$	-	\$	75,000	\$	175,000	\$	100,000	\$	100,000	\$	100,000	\$
	OSMP Master Plan Update	\$	852,000	\$	252,000	\$	200,000	\$	100,000	\$	100,000	\$	100,000	\$	100,000	\$
	S.Bldr Crk at E.Bldr Ditch Const	\$	300,000	\$	-	\$	300,000	\$	-	\$	-	\$	-	\$	-	\$
	South Boulder Creek Instream	\$	2,000,000	\$	2,000,000	\$		\$		\$	-	\$	-	\$	-	\$
	STSA - Plan and Implementation	\$	300,000	\$	-	\$		\$		\$	-	\$	200,000	\$	100,000	\$
	Visitor Infrastructure System Wide	\$	2,000,000	\$	100,000	\$	200,000	\$	200,000	\$	500,000	\$	500,000	\$	500,000	\$
	WTSA Implementation	\$	1,700,000	\$	350,000	\$	500,000	\$	400,000	\$	150,000	\$	150,000	\$	150,000	\$
CIP-CAPITAL MAINTENANCE	Subtotal	\$	3,036,330	\$	1,626,330	\$	270,000	\$	280,000	\$	280,000	\$	290,000	\$	290,000	\$
	Agriculture Facilities Projects	\$	720,000	\$	110,000	\$	110,000	\$	120,000	\$	120,000	\$	130,000	\$	130,000	\$
	Boulder & S Bldr Crk Flood Repair	\$	100,000	\$	100,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$
	Cultural Resource/Facility Restorat	\$	500,000	\$	-	\$	100,000	\$	100,000	\$	100,000	\$	100,000	\$	100,000	\$
	Farm Site Improvements	\$	360,000	\$	60,000	\$	60,000	\$	60,000	\$	60,000	\$	60,000	\$	60,000	\$
	Flood Trails	\$	991,000	\$	991,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$
	Foothills Nature Center	\$	205,330	\$	205,330	\$	-	\$	-	\$	-	\$	-	\$	-	\$
	Hartnagle House Restoration	\$	100,000	\$	100,000	\$	-	\$		\$	-	\$	-	\$	-	\$
	South Mesa Trailhead Bridge	\$	60,000	\$	60,000	\$	-	\$		\$	-	\$	-	\$	-	\$
CIP-LAND ACQUISITION	Subtotal	\$	34,200,000	\$	5,700,000	\$	5,700,000	\$	5,700,000	\$	5,700,000	\$	5,700,000	\$	5,700,000	\$
	Mineral Rights Acquisition	\$	600,000	\$	100,000	\$	100,000	\$	100,000	\$	100,000	\$	100,000	\$	100,000	\$
	OSMP Real Estate Acquisition	\$	32,400,000	\$	5,400,000	\$	5,400,000	\$	5,400,000	\$	5,400,000	\$	5,400,000	\$	5,400,000	\$
	Water Rights Acquisition	\$	1,200,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$
CIP-NEW FACILITY/INFRASTRUCTURE	Subtotal	\$	500,000	\$	500,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$
	Boulder Creek Bikepath Extension	\$	500,000	\$	500,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$

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

		Est Co		201	6 Approved	201	17 Projected	20	18 Projected	201	19 Projected	20	20 Projected	202	1 Projected	Unfunded Amount	
PARKS & RECREATION	Department Total	\$	32,872,000	\$	4,458,000	\$	5,920,000	\$	5,217,000	\$	6,500,000	\$	5,277,000	\$	5,500,000	\$	-
CIP-CAPITAL ENHANCEMENT	Subtotal	\$	11,500,000	\$	1,750,000	\$	1,850,000	\$	3,100,000	\$	1,600,000	\$	1,600,000	\$	1,600,000	\$	-
	Aquatic Facility Enhancements	\$	2,900,000	\$	400,000	\$	-	\$	2,000,000	\$	-	\$	500,000	\$	-	\$	-
	Athletic Field Development	\$	4,500,000	\$	500,000	\$	1,000,000	\$	500,000	\$	1,000,000	\$	500,000	\$	1,000,000	\$	-
	Lighting Ordinance	\$	500,000	\$	250,000	\$	250,000	\$	-	\$	-	\$	-	\$	-	\$	-
	Playground and Irrigation Repairs	\$	3,600,000	\$	600,000	\$	600,000	\$	600,000	\$	600,000	\$	600,000	\$	600,000	\$	-
CIP-CAPITAL MAINTENANCE	Subtotal	\$	17,048,000	\$	1,558,000	\$	3,620,000	\$	1,393,000	\$	2,900,000	\$	3,677,000	\$	3,900,000	\$	-
	ADA Compliance Initiatives	\$	1,100,000	\$	100,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	-
	Aquatics Facility Repairs	\$	1,288,000	\$	238,000	\$	-	\$	273,000	\$	-	\$	777,000	\$	-	\$	-
	Boulder Reservoir South	\$	4,500,000	\$	-	\$	1,000,000	\$	-	\$	-	\$	1,500,000	\$	2,000,000	\$	-
	Court Repairs and Resurfacing	\$	1,500,000	\$	250,000	\$	250,000	\$	250,000	\$	250,000	\$	250,000	\$	250,000	\$	-
	EAB Response Measures	\$	2,160,000	\$	220,000	\$	220,000	\$	220,000	\$	500,000	\$	500,000	\$	500,000	\$	-
	Flatiron Golf Course Repairs	\$	300,000	\$	300,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Park Structure Repairs and	\$	1,500,000	\$	-	\$	500,000	\$	-	\$	500,000	\$	-	\$	500,000	\$	-
	Parking Lot Repairs	\$	1,500,000	\$	250,000	\$	250,000	\$	250,000	\$	250,000	\$	250,000	\$	250,000	\$	-
	Recreation Facility Repairs	\$	2,000,000	\$	-	\$	1,000,000	\$	-	\$	1,000,000	\$	-	\$	-	\$	
	Turf Repairs and Replacement	\$	1,200,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	-
CIP-CAPITAL PLANNING	Subtotal	\$	500,000	\$	400,000	\$	100,000	\$	-	\$	-	\$	-	\$	-	\$	-
	Reservoir/Tom Watson Site Plan	\$	200,000	\$	200,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Scott Carpenter/Mapleton Site	\$	100,000	\$	100,000	\$		\$	-	\$	-	\$		\$	-	\$	-
	Urban Forest Management Plan	\$	100,000	\$	100,000	\$		\$	-	\$	-	\$		\$	-	\$	-
	Yard/Maintenance Facility Site	\$	100,000	\$	-	\$	100,000	\$	-	\$	-	\$	-	\$	-	\$	
CIP-LAND ACQUISITION	Subtotal	\$	1,874,000	\$	-	\$	-	\$	374,000	\$	1,500,000	\$	-	\$	-	\$	
	Boulder Junction Rail Plaza	\$	1,874,000	\$	-	\$	-	\$	374,000	\$	1,500,000	\$		\$	-	\$	-
CIP-NEW FACILITY/INFRASTRUCTURE	Subtotal	\$	1,950,000	\$	750,000	\$	350,000	\$	350,000	\$	500,000	\$	-	\$	-	\$	-
	Boulder Junction Pocket Park	\$	1,450,000	\$	750,000	\$	350,000	\$	350,000	\$	-	\$	-	\$	-	\$	-
	Violet Park	\$	500,000	\$	-	\$	-	\$	-	\$	500,000	\$	-	\$	-	\$	-

		Estin	nated Total	2010	6 Approved	2017 Pr	rojected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded
		Cost										Amount
POLICE	Department Total	\$	950,000	\$	950,000	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
CIP-CAPITAL MAINTENANCE	Subtotal	\$	950,000	\$	950,000	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
	Records Management System	\$	950,000	\$	950,000	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -

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

		Est Co:		201	6 Approved	201	7 Projected	20°	18 Projected	201	9 Projected	202	0 Projected	202	1 Projected	Unfunded Amount
PW/FACILITIES & ASSET MNGMT	Department Total	\$	9,647,000	\$	2,307,000	\$	1,475,000	\$	1,535,000	\$	2,318,000	\$	1,128,000	\$	884,000	\$ -
CIP-CAPITAL ENHANCEMENT	Subtotal	\$	1,742,000	\$	290,000	\$	-	\$	100,000	\$	1,100,000	\$	100,000	\$	152,000	\$ -
	East Boulder Community Center	\$	452,000	\$	-	\$	-	\$	100,000	\$	100,000	\$	100,000	\$	152,000	\$ -
	Outdoor Lighting Improvements	\$	190,000	\$	190,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
	Tantra Shop Renovation	\$	300,000	\$	-	\$	-	\$	-	\$	300,000	\$	-	\$	-	\$ -
	Upgrade EV Chargers/Battery	\$	100,000	\$	100,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
	West Senior Center Maj Maint &	\$	700,000	\$	-	\$	-	\$	-	\$	700,000	\$	-	\$	-	\$ -
CIP-CAPITAL MAINTENANCE	Subtotal	\$	7,025,000	\$	1,787,000	\$	1,345,000	\$	1,305,000	\$	1,088,000	\$	898,000	\$	602,000	\$ -
	Aquatics Facility Repairs	\$	1,366,000	\$	390,000	\$	-	\$	723,000	\$	-	\$	253,000	\$	-	\$ -
	EBCC Replace Pool Air Handlers	\$	500,000	\$	500,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
	Fire Stations Major Maintenance	\$	813,000	\$	120,000	\$	126,000	\$	132,000	\$	138,000	\$	145,000	\$	152,000	\$ -
	Martin Park Shelter Major Maint	\$	169,000	\$	-	\$	169,000	\$	-	\$	-	\$	-	\$	-	\$ -
	Misc Facility Maintenance Projects	\$	2,545,000	\$	515,000	\$	380,000	\$	400,000	\$	400,000	\$	450,000	\$	400,000	\$ -
	Miscellaneous Facilty DET Proj			\$	50,000	\$	50,000	\$	50,000	\$	50,000	\$	50,000	\$	50,000	\$ -
	North Boulder Park Shelter Rep	\$	120,000	\$	-	\$	120,000	\$	-	\$	-	\$	-	\$	-	\$ -
	Pool Replastering	\$	80,000	\$	80,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
	Recreation Facility Repairs	\$	1,000,000	\$	-	\$	500,000	\$	-	\$	500,000	\$	-	\$	-	\$ -
	Stazio Tensile Canopy Covering	\$	132,000	\$	132,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
CIP-CAPITAL PLANNING	Subtotal	\$	880,000	\$	230,000	\$	130,000	\$	130,000	\$	130,000	\$	130,000	\$	130,000	\$ -
	Facility Assessments	\$	300,000	\$	50,000	\$	50,000	\$	50,000	\$	50,000	\$	50,000	\$	50,000	\$ -
	Misc Space Needs and Analysis	\$	480,000	\$	80,000	\$	80,000	\$	80,000	\$	80,000	\$	80,000	\$	80,000	\$ -
	Radio System Analysis	\$	100,000	\$	100,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -

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

		Est Co:		201	6 Approved	201	7 Projected	20 <sup>-</sup>	18 Projected	201	9 Projected	202	0 Projected	202		Unfunded Amount	
PW/STORMWATER & FLOOD UTILITY	Department Total	\$	61,417,767	\$	5,209,921	\$	7,119,924	\$	33,256,596	\$	5,028,682	\$	5,673,278	\$	5,129,366	\$	-
CIP-CAPITAL ENHANCEMENT	Subtotal	\$	25,792,750	\$	3,365,021	\$	5,201,224	\$	6,688,096	\$	3,726,682	\$	3,682,578	\$	3,129,149	\$	-
	Bear Canyon Creek Flood	\$	500,000	\$	500,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Bluebell & King's Gultch	\$	600,000	\$	-	\$	100,000	\$	500,000	\$	-	\$	-	\$	-	\$	-
	Boulder Creek Flood Mitigation	\$	4,750,000	\$	-	\$	2,500,000	\$	2,250,000	\$	-	\$	-	\$	-	\$	-
	Fourmile - Upstream of Upland	\$	5,250,000	\$	500,000	\$	500,000	\$	1,000,000	\$	1,500,000	\$	1,250,000	\$	500,000	\$	-
	Greenways Program - Flood fund	\$	585,000	\$	97,500	\$	97,500	\$	97,500	\$	97,500	\$	97,500	\$	97,500	\$	-
	Greenways Program - Lottery	\$	752,646	\$	125,441	\$	125,441	\$	125,441	\$	125,441	\$	125,441	\$	125,441	\$	-
	Gregory Creek Flood Mitigation	\$	500,000	\$	500,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Local Drainage Improvements	\$	4,941,298	\$	730,080	\$	759,283	\$	789,655	\$	821,241	\$	854,090	\$	986,949	\$	-
	Skunk Creek Flood Mitigation	\$	600,000	\$	-	\$	100,000	\$	500,000	\$	-	\$	-	\$	-	\$	-
	Stormwater Quality Improvements	\$	1,076,390	\$	162,000	\$	169,000	\$	175,500	\$	182,500	\$	190,000	\$	197,390	\$	-
	Twomile Canyon Creek	\$	600,000	\$	-	\$	100,000	\$	500,000	\$	-	\$	-	\$	-	\$	-
	Upper Goose Creek Drainage	\$	5,637,416	\$	750,000	\$	750,000	\$	750,000	\$	1,000,000	\$	1,165,547	\$	1,221,869	\$	-
CIP-CAPITAL MAINTENANCE	Subtotal	\$	5,172,732	\$	594,900	\$	618,700	\$	643,500	\$	669,000	\$	1,330,700	\$	1,315,932	\$	-
	Storm Sewer Rehabilitation	\$	2,438,766	\$	270,400	\$	281,200	\$	292,500	\$	304,000	\$	632,700	\$	657,966	\$	-
	Transportation Coordination	\$	2,668,966	\$	324,500	\$	337,500	\$	351,000	\$	365,000	\$	633,000	\$	657,966	\$	-
	Utility Billing Computer System	\$	65,000	\$	-	\$	-	\$	-	\$	-	\$	65,000	\$	-	\$	-
CIP-LAND ACQUISITION	Subtotal	\$	3,627,285	\$	500,000	\$	550,000	\$	600,000	\$	633,000	\$	660,000	\$	684,285	\$	-
	Preflood Property Acquisition	\$	3,627,285	\$	500,000	\$	550,000	\$	600,000	\$	633,000	\$	660,000	\$	684,285	\$	-
CIP-NEW	Subtotal	\$	26,825,000	\$	750,000	\$	750,000	\$	25,325,000	\$	-	\$	-	\$	-	\$	-
FACILITY/INFRASTRUCTURE	South Boulder Creek Phase I	\$	26,825,000	\$	750,000	\$	750.000	\$	25,325,000	\$		\$		\$		\$	

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

		Es Co		201	16 Approved	20	17 Projected	20	18 Projected	20	19 Projected	20	20 Projected	202	1 Projected
PW/TRANSPORTATION	Department Total	\$	56,338,000	\$	8,774,500	\$	7,788,500	\$	15,692,500	\$	6,527,500	\$	11,027,500	\$	6,527,500
CIP-CAPITAL ENHANCEMENT	Subtotal	\$	13,772,000	\$	3,884,500	\$	1,877,500	\$	6,127,500	\$	627,500	\$	627,500	\$	627,500
	19th St (Norwood to Sumac)	\$	257,000	\$	257,000	\$	-	\$	-	\$	-	\$	-	\$	-
	Arap Comp St Recon/Bldr Crk	\$	2,500,000	\$	2,500,000	\$	-	\$	-	\$	-	\$	-	\$	-
	Broadway Recon Violet to 36	\$	7,050,000	\$	500,000	\$	1,250,000	\$	5,300,000	\$	-	\$	-	\$	-
	Greenways Program	\$	585,000	\$	97,500	\$	97,500	\$	97,500	\$	97,500	\$	97,500	\$	97,500
	Misc Development Coordination	\$	300,000	\$	50,000	\$	50,000	\$	50,000	\$	50,000	\$	50,000	\$	50,000
	Signal Maintenance & Upgrade	\$	200,000	\$	-	\$	-	\$	200,000	\$	-	\$	-	\$	-
	TIP Local Match TMP	\$	2,880,000	\$	480,000	\$	480,000	\$	480,000	\$	480,000	\$	480,000	\$	480,000
CIP-CAPITAL MAINTENANCE	Subtotal	\$	14,402,000	\$	1,694,000	\$	1,694,000	\$	1,864,000	\$	1,550,000	\$	6,050,000	\$	1,550,000
	Deficient Street Light Pole Replace	\$	893,000	\$	265,000	\$	265,000	\$	-	\$	121,000	\$	121,000	\$	121,000
	Major Capital Reconstruction	\$	4,800,000	\$	800,000	\$	800,000	\$	800,000	\$	800,000	\$	800,000	\$	800,000
	Ped Facilities Repair, Replace,	\$	3,774,000	\$	629,000	\$	629,000	\$	629,000	\$	629,000	\$	629,000	\$	629,000
	Rehab Runway & Eastern Taxiway	\$	4,935,000	\$	-	\$	-	\$	435,000	\$	-	\$	4,500,000	\$	-
CIP-CAPITAL PLANNING	Subtotal	\$	589,000	\$	338,000	\$	100,000	\$	151,000	\$	-	\$	-	\$	-
STUDIES															
	Bldr County/City Joint TIP Projects	\$	289,000	\$	138,000	\$	-	\$	151,000	\$	-	\$	-	\$	-
	East Arapahoe Transp Corridor	\$	100,000	\$	100,000	\$	-	\$	-	\$	-	\$	-	\$	-
	Trans Corridor 30th & Colorado	\$	200,000	\$	100,000	\$	100,000	\$	-	\$	-	\$	-	\$	-
CIP-NEW FACILITY/INFRASTRUCTURE	Subtotal	\$	27,575,000	\$	2,858,000	\$	4,117,000	\$	7,550,000	\$	4,350,000	\$	4,350,000	\$	4,350,000
TAGILIT I/INT KAGTKOOT OKE	28th St - Valmont to Iris (Baseline)	\$	1.330.000	\$	1,330,000	\$	-	\$	-	\$	-	\$	-	\$	-
	30th St and Colorado Bike/Ped	\$	, ,	\$	500,000	\$	1,300,000	\$	5,700,000			\$		\$	
	Bikeway Facilities - Enhancements	\$	1,350,000	\$	225,000		225,000			\$	225,000	\$	225,000	\$	225,000
	BJ Traffic Signal Bluff St & 30th	\$	228.000			\$	228,000			-				\$	
	BJ Traffic Signal Jct & Valmont	\$	304,000	-		\$	304,000		_	1	-	\$	_	\$	
	Boulder Junction - Develop Coord	\$	150,000		75,000	,	75,000			Ţ		T		\$	
	Boulder Slough Multiuse Path 30th		480,000		120,000		360,000					\$		\$	
	Ped Facs Enh Missing Links	\$	750,000	-	125,000		125,000	\$	125,000		125,000	\$	125,000	\$	125,000
	TIP Local Match/TMP		15,483,000		483.000	\$	1.500.000	\$	1,500,000	\$	4.000.000	\$	4.000.000	\$	4,000,000
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Table 2-1: 2016-2021 Funding Summary By Department (Cont.)

		Est Co	timated Total st	201	6 Approved	201	17 Projected	20°	18 Projected	20°	19 Projected	20	20 Projected	202	21 Projected	Unfunded Amount	
PW/WASTEWATER UTILITY	Department Total	\$	58,052,128	\$	4,355,600	\$	5,987,421	\$	5,571,420	\$	7,335,868	\$	27,559,276	\$	7,242,543	\$	-
CIP-CAPITAL ENHANCEMENT	Subtotal	\$	29,573,075	\$	570,000	\$	2,050,397	\$	1,476,915	\$	2,877,582	\$	20,731,179	\$	1,867,002	\$	-
	Goose Creek SS Interceptor	\$	3,749,723	\$	-	\$	-	\$	25,000	\$	647,590	\$	1,346,988	\$	1,730,145	\$	-
	Marshall Landfill	\$	100,000	\$	100,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Wastewater Treatment Facility	\$	150,000	\$	150,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	WWTF Activated Sludge	\$	175,479	\$	-	\$	175,479	\$	-	\$	-	\$	-	\$	-	\$	-
	WWTF Electrical	\$	1,320,000	\$	120,000	\$	1,200,000	\$		\$	-	\$	-	\$	-	\$	-
	WWTF Instrumentation/Control	\$	2,866,016	\$	-	\$	674,918	\$	701,915	\$	729,992	\$	759,191	\$	-	\$	-
	WWTF Laboratory	\$	50,000	\$	50,000	\$	-	\$		\$	-	\$	-	\$	-	\$	-
	WWTF Permit Improvements	\$	21,161,857	\$	150,000	\$	-	\$	750,000	\$	1,500,000	\$	18,625,000	\$	136,857	\$	-
CIP-CAPITAL MAINTENANCE	Subtotal	\$	28,479,053	\$	3,785,600	\$	3,937,024	\$	4,094,505	\$	4,458,286	\$	6,828,097	\$	5,375,541	\$	-
	Condition Assessment Program	\$	5,380,670	\$	811,200	\$	843,648	\$	877,394	\$	912,490	\$	948,989	\$	986,949	\$	-
	Sanitary Sewer Manhole	\$	1,829,626	\$	216,320	\$	224,973	\$	233,972	\$	243,331	\$	253,064	\$	657,966	\$	-
	Sanitary Sewer Rehabilitation	\$	18,294,276	\$	2,758,080	\$	2,868,403	\$	2,983,139	\$	3,102,465	\$	3,226,563	\$	3,355,626	\$	-
	Utility Billing Computer System	\$	65,000	\$	-	\$	-	\$	-	\$	-	\$	65,000	\$	-	\$	-
	WWTF Cogeneration	\$	184,481	\$	-	\$	-	\$	-	\$	-	\$	184,481	\$	-	\$	-
	WWTF Digester Complex	\$	2,200,000	\$	-	\$	-	\$	-	\$	200,000	\$	2,000,000	\$	-	\$	-
	WWTF Rehabilitation	\$	525,000	\$	-	\$	-	\$	-	\$	-	\$	150,000	\$	375,000	\$	-

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

		Estimated Total	2016 Approved	20	17 Projected	20	18 Projected	201	19 Projected	202	20 Projected	202	21 Projected	
N/WATER UTILITY	Department Tetal	Cost \$ 126 440 771	¢ 22,440,254	¢.	0 670 F0F	¢.	44 407 F00	¢	11 100 670	¢	10 600 524	¢	12 210 440	Amount
CIP-CAPITAL ENHANCEMENT	Department Total						41,107,592							
CIP-CAPITAL ENHANCEMENT	Subtotal				2,511,322	\$			1,668,882	\$	9,148,194	\$	-, ,	\$
	Automated Meter Reading	\$ 684,285		7	-			\$		\$		\$	684,285	
	Barker Dam and Reservoir	\$ 115,000			50,000			۳	-	\$	-	\$	-	Ψ
	Barker Dam Outlet	\$ 9,566,060			175,000			\$		\$	8,455,509	\$	-	Ψ
	Betasso Water Treatment Facility	\$ 25,140,000			-	\$		\$		\$	-	\$	-	\$
	Green Lake 2 Dam	\$ 561,773	\$ -	\$	-	Ψ.	-	\$		\$	75,000	\$	486,773	
	Lakewood Dam	\$ 124,707	\$ -	\$	-	\$	124,707	\$	-	\$	-	\$	-	\$
	Lakewood Hydroelectric/PRV	\$ 430,000	\$ 130,000	\$	-	\$	-	\$	300,000	\$	-	\$	-	\$
	NCWCD Conveyance - Carter Lake	\$ 40,801,585	\$ 850,000	\$	2,036,322	\$	37,915,263	\$	-	\$	-	\$	-	\$
	Orodell Hydro/PRV Facility	\$ 75,000	\$ 75,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$
	Pearl Street Hydro/PRV Facility	\$ 267,664	\$ -	\$	-	\$	24,333	\$	243,331	\$	-	\$	-	\$
	Source Water	\$ 400,000	\$ 100,000	\$	100,000	\$	100,000	\$	100,000	\$	-	\$		\$
	Utility Billing Computer System	\$ 125,000	\$ -	\$	-	\$	-	\$	-	\$	125,000	\$		\$
	Water System Security/Quality	\$ 540,000	\$ 150,000	\$	150,000	\$	150,000	\$	90,000	\$	-	\$	-	\$
	Wittemyer Ponds	\$ 5,519,534	\$ -	\$	-	\$	-	\$	100,000	\$	492,685	\$	4,926,849	\$
CIP-CAPITAL MAINTENANCE	Subtotal			\$	6,168,263	\$	2,743,289	\$	9,277,794	\$	8,050,327	\$		\$
	Albion Dam	\$ 3,882,997			-		341,636	\$		\$	-	\$		\$
	Barker Gravity Pipeline Repair	\$ 7,003,748			1,169,859	\$	1,216,653	\$	1,265,319	\$	1,315,932	\$	1,368,569	\$
	Barker - Kossler Penstock Repair	\$ 116,986		\$	116,986		-,=::,:::	-		\$		\$		\$
	Betasso Hydroelectric / PRF	\$ 860,000		\$	380,000	\$	480,000	\$		\$		\$		\$
	Betasso Storage Tank	\$ 292,465		\$	292,465			\$		\$				\$
	Boulder Reservoir	\$ 168,434			232,400	-		-		\$	118,434	\$		\$
	Distribution Waterline				3,487,078	\$		-						\$
				\$				\$		\$	3,922,489	\$	· ·	*
	Farmer's Ditch	\$ 108,160		,		\$		\$		\$		\$		\$
	Goose Lake Dam	\$ 75,000		\$		\$	75,000	_		\$		\$		\$
	Island Lake Dam	\$ 50,000		\$		\$	50,000	_		\$		\$		\$
	Kohler Storage Tank Roof	\$ 799,875				\$	-	\$		\$	-	\$		\$
	Kossler Dam	\$ 75,000				\$	-	Υ.		\$	-	-		\$
	Lakewood Pipeline	\$ 316,330			-	\$	-	\$	316,330	\$	-	\$	-	\$
	Reservoir Water Treatment	\$ 2,314,000			-	-		\$		\$	2,000,000	\$	-	\$
	Silver Lake Dam	\$ 100,000	\$ -	\$	-	\$	100,000	\$	-	\$	-	\$	-	\$
	Silver Lake Hydroelectric/PRV	\$ 155,000	\$ 25,000	\$	50,000	\$	80,000	\$	-	\$	-	\$	-	\$
	Skyscraper Dam	\$ 171,071	\$ -	\$	-	\$	-	\$	-	\$	-	\$	171,071	\$
	Source Water Pressure Reducing,	\$ 1,294,682	\$ 150,000	\$	150,000	\$	150,000	\$	150,000	\$	343,472	\$	351,210	\$
	Sunshine Hydroelectric/PRV	\$ 271,875	\$ -	\$	271,875	\$	-	\$	-	\$	-	\$	-	\$
	Watershed Improvements	\$ 180,000	\$ 80,000	\$	-	\$	-	\$	-	\$	100,000	\$	-	\$
	Zone 1 Transmission Pipes	\$ 500,000	\$ -	\$	-	\$	250,000	\$	-	\$	-	\$	250,000	\$
	Zone 2 Transmission Pipes	\$ 500,000	\$ -	\$	250,000	\$	-	\$	-	\$	250,000	\$	-	\$
	Zone 3 Transmission Pipes	\$ 1,450,000			•	\$		\$	250,000			\$		\$

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

		Estimated Total Cost	2016 Approved	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount
PW/WATER UTILITY (Cont.)	Department Total	\$ 126,449,771	\$ 33,449,251	\$ 8,679,585	\$ 41,107,592	\$ 11,196,676	\$ 19,698,521	\$ 12,318,146	\$
CIP-NEW FACILITY/INFRASTRUCTURE	Subtotal	\$ 2,800,000	\$ -	\$ -	\$ 50,000	\$ 250,000	\$ 2,500,000	\$ -	\$
	Carter Lake Hydroelectric	\$ 2,800,000	\$ -	\$ -	\$ 50,000	\$ 250,000	\$ 2,500,000	\$ -	\$

City of Boulder

### FUNDING BY PROJECT TYPE

2016-2021 Capital Improvement Program

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

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

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

#### **Capital Enhancement:**

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

#### Capital Maintenance:

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



#### **Capital Planning Studies:**

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

#### Land & Asset Acquisition:

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

#### **Criteria for New Capital Project:**

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





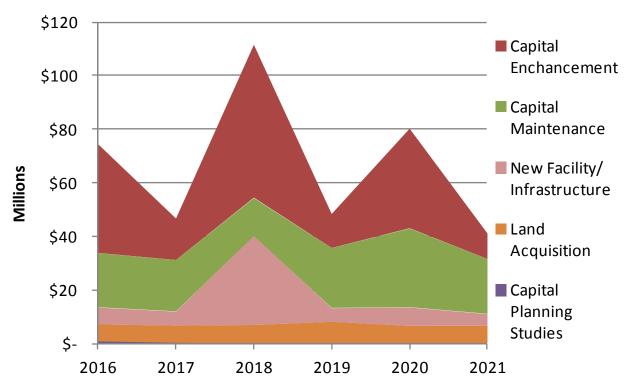


Figure 2-4: 2016-2021 Funding by Project Type Excluding Utilities

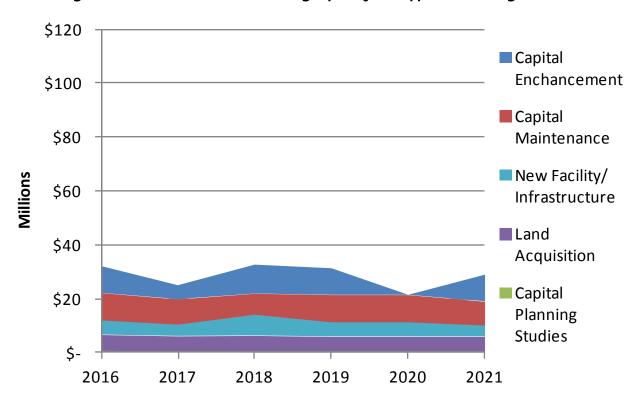


Table 2-2: 2016-2021 Funding Summary By Project Type

Project Type	Project Title	<b>Estimated Total</b>	2016	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded	
		Cost	Recommended						Amount	
CIP-CAPITAL ENHANCEMENT	Type Total	\$ 178,344,033	\$ 40,682,121	\$ 15,465,443	\$ 57,432,814	\$ 12,700,646	\$ 37,289,451	\$ 14,773,558	\$	-
CIP-CAPITAL MAINTENANCE	Type Total	\$ 126,732,240	\$ 20,407,101	\$ 19,295,441	\$ 14,296,766	\$ 22,508,751	\$ 29,612,148	\$ 20,612,033	\$	-
CIP-CAPITAL PLANNING STUDIES	Type Total	\$ 1,680,000	\$ 830,000	\$ 330,000	\$ 130,000	\$ 130,000	\$ 130,000	\$ 130,000	\$	-
CIP-LAND ACQUISITION	Type Total	\$ 39,701,285	\$ 6,200,000	\$ 6,250,000	\$ 6,674,000	\$ 7,833,000	\$ 6,360,000	\$ 6,384,285	\$	-
CIP-NEW FACILITY/INFRASTRUCTURE	Type Total	\$ 61,075,765	\$ 6,283,765	\$ 5,217,000	\$ 33,275,000	\$ 5,100,000	\$ 6,850,000	\$ 4,350,000	\$	-
Total		\$ 407,533,323	\$ 74,402,987	\$ 46,557,884	\$ 111,808,580	\$ 48,272,397	\$ 80,241,599	\$ 46,249,876	\$	-

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

Project Type	Project Title	Estimated Total Cost	2016 Recomme		2017 Projected	201	8 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded Amount	
CIP-CAPITAL ENHANCEMENT	Type Total	\$ 178,344,033		_	\$ 15,465,443	\$	57,432,814	\$ 12,700,646	\$ 37,289,451	\$ 14,773,558	\$	-1
	19th St (Norwood to Sumac)	\$ 257,000	\$ 25	7,000	\$ -	\$	-	\$ -	\$ -	\$ -	\$	-
	Aquatic Facility Enhancements	\$ 2,900,000	\$ 40	0,000	\$ -	\$	2,000,000	\$ -	\$ 500,000	\$ -	\$	-
	Arap Comp St Recon/Bldr Crk Underpa	\$ 2,500,000	\$ 2,50	0,000	\$ -	\$	-	\$ -	\$ -	\$ -	\$	-
	Athletic Field Development	\$ 4,500,000	\$ 50	0,000	\$ 1,000,000	\$	500,000	\$ 1,000,000	\$ 500,000	\$ 1,000,000	\$	-
	Automated Meter Reading	\$ 684,285	\$	-	\$ -	\$	-	\$ -	\$ -	\$ 684,285	\$	-
	Barker Dam and Reservoir	\$ 115,000	\$ 65	5,000	\$ 50,000	\$	-	\$ -	\$ -	\$ -	\$	-
	Barker Dam Outlet	\$ 9,566,060	\$ 10	0,000	\$ 175,000	\$	-	\$ 835,551	\$ 8,455,509	\$ -	\$	-
	Bear Canyon Creek Flood Mitigation	\$ 500,000	\$ 50	0,000	\$ -	\$	-	\$ -	\$ -	\$ -	\$	-
	Betasso Water Treatment Facility	\$ 25,140,000	\$ 25,140	0,000	\$ -	\$	-	\$ -	\$ -	\$ -	\$	-
	Bldr County/City Joint TIP Projects	\$ 289,000	\$ 13	8,000	\$ -	\$	151,000	\$ -	\$ -	\$ -	\$	-
	Bluebell & King's Gultch	\$ 600,000	\$	-	\$ 100,000	\$	500,000	\$ -	\$ -	\$ -	\$	-
	Boulder Creek Flood Mitigation	\$ 4,750,000	\$	-	\$ 2,500,000	\$	2,250,000	\$ -	\$ -	\$ -	\$	-
	Boulder Crk Above 95th Restoration	\$ 500,000	\$ 50	0,000	\$ -	\$	-	\$ -	\$ -	\$ -	\$	-
	Broadway Recon Violet to 36	\$ 7,050,000	\$ 50	0,000	\$ 1,250,000	\$	5,300,000	\$ -	\$ -	\$ -	\$	-
	East Boulder Community Center Ren	\$ 452,000	\$	-	\$ -	\$	100,000	\$ 100,000	\$ 100,000	\$ 152,000	\$	-
	ETSA - Plan and Implementation	\$ 650,000	\$	-	\$ -	\$	200,000	\$ 50,000	\$ 200,000	\$ 200,000	\$	-
	Facility Modifications-Space Needs	\$ 900,000	\$ 20	0,000	\$ 200,000	\$	200,000	\$ 100,000	\$ 100,000	\$ 100,000	\$	-
	Flood Eng. Trails	\$ 572,600	\$ 57	2,600	\$ -	\$	-	\$ -	\$ -	\$ -	\$	-
	Four Mile - Upland to Violet	\$ 5,250,000	\$ 50	0,000	\$ 500,000	\$	1,000,000	\$ 1,500,000	\$ 1,250,000	\$ 500,000	\$	-
	Goodhue Ditch Fish Passage	\$ 300,000	\$	-	\$ 300,000	\$	-	\$ -	\$ -	\$ -	\$	-
	Goose Creek SS Interceptor Rehab	\$ 3,749,723	\$	-	\$ -	\$	25,000	\$ 647,590	\$ 1,346,988	\$ 1,730,145	\$	-
	Green Lake 2 Dam	\$ 561,773	\$	-	\$ -	\$	-	\$ -	\$ 75,000	\$ 486,773	\$	-
	Greenways Program - Flood fund	\$ 585,000	\$ 97	7,500	\$ 97,500	\$	97,500	\$ 97,500	\$ 97,500	\$ 97,500	\$	-
	Greenways Program Transportation	\$ 585,000	\$ 97	7,500	\$ 97,500	\$	97,500	\$ 97,500	\$ 97,500	\$ 97,500	\$	-
	Greenways Program - Lottery Fund	\$ 752,646	\$ 12	5,441	\$ 125,441	\$	125,441	\$ 125,441	\$ 125,441	\$ 125,441	\$	-
	Gregory Creek Flood Mitigation	\$ 500,000	\$ 50	0,000	\$ -	\$	-	\$ -	\$ -	\$ -	\$	-
	Lakewood Dam	\$ 124,707	\$	-	\$ -	\$	124,707	\$ -	\$ -	\$ -	\$	-
	Lakewood Hydroelectric/PRV	\$ 430,000	\$ 13	0,000	\$ -	\$	-	\$ 300,000	\$ -	\$ -	\$	-
	Lighting Ordinance Implementation	\$ 500,000	\$ 25	0,000	\$ 250,000	\$	-	\$ -	\$ -	\$ -	\$	-
	Local Drainage Improvements	\$ 4,941,298	\$ 73	0,080	\$ 759,283	\$	789,655	\$ 821,241	\$ 854,090	\$ 986,949	\$	-
	Marshall Landfill	\$ 100,000	\$ 10	0,000	\$ -	\$	-	\$ -	\$ -	\$ -	\$	-
	Misc Development Coordination	\$ 300,000	\$ 50	0,000	\$ 50,000	\$	50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$	-
	NCWCD Conveyance - Carter Lake	\$ 40,801,585	\$ 85	0,000	\$ 2,036,322	\$	37,915,263	\$ -	\$ -	\$ -	\$	-
	NTSA - Plan and Implementation	\$ 700,000	\$ 10	0,000	\$ 200,000	\$	200,000	\$ 100,000	\$ 50,000	\$ 50,000	\$	-
	Orodell Hydro/PRV Facility	\$ 75,000	\$ 75	5,000	\$ -	\$	-	\$ -	\$ -	\$ -	\$	-

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

Project Type	Project Title	Estimated Tota	I 2016 Recommer		2017 Projected	2018 Projected	2019 Projecte	d 2020 Projected	2021 Projected	Unfunded Amount	
CIP-CAPITAL ENHANCEMENT (Cont.)	Type Total	\$ 178,344,03			\$ 15,465,443	\$ 57,432,814	\$ 12,700,646	\$ 37,289,451	\$ 14,773,558	\$	
	OSMP Master Plan Update	\$ 852,000	\$ 252	2,000	\$ 200,000	\$ 100,000	\$ 100,00	0 \$ 100,000	\$ 100,000	\$	-
	Outdoor Lighting Improvements	\$ 190,000	\$ 190	0,000	\$ -	\$ -	\$	- \$ -	\$ -	\$	-
	Pearl Street Hydro/PRV Facility	\$ 267,664	\$	-	\$ -	\$ 24,333	\$ 243,33	1 \$ -	\$ -	\$	-
	Outdoor Lighting Improvements	\$ 190,000	\$ 190	0,000	\$ -	\$ -	\$	- \$ -	\$ -	\$	-
	Pearl Street Hydro/PRV Facility	\$ 267,664	\$	-	\$ -	\$ 24,333	\$ 243,33	1 \$ -	\$ -	\$	-
	Playground and Irrigation Repairs	\$ 3,600,000	\$ 600	0,000	\$ 600,000	\$ 600,000	\$ 600,00	0 \$ 600,000	\$ 600,000	\$	-
	S.Bldr Crk at E.Bldr Ditch Const	\$ 300,000	\$	-	\$ 300,000	\$ -	\$	- \$ -	\$ -	\$	-
	Signal Maintenance & Upgrade	\$ 200,000	\$	-	\$ -	\$ 200,000	\$	- \$ -	\$ -	\$	-
	Skunk Creek Flood Mitigation	\$ 600,000	\$	-	\$ 100,000	\$ 500,000	\$	- \$ -	\$ -	\$	-
	Source Water Monitoring/Protection	\$ 400,000	\$ 100	0,000	\$ 100,000	\$ 100,000	\$ 100,00	0 \$ -	\$ -	\$	-
	South Boulder Creek Instream Flow	\$ 2,000,000	\$ 2,000	0,000	\$ -	\$ -	\$	- \$ -	\$ -	\$	-
	Stormwater Quality Improvements	\$ 1,076,390	\$ 162	2,000	\$ 169,000	\$ 175,500	\$ 182,50	0 \$ 190,000	\$ 197,390	\$	-
	STSA - Plan and Implementation	\$ 300,000	\$	-	\$ -	\$ -	\$	- \$ 200,000	\$ 100,000	\$	-
	Tantra Shop Renovation	\$ 300,000	\$	-	\$ -	\$ -	\$ 300,00	0 \$ -	\$ -	\$	-
	TIP Local Match TMP Implementation	\$ 2,880,000	\$ 480	0,000	\$ 480,000	\$ 480,000	\$ 480,00	0 \$ 480,000	\$ 480,000	\$	-
	Twomile Canyon Creek	\$ 600,000	\$	-	\$ 100,000	\$ 500,000	\$	- \$ -	\$ -	\$	-
	Upgrade EV Chargers/Battery Storage	\$ 100,00	\$ 100	0,000	\$ -	\$	· \$	- \$ -	\$ -	\$	-
	Upper Goose Creek Drainage	\$ 5,637,416	\$ 750	0,000	\$ 750,000	\$ 750,000	\$ 1,000,000	\$ 1,165,547	\$ 1,221,869	\$	-
	Utility Billing Computer System	\$ 125,000	\$	-	\$ -	\$ -	\$	- \$ 125,000	\$ -	\$	-
	Visitor Infrastructure System Wide	\$ 2,000,000	\$ 100	0,000	\$ 200,000	\$ 200,000	\$ 500,00	0 \$ 500,000	\$ 500,000	\$	-
	Wastewater Treatment Facility Pumps	\$ 150,000	\$ 150	0,000	\$ -	\$ -	\$	- \$ -	\$ -	\$	-
	Water System Security/Quality Imprv	\$ 540,000	\$ 150	0,000	\$ 150,000	\$ 150,000	\$ 90,000	\$ -	\$ -	\$	-
	West Senior Center Maj Maint & Reha	\$ 700,000	\$	-	\$ -	\$ -	\$ 700,00	0 \$ -	\$ -	\$	-
	Wittemyer Ponds	\$ 5,519,534	\$	-	\$ -	\$ -	\$ 100,00	0 \$ 492,685	\$ 4,926,849	\$	-
	WTSA Implementation	\$ 1,700,000	\$ 350	0,000	\$ 500,000	\$ 400,000	\$ 150,00	0 \$ 150,000	\$ 150,000	\$	-
	WWTF Activated Sludge	\$ 175,479	\$	-	\$ 175,479	\$ -	\$	- \$ -	\$ -	\$	-
	WWTF Electrical	\$ 1,320,000	\$ 120	0,000	\$ 1,200,000	\$ -	\$	- \$ -	\$ -	\$	-
	WWTFInstrumentation/Control	\$ 2,866,016	\$	-	\$ 674,918	\$ 701,915	\$ 729,99	2 \$ 759,191	\$ -	\$	-
	WWTFLaboratory	\$ 50,000	\$ 50	0,000	\$ -	\$ -	\$	- \$ -	\$ -	\$	-
	WWTFPermit Improvements	\$ 21,161,85	7 \$ 150	0,000	\$ -	\$ 750,000	\$ 1,500,000	\$ 18,625,000	\$ 136,857	\$	-

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

Project Type	Project Title	Est	timated Total	6 ommended	201	17 Projected	20°	18 Projected	20	19 Projected	202	20 Projected	202	1 Projected	Unfunded Amount	
CIP-CAPITAL MAINTENANCE	Type Tota		126,732,240		\$	19,295,441	\$	14,296,766	\$	22,508,751	\$	29,612,148	\$	20,612,033	\$	-
	ADA Compliance Initiatives	\$	1,100,000	\$ 100,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	-
	Agriculture Facilities Projects	\$	720,000	\$ 110,000	\$	110,000	\$	120,000	\$	120,000	\$	130,000	\$	130,000	\$	-
	Albion Dam	\$	3,882,997	\$ 125,000	\$	-	\$	341,636	\$	3,416,361	\$	-	\$	-	\$	-
	Aquatics Facility Repairs	\$	1,288,000	\$ 238,000	\$	-	\$	273,000	\$	-	\$	777,000	\$	-	\$	-
	Aquatics Facility Repairs	\$	1,366,000	\$ 390,000	\$	-	\$	723,000	\$	-	\$	253,000	\$	-	\$	-
	Barker Gravity Pipeline Repair	\$	7,003,748	\$ 667,416	\$	1,169,859	\$	1,216,653	\$	1,265,319	\$	1,315,932	\$	1,368,569	\$	-
	Barker-Kossler Penstock Repair	\$	116,986	\$ -	\$	116,986	\$	-	\$	-	\$	-	\$	-	\$	-
	Betasso Hydroelectric / PRF	\$	860,000	\$ -	\$	380,000	\$	480,000	\$	-	\$	-	\$	-	\$	-
	Betasso Storage Tank Rehabilitation	\$	292,465	\$ -	\$	292,465	\$	-	\$	-	\$	-	\$	-	\$	-
	Boulder & S Bldr Crk Flood Repair	\$	100,000	\$ 100,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Boulder Reservoir	\$	168,434	\$ 50,000	\$	-	\$	-	\$	-	\$	118,434	\$	-	\$	-
	Boulder Reservoir South Improvement	t \$	4,500,000	\$ -	\$	1,000,000	\$	-	\$	-	\$	1,500,000	\$	2,000,000	\$	-
	Condition Assessment Program	\$	5,380,670	\$ 811,200	\$	843,648	\$	877,394	\$	912,490	\$	948,989	\$	986,949	\$	-
	Court Repairs and Resurfacing	\$	1,500,000	\$ 250,000	\$	250,000	\$	250,000	\$	250,000	\$	250,000	\$	250,000	\$	-
	Cultural Resource/Facility Restorat	\$	500,000	\$ -	\$	100,000	\$	100,000	\$	100,000	\$	100,000	\$	100,000	\$	-
	Data Backup and Disaster Recovery	\$	122,234	\$ -	\$	41,895	\$	80,339	\$	-	\$	-	\$	-	\$	-
	Database Hardware Replacement	\$	108,987	\$ 10,500	\$	-	\$	-	\$	31,482	\$	53,604	\$	13,401	\$	-
	Deficient Street Light Pole Replace	\$	893,000	\$ 265,000	\$	265,000	\$	-	\$	121,000	\$	121,000	\$	121,000	\$	-
	Distribution Waterline Replacement	\$	18,613,540	\$ 3,352,960	\$	3,487,078	\$	-	\$	3,771,624	\$	3,922,489	\$	4,079,389	\$	-
	Downtown 14th St Prkg Lot Improve	\$	150,000	\$ 25,000	\$	25,000	\$	25,000	\$	25,000	\$	25,000	\$	25,000	\$	-
	Downtown Parking Garage Elevators	\$	609,000	\$ 330,800	\$	278,200	\$	-	\$	-	\$	-	\$	-	\$	-
	Downtown Parking Garage Major	\$	1,500,000	\$ 250,000	\$	250,000	\$	250,000	\$	250,000	\$	250,000	\$	250,000	\$	-
	Downtown Pearl St Mall Amenity Repl	\$	750,000	\$ 125,000	\$	125,000	\$	125,000	\$	125,000	\$	125,000	\$	125,000	\$	-
	EAB Response Measures	\$	2,160,000	\$ 220,000	\$	220,000	\$	220,000	\$	500,000	\$	500,000	\$	500,000	\$	-
	EBCC Replace Pool Air Handlers	\$	500,000	\$ 500,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	End User Device Replacement	\$	4,847,207	\$ 703,638	\$	702,115	\$	1,174,388	\$	751,182	\$	745,731	\$	770,153	\$	-
	Farm Site Improvements	\$	360,000	\$ 60,000	\$	60,000	\$	60,000	\$	60,000	\$	60,000	\$	60,000	\$	-
	Farmer's Ditch	\$	108,160	\$ -	\$	-	\$	-	\$	108,160	\$	-	\$	-	\$	-
	Fire Stations Major Maintenance	\$	813,000	\$ 120,000	\$	126,000	\$	132,000	\$	138,000	\$	145,000	\$	152,000	\$	-
	Flatiron Golf Course Repairs	\$	300,000	\$ 300,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Flood Trails	\$	991,000	\$ 991,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Foothills Nature Center	\$	205,330	\$ 205,330	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Goose Lake Dam	\$	75,000	\$ -	\$	-	\$	75,000	\$	-	\$	-	\$	-	\$	-
	Hartnagle House Restoration	\$	100,000	\$ 100,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Island Lake Dam	\$	50,000	\$ -	\$	-	\$	50,000	\$	-	\$	-	\$	-	\$	-
	Kohler Storage Tank Roof	\$	799,875	\$ 799,875	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Kossler Dam	\$	75,000	\$ 75,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-

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

Project Type	Project Title	Estimated Total		201	17 Projected	201	8 Projected	201	19 Projected	202	0 Projected	2021	l Projected	
CIP-CAPITAL MAINTENANCE (Cont.)	Type Total	Cost \$ 126,732,240	mmended	¢	19,295,441	¢	14 206 766	¢	22,508,751	¢ ·	20 612 1/18	¢ 2	n 612 n33	Amount \$
on the maintenance (cont.)	Lakewood Pipeline	\$ 316,330	\$ .0,407,101	\$	13,233,771	\$	14,230,700	\$	316,330	\$	23,012,140	\$	-	\$
	Major Capital Reconstruction		900 000	\$	900 000	\$	800,000	\$	800,000		800,000	\$		
	Martin Park Shelter Major Maint		\$ 800,000		800,000		,			\$	,	\$	800,000	\$
	Miscellaneous Facilty DET Proj	\$ 169,000	\$ 50,000	\$	169,000 50,000		50,000	\$	50,000		50,000		50,000	\$
		¢ 2.545.000												
	Misc Facility Maintenance Projects	\$ 2,545,000 \$ 2,409,400	\$ 515,000		380,000	\$	400,000		400,000	-	,	\$	400,000	
	Network Hardware Replacement	, , ,	\$ 111,090		219,232	\$	241,423	\$	1,034,092			\$	173,537	
	North Boulder Park Shelter Rep	, ,	\$	\$	120,000		-	\$	-	\$	-	\$	-	\$
	Park Structure Repairs and Replace	\$ 1,500,000	\$	\$	500,000	\$	-	-	500,000			\$	500,000	
	Parking Lot Repairs	\$ 1,500,000	\$ 250,000		250,000	\$	250,000		250,000		,	\$	250,000	
	Ped Facilities Repair, Replace, ADA	\$ 3,774,000	\$ 629,000		629,000	\$	629,000		629,000	\$	629,000	\$	629,000	
	Pool Replastering	. ,	\$ 80,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$
	Records Management System (RMS)	, ,	\$ 950,000		-	-	-	\$	-	\$	-	\$	-	\$
	Recreation Facility Repairs	\$ 2,000,000	\$ -	\$	1,000,000	\$	-	\$	1,000,000	\$	-	\$	-	\$
	Recreation Facility Repairs	\$ 1,000,000	\$ -	\$	500,000		-	\$	500,000	\$	-	\$	-	\$
	Rehab Runway & Eastern Taxiway	\$ 4,935,000	\$ -	\$	-	\$	435,000	\$	-	\$	4,500,000	\$	-	\$
	Reservoir Water Treatment Facility	\$ 2,314,000	\$ 314,000	\$	-	\$	-	\$	-	\$	2,000,000	\$	-	\$
	Sanitary Sewer Manhole Rehabilitati	\$ 1,829,626	\$ 216,320	\$	224,973	\$	233,972	\$	243,331	\$	253,064	\$	657,966	\$
	Sanitary Sewer Rehabilitation	\$ 18,294,276	\$ 2,758,080	\$	2,868,403	\$	2,983,139	\$	3,102,465	\$	3,226,563	\$	3,355,626	\$
	Security Administration	\$ 49,798	\$ 8,117	\$	1,012	\$	-	\$	33,058	\$	6,381	\$	1,230	\$
	Server Hardware Replacement	\$ 773,336	\$ 7,875	\$	-	\$	77,322	\$	35,857	\$	652,282	\$	-	\$
	Silver Lake Dam	\$ 100,000	\$ -	\$	-	\$	100,000	\$	-	\$	-	\$	-	\$
	Silver Lake Hydroelectric/PRV	\$ 155,000	\$ 25,000	\$	50,000	\$	80,000	\$	-	\$	-	\$	-	\$
	Skyscraper Dam	\$ 171,071	\$ -	\$	-	\$	-	\$	-	\$	-	\$	171,071	\$
	Source Water Pressure Reducing,	\$ 1,294,682	\$ 150,000	\$	150,000	\$	150,000	\$	150,000	\$	343,472	\$	351,210	\$
	South Mesa Trailhead Bridge Replace	\$ 60,000	\$ 60,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$
	Stazio Tensile Canopy Covering Repl	\$ 132,000	\$ 132,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$
	Storm Sewer Rehabilitation	\$ 2,438,766	\$ 270,400	\$	281,200	\$	292,500	\$	304,000	\$	632,700	\$	657,966	\$
	Sunshine Hydroelectric/PRV Facility	\$ 271,875	\$ -	\$	271,875	\$	-	\$	-	\$	-	\$	-	\$
	Transportation Coordination	\$ 2,668,966	\$ 324,500	\$	337,500	\$	351,000	\$	365,000	\$	633,000	\$	657,966	\$
	Turf Repairs and Replacement	\$ 1,200,000	\$ 200,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$
	Utility Billing Computer System	\$ 130,000	\$ -	\$	-	\$	-	\$	-	\$	130,000	\$	-	\$
	Watershed Improvements	\$ 180,000	\$ 80,000	\$	-	\$	-	\$	-	\$	100,000	\$	-	\$
	WWTF Cogeneration	\$ 184,481	\$ 	\$	-	\$	-	\$	-	\$	184,481	\$	-	\$
	WWTF Digester Complex	\$ 2,200,000	\$ -	\$	-	\$		\$	200,000	\$	2,000,000		-	\$
	WWTFRehabilitation	\$ 525,000	\$ -		-	\$	-	\$	-	\$		\$	375,000	*
	Zone 1 Transmission Pipes		\$ -	\$	-	,	250,000		-	\$	-	\$	250,000	
	Zone 2 Transmission Pipes	\$ 500,000	\$ 	\$	250,000			\$	-	\$		\$	,	\$
	Zone 3 Transmission Pipes	\$ 1,450,000	1,200,000	\$	200,000	\$	-	\$	250,000		200,000	\$		\$

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

Project Type	Project Title	Est	imated Total	2016	;	201	7 Projected	201	8 Projected	201	9 Projected	202	0 Projected	202	1 Projected	Unfunded	
		Co	st	Rec	ommended			<u> </u>		<u> </u>						Amount	
CIP-CAPITAL PLANNING STUDIES	Type Total	\$	1,680,000	\$	830,000	\$	330,000	\$	130,000	\$	130,000	\$	130,000	\$	130,000	\$	-
	East Arapahoe Transp Corridor Study	\$	100,000	\$	100,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
	Facility Assessments	\$	300,000	\$	50,000	\$	50,000	\$	50,000	\$	50,000	\$	50,000	\$	50,000	\$	
	Misc Space Needs and Analysis	\$	480,000	\$	80,000	\$	80,000	\$	80,000	\$	80,000	\$	80,000	\$	80,000	\$	
	Radio System Analysis	\$	100,000	\$	100,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
	Reservoir/Tom Watson Site Plan	\$	200,000	\$	200,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
	Scott Carpenter/Mapleton Site Plan	\$	100,000	\$	100,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
	Trans Corridor 30th & Colorado	\$	200,000	\$	100,000	\$	100,000	\$	-	\$	-	\$	-	\$	-	\$	
	Urban Forest Management Plan	\$	100,000	\$	100,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
	Yard/Maintenance Facility Site Plan	\$	100,000	\$	-	\$	100,000	\$	-	\$	-	\$	-	\$	-	\$	

Project Type	Project Title	Es	timated Total	201	6	201	7 Projected	201	8 Projected	201	19 Projected	202	20 Projected	202	1 Projected	Unfunded	
		Со	st	Rec	ommended											Amount	
CIP-LAND ACQUISITION	Type Total	\$	39,701,285	\$	6,200,000	\$	6,250,000	\$	6,674,000	\$	7,833,000	\$	6,360,000	\$	6,384,285	\$	-
	Boulder Junction Rail Plaza	\$	1,874,000	\$	-	\$	-	\$	374,000	\$	1,500,000	\$	-	\$	-	\$	-
	Mineral Rights Acquisition	\$	600,000	\$	100,000	\$	100,000	\$	100,000	\$	100,000	\$	100,000	\$	100,000	\$	-
	OSMP Real Estate Acquisition	\$	32,400,000	\$	5,400,000	\$	5,400,000	\$	5,400,000	\$	5,400,000	\$	5,400,000	\$	5,400,000	\$	-
	Preflood Property Acquisition	\$	3,627,285	\$	500,000	\$	550,000	\$	600,000	\$	633,000	\$	660,000	\$	684,285	\$	-
	Water Rights Acquisition	\$	1,200,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	-

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

Project Type	Project Title	Est	imated Total	201	6	201	17 Projected	20	18 Projected	20	19 Projected	20	20 Projected	202	1 Projected	Unfunded	
		Cos	st	Rec	ommended											Amount	
CIP-NEW FACILITY/INFRASTRUCTURE	Type Total	\$	61,075,765	\$	6,283,765	\$	5,217,000	\$	33,275,000	\$	5,100,000	\$	6,850,000	\$	4,350,000	\$	-
	28th St - Valmont to Iris (Baseline	\$	860,000	\$	860,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	28th St Valmont to Iris (Baseline)	\$	470,000	\$	470,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	30th St and Colorado Bike/Ped Under	\$	7,500,000	\$	500,000	\$	1,300,000	\$	5,700,000	\$	-	\$	-	\$	-	\$	-
	Bikeway Facilities - Enhancements	\$	1,350,000	\$	225,000	\$	225,000	\$	225,000	\$	225,000	\$	225,000	\$	225,000	\$	-
	BJ Traffic Signal Bluff St & 30th	\$	228,000	\$	-	\$	228,000	\$	-	\$	-	\$	-	\$	-	\$	-
	BJ Traffic Signal Jct & Valmont	\$	304,000	\$	-	\$	304,000	\$	-	\$	-	\$	-	\$	-	\$	-
	Boulder Creek Bikepath Extension	\$	500,000	\$	500,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Boulder Junction - Develop Coord	\$	150,000	\$	75,000	\$	75,000	\$	-	\$	-	\$	-	\$	-	\$	-
	Boulder Junction Pocket Park	\$	1,450,000	\$	750,000	\$	350,000	\$	350,000	\$	-	\$	-	\$	-	\$	-
	Boulder Slough Multiuse Path 30th	\$	480,000	\$	120,000	\$	360,000	\$	-	\$	-	\$	-	\$	-	\$	-
	<b>CAGID Trinity Commons Construction</b>	\$	1,425,765	\$	1,425,765	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Carter Lake Hydroelectric	\$	2,800,000	\$	-	\$	-	\$	50,000	\$	250,000	\$	2,500,000	\$	-	\$	-
	Ped Facs Enh Missing Links Crossing	\$	750,000	\$	125,000	\$	125,000	\$	125,000	\$	125,000	\$	125,000	\$	125,000	\$	-
	South Boulder Creek Phase I	\$	26,825,000	\$	750,000	\$	750,000	\$	25,325,000	\$	-	\$	-	\$	-	\$	-
	TIP Local Match/TMP Implementation	\$	15,483,000	\$	483,000	\$	1,500,000	\$	1,500,000	\$	4,000,000	\$	4,000,000	\$	4,000,000	\$	-
	Violet Park	\$	500,000	\$	-	\$	-	\$	-	\$	500,000	\$	-	\$	-	\$	-

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City of Boulder

FUNDING BY FUND

2016-2021 Capital Improvement Program

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

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

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

Similar to the department distributions described earlier in this section, the Transportation and



Utility Funds are the largest contributors to the city's 2016-2021 CIP.

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

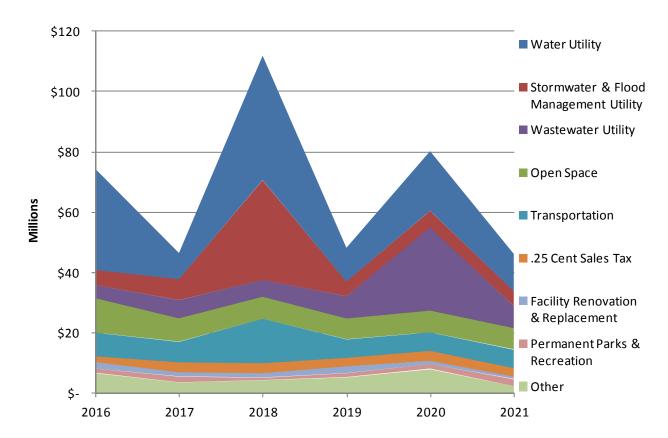


Figure 2-5: 2016-2021 Funding by Fund

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

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

Fund	Project Title	Estimated Total	2016	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded
		Cost	Recommended						Amount
.25 Cent Sales Tax	Fund Total	\$ 18,241,200	\$ 2,052,700	\$ 3,409,700	\$ 3,432,700	\$ 2,939,700	\$ 3,466,700	\$ 2,939,700	\$ -
Airport	Fund Total	\$ 4,935,000	\$ -	\$ -	\$ 435,000	\$ -	\$ 4,500,000	\$ -	\$ -
Bldr Junction Cap Imprvmt	Fund Total	\$ 4,006,000	\$ 825,000	\$ 957,000	\$ 724,000	\$ 1,500,000	\$ -	\$ -	\$ -
Capital Development	Fund Total	\$ 800,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 550,000	\$ 50,000	\$ 50,000	\$ -
Computer Replacement	Fund Total	\$ 8,310,962	\$ 841,220	\$ 964,254	\$ 1,573,472	\$ 1,885,671	\$ 2,088,024	\$ 958,321	\$ -
Downtown Commercial District	Fund Total	\$ 4,434,765	\$ 2,156,565	\$ 678,200	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ -
Facility Renovation & Replace	Fund Total	\$ 9,247,000	\$ 2,157,000	\$ 1,425,000	\$ 1,485,000	\$ 2,268,000	\$ 1,078,000	\$ 834,000	\$ -
General	Fund Total	\$ 1,025,000	\$ 1,025,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Lottery	Fund Total	\$ 3,275,076	\$ 846,371	\$ 485,741	\$ 485,741	\$ 485,741	\$ 485,741	\$ 485,741	\$ -
Open Space	Fund Total	\$ 48,705,300	\$ 11,545,300	\$ 7,945,000	\$ 7,455,000	\$ 7,080,000	\$ 7,390,000	\$ 7,290,000	\$ -
Permanent Parks & Recreation	Fund Total	\$ 8,650,000	\$ 1,300,000	\$ 1,800,000	\$ 700,000	\$ 1,200,000	\$ 1,450,000	\$ 2,200,000	\$ -
Stormwater & Flood Mgt Utility	Fund Total	\$ 60,665,121	\$ 5,084,480	\$ 6,994,483	\$ 33,131,155	\$ 4,903,241	\$ 5,547,837	\$ 5,003,925	\$ -
Transportation	Fund Total	\$ 46,878,500	\$ 7,707,000	\$ 6,651,500	\$ 14,527,500	\$ 5,997,500	\$ 5,997,500	\$ 5,997,500	\$ -
Transportation Development	Fund Total	\$ 3,850,000	\$ 1,000,000	\$ 530,000	\$ 730,000	\$ 530,000	\$ 530,000	\$ 530,000	\$ -
Wastewater Utility	Fund Total	\$ 58,052,128	\$ 4,355,600	\$ 5,987,421	\$ 5,571,420	\$ 7,335,868	\$ 27,559,276	\$ 7,242,543	\$ -
Water Utility	Fund Total	\$ 126,457,271	\$ 33,456,751	\$ 8,679,585	\$ 41,107,592	\$ 11,196,676	\$ 19,698,521	\$ 12,318,146	\$ -
Total		\$ 407,533,323	\$ 74,402,987	\$ 46,557,884	\$111,808,580	\$ 48,272,397	\$ 80,241,599	\$ 46,249,876	\$ -

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

Fund	Project Title	Est Cos		201 Red	16 commended	201	7 Projected	201	18 Projected	201	19 Projected	202	20 Projected	202	1 Projected	Unfunded Amount	
.25 Cent Sales Tax		\$	17,083,200	\$	894,700	\$	3,409,700	\$	3,432,700	\$	2,939,700	\$	3,466,700	\$	2,939,700	\$	-
CIP-CAPITAL ENHANCEMENT	Subtotal	\$	4,838,200	\$	889,700	\$	489,700	\$	2,239,700	\$	239,700	\$	739,700	\$	239,700	\$	-
	Aquatic Facility Enhancements	\$	2,900,000	\$	400,000	\$	-	\$	2,000,000	\$	-	\$	500,000	\$	-	\$	-
	Lighting Ordinance Implementation	\$	500,000	\$	250,000	\$	250,000	\$	-	\$	-	\$	-	\$	-	\$	-
	Playground and Irrigation Repairs	\$	1,438,200	\$	239,700	\$	239,700	\$	239,700	\$	239,700	\$	239,700	\$	239,700	\$	-
CIP-CAPITAL MAINTENANCE	Subtotal	\$	13,398,000	\$	1,158,000	\$	2,920,000	\$	1,193,000	\$	2,700,000	\$	2,727,000	\$	2,700,000	\$	-
	Aquatics Facility Repairs	\$	1,288,000	\$	238,000	\$	-	\$	273,000	\$	-	\$	777,000	\$	-	\$	-
	Boulder Reservoir South	\$	2,250,000	\$	-	\$	500,000	\$	-	\$	-	\$	750,000	\$	1,000,000	\$	-
	Court Repairs and Resurfacing	\$	1,500,000	\$	250,000	\$	250,000	\$	250,000	\$	250,000	\$	250,000	\$	250,000	\$	-
	EAB Response Measures	\$	2,160,000	\$	220,000	\$	220,000	\$	220,000	\$	500,000	\$	500,000	\$	500,000	\$	-
	Park Structure Repairs and Replace	\$	1,500,000	\$	-	\$	500,000	\$	-	\$	500,000	\$	-	\$	500,000	\$	-
	Parking Lot Repairs	\$	1,500,000	\$	250,000	\$	250,000	\$	250,000	\$	250,000	\$	250,000	\$	250,000	\$	-
	Recreation Facility Repairs	\$	2,000,000	\$	-	\$	1,000,000	\$	-	\$	1,000,000	\$	-	\$	-	\$	-
	Turf Repairs and Replacement	\$	1,200,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	-
CIP-CAPITAL PLANNING STUDIES	Subtotal	\$	5,000	\$	5,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Radio System Analysis	\$	5,000	\$	5,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-

Fund	Project Title	Esti	mated Total	2016	2017 Pr	ojected	2018	Projected	2019 Projected	202	0 Projected	2021 Projected	Unfunded	
		Cos	t	Recommended									Amount	
Airport		\$	4,935,000	\$ -	\$	-	\$	435,000	\$ -	\$	4,500,000	\$ -	\$	-
CIP-CAPITAL MAINTENANCE		\$	4,935,000	\$ -	\$	-	\$	435,000	\$ -	\$	4,500,000	\$ -	\$	-
	Rehab Runway & Eastern Taxiway	\$	4,935,000	\$ -	\$	-	\$	435,000	\$ -	\$	4,500,000	\$ -	\$	-

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

Fund	Project Title	Esti	mated Total	2016	20	17 Projected	201	8 Projected	201	9 Projected	202	20 Projected	2021 Projected	Unfunded	
		Cos	t	Recommende	d									Amount	
Bldr Junction Cap Imprvmt		\$	3,181,000	\$	- \$	957,000	\$	724,000	\$	1,500,000	\$	-	\$ -	\$	-
CIP-LAND ACQUISITION		\$	1,874,000	\$	- \$	-	\$	374,000	\$	1,500,000	\$	-	\$ -	\$	-
	Boulder Junction Rail Plaza	\$	1,874,000	\$	- \$	-	\$	374,000	\$	1,500,000	\$	-	\$ -	\$	-
CIP-NEW		\$	2,132,000	\$ 825,00	0 \$	957,000	\$	350,000	\$	-	\$		\$ -	\$	-
FACILITY/INFRASTRUCTURE															
	BJ Traffic Signal Bluff St & 30th	\$	228,000	\$	- \$	228,000	\$	-	\$	-	\$	-	\$ -	\$	-
	BJ Traffic Signal Junction &	\$	304,000	\$	- \$	304,000	\$	-	\$	-	\$	-	\$ -	\$	-
	Boulder Junction - Develop Coord	\$	150,000	\$ 75,000	) \$	75,000	\$	-	\$	-	\$	-	\$ -	\$	-
	Boulder Junction Pocket Park	\$	1,450,000	\$ 750,00	0 \$	350,000	\$	350,000	\$		\$	-	\$ -	\$	-

Fund	Project Title	Estim	ated Total	2016		2017	7 Projected	2018	8 Projected	2019	Projected	2020	Projected	2021	Projected	Unfunded	
		Cost		Reco	mmended											Amount	
Capital Development	Fund Total	\$	800,000	\$	50,000	\$	50,000	\$	50,000	\$	550,000	\$	50,000	\$	50,000	\$	-
CIP-CAPITAL MAINTENANCE	Subtotal	\$	800,000	\$	50,000	\$	50,000	\$	50,000	\$	550,000	\$	50,000	\$	50,000	\$	-
	Miscellaneous Facilty DET Proj	\$	300,000	\$	50,000	\$	50,000	\$	50,000	\$	50,000	\$	50,000	\$	50,000	\$	-
	Violet Park	\$	500,000	\$	-	\$	-	\$	-	\$	500,000	\$	-	\$	-	\$	-

Fund	Project Title	Est	imated Total	2016	ŝ	2017	7 Projected	201	18 Projected	201	9 Projected	202	20 Projected	202	1 Projected	Unfunded	
		Cos	it	Rec	ommended											Amount	
Computer Replacement		\$	8,310,962	\$	841,220	\$	964,254	\$	1,573,472	\$	1,885,671	\$	2,088,024	\$	958,321	\$	-
CIP-CAPITAL MAINTENANCE		\$	8,310,962	\$	841,220	\$	964,254	\$	1,573,472	\$	1,885,671	\$	2,088,024	\$	958,321	\$	-
	Data Backup and Disaster Recovery	\$	122,234	\$	-	\$	41,895	\$	80,339	\$	-	\$	-	\$	-	\$	-
	Database Hardware Replacement	\$	108,987	\$	10,500	\$	-	\$	-	\$	31,482	\$	53,604	\$	13,401	\$	-
	End User Device Replacement	\$	4,847,207	\$	703,638	\$	702,115	\$	1,174,388	\$	751,182	\$	745,731	\$	770,153	\$	-
	Network Hardware Replacement	\$	2,409,400	\$	111,090	\$	219,232	\$	241,423	\$	1,034,092	\$	630,026	\$	173,537	\$	-
	Security Administration	\$	49,798	\$	8,117	\$	1,012	\$	-	\$	33,058	\$	6,381	\$	1,230	\$	-
	Server Hardware Replacement	\$	773,336	\$	7,875	\$	-	\$	77,322	\$	35,857	\$	652,282	\$	-	\$	-

Fund	Project Title	Esti	mated Total	20	16	201	7 Projected	20	18 Projected	20	19 Projected	20	20 Projected	202	1 Projected	Unf	funded	
		Cos	t	Re	commended											Am	ount	
Downtown Commercial District		\$	3,009,000	\$	730,800	\$	678,200	\$	400,000	\$	400,000	\$	400,000	\$	400,000	\$		-
CIP-CAPITAL MAINTENANCE	Subtotal	\$	3,009,000	\$	730,800	\$	678,200	\$	400,000	\$	400,000	\$	400,000	\$	400,000	\$		-
	Downtown 14th St Prkg Lot Improve	\$	150,000	\$	25,000	\$	25,000	\$	25,000	\$	25,000	\$	25,000	\$	25,000	\$		-
	Downtown Parking Garage Elevators	\$	609,000	\$	330,800	\$	278,200	\$	-	\$	-	\$	-	\$	-	\$		-
	Downtown Parking Garage Major	\$	1,500,000	\$	250,000	\$	250,000	\$	250,000	\$	250,000	\$	250,000	\$	250,000	\$		-
	Downtown Pearl St Mall Amenity	\$	750,000	\$	125,000	\$	125,000	\$	125,000	\$	125,000	\$	125,000	\$	125,000	\$		-
CIP-NEW	Subtotal	\$	1,425,765	\$	1,425,765	\$	-	\$	-	\$	-	\$	-	\$	-	\$		-
FACILITY/INFRASTRUCTURE																		
	CAGID Trinity Commons Construction	\$	1,425,765	\$	1,425,765	\$	-	\$	-	\$	-	\$	-	\$	-	\$		-

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

- Fund	Project Title			201	6 commended	201	7 Projected	20	18 Projected	201	9 Projected	20:	20 Projected	2021	Projected		
Facility Renovation & Replace		Cos \$	9,247,000	S.	2,157,000	\$	1,425,000	\$	1,485,000	\$	2,268,000	\$	1,078,000	S	834,000	Amount	
CIP-CAPITAL ENHANCEMENT		\$		\$	290,000			\$	100,000	\$	1,100,000	\$	100,000		152,000		
OII -OAI ITAL LINIANOLINLINI	East Boulder Community Center Ren	\$	452,000		230,000	\$	_	\$	100,000	¢		\$	100,000		152,000		
	Outdoor Lighting Improvements	\$	190,000		190,000			-	100,000	φ	100,000	\$	100,000	\$	-	\$	_
	I	T		-	190,000			-		D D		-			-	,	
	Tantra Shop Renovation	\$	300,000		-	\$	-	Ψ		\$	300,000	\$	-	Ψ	-	Ψ	
	Upgrade EV Chargers/Battery Storage	\$	100,000	\$	100,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
	West Senior Center Maj Maint &	\$	700,000	\$	-	\$	-	\$	-	\$	700,000	\$	-	\$	-	\$	-
CIP-CAPITAL MAINTENANCE		\$	6,725,000	\$	1,737,000	\$	1,295,000	\$	1,255,000	\$	1,038,000	\$	848,000	\$	552,000	\$	-
	Aquatics Facility Repairs	\$	1,366,000	\$	390,000	\$	-	\$	723,000	\$	-	\$	253,000	\$	-	\$	-
	EBCC Replace Pool Air Handlers	\$	500,000	\$	500,000	\$		\$		\$		\$	-	\$		\$	-
	Fire Stations Major Maintenance	\$	813,000	\$	120,000	\$	126,000	\$	132,000	\$	138,000	\$	145,000	\$	152,000	\$	-
	Martin Park Shelter Major Maint	\$	169,000	\$	-	\$	169,000	\$	-	\$	-	\$	-	\$	-	\$	-
	Misc Facility Maintenance Projects	\$	2,545,000	\$	515,000	\$	380,000	\$	400,000	\$	400,000	\$	450,000	\$	400,000	\$	-
	North Boulder Park Shelter Rep	\$	120,000	\$	-	\$	120,000	\$	-	\$	-	\$	-	\$	-	\$	-
	Pool Replastering	\$	80,000	\$	80,000	\$	-	\$		\$		\$		\$		\$	_
	Recreation Facility Repairs	\$	1,000,000	\$		\$	500,000	\$	-	\$	500.000	\$		\$	-	\$	_
	Stazio Tensile Canopy Covering	\$	132,000	-	132,000	\$	-	\$	-	\$	-	\$	-	\$		\$	
CIP-CAPITAL PLANNING STUDIES		\$	780,000	_	130,000		130,000		130,000		130,000	\$	130,000		130,000	,	
on ora time i Entitudo i obies	Facility Assessments	\$	300,000		50,000		50,000		50,000		50,000				50,000		
	l	,	,	i.			,										
	Misc Space Needs and Analysis	\$	480,000	ф	80,000	\$	80,000	\$	80,000	ф	80,000	\$	80,000	Э	80,000	Þ	-

Fund	Project Title	Estim	ated Total	2016	5	2017 Projec	ted	2018 Projec	ted	2019 Projected	2020 Projected	2021 Projected	Unfunded	
		Cost		Reco	ommended								Amount	
General		\$	950,000	\$	950,000	\$	-	\$	-	\$ -	\$ -	\$ -	\$	-
CIP-CAPITAL MAINTENANCE		\$	-	\$	950,000	\$	-	\$	-	\$ -	\$ -	\$ -	\$	-
	Records Management System (RMS)	\$	-	\$	950,000	\$	-	\$	-	\$ -	\$ -	\$ -	\$	-
CIP-CAPITAL PLANNING STUDIES		\$	-	\$	75,000	\$	-	\$	-	\$ -	\$ -	\$ -	\$	-
	Radio System Analysis	\$	-	\$	75,000	\$	-	\$	-	\$ -	\$ -	\$ -	\$	-

Fund	Project Title	Est	imated Total	2010	6	2017	7 Projected	201	8 Projected	201	9 Projected	2020	) Projected	202	1 Projected	Unfunded	
		Cos	st	Rec	ommended											Amount	
Lottery		\$	3,069,746	\$	641,041	\$	485,741	\$	485,741	\$	485,741	\$	485,741	\$	485,741	\$	-
CIP-CAPITAL ENHANCEMENT		\$	3,069,746	\$	641,041	\$	485,741	\$	485,741	\$	485,741	\$	485,741	\$	485,741	\$	-
	Flood Eng. Trails	\$	155,300	\$	155,300	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Greenways Program - Lottery Fund	\$	752,646	\$	125,441	\$	125,441	\$	125,441	\$	125,441	\$	125,441	\$	125,441	\$	-
	Playground and Irrigation Repairs	\$	2,161,800	\$	360,300	\$	360,300	\$	360,300	\$	360,300	\$	360,300	\$	360,300	\$	-
CIP-CAPITAL MAINTENANCE		\$	205,330	\$	205,330	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Foothills Nature Center	\$	205,330	\$	205,330	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-

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

Fund	Project Title		imated Total			201	7 Projected	20	18 Projected	201	9 Projected	202	20 Projected	202	21 Projected	Unfunded
Open Space		Cos	48,705,300		ommended 11,545,300	¢	7,945,000	¢	7,455,000	¢	7,080,000	¢	7,390,000	¢	7,290,000	Amount
CIP-CAPITAL ENHANCEMENT			11,169,300	\$	3,919,300	\$	1,975,000	\$			1,100,000	\$	1,400,000	\$	1,300,000	
CIP-CAPITAL ENHANCEMENT	Boulder Crk Above 95th Restoration				, , ,	\$			1,475,000		1,100,000		1,400,000	\$	' '	
		\$	500,000		500,000	-	-	\$	-	\$	-	\$	-	\$		\$
	ETSA - Plan and Implementation	\$	650,000	-	-	\$	-	\$	200,000		50,000		200,000		200,000	·
	Facility Modifications-Space Needs	\$	900,000		200,000		200,000	\$	200,000		100,000		100,000		100,000	
	Flood Eng. Trails	\$	417,300		417,300		-	Ψ	-	\$		\$	-	Τ.	-	\$
	Goodhue Ditch Fish Passage	\$	300,000		-	\$	300,000			\$		\$		\$		\$
	NTSA - Plan and Implementation	\$	700,000		100,000		200,000		200,000		100,000		50,000		50,000	
	OSMP Innovations	\$	550,000			\$	75,000		175,000		100,000		100,000		100,000	·
	OSMP Master Plan Update	\$	852,000		252,000	\$	200,000		100,000		100,000		100,000	\$	100,000	\$
	S.Bldr Crk at E.Bldr Ditch Const	\$	300,000	\$	-	\$	300,000	\$	-	\$	-	\$	-	\$	-	\$
	South Boulder Creek Instream Flow	\$	2,000,000	\$	2,000,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$
	STSA - Plan and Implementation	\$	300,000	\$	-	\$	-	\$	-	\$	-	\$	200,000	\$	100,000	\$
	Visitor Infrastructure System	\$	2,000,000	\$	100,000	\$	200,000	\$	200,000	\$	500,000	\$	500,000	\$	500,000	\$
	WTSA Implementation	\$	1,700,000	\$	350,000	\$	500,000	\$	400,000	\$	150,000	\$	150,000	\$	150,000	\$
CIP-CAPITAL MAINTENANCE		\$	2,831,000	\$	1,421,000	\$	270,000	\$	280,000	\$	280,000	\$	290,000	\$	290,000	\$
	Agriculture Facilities Projects	\$	720,000	\$	110,000	\$	110,000	\$	120,000	\$	120,000	\$	130,000	\$	130,000	\$
	Boulder & S Bldr Crk Flood Repair	\$	100,000	\$	100,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$
	Cultural Resource/Facility	\$	500,000	\$	-	\$	100,000	\$	100,000	\$	100,000	\$	100,000	\$	100,000	\$
	Farm Site Improvements	\$	360,000	\$	60,000	\$	60,000	\$	60,000	\$	60,000	\$	60,000	\$	60,000	\$
	Flood Trails	\$	991,000	\$	991,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$
	Hartnagle House Restoration	\$	100,000	\$	100,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$
	South Mesa Trailhead Bridge	\$	60,000	\$	60,000	\$		\$		\$		\$		\$		\$
CIP-CAPITAL PLANNING STUDIES		\$	5,000	\$	5,000	\$		\$	-	\$		\$		\$		\$
	Radio System Analysis	\$	5,000	\$	5,000	\$		\$		\$		\$		\$		\$
CIP-LAND ACQUISITION		\$	34,200,000	\$	5,700,000	\$	5,700,000	\$	5,700,000	\$	5,700,000	\$	5,700,000	\$	5,700,000	\$
	Mineral Rights Acquisition	\$	600,000	\$	100,000	\$	100,000	\$	100,000	\$	100,000	\$	100,000	\$	100,000	\$
	OSMP Real Estate Acquisition	\$	32,400,000	\$	5,400,000		5,400,000	\$	5,400,000		5,400,000		5,400,000		5,400,000	
	Water Rights Acquisition	\$	1,200,000		200,000		200,000	\$	200,000		200,000		200,000		200,000	
CIP-NEW		\$	500,000		500,000			\$		\$	,	\$	,	\$	,	\$
FACILITY/INFRASTRUCTURE		7		Ť	200,000	Ť		Ť		Ť		_		_		Ŧ
	Boulder Creek Bikepath Extension	\$	500,000	\$	500,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$

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

Fund	Project Title	Est	imated Total	201	16	201	7 Projected	201	8 Projected	201	9 Projected	202	20 Projected	202	21 Projected	Unfunded	
		Cos	st	Re	commended											Amount	
Permanent Parks & Recreation		\$	8,650,000	\$	1,300,000	\$	1,800,000	\$	700,000	\$	1,200,000	\$	1,450,000	\$	2,200,000	\$	-
CIP-CAPITAL ENHANCEMENT		\$	4,500,000	\$	500,000	\$	1,000,000	\$	500,000	\$	1,000,000	\$	500,000	\$	1,000,000	\$	-
	Athletic Field Development	\$	4,500,000	\$	500,000	\$	1,000,000	\$	500,000	\$	1,000,000	\$	500,000	\$	1,000,000	\$	-
CIP-CAPITAL MAINTENANCE		\$	3,650,000	\$	400,000	\$	700,000	\$	200,000	\$	200,000	\$	950,000	\$	1,200,000	\$	-
	ADA Compliance Initiatives	\$	1,100,000	\$	100,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	-
	Boulder Reservoir South	\$	2,250,000	\$	-	\$	500,000	\$	-	\$	-	\$	750,000	\$	1,000,000	\$	-
	Flatiron Golf Course Repairs	\$	300,000	\$	300,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
CIP-CAPITAL PLANNING STUDIES		\$	500,000	\$	400,000	\$	100,000	\$	-	\$	-	\$	-	\$	-	\$	-
	Reservoir/Tom Watson Site Plan	\$	200,000	\$	200,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Scott Carpenter/Mapleton Site Plan	\$	100,000	\$	100,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Urban Forest Management Plan	\$	100,000	\$	100,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
	Yard/Maintenance Facility Site	\$	100,000	\$	-	\$	100,000	\$	-	\$	-	\$	-	\$	-	\$	-

Fund	Project Title	Estimated Total	2016	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded
		Cost	Recommended						Amount
Stormwater & Flood Mgt Utility		\$ 59,144,721	\$ 3,564,080	\$ 6,994,483	\$ 33,131,155	\$ 4,903,241	\$ 5,547,837	\$ 5,003,925	\$ -
CIP-CAPITAL ENHANCEMENT		\$ 25,040,104	\$ 3,239,580	\$ 5,075,783	\$ 6,562,655	\$ 3,601,241	\$ 3,557,137	\$ 3,003,708	\$ -
	Bear Canyon Creek Flood Mitigation	\$ 500,000	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Bluebell & King's Gultch	\$ 600,000	\$ -	\$ 100,000	\$ 500,000	\$ -	\$ -	\$ -	\$ -
	Boulder Creek Flood Mitigation	\$ 4,750,000	\$ -	\$ 2,500,000	\$ 2,250,000	\$ -	\$ -	\$ -	\$ -
	Four Mile - Upland to Violet	\$ 5,250,000	\$ 500,000	\$ 500,000	\$ 1,000,000	\$ 1,500,000	\$ 1,250,000	\$ 500,000	\$ -
	Greenways Program - Flood fund	\$ 585,000	\$ 97,500	\$ 97,500	\$ 97,500	\$ 97,500	\$ 97,500	\$ 97,500	\$ -
	Gregory Creek Flood Mitigation	\$ 500,000	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Local Drainage Improvements	\$ 4,941,298	\$ 730,080	\$ 759,283	\$ 789,655	\$ 821,241	\$ 854,090	\$ 986,949	\$ -
	Skunk Creek Flood Mitigation	\$ 600,000	\$ -	\$ 100,000	\$ 500,000	\$ -	\$ -	\$ -	\$ -
	Stormwater Quality Improvements	\$ 1,076,390	\$ 162,000	\$ 169,000	\$ 175,500	\$ 182,500	\$ 190,000	\$ 197,390	\$ -
	Twomile Canyon Creek	\$ 600,000	\$ -	\$ 100,000	\$ 500,000	\$ -	\$ -	\$ -	\$ -
	Upper Goose Creek Drainage	\$ 5,637,416	\$ 750,000	\$ 750,000	\$ 750,000	\$ 1,000,000	\$ 1,165,547	\$ 1,221,869	\$ -
CIP-CAPITAL MAINTENANCE		\$ 5,172,732	\$ 594,900	\$ 618,700	\$ 643,500	\$ 669,000	\$ 1,330,700	\$ 1,315,932	\$ -
	Storm Sewer Rehabilitation	\$ 2,438,766	\$ 270,400	\$ 281,200	\$ 292,500	\$ 304,000	\$ 632,700	\$ 657,966	\$ -
	Transportation Coordination	\$ 2,668,966	\$ 324,500	\$ 337,500	\$ 351,000	\$ 365,000	\$ 633,000	\$ 657,966	\$ -
	Utility Billing Computer System	\$ 65,000	\$ -	\$ -	\$ -	\$ -	\$ 65,000	\$ -	\$ -
CIP-LAND ACQUISITION		\$ 3,627,285	\$ 500,000	\$ 550,000	\$ 600,000	\$ 633,000	\$ 660,000	\$ 684,285	\$ -
	Preflood Property Acquisition	\$ 3,627,285	\$ 500,000	\$ 550,000	\$ 600,000	\$ 633,000	\$ 660,000	\$ 684,285	\$ -
CIP-NEW FACILITY/INFRASTRUCTURE		\$ 26,825,000	\$ 750,000	\$ 750,000	\$ 25,325,000	\$ -	\$ -	\$ -	\$ -
	South Boulder Creek Phase I	\$ 26,825,000	\$ 750,000	\$ 750,000	\$ 25,325,000	\$ -	\$ -	\$ -	\$ -

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

Fund	Project Title	Est Cos		201 Red	6 commended	201	7 Projected	20	18 Projected	201	9 Projected	202	20 Projected	202		Unfunded Amount	
Transportation		\$	46,878,500	\$	7,707,000	\$	6,651,500	\$	14,527,500	\$	5,997,500	\$	5,997,500	\$	5,997,500	\$	-
CIP-CAPITAL ENHANCEMENT		\$	10,392,000	\$	3,354,500	\$	1,347,500	\$	5,397,500	\$	97,500	\$	97,500	\$	97,500	\$	-
	19th St (Norwood to Sumac)	\$	257,000	\$	257,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Arap Comp St Recon/Bldr Crk	\$	2,500,000	\$	2,500,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Broadway Recon Violet to 36	\$	7,050,000	\$	500,000	\$	1,250,000	\$	5,300,000	\$	-	\$	-	\$	-	\$	-
	Greenways Program Transportation	\$	585,000	\$	97,500	\$	97,500	\$	97,500	\$	97,500	\$	97,500	\$	97,500	\$	-
CIP-CAPITAL MAINTENANCE		\$	9,467,000	\$	1,694,000	\$	1,694,000	\$	1,429,000	\$	1,550,000	\$	1,550,000	\$	1,550,000	\$	-
	Deficient Street Light Pole	\$	893,000	\$	265,000	\$	265,000	\$	-	\$	121,000	\$	121,000	\$	121,000	\$	-
	Major Capital Reconstruction	\$	4,800,000	\$	800,000	\$	800,000	\$	800,000	\$	800,000	\$	800,000	\$	800,000	\$	-
	Ped Facilities Repair, Replace,	\$	3,774,000	\$	629,000	\$	629,000	\$	629,000	\$	629,000	\$	629,000	\$	629,000	\$	-
CIP-CAPITAL PLANNING STUDIES		\$	596,500	\$	345,500	\$	100,000	\$	151,000	\$	-	\$	-	\$	-	\$	-
	Bldr County/City Joint TIP	\$	289,000	\$	138,000	\$	-	\$	151,000	\$	-	\$	-	\$	-	\$	-
	East Arapahoe Transp Corridor	\$	100,000	\$	100,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Radio System Analysis	\$	7,500	\$	7,500	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Trans Corridor 30th & Colorado	\$	200,000	\$	100,000	\$	100,000	\$	-	\$	-	\$	-	\$	-	\$	-
CIP-NEW FACILITY/INFRASTRUCTURE		\$	26,423,000	\$	2,313,000	\$	3,510,000	\$	7,550,000	\$	4,350,000	\$	4,350,000	\$	4,350,000	\$	-
	28th St - Valmont to Iris	\$	860,000	\$	860,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	30th St and Colorado Bike/Ped	\$	7,500,000	\$	500,000	\$	1,300,000	\$	5,700,000	\$	-	\$	-	\$	-	\$	-
	Bikeway Facilities - Enhancements	\$	1,350,000	\$	225,000	\$	225,000	\$	225,000	\$	225,000	\$	225,000	\$	225,000	\$	-
	Boulder Slough Multiuse Path 30th	\$	480,000	\$	120,000	\$	360,000	\$	-	\$	-	\$	-	\$	-	\$	-
	Ped Facs Enh Missing Links	\$	750,000	\$	125,000	\$	125,000	\$	125,000	\$	125,000	\$	125,000	\$	125,000	\$	-
	TIP Local Match/TMP Implementation	\$	15,483,000	\$	483,000	\$	1,500,000	\$	1,500,000	\$	4,000,000	\$	4,000,000	\$	4,000,000	\$	-

Fund	Project Title	Est	imated Total	201	6	201	7 Projected	201	18 Projected	201	9 Projected	202	0 Projected	202	1 Projected	Unfunded	
		Cos	st	Rec	ommended											Amount	
Transportation Development		\$	3,380,000	\$	530,000	\$	530,000	\$	730,000	\$	530,000	\$	530,000	\$	530,000	\$	-
CIP-CAPITAL ENHANCEMENT		\$	3,380,000	\$	530,000	\$	530,000	\$	730,000	\$	530,000	\$	530,000	\$	530,000	\$	-
	Misc Development Coordination	\$	300,000	\$	50,000	\$	50,000	\$	50,000	\$	50,000	\$	50,000	\$	50,000	\$	-
	Signal Maintenance & Upgrade	\$	200,000	\$	-	\$	-	\$	200,000	\$	-	\$	-	\$	-	\$	-
	TIP Local Match TMP Implementation	\$	2,880,000	\$	480,000	\$	480,000	\$	480,000	\$	480,000	\$	480,000	\$	480,000	\$	-
CIP-NEW		\$	470,000	\$	470,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
FACILITY/INFRASTRUCTURE																	
	28th St Valmont to Iris (Baseline)	\$	470,000	\$	470,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-

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

Fund	Project Title	Estimated Total	2016	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded
		Cost	Recommended						Amount
Wastewater Utility		\$ 58,052,128	\$ 4,355,600	\$ 5,987,421	\$ 5,571,420	\$ 7,335,868	\$ 27,559,276	\$ 7,242,543	\$ -
CIP-CAPITAL ENHANCEMENT		\$ 29,573,075	\$ 570,000	\$ 2,050,397	\$ 1,476,915	\$ 2,877,582	\$ 20,731,179	\$ 1,867,002	\$ -
	Goose Creek SS Interceptor Rehab	\$ 3,749,723	\$ -	\$ -	\$ 25,000	\$ 647,590	\$ 1,346,988	\$ 1,730,145	\$ -
	Marshall Landfill	\$ 100,000	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Wastewater Treatment Facility	\$ 150,000	\$ 150,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	WWTF Activated Sludge	\$ 175,479	\$ -	\$ 175,479	\$ -	\$ -	\$ -	\$ -	\$ -
	WWTF Electrical	\$ 1,320,000	\$ 120,000	\$ 1,200,000	\$ -	\$ -	\$ -	\$ -	\$ -
	WWTF Instrumentation/Control	\$ 2,866,016	\$ -	\$ 674,918	\$ 701,915	\$ 729,992	\$ 759,191	\$ -	\$ -
	WWTFLaboratory	\$ 50,000	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	WWTF Permit Improvements	\$ 21,161,857	\$ 150,000	\$ -	\$ 750,000	\$ 1,500,000	\$ 18,625,000	\$ 136,857	\$ -
CIP-CAPITAL MAINTENANCE		\$ 28,479,053	\$ 3,785,600	\$ 3,937,024	\$ 4,094,505	\$ 4,458,286	\$ 6,828,097	\$ 5,375,541	\$ -
	Condition Assessment Program	\$ 5,380,670	\$ 811,200	\$ 843,648	\$ 877,394	\$ 912,490	\$ 948,989	\$ 986,949	\$ -
	Sanitary Sewer Manhole	\$ 1,829,626	\$ 216,320	\$ 224,973	\$ 233,972	\$ 243,331	\$ 253,064	\$ 657,966	\$ -
	Sanitary Sewer Rehabilitation	\$ 18,294,276	\$ 2,758,080	\$ 2,868,403	\$ 2,983,139	\$ 3,102,465	\$ 3,226,563	\$ 3,355,626	\$ -
	Utility Billing Computer System	\$ 65,000	\$ -	\$ -	\$ -	\$ -	\$ 65,000	\$ -	\$ -
	WWTF Cogeneration	\$ 184,481	\$ -	\$ -	\$ -	\$ -	\$ 184,481	\$ -	\$ -
	WWTF Digester Complex	\$ 2,200,000	\$ -	\$ -	\$ -	\$ 200,000	\$ 2,000,000	\$ -	\$ -
	WWTF Rehabilitation	\$ 525,000	\$ -	\$ -	\$ -	\$ -	\$ 150,000	\$ 375,000	\$ -

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

Fund	Project Title	Estimated Total		2017 Projected	2018 Projected	2019 Projected	2020 Projected 2021 Projected	
		Cost	Recommended	A 0.070 F3-	0 44 407 500	A 44 (00 000	A 40 000 F04 A 40 040 110	Amount
/ater Utility		\$ 126,457,271					\$ 19,698,521 \$ 12,318,146	
CIP-CAPITAL ENHANCEMENT		\$ 84,350,608	\$ 26,610,000	\$ 2,511,322		\$ 1,668,882	\$ 9,148,194 \$ 6,097,907	\$
	Automated Meter Reading	\$ 684,285		\$ -		\$ -	\$ - \$ 684,285	
	Barker Dam and Reservoir	\$ 115,000		\$ 50,000		\$ -	, ,	\$
	Barker Dam Outlet	\$ 9,566,060	\$ 100,000			\$ 835,551	,, ,	\$
	Betasso Water Treatment Facility	\$ 25,140,000	\$ 25,140,000	\$ -	\$ -	\$ -	\$ - \$ -	\$
	Green Lake 2 Dam	\$ 561,773	\$ -	\$ -	\$ -	\$ -	\$ 75,000 \$ 486,773	\$
	Lakewood Dam	\$ 124,707	\$ -	\$ -	\$ 124,707	\$ -	\$ - \$ -	\$
	Lakewood Hydroelectric/PRV	\$ 430,000	\$ 130,000	\$ -	\$ -	\$ 300,000	\$ - \$ -	\$
	NCWCD Conveyance - Carter Lake	\$ 40,801,585	\$ 850,000	\$ 2,036,322	\$ 37,915,263	\$ -	\$ - \$ -	\$
	Orodell Hydro/PRV Facility	\$ 75,000	\$ 75,000	\$ -	\$ -	\$ -	\$ - \$ -	\$
	Pearl Street Hydro/PRV Facility	\$ 267,664	\$ -	\$ -	\$ 24,333	\$ 243,331	\$ - \$ -	\$
	Source Water Monitoring/Protection	\$ 400,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ - \$ -	\$
	Utility Billing Computer System	\$ 125,000	\$ -	\$ -	\$ -	\$ -	\$ 125,000 \$ -	\$
	Water System Security/Quality	\$ 540,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 90,000	\$ - \$ -	\$
	Wittemyer Ponds	\$ 5,519,534	\$ -	\$ -	\$ -	\$ 100,000	\$ 492,685 \$ 4,926,849	\$
CIP-CAPITAL MAINTENANCE		\$ 39,299,163	\$ 6,839,251	\$ 6,168,263	\$ 2,743,289	\$ 9,277,794	\$ 8,050,327 \$ 6,220,239	\$
	Albion Dam	\$ 3,882,997	\$ 125,000	\$ -	\$ 341,636	\$ 3,416,361	\$ - \$ -	\$
	Barker Gravity Pipeline Repair	\$ 7,003,748	\$ 667,416	\$ 1,169,859	\$ 1,216,653	\$ 1,265,319	\$ 1,315,932 \$ 1,368,569	\$
	Barker-Kossler Penstock Repair	\$ 116,986	\$ -	\$ 116,986	\$ -	\$ -	\$ - \$ -	\$
	Betasso Hydroelectric / PRF	\$ 860,000	\$ -	\$ 380,000	\$ 480,000	\$ -	\$ - \$ -	\$
	Betasso Storage Tank	\$ 292,465	\$ -	\$ 292,465	\$ -	\$ -	\$ - \$ -	\$
	Boulder Reservoir	\$ 168,434	\$ 50,000	\$ -	\$ -	\$ -	\$ 118,434 \$ -	\$
	Distribution Waterline Replacement	\$ 18,613,540	\$ 3,352,960	\$ 3,487,078	\$ -	\$ 3,771,624	\$ 3,922,489 \$ 4,079,389	\$
	Farmer's Ditch	\$ 108,160			\$ -	\$ 108,160		\$
	Goose Lake Dam	\$ 75,000		\$ -	-	\$ -		\$
	Island Lake Dam	\$ 50,000		\$ -		\$ -	, ,	\$
	Kohler Storage Tank Roof	\$ 799,875			1	\$ -	, ,	\$
	Kossler Dam	\$ 75,000	. ,	· ·		\$ -	, ,	\$
	Lakewood Pipeline	\$ 316,330		\$ -		\$ 316,330	, ,	\$
	Reservoir Water Treatment Facility	\$ 2,314,000	\$ 314,000	Ť	'			\$
	Silver Lake Dam	\$ 100,000		\$ -		\$ -	. ,,	\$
	Silver Lake Hydroelectric/PRV	\$ 155,000		\$ 50,000		\$ -	, ,	\$
	Skyscraper Dam	\$ 171,071		\$ 30,000		\$ -		•
	Source Water Pressure Reducing,	\$ 1,294,682	*	,		*	\$ 343,472 \$ 351,210	
	Sunshine Hydroelectric/PRV	\$ 1,294,002		\$ 271,875				\$
						•		
	Watershed Improvements	\$ 180,000		Ψ	Ψ	\$ -		\$
	Zone 1 Transmission Pipes	\$ 500,000		\$ -	Ψ 200,000	\$ -	T ====,===	
	Zone 2 Transmission Pipes	\$ 500,000	\$ -	\$ 250,000				\$
	Zone 3 Transmission Pipes	\$ 1,450,000	\$ 1,200,000	\$ -	\$ -	\$ 250,000	\$ - \$ -	\$

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

Fund	Project Title	Estimated Total		2016	2	017 Projected	201	8 Projected	201	9 Projected	202	0 Projected	202	21 Projected	Unfunded	
		Cost		Recommende	∍d										Amount	
Water Utility (Cont.)		\$ 12	26,457,271	\$ 33,456,75	1	\$ 8,679,585	\$	41,107,592	\$	11,196,676	\$	19,698,521	\$	12,318,146	\$	-
CIP-CAPITAL PLANNING STUDIES		\$	7,500	\$ 7,50	0	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-
	Radio System Analysis	\$	7,500	\$ 7,50	0	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-
CIP-NEW		\$	2,800,000	\$	- 3	\$ -	\$	50,000	\$	250,000	\$	2,500,000	\$	-	\$	-
FACILITY/INFRASTRUCTURE																
	Carter Lake Hydroelectric	\$	2,800,000	\$	- 3	\$ -	\$	50,000	\$	250,000	\$	2,500,000	\$	-	\$	-



# City of Boulder SPECIAL HIGHLIGHT ON CAPITAL IMPROVEMENT BOND

2016-2021 Capital Improvement Program

#### Introduction

The Special Highlight on the Capital Improvement Bond section details a significant, multi–department, capital improvement effort currently underway in the City of Boulder. Implementation of the bond is consistent with the City Council support, voter approval, stakeholder committee recommendation, and meets the legal requirements of the bond council. A website has been created that allows the community to track the progress of implementation of the bond projects at <a href="https://www.bouldercolorado.gov/bondprojects.">www.bouldercolorado.gov/bondprojects.</a> Background information on the Capital Improvement Bond, including bond issuance, is available in the 2014–2019 CIP document at: <a href="https://www.bouldercolorado.gov/bondprojects">2014–2019 CIP</a> Special Highlight on Capital Bond.

Overview of Capital Investment Strategy and Capital Improvement Bond Implementation
In the November 2011 election, City of Boulder voters approved a measure, by a 3-to-1 margin, that would allow the city to leverage existing revenues to bond for up to \$49 million to fund capital projects that address significant deficiencies and high priority infrastructure improvements throughout the community. Because the city was able to leverage existing revenues, the measure did not raise taxes. The \$49 million bond package has a 20-year payback and 85 percent of the total proceeds of \$55.11 million (including the bond issuance premium and accumulated interest) are required to be spent by March 22, 2015. One-hundred percent of the total funding is required

to be spent by March 22, 2017. As of July 15, 2015, 98 percent of the total funding had been spent. The city met the three-year spending requirement and is working to ensure 100 percent of the total funding is spent by March 22, 2017.

#### **Project Highlights and Status**

There are 85 individual projects that are being implemented with the bond funds throughout the community. The individual projects are grouped into 26 categories which are briefly

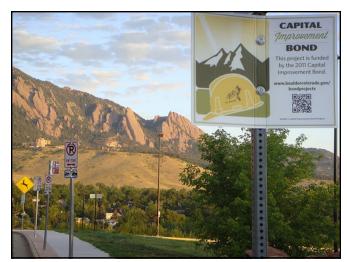
#### Highlights at a Glance

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



described below along with the current status of the projects as of July 2015. Most of the projects have been completed with approximately 14 percent that are under construction. Details related to each project can be found at <a href="https://www.bouldercolorado.gov/bondprojects">www.bouldercolorado.gov/bondprojects</a>.

- 1. Boulder Reservoir Infrastructure Improvements: This project is complete, including improving the entry gate, roadway, parking lot, utility infrastructure, and grounds and landscape. The new Gateway Enhancement project at the main Reservoir entrance at 51st Street is complete and provides improved traffic access, new entry buildings and an improved inspection station for Aquatic Nuisance Species (ANS). Utility upgrades are complete and provide improved water and sanitary sewer facilities at the reservoir.
- 2. Columbia Cemetery Upgrades and Enhancements: This project is complete, including constructing new fencing, repairing headstones and improving irrigation. A new fence has been installed along the west property boundary in keeping with the historic quality of the cemetery and headstones have been repaired. A new rawwater irrigation system has been installed to improve water conservation and efficiency.
- 3. Park Shelter Replacements and Improvements:
  Includes maintaining existing park shelters
  and providing critical shade amenities within
  multiple parks. Shade shelters construction at
  Valmont City Park, Foothills Dog Park, Eaton
  Park, Martin Park and Pleasant View Fields are



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

- complete. New shelters and a restroom at Harlow Platts Park are scheduled to be complete later in 2015.
- 4. Existing Park and Recreation Facility Renovations: Includes addressing ongoing maintenance and accessibility while improving the overall safety and enjoyment of park facilities. Canyon Park, Columbine Park, Harlow Platts Park, Pineview Park, East Palo Park, North Boulder Park, and Crestview Park are completed with improvements ranging from turf and irrigation renovations, playground replacement, accessibility compliance and replacement of park amenities. Pleasant View Sports facility, Mapleton Ballfields, and Stazio Ballfields all have completed parking lot and ADA compliance upgrades.
- 5. South Boulder Recreation Center Floor Replacement: Includes replacing water-damaged wooden





floor at the South Boulder Recreation Center (SBRC) gym and racquetball courts. During the design and investigative stages in January 2012, low levels of mercury and lead contamination were found in the underlying floor membrane in the gym, racquetball and Pilates rooms. Although posing no immediate risks to patrons and staff, it was decided to remove the old flooring system in all three rooms. The floor has been replaced along with installation of necessary ADA compliance upgrades that provide full access to the new gym floor by all members of the community.

- 6. Downtown Commercial District Improvements: Includes public right-of-way enhancements to downtown commercial district and Pearl Street Mall. 15<sup>th</sup> Street between Arapahoe and Canyon to improve pedestrian accessibility as well as streetscape character is complete. A new interactive kiosk for public use on the Pearl Street Mall is also complete. Streetscape improvements on West Pearl Street from 11<sup>th</sup> to 7<sup>th</sup> Streets are under construction, with an estimated completion date of summer 2015.
- 7. Main Library Renovation: Includes extensive renovations that were primarily funded by the Capital Improvement Bond, such as: renovating and relocating the children's area; creating a new, larger Teen Space and a "maker" space; relocating and renovating the fiction, music and movies area; replacing outdated electrical and data distribution systems; repairing clerestory windows; improving Americans with Disability Act accessibility; replacing worn carpeting; providing facilities for café service on the library bridge; and installing additional HVAC (heating, ventilation, and air conditioning) equipment to improve building cooling. The project is complete and throughout the renovation the library remained open to the public.
- 8. Replace Financial and Human Resources Software: Includes replacing the outdated financial, human resources and payroll systems with an integrated, more modern and comprehensive software solution. The project has several phases and the first phase of implementing the finance system is complete. The remaining phases are expected to be completed later in 2015 and 2016.
- 9. Major Business Software Replacement: Includes replacing and augmenting major business software, such as website/eGov, records management, and permit systems. The redesign of the city's website is complete, including a web-based Constituent Relationship Management (CRM) system. It is anticipated that the citywide records management and document imaging software will be completed in summer 2015 and the city's permit management system in summer 2017.
- 10. Facility Electrical, Plumbing, HVAC and Elevator Replacements: Includes infrastructure overdue for replacement and repair projects such as at the Public Safety Building, Municipal Building,



Main Library, Dairy Center, and Fleet Services. These projects have been completed, with the exception of the elevator repairs at the Public Safety Building. These repairs will be completed later in 2015.

- 11. Facility Parking Lot Repair: This project is complete, including repairs for some of the city's asphalt parking areas, such as downtown facilities, fire stations, and Spruce Pool.
- 12. Facility Outdoor Lighting: Includes solar canopy, car charging, and lighting projects, which would eliminate electrical conduit runs. Two of the solar canopies/car chargers are complete with one at East Boulder Recreation Center and one at the lot at Broadway and Spruce. New lights with solar powered fixtures will be installed in the public lot next to the Park Central building at the corner of Broadway and Arapahoe later in 2015.
- 13. Facility ADA Compliance: Includes prioritizing and adapting city facilities that do not meet the 2010 requirements of the Americans with Disabilities Act (ADA). Based on an assessment, ADA improvements have been made at the Main Library, and South Boulder Recreation Center. In addition, by using primarily bond funds, a new building is being completed for ADA–accessible restrooms, along with extensive site and infrastructure improvements at Chautauqua Park, completion date is mid–July 2015.
- 14. Fire Station #8: Previously referred to as the Wildland Fire Station, this station consolidates the operations of the Boulder Fire-Rescue Department's Wildland Fire personnel into one new 10,500 square-foot facility on the site of the existing Fire Training Center, east of the Boulder Reservoir property. The facility is constructed and provides accommodations for a full-time crew of Wildland Fire Specialists, and storage and maintenance of vehicles and support equipment for the wildland fire management.
- 15. Replace Substandard Bridges, Structures, Signs and Systems: Includes the replacement of the 63<sup>rd</sup> Street Bridge, irrigation system replacement on the Foothills Parkway landscaping, replacement of substandard signs and the replacement of signal light bulbs with LED lights. The 63<sup>rd</sup> Street Bridge is complete and the Foothills irrigation system replacement between Colorado and US 36 is complete. All of the traffic signal lighting (red, yellow and green) has been replaced with LED displays. The substandard sign installations have started with completion anticipated later this year.
- 16. Arterial Road Reconstruction: Arapahoe is the arterial in highest need of reconstruction. The project has been completed and improvements primarily include a reconstruction of the street with concrete as well as storm sewer and other underground utility improvements, sidewalk, bus stop, landscaping and urban design improvements. In addition, an extension of the existing student-drop off area and multi-use path on the south side of Arapahoe Avenue





- along the Boulder High School property was also constructed as part of this work.
- 17. Road Pavement Repair: Includes overlay and chip seal of various streets throughout the city. Approximately one-third of the funds will be spent each year to overlay approximately 50 blocks, or 5.5 miles, of roadway, in addition to the city's annual repair schedule.
- 18. Road Reconstruction: Includes reconstruction of streets that rate below 25, on the Overall Condition Index (OCI) that are mostly lower volume streets and cul-de-sacs. Approximately one-third of the funds will be spent each year to reconstruct approximately 14 blocks, or approx 1.5 miles of roadway, in addition to the city's annual reconstruction schedule.
- 19. Transportation Boulder Junction Improvements: Includes the Junction Place Bridge at Goose Creek and the Pearl Parkway Multi-Way Boulevard from 30<sup>th</sup> to BNSF Railroad tracks on the south side of Pearl. The south side of Pearl Parkway is complete, and the Junction Place Bridge is under construction to be completed later in 2015.
- 20. Transportation Transit System Enhancements: Includes two projects, the largest of which is the 14<sup>th</sup> and Walnut Street Transit Center Improvements, including bus, pedestrian, and bicycle access improvements. The second transit project provides additional money for transit stop improvements throughout the city. Both projects are complete.
- 21. Transportation New Multi-Use Path Connections: Includes various multi-use path connections throughout the city, such as constructing a multi-use path on 28<sup>th</sup> Street from Arapahoe to Goose Creek, and constructing a new multi-use path at 22<sup>nd</sup> Street east of Naropa, from Arapahoe to the Boulder Creek Path. All projects are complete.
- 22. Transportation Pedestrian Enhancements: Includes pedestrian crossing treatments, small and large missing sidewalk links and pedestrian improvements at Manhattan and S. Boulder Road. The enhancements to the pedestrian crossing at Canyon and 21<sup>st</sup> Street have been completed as well as the missing link on Gillaspie from Greenbriar to Julliard, Folsom south of Arapahoe on the east side, and on Pine Street and 27<sup>th</sup> Street.
- 23. Transportation Intersection Improvements: Includes improvements at the Foothills/Baseline intersection and the South Boulder Road/Manhattan Intersection. All projects are complete except the South Boulder Road/Manhattan intersection which will be completed later in 2015.
- 24. Transportation Bike System Enhancements: Includes additional bike system signage such as the designation of new on-street bike routes and installing way-finding and destination signs along existing greenways. Projects are complete.
- 25. Police Equipment: Includes upgrading the records management system and adding more incar video systems to the patrol fleet and personal video systems. Projects are complete.
- 26. Police Equipment Upgrades and Replacement: Includes replacing the bomb squad robot, and





purchasing equipment to operate a DNA Lab in Boulder in partnership with the Colorado Bureau of Investigation (CBI), and upgrading the emergency radio infrastructure. These projects are all complete.

# **Implementation**

To ensure that the city meets the spending and timing requirements of the capital improvement bond, the city has collected spending plans for each project and closely monitors construction progress. Table 3–1 shows the annual expenditure plan for each project for 2011 through 2015.

# **Next Steps**

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

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

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





Table 3-1: 2011-2015 Spend Plan

CAPITAL IMPROVEMENT BOND						
	Total	2011	2012	2013	2014	2015
	Amount	Actual	Actual	Actual	Actual	Projected
Arterial Road Reconstruction	\$ 5,280,000	\$ -	\$ 292,179	\$ 1,879,397	\$ 2,682,984	\$ 425,441
Boulder Reservoir Infrastructure Improvements	3,300,915	-	794,813	1,312,067	1,110,253	83,782
Columbia Cemetery Upgrades and Enhancements	637,000	-	87,280	237,741	151,387	160,592
Downtown Commercial District Improvements	2,935,000	-	79,089	979,599	1,408,417	467,894
Existing Park and Recreation Facility Renovations	4,215,035	-	1,605,009	874,086	956,841	779,099
Facility ADA Compliance	565,000	-	50,425	49,486	106,546	358,543
Facility Electrical, Plumbing, HVAC and Elevator Rep.	1,580,960	-	466,364	1,008,990	64,400	41,206
Facility Outdoor Lighting	71,688	-	8,611	48,196	13,744	1,136
Facility Parking Lot Repair	413,312	-	19,754	271,706	92,836	29,016
Main Library Renovations	3,200,000	-	12,481	289,353	2,202,879	695,288
Major Business Software Replacement	821,600	-	25,000	451,008	249,524	96,068
New Wildland Fire Station	3,077,718	-	20,327	182,000	2,043,872	831,519
Park Shelter Replacements and Improvements	924,965	-	355,535	239,885	41,018	288,527
Police Equipment	253,290	-	71,224	63,668	96,412	21,986
Police Equipment Upgrades and Replacement	1,020,050	-	369,938	451,718	-	198,395
Replace Financial and Human Resources Software	4,318,693	-	259,170	763,326	1,368,989	1,927,208
Replace Substandard Bridges, Structures, Signs & Sys.	4,146,977	-	475,563	1,130,808	1,786,381	754,226
Road Pavement Repair	5,000,000	-	1,568,616	1,947,932	1,483,452	-
Road Reconstruction	2,500,000	-	525,960	713,741	1,260,298	-
South Boulder Recreation Center Floor Replacement	281,748	-	205,237	76,511	-	-
Transportation Bike System Enhancements	300,000	5,120	106,234	114,836	73,810	-
Transportation Boulder Junction Improvements	5,813,023	-	855,192	2,083,198	2,594,511	280,123
Transportation Intersection Improvements	500,000	-	13,454	8,205	142,921	335,419
Transportation New Multi Use Path connections	2,000,000	5,229	354,468	235,076	1,353,185	52,042
Transportation Pedestrian Enhancements	850,000	5,658	285,531	304,954	253,857	-
Transportation Transit System Enhancements	608,000		127,041	232,653	248,306	
Tota	\$ 54,614,974	\$16,006	\$9,034,496	\$ 15,950,138	\$ 21,786,822	\$ 7,827,512



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# City of Boulder SPECIAL HIGHLIGHT ON SEPTEMBER 2013 FLOOD

2016-2021 Capital Improvement Program

# Flood Impact to CIP - Overview

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

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

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

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

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

The city has identified approximately 321 flood related capital projects. As of July 31, 2015, the city is 78 percent complete with flood recovery projects.



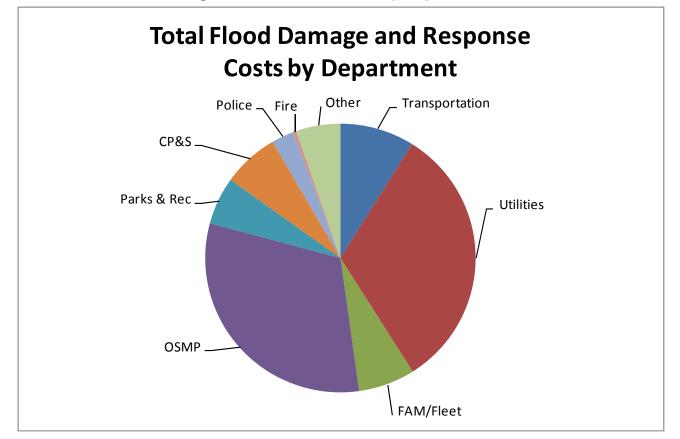


Figure 4–1: Flood Costs by Department

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

It is anticipated that 75% of eligible costs will eventually be reimbursed by FEMA, and an additional 12.5% by the State of Colorado. To be eligible for reimbursement the work must meet certain criteria established by FEMA and be completed within the FEMA deadline, which varies by type of project. Currently, all FEMA related work is projected to be complete by September 30, 2017. As of July 1, 2015, the expected federal/state contribution to flood recovery is \$17.3 million. To date, the city has received federal and state reimbursements of \$5.3 million. The city has also received over \$4 million in non–FEMA grant awards to assist the city and its residents with flood recovery and resilience activities.



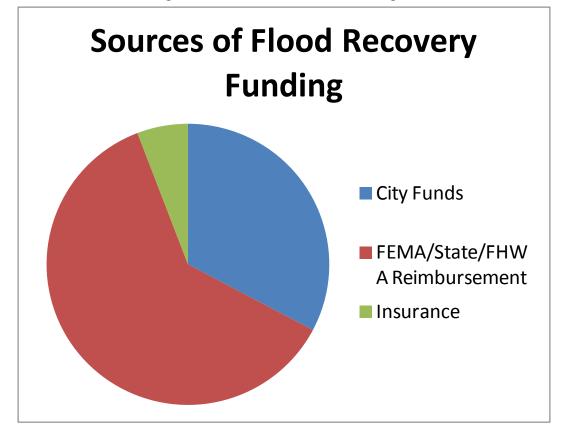


Figure 4–2: Sources of Funding

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

Additional information on flood impacts to people, private property and infrastructure citywide and the current status of recovery can be found at <a href="https://www.BoulderFloodInfo.net">www.BoulderFloodInfo.net</a>.

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City of Boulder
SPECIAL HIGHLIGHT ON
COMMUNITY, CULTURE AND SAFETY PROJECT

2016-2021 Capital Improvement Program

#### Introduction

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

## Overview of Community, Culture and Safety Capital Improvement Project

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

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

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

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



safety.

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

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

## **Project Highlights**

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



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

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



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

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

# **Implementation**

To ensure that the city meets the spending and timing goals of the ballot measure, the city has collected spending plans for each project and is closely monitoring construction progress. Table 5 –3 shows the annual expenditure plan for each project for 2015 through 2018.



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

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

## **Next Steps**

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

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

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City of Boulder
SPECIAL HIGHLIGHT ON
PAVEMENT MANAGEMENT PROGRAM

2016-2021 Capital Improvement Program

#### Introduction

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

# **Funding**

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

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

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



# **Pavement Management Program**

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

## Overall Conditions Index

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

Table 6-1: Overall Conditions Index

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



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

# **PMP Strategy**

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

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

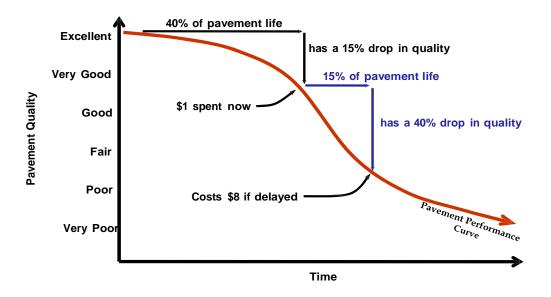


Figure 6-1 - Pavement Deterioration and Life Cycle Costs

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



Comparative costs for the most typical treatments are shown below.

Table 6-2: Comparative Costs

Treatment Type	Approximate Cost
Crack Seal	\$1/yd²
Chip Seal	\$4 - \$5/yd <sup>2</sup>
Overlay	\$15 - \$17/yd²
Reconstruction	\$30 - \$35/yd²

# **Existing Conditions**

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

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

Table 6-3: Condition of Streets

	Excellent (90 – 100)	Very Good (80 - 90)	Good (65–80)	Fair (50-65)	Very Poor (< 50)
Local %	26%	24%	28%	13%	1 0%
Collector %	23%	25%	34%	12%	6%
Arterial %	32%	24%	30%	8%	5%

# **Peer Comparison**

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

## Denver

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



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

Table 6-4: Weighted Average OCI Comparison

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

### **PMP Improvements**

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

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

#### Conclusions

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

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City of Boulder

# **COMMUNITY VITALITY**

2016-2021 Capital Improvement Program

# **Overview of Department Mission**

Community Vitality (CV) serves the downtown, University Hill and affected communities by providing quality program, parking, enforcement, maintenance and alternative modes services through the highest level of customer service, efficient management and effective problem solving.

# **Funding Overview**

CV manages programs in five funds:

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

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



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



West End Streetscape at Pearl and 10th Street.

# Current Focus for Capital Planning and Projects in 2016

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



garage lot attendant booths

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

# Highlights

Projects expected to be completed in 2015

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

# Priority Projects for 2016

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

# **Community Vitality**



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

## Highlights of 2017 - 2021 Projects

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

# **Board Action**

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

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



# **Guiding Principles and Project Prioritization**

# **CIP Guiding Principles**

All proposed projects in the 2016–2021 CIP are consistent with the CIP guiding principles. All projects have sufficient funds for ongoing maintenance and operations. All projects in the proposed CIP maintain and improve existing assets.

The Downtown/Pearl Street Mall Improvements/Replacements support the economic sustainability of downtown Boulder by ensuring long term sustainability of our existing infrastructure and investing in the future economic and social vitality of our community center. The CAGID garage major maintenance, the garage elevator and the downtown 14<sup>th</sup> Street Parking Lot replacement provide essential on–going major maintenance and reinvestment in the five parking facilities and three surface lots.

#### Prioritization

CV has the responsibility to maintain an adequate parking supply in Downtown Boulder and will build or buy assets as available. The division is also responsible for maintaining all CAGID parking garage assets and the surface parking lots on 14<sup>th</sup> Street, in order to protect the investment and sustain functionality and safety.

The Downtown/Pearl Street Mall improvements are prioritized by necessary maintenance, replacement and repair of all amenities in the downtown area.

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

#### Projects Not in Master Plan

CV does not have a master plan. Projects are included in the CIP based on stakeholder interest and necessary maintenance of capital assets.

# Projects not Previously Identified in the CIP

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



# **Operation and Maintenance Impacts**

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

# Deferred, Eliminated, or Changed Projects

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

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

# **Unfunded Projects and Emerging Needs**

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

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

		Est Co:		20°	16 Approved	2017	Projected	201	8 Projected	2019	Projected	202	20 Projected	202	1 Projected	Unfunded Amount	
DUHMD	Department Total	\$	4,434,765	\$	2,156,565	\$	678,200	\$	400,000	\$	400,000	\$	400,000	\$	400,000	\$	-
CIP-CAPITAL MAINTENANCE	Subtotal	\$	3,009,000	\$	730,800	\$	678,200	\$	400,000	\$	400,000	\$	400,000	\$	400,000	\$	-
	Downtown 14th St Prkg Lot	\$	150,000	\$	25,000	\$	25,000	\$	25,000	\$	25,000	\$	25,000	\$	25,000	\$	-
	Downtown Parking Garage	\$	609,000	\$	330,800	\$	278,200	\$	-	\$	-	\$	-	\$	-	\$	-
	Downtown Parking Garage Major	\$	1,500,000	\$	250,000	\$	250,000	\$	250,000	\$	250,000	\$	250,000	\$	250,000	\$	-
	Downtown Pearl St Mall Amenity	\$	750,000	\$	125,000	\$	125,000	\$	125,000	\$	125,000	\$	125,000	\$	125,000	\$	-
CIP-NEW FACILITY/INFRASTRUCTURE	Subtotal	\$	1,425,765	\$	1,425,765	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	CAGID Trinity Commons	\$	1,425,765	\$	1,425,765	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-

# **Community Vitality**



# Mapping

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



**Project Name: CAGID Trinity Commons Construction** 

Project at a Glance

CIP-NEW FACILITY/INFRASTRUCTUR Project Type:

Department: DUHMD Subcommunity: CENTRAL BOULDER

**BVCP Area: Project Number:** 620CAGTrin AREA I

**CEAP Required: CEAP Status:** 

#### **Project Description**

Staff was approached by Trinity Church leaders to see if CAGID would be interested in partnering with the church in an expansion of the church property. Trinity Church is proposing to add a fellowship hall, 16 unites of affordable senior housing (with a possible expansion) and a below grade parking garage. CAGID was asked to participaate in the funding to allow a second level of below grade parking that would be owned and managed by CAGID for downtown parking.

A Memorandum of Understanding (MOU) is in the final stages of draft to allow CAGID and Trinity to proceed. If an agreement is

reached, CAGID will provide financing from fund balance to pay for a portion of the developement, to include a below grade 54 space parking garage for use by CAGID for long term parking permits. Total cost is estimated to be \$3,125,765 which includes \$70,000 for a construction consultant.

#### Project Phasing

#### **Public Process**

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

#### Interdepartmental and Interagency Collaboration

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

#### Change From Past CIP

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

Capital Funding Plan								
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021	
Downtown Commercial District	\$1,700,000	\$1,425,765	\$0	\$0	\$0	\$0	\$0	

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$3,125,765

Additional Annual Operating and Maintenance

**Additional Annual** 

O&M:

25.650

**Funding Source for** 

O&M:

Additional Annual O&M Description:

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



**Project Name:** Downtown 14th St Prkg Lot Improve

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department: DUHMD Subcommunity: CENTRAL BOULDER

Project Number: 620CAGFLot **BVCP Area:** AREA I

**CEAP Required: CEAP Status:** No

## **Project Description**

The 14th Street parking lot improvement project is an ongoing project to maintain the 3 surface parking lots on 14th Street between Canyon and Arapahoe. These lots are not owned by CAGID, they are city property, but located within the CAGID

The 14th Street lots surfaces are near their useful life and need repair and replacement. DUHMD/PS does not have a master plan, but identified the lack of funding to maintain the lots in the 2012 budget cycle. Facilities and Asset Management performed an inspection in 2010 for the three lots. They found that 2 of the lots require replacement due to severity of asphalt fatigue, cracks, potholes and drainage issues in over 20% of the surface. The third lot requires patching and sealing to maintain in good operating condition. Once a lot is newly paved, it will have an estimated life span of 20 years.

The center lot was removed and replaced by FAM in 2014 as part of a larger remediation project and rebuild of the civic plaza on

The CIP for this project is an annual and ongoing appropriation of \$25,000 per year to establish repair and replacement savings. As the funds accumulate, the improvements to the lots will be completed on a rolling basis. Surface replacement of the lots with the highest severity of issues will be completed first.

A capital improvement amount of approximately \$285,500 was estimated to complete all necessary asphalt surface repairs and replacement for the lots. 2015 represents the 4th year of appropriation toward the repair and improvement plan. As the middle lot was paved through the FAM remediation project, funds to upgrade the other two lots will be available sooner. Staff will monitor the implementation of the Civic Area Plan to ensure coordination with any redevelopment projects and responsible expenditure of funds.

#### **Project Phasing**

Annual transfer to FAM

#### **Public Process**

There is no public process

## Interdepartmental and Interagency Collaboration

Change From Past CIP

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

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Downtown Commercial District	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000

Funding to Completion \$0 Future Unfunded \$0

**Total Funding Plan:** \$175,000

**Additional Annual Operating and Maintenance** 

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

Additional Annual O&M Description:

Operating Costs are currently covered in the Downtown Commercial Dis



Project Name: Downtown Parking Garage Elevators

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

**Department:** DUHMD **Subcommunity:** CENTRAL BOULDER

Project Number: 620CAGELEV BVCP Area: AREA I

CEAP Required: No CEAP Status:

#### **Project Description**

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

These improvements will be funded with fund balance from the Downtown Commercial District Fund.

#### **Project Phasing**

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

#### **Public Process**

No public process

#### Interdepartmental and Interagency Collaboration

Change From Past CIP

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

#### Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Downtown Commercial District	\$0	\$330,800	\$278,200	\$0	\$0	\$0	\$0

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$609,000

Additional Annual Operating and Maintenance

Additional Annual \$0 Funding Source for

O&M: O&M:

Additional Annual O&M Description:

No additional O&M required



Project Name: Downtown Parking Garage Major Maint

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department: DUHMD Subcommunity: CENTRAL BOULDER

Project Number: 620CAGMain BVCP Area: AREA I

CEAP Required: No CEAP Status:

#### **Project Description**

Funding for the 4 year, 4.5 million dollar major capital renovation and repair project funding ended in 2011. Starting in 2012, \$250,000 per year was allocated as ongoing repairs/renovations to maintain the garages in good standing. Major maintenance projects include, but, are not limited to: epoxy coating of exposed garage decks (on a 6-8 year replacement schedule, one structure a year), painting (interior and exterior), major elevator repairs, and concrete deterioration. Many of these procedures require significant funding and are part of a rotating maintenance schedule. The intent is to maintain the garages in a manner to avoid or delay significant capital outlay brought on without timely maintenance.

Projects completed in 2015 include:

-Stair replacement at 1100 Walnut and 1400 Walnut. -Elevator refurbishment at 1400 Walnut,

Projects planned for 2016 include:

-Interior painting of all parking garages and updating/replacemnt of the parking lot attendant booths.

#### Project Phasing

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

#### **Public Process**

No public process

#### Interdepartmental and Interagency Collaboration

Change From Past CIP

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

Capita	al Fund	ling P	'lan
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Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Downtown Commercial District	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$1,750,000

Additional Annual Operating and Maintenance

Additional Annual Funding Source for

O&M: O&M:

## Additional Annual O&M Description:

Operating costs are covered in Downtown Commercial District Fund



Project Name: Downtown Pearl St Mall Amenity Repl

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department: DUHMD Subcommunity: CENTRAL BOULDER

Project Number: 620CAGFMAL BVCP Area: AREA I

CEAP Required: No CEAP Status:

#### **Project Description**

Until 2012, there was no capital replacement or future improvements plan or funding source identified for the Pearl Street Mall and downtown streetscape improvements. The Downtown/Pearl St Mall Amenities replacement plan consists of two components: 1) capital replacement budget for the existing amenities on the Pearl Street Mall (pop jet fountain, shade structure, kiosks, play areas, etc.) and existing streetscape elements within the downtown area (benches, trash receptacles, bike racks, etc.) and 2) replacement of future streetscape improvements in sub areas of the downtown.

This project is for an ongoing funding program. DUHMD/PS worked with the Parks Mall staff and FAM to develop a replacement schedule. The replacement funds are designated as amenities age, and need replacement or repairs.

In 2016-2021, in addition to accumulating funds for amenities replacement, other projects will be identified as needed.

#### 2016 projects are projected to include:

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

#### **Project Phasing**

Annual transfer to FAM

#### **Public Process**

A Downtown Improvement Plan Task Force prioritized and identified improvements. Staff on the task force represent Parks and Recreation, Planning, Transportation, DUHMD/PS and Facilities Asset Management. Also included are representatives from the downtown boards and organizations. Downtown Management Division, Downtown Boulder Inc. and Downtown Boulder Business Improvement District. Additional stakeholders will be added as the project evolves. The primary foci of the task force has been twofold. First, working with Parks, GIS and FAM staff to create an inventory of exisiting amenity and streetscape improvements on the Pearl St Mall and the downtown. This provides the detailed budget necessary to ensure that capital replacement funds are in place for these existing investments. The second component has been the recommendation for areeas for future streetscape and infratstructure improvements.

FAM prepared a detailed replacement schedule spanning 10 years.

#### Interdepartmental and Interagency Collaboration

Change From Past CIP

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

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Downtown Commercial	\$125,000	\$125,000	\$125,000	\$125,000	\$125,000	\$125,000	\$125,000

 Downtown Commercial
 \$125,000
 \$125,000
 \$125,000
 \$125,000
 \$125,000
 \$125,000
 \$125,000

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$875,000
Additional Annual Operating and Maintenance

Additional Annual Funding Source for O&M:

Additional Annual O&M Description:

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

City of Boulder

# FACILITIES AND ASSET MANAGEMENT

2016-2021 Capital Improvement Program

# **Overview of Department Mission**

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

# **Funding Overview**

The Facilities and Asset Management (FAM) CIP is supported by the following funds:

# Capital Development Fund

The Capital Development Fund accounts for development fees to be utilized for the construction of capital improvements related to new development and growth. Funding for the Capital Development Fund is provided through the development excise tax (DET) and impact fees.

In 1987, DET was instituted to fund capital improvements related to growth and is paid by new commercial and residential development. Beginning in 2010, excise taxes previously collected for new construction for Fire, Human Services, Library, Police and Municipal Facilities ceased and were replaced with impact fees. In addition, Parks and Recreation was added to the list of departments collecting impact fees.



Table 8-1: Capital	Development Fund	d Balance – 20	14 Year-End
•	•		

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

#### Note:

The DET balances above reflect the first of five payments that will be made to repay the loan from the Capital Development Fund to the FR&R fund for the 13th Street Clean Up project. The loan amount was \$4,000,000 and will be paid back by the General Fund. The final loan payment will occur in 2018.

# Facility Renovation and Replacement Fund

The Facility Renovation and Replacement Fund (FR&R) accounts for major maintenance (projects >\$3,000), renovation and building system replacement projects for FAM maintained buildings, structures and property. The majority of FR&R funding is received as a transfer from the General Fund (GF). The FR&R fund also receives funding from restricted and enterprise funds for specific departmental projects including remediation work. The FR&R fund is an internal service fund managed by FAM.

# Capital Improvement Bond Fund

Funding from the Capital Improvement Bond (CIB) Fund supported a number of projects managed

by FAM. CIB funding is indicated by the following symbol:



# Current Focus for Capital Planning and Projects in 2016

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

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



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

# Highlights

Projects Expected to be Completed in 2015

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



Inside of the Library post renovation.

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

# Priority Projects for 2016

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



their useful life.

# Highlights of 2017-2021 Projects

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

# **Guiding Principles and Project Prioritization**

# **CIP Guiding Principles**

The proposed 2016 – 2021 CIP is consistent with the CIP Guiding Principles. The primary focus of this capital investment is to sustain and improve maintenance of existing assets. As projects are developed, improvements may also require building code updates, safety and security enhancements and added efficiencies to reduce energy consumption and operating costs.

#### Prioritization

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

In accordance to the FAM Master Plan and under current fiscally constrained funding, essential facilities are maintained to industry standards and remaining facilities at standards commensurate with available funding. Energy efficiency projects, such as the work accomplished through the Energy Performance Contracts, are funded if budget neutral or if there is less than a three year simple payback.

In addition, FAM prioritizes its projects based on the type of facility and type of work as shown below. Should a higher priority project need arise during the current year and future years,



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

Table 8-2: FAM Priority Codes

Priority Code	Type of Facility	Type of Work
1	Essential <sup>1</sup>	Essential <sup>2</sup>
2	Non-Essential	Essential
3	Essential	Desirable
4	Non-Essential	Desirable <sup>3</sup>
5	Essential or Non-Essential	Discretionary <sup>4</sup>
6	Essential or Non-Essential	Deferred

<sup>1</sup>Essential Facility: A facility necessary to sustain the most basic core of city services such as public health and safety and/or compliance with federal or state laws particularly during an emergency event. 26 facilities are identified as "essential" in the City of Boulder such as the Municipal Building, Park Central, New Britain, Public Safety Building, Municipal Service Center, Fleet Services, Fire Stations, North Boulder Recreation Center and East Boulder Community Center.

<sup>2</sup>Essential Work: Work that is performed for life, health, and safety-related situations. Also includes work that is needed so that a city service can be provided.

# Examples of priority code projects:

- Priority 1: repair emergency generator at the Public Service Building
- Priority 2: repair emergency lighting at South Boulder Recreation Center
- Priority 3: replace lighting at Park Central
- Priority 4: replace lighting at Meadows Library
- Priority 5: paint walls at New Britain after 10 years
- Priority 6: replace carpet in staff spaces after 7 years

# Projects Not in master Plans

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

<sup>&</sup>lt;sup>3</sup>Desirable Work: Work that does not meet the essential or discretionary definition.

<sup>&</sup>lt;sup>4</sup>Discretionary Work: Work that is not required but would be defined as "nice-to-have."



# Projects not Previously Identified in the CIP

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

# Operation and Maintenance Impacts

Since the proposed FAM 2016–2021 CIP enhances and maintains current facilities, the impacts to FAM's Operation and Maintenance (O&M) budget will be positive in the replacement of aging and inefficient infrastructure. However, despite additional ongoing operating dollars allocated to FAM in 2014 to help slow the rate of backlog increase, FAM's current O&M budget is still funded to a level at which the backlog continues to increase annually. Higher construction costs are also being seen and not adequately accounted for in O&M budgets. The FAM Master Plan update will also identify climate change impacts to building systems such as lower service lives of equipment and building systems, which will require more frequent replacements and possibly larger equipment. Ongoing analysis related to replacement funding has begun to address these issues and strategies will continue to be implemented to identify funding mechanisms to reduce the backlog.

# Deferred, Eliminated or Changed Projects

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



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

# **Unfunded Projects and Emerging Needs**

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

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

		Est Co:		201	6 Approved	201	7 Projected	20	18 Projected	201	19 Projected	202	20 Projected	202	1 Projected	Unfunded Amount	
PW/FACILITIES & ASSET MNGMT	Department Total	\$	9,647,000	\$	2,307,000	\$	1,475,000	\$	1,535,000	\$	2,318,000	\$	1,128,000	\$	884,000	\$	-
CIP-CAPITAL ENHANCEMENT	Subtotal	\$	1,742,000	\$	290,000	\$	-	\$	100,000	\$	1,100,000	\$	100,000	\$	152,000	\$	-
	East Boulder Community Center	\$	452,000	\$	-	\$	-	\$	100,000	\$	100,000	\$	100,000	\$	152,000	\$	-
	Outdoor Lighting Improvements	\$	190,000	\$	190,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Tantra Shop Renovation	\$	300,000	\$	-	\$	-	\$	-	\$	300,000	\$	-	\$	-	\$	-
	Upgrade EV Chargers/Battery	\$	100,000	\$	100,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	West Senior Center Maj Maint &	\$	700,000	\$	-	\$	-	\$	-	\$	700,000	\$	-	\$	-	\$	-
CIP-CAPITAL MAINTENANCE	Subtotal	\$	7,025,000	\$	1,787,000	\$	1,345,000	\$	1,305,000	\$	1,088,000	\$	898,000	\$	602,000	\$	-
	Aquatics Facility Repairs	\$	1,366,000	\$	390,000	\$	-	\$	723,000	\$	-	\$	253,000	\$	-	\$	-
	EBCC Replace Pool Air Handlers	\$	500,000	\$	500,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Fire Stations Major Maintenance	\$	813,000	\$	120,000	\$	126,000	\$	132,000	\$	138,000	\$	145,000	\$	152,000	\$	-
	Martin Park Shelter Major Maint	\$	169,000	\$	-	\$	169,000	\$	-	\$	-	\$	-	\$	-	\$	-
	Misc Facility Maintenance Projects	\$	2,545,000	\$	515,000	\$	380,000	\$	400,000	\$	400,000	\$	450,000	\$	400,000	\$	-
	Miscellaneous Facilty DET Proj			\$	50,000	\$	50,000	\$	50,000	\$	50,000	\$	50,000	\$	50,000	\$	-
	North Boulder Park Shelter Rep	\$	120,000	\$	-	\$	120,000	\$	-	\$	-	\$	-	\$	-	\$	-
	Pool Replastering	\$	80,000	\$	80,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Recreation Facility Repairs	\$	1,000,000	\$	-	\$	500,000	\$	-	\$	500,000	\$	-	\$	-	\$	-
	Stazio Tensile Canopy Covering	\$	132,000	\$	132,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
CIP-CAPITAL PLANNING	Subtotal	\$	880,000	\$	230,000	\$	130,000	\$	130,000	\$	130,000	\$	130,000	\$	130,000	\$	-
	Facility Assessments	\$	300,000	\$	50,000	\$	50,000	\$	50,000	\$	50,000	\$	50,000	\$	50,000	\$	-
	Misc Space Needs and Analysis	\$	480,000	\$	80,000	\$	80,000	\$	80,000	\$	80,000	\$	80,000	\$	80,000	\$	-
	Radio System Analysis	\$	100,000	\$	100,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-

# **Facilities and Asset Management**



# Mapping

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



**Project Name:** Aquatics Facility Repairs

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

PW/FACILITIES & ASSET MNGMT SYSTEM-WIDE Department: Subcommunity:

**BVCP** Area: **Project Number:** 3158885715 AREA I

**CEAP Required: CEAP Status:** No

# **Project Description**

As part of recommendations of the master plan and the recently completed Aquatics Facility Study the department has identified deferred maintenance needs within the existing facilities. The Parks and Recreation Department manages and operates 11 pools within the city including indoor and outdoor leisure pools, lap pools and hot tubs. As part of the Aquatics Facility Study ongoing maintenance and repairs to recreation facilities have been prioritize starting with the three indoor facilities. Pools are an integral component in providing health and wellness programs as well as generating revenues for the city.

#### **Project Phasing**

Planning: \$90,000 budgeted in 2016

Construction: \$1,350,000.00 budgeted over 3 years

#### **Public Process**

Presented to the Parks & Recreation Advisory Board

# Interdepartmental and Interagency Collaboration

**Change From Past CIP** 

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

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Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Facility Renovation & Replace	\$0	\$390,000	\$0	\$723,000	\$0	\$253,000	\$0

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$1,366,000

**Additional Annual Operating and Maintenance** 

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



Project Name: East Boulder Community Center Ren

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: PW/FACILITIES & ASSET MNGMT Subcommunity: EAST BOULDER

Project Number: 3150558715 BVCP Area: AREA I

CEAP Required: No CEAP Status:

# **Project Description**

Both the North Boulder Recreation Center and the South Boulder Recreation Center have had major renovations approximately every 20 years to accommodate new and changed programs and also ensure building code updates to the city's highest use facilities. This project will accomplish the same at East Boulder Community Center since it's construction in 1991

### **Project Phasing**

Planning: \$110,000 estimated cost Construction: \$990,000 estimated cost

\$400,000 of total project cost is funded over 4 years from 2018-2021

\$800,000 of total project cost is unfunded.

#### **Public Process**

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

# Interdepartmental and Interagency Collaboration

Change From Past CIP

**Funding Source for** 

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

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Facility Renovation & Replace	\$0	\$0	\$0	\$100,000	\$100,000	\$100,000	\$152,000

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$452,000

**Additional Annual Operating and Maintenance** 

Additional Annual

kM: O



Project Name: EBCC Replace Pool Air Handlers

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

**Department:** PW/FACILITIES & ASSET MNGMT **Subcommunity:** EAST BOULDER

**Project Number:** 3150558815 **BVCP Area:** AREA I

CEAP Required: No CEAP Status:

# **Project Description**

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

#### **Project Phasing**

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

# Public Process

None - permits will be applied for

# Interdepartmental and Interagency Collaboration

Change From Past CIP

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

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Facility Renovation & Replace	\$0	\$500,000	\$0	\$0	\$0	\$0	\$0

O&M:

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$500,000

Additional Annual Operating and Maintenance

Additional Annual \$2,000 Funding Source for

O&M:

Additional Annual O&M Description:

For annual system mainteance



Project Name: Facility Assessments

Project at a Glance

Project Type: CIP-CAPITAL PLANNING STUDIES

Department: PW/FACILITIES & ASSET MNGMT Subcommunity: SYSTEM-WIDE

Project Number: 3158885115 BVCP Area: AREA I

CEAP Required: No CEAP Status:

# **Project Description**

Funding is for study and analysis. Perform visual inspections and sampling of materials in city facilities to have an inventory of any asbestos, lead based paint and other indoor air quality concerns. Identify code and safety deficiencies in existing facilities. The inventory will provide awareness for building occupants, maintenance staff, construction personnel and emergency responders so as not to disturb the hazard. An inventory will also identify remediation projects, as needed. Expect a multi-year program to complete the 130-plus buildings managed by FAM and repeat the process.

#### **Project Phasing**

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

#### **Public Process**

None.

# Interdepartmental and Interagency Collaboration

Change From Past CIP

FAM will coordinate with other departments in performing the inventory of the facilities and any subsequent remediation requirements so disruption to occupants and customers is minimized

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Facility Renovation & Replace	\$150,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$450,000

# Additional Annual Operating and Maintenance

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

#### Additional Annual O&M Description:

No additional O&M anticipated with this assessment



Project Name: Fire Stations Major Maintenance

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PW/FACILITIES & ASSET MNGMTSubcommunity:SYSTEM-WIDEProject Number:3158885515BVCP Area:SYSTEM-WIDE

CEAP Required: No CEAP Status:

# **Project Description**

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

# **Project Phasing**

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

# **Public Process**

Building permits will be submitted for as required

#### Interdepartmental and Interagency Collaboration

Change From Past CIP

Projects have been coordinated with the Fire and Rescue Department

0	Funding	. 61

Suprair arraing riair								
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021	
Facility Renovation & Replace	\$0	\$120,000	\$126,000	\$132,000	\$138,000	\$145,000	\$152,000	

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$813,000

Additional Annual Operating and Maintenance

Additional Annual Funding Source for

O&M: O&M:



Project Name: Martin Park Shelter Major Maint

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department: PW/FACILITIES & ASSET MNGMT Subcommunity: SOUTH BOULDER

Project Number: 3150340215 BVCP Area: AREA I

CEAP Required: No CEAP Status:

# **Project Description**

This project upgrades the plumbing and fixtures and renews interior and exterior surface finishes of this facility constructed in 1962. Minor cosmetic work totaling \$16,000 was last done in 2007. Code upgrades for the electrical systems will also be accomplished as required with any major renovation project.

### **Project Phasing**

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

#### **Public Process**

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

# Interdepartmental and Interagency Collaboration

Change From Past CIP

This project will be coordinated with the Parks and Recreation Department. The P&R Round 1, Capial Investment Strategy project improves the shelter's exterior to include ADA access to the shelters, lighting upgrades, anunities (benches/tables), bear proof trash/recycling receptacles and concrete flatework. FR&R funding not available currently to accomplish with 2013/2014 CIS porject.

Capital	Funding	Plan
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Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Facility Renovation & Replace	\$0	\$0	\$169,000	\$0	\$0	\$0	\$0

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$169,000

Additional Annual Operating and Maintenance

Additional Annual \$0 Funding Source for

O&M: O&M:



**Project Name:** Miscellaneous Facilty DET Proj

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department: PW/FACILITIES & ASSET MNGMT Subcommunity: SYSTEM-WIDE **BVCP** Area: **Project Number:** 3158885315 SYSTEM-WIDE

**CEAP Required: CEAP Status:** No

# **Project Description**

City's participation in accomplishing small projects and advance project planning, less than \$50,000 each, that are done in conjuction with other new construction or expansion projects related to growth. Previous projects include: Valmont Butte engineering and environmental studies, Children, youth and Family Services Addition, Outfitting the University Hill Police Annex and Public Safet Building Space Analysis.

The project includes Misc DET Civic Area DET budget Civic Area GF budget

# **Project Phasing**

#### **Public Process**

Any public process will be identified in conjunction with the overall project development. Project design will be reviewed by the Planning Department. Futher design reviews will be conducted by the Landmarks Board, Design Advisory Board and/or Planning Board as appropriate.

### Interdepartmental and Interagency Collaboration

**Change From Past CIP** 

This project will be coordinated with the affected departments, dependant on the project

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Capital Development	\$121,350	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
					Funding	to Completic	on \$0
					Fu	ıture Unfunde	ed \$0
General	\$294,650	\$0	\$0	\$0	\$0	\$0	\$0
					Funding	to Completic	on \$0
					Fu	ıture Unfunde	ed \$0

Total Funding Plan: \$716,000

Additional Annual Operating and Maintenance

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

O&M:

# Additional Annual O&M Description:

No additional operational costs will result from completing these proj



Project Name: Misc Facility Maintenance Projects

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PW/FACILITIES & ASSET MNGMTSubcommunity:SYSTEM-WIDEProject Number:3155904615BVCP Area:SYSTEM-WIDE

CEAP Required: No CEAP Status:

# **Project Description**

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

# Project Phasing

# **Public Process**

Any project associated with these funds withh be taken through the appropriate public process and CEAP review as part of the conceptual design if needed. Project design will be reviewed by the Planning Department. Further design reviews will be conducted by the Boards and Commissions as appropriate.

#### Interdepartmental and Interagency Collaboration

#### Change From Past CIP

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

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Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Facility Renovation & Replace	\$296,267	\$515,000	\$380,000	\$400,000	\$400,000	\$450,000	\$400,000

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$2,841,267

# Additional Annual Operating and Maintenance

Additional Annual \$0 Funding Source for

O&M: O&M:

# Additional Annual O&M Description:

No additional operational costs will result from completing these rep



**Project Name:** Misc Space Needs and Analysis

Project at a Glance

Project Type: CIP-CAPITAL PLANNING STUDIES

Department: PW/FACILITIES & ASSET MNGMT Subcommunity: SYSTEM-WIDE

3158883614 Project Number: **BVCP Area:** AREA I

**CEAP Required: CEAP Status:** 

# **Project Description**

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

# Project Phasing

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

# **Public Process**

# Interdepartmental and Interagency Collaboration

Change From Past CIP

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

Fund(s)	Revised 2015 Budget - Current	2016 Requested Funding	2017	2018	2019	2020	2021
Facility Renovation & Replace	<b>Year</b> \$39,128	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$519,128 **Additional Annual Operating and Maintenance** 

**Additional Annual** 

O&M:

**Funding Source for** O&M:



Project Name: North Boulder Park Shelter Rep

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department: PW/FACILITIES & ASSET MNGMT Subcommunity: CENTRAL BOULDER

Project Number: 3150330215 BVCP Area: AREA I

CEAP Required: No CEAP Status:

# **Project Description**

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

### **Project Phasing**

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

#### **Public Process**

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

#### Interdepartmental and Interagency Collaboration

Change From Past CIP

This project will be coordinated with the Parks and Recreation Department. The P&R Round 1, Capital Investment Strategy project improved the shelter's exterior to included ADA access to the shelters, lighting upgrades, amenities (benches/tables), bear proof trash/recycling receptacles and concrete flatwork. FR&R funding not available to time with CIS project.

Capital Funding Plan								
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021	
Facility Renovation & Replace	\$0	\$0	\$120,000	\$0	\$0	\$0	\$0	

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$120,000

Additional Annual Operating and Maintenance

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

Additional Annual O&M Description:

No additional operating costs are anticipated



Project Name: Outdoor Lighting Improvements

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: PW/FACILITIES & ASSET MNGMT Subcommunity: SYSTEM-WIDE

Project Number: 3158883315 BVCP Area: AREA I

CEAP Required: No CEAP Status:

# **Project Description**

Replace outdoor lighting fixtured to comply with Boulder Revised Code 9-9-16, Outdoor Lighting ordinance. Lights must conform not later then 15 years adter July 15, 2003. Projects will occur as lighting technologies, such as light emitting diodes, LED's, become more advanced and less costly. This project is only for outdoor lighting under FAM's responsibility. Other departments, such as Parks and Recreation are programming seperate lighting projects.

In 2016, perform an inventory of lights that are not yet in compliance. In 2016, replace remaining non-compliant lights. This could impact all 130 facilities managed by FAM. No inventory of non-conforming lights has been completed yet.

# **Project Phasing**

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

#### **Public Process**

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

#### Interdepartmental and Interagency Collaboration

Change From Past CIP

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

Capital Funding Plan								
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021	
Facility Renovation & Replace	\$10,000	\$190,000	\$0	\$0	\$0	\$0	\$0	

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$200,000

Additional Annual Operating and Maintenance

Additional Annual (\$10,000) Funding Source for O&M:

Additional Annual O&M Description:

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



Project Name: Pool Replastering

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department: PW/FACILITIES & ASSET MNGMT Subcommunity: MULTIPLE SUBCOMMUNITIES

Project Number: 3158885215 BVCP Area: AREA I

CEAP Required: No CEAP Status:

# **Project Description**

Repalster one of the recreational pools which will be determined at a future date. This 2016 project follows Parks and Recreation replastering pools projects in 2013, 2014 and 2015.

Funding from other than General Fund FR&R:

Fund 118, Major Maintenance, P&R-managed by FAM

### Project Phasing

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

# **Public Process**

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

#### Interdepartmental and Interagency Collaboration

Change From Past CIP

This project will be coordinated with Parks and Recreation following other re-plaster work they will be funding in 2014 and 2015.

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Facility Renovation & Replace	\$0	\$80,000	\$0	\$0	\$0	\$0	\$0

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$80,000

#### **Additional Annual Operating and Maintenance**

Additional Annual \$0 Funding Source for

O&M: O&M:

# Additional Annual O&M Description:

No additional operational costs will result from completing this proj



**Project Name:** Radio System Analysis

Project at a Glance

Project Type: CIP-CAPITAL PLANNING STUDIES

Department: PW/FACILITIES & ASSET MNGMT Subcommunity: SYSTEM-WIDE **Project Number:** 3158886015 **BVCP Area:** SYSTEM-WIDE

**CEAP Required: CEAP Status:** No

# **Project Description**

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

### **Project Phasing**

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

#### **Public Process**

None

# Interdepartmental and Interagency Collaboration

Change From Past CIP

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

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
.25 Cent Sales Tax	\$0	\$5,000	\$0	\$0	\$0	\$0	\$0
					Fundin	g to Completi	on \$0
					F	uture Unfund	ed \$0
General	\$0	\$75,000	\$0	\$0	\$0	\$0	\$0
					Fundin	g to Completi	on \$0
					F	uture Unfund	ed \$0
Open Space	\$0	\$5,000	\$0	\$0	\$0	\$0	\$0
					Fundin	g to Completi	on \$0
					F	uture Unfund	ed \$0
Transportation	\$0	\$7,500	\$0	\$0	\$0	\$0	\$0
					Fundin	g to Completi	on \$0
					F	uture Unfund	ed \$0
Water Utility	\$0	\$7,500	\$0	\$0	\$0	\$0	\$0
					Fundin	g to Completi	on \$0
					F	uture Unfund	ed \$0

Total Funding Plan: \$100,000

Additional Annual Operating and Maintenance

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



Project Name: Recreation Facility Repairs

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department: PW/FACILITIES & ASSET MNGMT Subcommunity: SYSTEM-WIDE

Project Number: 3158885615 BVCP Area: AREA I

CEAP Required: No CEAP Status:

# **Project Description**

The department's master plan indicates several key themes that relate to health and wellness, youth activity, community engagement and asset management. To continue supporting these key themes, the department will be providing repairs, renovations and upgrades to recreation centers. In 2016, the department will complete a strategic plan for all recreation centers that illustrates implementation priority for critical projects. Pending the outcome and strategies of the Recreation Facility Strategic Plan, this project will fund the initial implementation projects outlined within the plan. A critical project that has been identified previously includes renovating the front desk area at the North Boulder Recreation Center to increase operational efficiency of user access and safety of center customers.

# Project Phasing

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

# **Public Process**

none

#### Interdepartmental and Interagency Collaboration

Change From Past CIP

**Funding Source for** 

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

	Funding	

Capital Fallang Flan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Facility Renovation & Replace	\$0	\$0	\$500,000	\$0	\$500,000	\$0	\$0

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$1,000,000

**Additional Annual Operating and Maintenance** 

Additional Annual

O&M: O&M:



**Project Name:** Stazio Tensile Canopy Covering Repl

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department: Subcommunity: EAST BOULDER PW/FACILITIES & ASSET MNGMT

**Project Number:** 3150590815 **BVCP Area:** AREA I

**CEAP Required: CEAP Status:** No

# **Project Description**

The Stazio Tensile Canopy was inspected in 2003 by the contractor that originally installed the structure. All cables, structural components and coverings were inspected and found to be sound and fully functional. Preventative maintenance was performed on the structure. This contractor noted in their report that the covering is nearing the end of its service life and should be replaced in approximately five years (2008). The contractor prepared a cost estimate for replacement of the covering. This project was originally scheduled for 2009; the delay to 2016 is allowable by accomplishing minor repairs in 2010 versus complete replacement.

#### Project Phasing

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

#### **Public Process**

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

# Interdepartmental and Interagency Collaboration

**Change From Past CIP** 

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

Capi	tal	Fund	ing F	'lan
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Capital Funding Plan								
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021	
Facility Renovation & Replace	\$0	\$132,000	\$0	\$0	\$0	\$0	\$0	

Funding to Completion \$0

Future Unfunded \$0

**Total Funding Plan:** \$132,000

# Additional Annual Operating and Maintenance

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

#### Additional Annual O&M Description:

No additional operational costs are anticipated from completing this



Project Name: Tantra Shop Renovation

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: PW/FACILITIES & ASSET MNGMT Subcommunity: SOUTH BOULDER

Project Number: 3150400415 BVCP Area: AREA I

CEAP Required: No CEAP Status:

# **Project Description**

Renovate the Tantra Park Shop for continuing use for Park Operations maintenance staff. The 3,000 square foor facility, constructed in 1984, needs repairs and renovations to major building systems. At this time, no specific scope has been identified for this project planned in 2019

### **Project Phasing**

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

#### **Public Process**

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

#### Interdepartmental and Interagency Collaboration

Change From Past CIP

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

	Fund		

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021	
Facility Renovation & Replace	\$0	\$0	\$0	\$0	\$300,000	\$0	\$0	

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$300,000

Additional Annual Operating and Maintenance

Additional Annual Funding Source for

O&M: O&M:



Project Name: West Senior Center Maj Maint & Reha

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: PW/FACILITIES & ASSET MNGMT Subcommunity: CENTRAL BOULDER

Project Number: 3150254715 BVCP Area: AREA I

CEAP Required: No CEAP Status:

# **Project Description**

This project provides refurbishment and replacement of the facilities including HVAC, electrical and plumbing systems. It renews all surface finishes including carpet, paint and ceilings. Provides improvements to restrooms and adds a fire sprinkler system, which is currently lacking, to the entire facility as required by B.R.C. 10-8, Fire Prevention Code. Provides for requirements under the new 2010 ADA standards. Replaces 1995 roof sections as required.

This project is scheduled for 2019, but may change depending on the outcomes of the Civic Area Plan and the Human Services Department Master Plan.

#### Project Phasing

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

#### **Public Process**

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

### Interdepartmental and Interagency Collaboration

Change From Past CIP

This project will be coordinated with the Human Services Department and the Civic Area planning process. The kitchen was remodeled in 2006 by Meals on Wheels at the cost of approximately \$400,000. This cost has been subtracted from the estimated refurbishment cost noted in the 2005 FAM Master Plan of \$1,228,000, leaving an estimated cost of \$828,000. Additional work was accomplished in the Energy Performance Contracts and a \$140,000 refurbishment of the office areas was performed due to the Sept 2013 flood.

Capital Funding Plan								
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021	
Facility Renovation & Replace	\$0	\$0	\$0	\$0	\$700,000	\$0	\$0	

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$700,000

Additional Annual Operating and Maintenance

Additional Annual \$0 Funding Source for

&M: O&M:



Project Name: Upgrade EV Chargers/Battery Storage

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department:PW/FACILITIES & ASSET MNGMTSubcommunity:SYSTEM-WIDEProject Number:3158886116BVCP Area:SYSTEM-WIDE

CEAP Required: No CEAP Status:

# **Project Description**

Upgrade electric vehicle chargers to inclue providing for more workplace charging and replace obsolete chargers. Replace existing lead-acid bettery storage system at 1720 13th Street with more advanced batteries developed. Current 21 kilowatt system was a prototype developed locally as part of a DOE funded grant. Current technology will allow for smaller batteries with less maintenance needs of a lead acid system

### Project Phasing

Acquisition: \$750,000 budgeted in 2016 Cionstruction: \$25,000 budgeted in 2016

#### **Public Process**

# Interdepartmental and Interagency Collaboration

# Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Facility Renovation & Replace	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$100,000

Additional Annual Operating and Maintenance

Additional Annual \$0 Funding Source for

O&M: O&M:

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City of Boulder
FIRE AND RESCUE
2016-2021 Capital Improvement Program

# **Overview of Department Mission**

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

# **Funding Overview**

The Fire Department is funded by the General Fund. Currently there is no specific capital funding source for General Fund departments and capital needs are addressed on a case by case basis, as funds are available. Strategies for addressing unfunded capital needs are being developed (see Appendix B).

Potential sources of funding for the capital projects noted below include each of the following or any combination of:

- An increase in sales and use tax,
- An increase in property tax mill levy,
- Bond funding, or
- Use of existing operating funding to build a capital fund or pool of money available for capital projects.

Funding from the Capital Improvement Bond (CIB) Fund supported projects managed by Fire-

Rescue. CIB funding is indicated by the following symbol: -



# Current Focus for Capital Planning and Projects in 2016

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



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

# Highlights

Projects Expected to be Completed in 2015

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

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

Priority Projects for 2016 None

Highlights of 2017 – 2021 Projects None

# **Guiding Principles and Project Prioritization**

**CIP Guiding Principles** 

The fire station projects are guided by strategies and initiatives in the 2012 Fire–Rescue Master Plan. All of the listed projects help the Fire Department maintain and improve public safety. Proper fire station location improves accessibility to services provided to the community by the Fire Department and ensures a timely response to emergencies occurring in the neighborhood. The construction or remodel of facilities will use Leadership in Energy and Environmental Design (LEED) targets to ensure energy efficiency. Each project listed identifies the estimated on–going funds needed to operate and maintain the project.



#### Prioritization

Projects listed below in Unfunded Projects and Emerging Needs are in priority order based on the critical need, degree of deficiency in each project, and the degree to which the project advances efficiency or community livability goals. Station 3 relocation is listed first because of its susceptibility to flooding and impact to our emergency response system if it were out of service. The remaining facilities' positions on the list reflect the degree to which each station does not fulfill the department's needs for effective, efficient and safe fire station design.

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

# Projects Not in Master Plans

The following projects are not specified in the Master Plan and are added here because of their expense, over \$50,000, and life cycle of at least 15 years:

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

# Projects Not Previously identified in the CIP

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

# **Operation and Maintenance Impacts**

The primary Fire Department emerging need is to relocate and/or renovate facilities. Three of the seven existing fire stations are over fifty years old and all are inadequately sized for today's needs and future capacity. A comprehensive community risk analysis is underway including response times from existing stations and emergency call demand loads. Preliminary findings demonstrate potential better locations for some stations and reaffirm others are correctly located. Further analysis is needed before final recommendations on station relocations are made.



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

# Deferred, Eliminated, or Changed Projects

None

# **Unfunded Projects and Emerging Needs**

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

- Relocate Fire Station 3 out of the 100-year floodplain, co-locate with Fire Administration Offices, and construct a separate storage facility for fire vehicles and equipment
  - In 2011, 13 sites were identified as potential locations for Station 3. After analyzing multiple criteria, six sites remained. Since that time, three of those six could still be possible, each with their own acquisition issues. The top site is still the Mapleton ball fields. This station needs to be 17,000 square feet to house a fire engine, ladder truck, LRV/Ambulance, Dive Team and crews plus a battalion chief. The administration building needs to be 7,500 square feet and the storage building 10,000 square feet
  - Fire will continue to coordinate with Parks and Recreation to evaluate the practicality of, and financial issues related to, relocating Station 3 and Fire Administration to the Mapleton ball fields site
  - Estimated costs are: Buildings \$11,412,500, Land up to \$8,600,000, on-going \$459,000
- Replace Fire Station 4 north of the current location of 4100 Darley Avenue.
  - Constructed in 1967 with 2,000 square feet this station is too small and needs to be 6,514 square feet to house one fire engine and crew.
  - Estimated costs are: Building \$2,442,750, Land up to \$2,000,000, on-going \$165,000
- Remodel Fire Station 6 currently located at 5145 N 63<sup>rd</sup> Street
  - Constructed in 1979 with 3,435 square feet this station is too small and needs to be 6,514 square feet to house one fire engine and crew.
  - We are currently exploring the possibility of co-locating our fire engine and crew with Boulder Rural in their station located at 6230 Lookout Rd. The building and land at Station 6 could be sold.
  - If this is not possible costs are estimated at: One-time \$1,154,625, On-going \$165,000
- Remodel Fire Station 2 at the current location of 2225 Baseline Road.
  - Constructed in 1959 with 4,752 square feet this station is too small and needs to be



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

- Estimated costs are: Building \$3,842,000, Land up to \$3,500,000, on-going \$229,500
- Remodel Fire Station 5 at the current location of 4365 19<sup>th</sup> Street.
  - Constructed in 1992with 3,622 square feet this station is too small and needs to be 6,514 to house one fire engine and crew.
  - Estimated costs are: Building \$1,084,500, on-going \$229,500
- Remodel Fire Station 1 at the current location of 2441 13<sup>th</sup> Street.
  - Constructed in 1957 at 7,941 square feet this station is too small and poorly designed. It needs to be 17,000 square feet to house one fire engine, one ladder truck and crews plus a battalion chief.
  - Estimated costs are: Building \$3,397,125, on-going \$128,800
- Remodel Fire Station 7 at the current location of 1380 55<sup>th</sup> Street.
  - Constructed in 2000 with 5,081 square feet this station is too small and needs to be 8,006 square feet to house one fire engine, the Hazardous Materials Team and crew.
  - Estimated costs are: Building \$1,096,875, on-going \$42,000.
- Fire Training Center Phase 2 Driving area and storage building
  - Construct a concrete driver training area totaling approximately 200,000 square feet.
     This was approved as a future phase of improvements in the original development approval. Construct a 10,000 square foot storage building for training props and equipment.
  - Estimated costs are: Concrete \$2,500,000, Building \$2,250,000, on-going \$60,000.
- Fire Training Center Phase 3 Additional classroom and office space.
  - To complete the original design of facilities eliminated in the construction due to budget constraints add more classrooms, offices and conference room space totaling 4,000 square feet.
  - Estimated costs are: One-time \$1,500,000, on-going \$56,000.



Table 9-1: Unfunded Projects

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



# Mapping

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

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City of Boulder
GREENWAYS
2016-2021 Capital Improvement Program

# **Overview of Department Mission**

The City of Boulder Greenways System is comprised of a series of corridors along riparian areas including Boulder Creek and its 14 tributaries, which provide an opportunity to integrate multiple objectives, including habitat protection, water quality enhancement, storm drainage and floodplain management, alternative transportation routes for pedestrians and bicyclists, recreation and cultural resources.

The Greenways CIP follows an opportunistic approach, contributing funding toward projects that are being completed by other departments or private development in order to meet the various objectives of the Greenways Program. The Greenways CIP also looks to leverage funds with outside agencies in order to move projects forward that meet more than one objective of the Greenways Program, but may not be the highest priority when evaluating any one particular objective. Projects included in the Greenways CIP are typically called out in the Greenways Master Plan and are projects that Greenways staff can take the lead in coordinating.

# **Funding Overview**

The total 2016 Greenways capital budget is \$320,441, with \$105,000 in the operating budget. Greenways projects are funded from the Transportation Fund, Stormwater and Flood Management Utility Fund, and the Lottery Fund. Annual funding distribution for the Greenways Capital Program for 2016 is as follows:

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

Historically the Lottery contribution to the Greenways Program has been \$150,000 per year. As a result of a projected reduction of the city's allocation of Lottery funds, starting in 2015, the Lottery contribution to Greenways is expected to be reduced to \$125,441 (based on Greenways).



receiving 15% of the city's funding allocation, with a projection of total Lottery proceeds being \$836,275). Should the city's allocation of Lottery funds exceed the projected amount, a budget adjustment will be made to reflect the increase.

# Current Focus for Capital Planning and Projects in 2016

The focus of the 2016–2021 Greenways CIP is on flood mitigation, bicycle and pedestrian multiuse paths and underpasses, and habitat and water quality improvements along the Fourmile and Wonderland Creek corridors. For more information about the timing and details of these projects, please see the Utilities—Stormwater/Flood Overview section. In addition to the projects along Fourmile Canyon Creek and Wonderland Creek, possible habitat restoration projects during the next few years include:

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

Work on Boulder Creek at the Fish Observatory.

# **Board Action**

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

# Guiding Principles and Project Prioritization

**CIP Guiding Principles** 

Greenways projects address many of the CIP guiding principles. Greenways projects are identified in multiple master plans and meet the community sustainability goals. Most of the Greenways projects leverage outside or interdepartmental funding. Greenways habitat improvements seek to be sustainable and are intended to reduce the future maintenance required.



The Greenways CIP has been developed within the context of and is consistent with the Boulder Valley Comprehensive Plan (BVCP), the Transportation Master Plan (TMP), the major drainageway flood mitigation plans, the Comprehensive Flood and Stormwater Master Plan and the Greenways Master Plan. The Greenways Master Plan was updated in 2011 to reflect improvements that had been completed, and adopted changes that have been made in other master plans, city policies and ordinances that affect the Greenways Program since the last Master Plan update in 2001.

### Prioritization

Many of the Greenways projects shown in the CIP are being designed and constructed in coordination with major flood or transportation improvements. The Greenways funding associated with these projects focuses on habitat restoration, water quality improvements and trail connections. In addition to leveraging funding with the Transportation and Flood Utilities budgets, funding for Greenways projects is also available through the Urban Drainage and Flood Control District and Federal Transportation funds.

## Projects not in Master Plans

It should be noted that the city experienced a major flood in September 2013 that resulted in extensive flooding along most of the city's major drainageways. Following the flood, additional funds have been allocated in the Flood Utility CIP to reflect an increased interest in pursuing flood mitigation efforts along the city's major drainageways. As a result of updated mapping and the September 2013 flood, flood mitigation plans were initiated for Gregory Creek, Bear Canyon Creek and Boulder Creek to identify economically feasible improvement projects. Flood mitigation plans will be initiated in 2016 for Upper Goose Creek and Twomile Canyon Creek, and Skunk, King's Gulch and Bluebell Creeks after completion of flood mapping updates on these drainageways. Results from these flood mitigation plans will inform future capital improvements. Continued evaluation of potential improvement may result in additional changes to the Flood Utility and Greenways CIP in upcoming years.

# Projects Not Previously Included in the CIP

None

# **Operation and Maintenance Impacts**

\$105,000 is budgeted each year for Greenways operations and maintenance. \$80,000 of the operating budget is dedicated to habitat maintenance. The Greenways habitat crew works closely



with Parks and Open Space maintenance staff to provide on-going maintenance, as well as on collaborative projects as part of the operations budget. Major drainageway improvements are maintained by the flood maintenance staff and multi-use paths and underpasses are maintained by either Transportation or Parks maintenance, depending upon jurisdiction.

# Deferred, Eliminated, or Changed Projects

None

# **Unfunded Projects and Emerging Needs**

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

City of Boulder

# **INFORMATION TECHNOLOG**

2016-2021 Capital Improvement Program

# Overview of Department Mission

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

# **Funding Overview**

Beginning in 2010 the City has appropriated approximately \$350k per year from the General Fund to an Information Technology CIP. Though often supplemented by limited operating transfers from departments such as IT, this allocation has been the primary, predictive revenue source for

IT capital investments, particularly major software procurements. To date the majority of this funding has been primarily dedicated to supplement the critical, bond-funded finance, human resources and payroll system replacement project.

Both the Computer Replacement Fund (CRF) and the Telecommunications Fund (TF) have been used to



The City of Boulder website.

progressively accumulate replacement reserves for existing personal computers, server equipment, network infrastructure, central telephone systems and associated operating system and database costs. These systems represent the critical IT capital infrastructure upon which all the major IT CIP projects and existing city computer applications fundamentally depend.



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

# Current Focus for Capital Planning and Projects in 2016

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

# **Highlights**

Projects Expected to be Completed in 2015

• 2015 elements of the ongoing document management system implementation program: This project continues the work begun in 2012 to plan and execute the expansion of automated document management and digital imaging technologies to underserved departments and the public. Initial implementation of the new on-line archival records system and initial upgrading and expansion of the citywide LaserFiche document management system. (Funded by bond proceeds and departmental reserves).

# Priority Projects for 2016

- Server Hardware Replacement: The city's virtual server hardware, software and storage systems are scheduled to begin replacement in 2015. This will include not only upgrades to central computer hardware, but will add an analysis of current and emerging storage and server technologies to ensure an optimal solution with available funds. (Funded by earmarked Computer Replacement Fund reserves). The project will be started in 2015, but not complete until 2016.
- Complete the implementation of payroll and human resources modules of Tyler Munis system: Following final configuration, testing and staff training activities, the new payroll and human resources modules of the Tyler Technologies "Munis" system are expected to be operational early in 2016. (Funded by bond proceeds and IT CIP)



- Begin implementation of new integrated permits, licensing and land records system: Following a needs assessment and procurement process undertaken in 2013, the EnerGov system was selected in early-2014 and implementation of this critical system replacement project began in early-2015. The new system is estimated to reach live operation by the first quarter of 2017. (Funded by bond proceeds and restricted fund operating reserves)
- Asset and Maintenance Management software improvements: After concluding that the asset and maintenance management capabilities of the Tyler Munis (financial software) and EnerGov (permits and licensing software) products were not sufficient to meet citywide business needs, a consultant is being engaged to undertake an organization-wide reassessment of automation needs and business process improvement opportunities in these areas. The analysis will consider the capabilities of current systems and recommend whether a single, integrated product or a distributed, "best of breed" approach should be undertaken to address organizational needs. (Funded by IT capital funds)

# Highlights of 2017-2021 Projects

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

# **Guiding Principles and Project Prioitization**

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

# Prioritization

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



Projects Not in Master Plans None.

# Projects Not Previously Included in the CIP

None

# **Operation and Maintenance Impacts**

Operation of IT systems is included in the department's operating budget. IT is participating in a citywide effort to analyze and assess replacement needs and funding structures, including a look to how future technological changes and technology use behaviors may inform replacement charging models for the department's internal service funds.

# Deferred, Eliminated, or Changed Projects

None

# **Unfunded Projects and Emerging Needs**

Though critical, short-term technology investment needs have been significantly aided by the one -time funding from the recent capital bond initiative, current annual IT CIP funding allocations of roughly \$350k annually will not address the funding needs associated with new, emerging software-based automation opportunities that will continually arise. In addition, current ongoing CIP funding will not address the need to accumulate reserves for future replacements and/or expansion of critical enterprise software (e.g. finance and payroll) and departmental systems (e.g. police records management, parks and recreation registration, court case management and many others).

From a broader perspective, the Computer Replacement and Telecommunication internal service funds currently used to accumulate reserves for future IT infrastructure replacement (e.g. PCs, networks, servers, telephones, etc) are based on a funding model that only accounts for the replacement of current systems. As central and mobile computing infrastructure (e.g. mobile devices, wireless networks, virtualized servers, associated security systems), data storage, and use of cloud-based applications and data storage expand significantly over the next several years, we lack capital funding to address infrastructure capacity needs to sustain them.

# **Information Technology**



A focus of the pending major update to the IT Strategic Plan (2016–2019) will include identification and costing of expanded automation and deferred capital replacement needs. At a basic level, it is anticipated that the updated Plan will move beyond planning for the needs of only enterprise systems (those impacting nearly all departments) by expanding to include the critical business and automation needs of individual departments – including current critical systems without future replacement funding strategies. The growth of electronic services, mobile computing, hardware and software virtualization and cloud computing (all of which the City is pursuing in current CIP projects or smaller tactical projects) will also be a key theme of the new Plan.

Table 11-1: 2016-2021 Funding Summary By Department

		Est	imated Total	201	6 Approved	201	7 Projected	201	18 Projected	201	19 Projected	202	20 Projected	2021	Projected	Unfunded	
		Cos	st									<u> </u>				Amount	
INFORMATION TECHNOLOGY	Department Total	\$	8,310,962	\$	841,220	\$	964,254	\$	1,573,472	\$	1,885,671	\$	2,088,024	\$	958,321	\$	-
CIP-CAPITAL MAINTENANCE	Subtotal	\$	8,310,962	\$	841,220	\$	964,254	\$	1,573,472	\$	1,885,671	\$	2,088,024	\$	958,321	\$	-
	Data Backup and Disaster	\$	122,234	\$	-	\$	41,895	\$	80,339	\$	-	\$	-	\$	-	\$	-
	Database Hardware Replacement	\$	108,987	\$	10,500	\$	-	\$	-	\$	31,482	\$	53,604	\$	13,401	\$	-
	End User Device Replacement	\$	4,847,207	\$	703,638	\$	702,115	\$	1,174,388	\$	751,182	\$	745,731	\$	770,153	\$	-
	Network Hardware Replacement	\$	2,409,400	\$	111,090	\$	219,232	\$	241,423	\$	1,034,092	\$	630,026	\$	173,537	\$	-
	Security Administration	\$	49,798	\$	8,117	\$	1,012	\$	-	\$	33,058	\$	6,381	\$	1,230	\$	-
	Server Hardware Replacement	\$	773,336	\$	7,875	\$	-	\$	77,322	\$	35,857	\$	652,282	\$	-	\$	-

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**Project Name:** Data Backup and Disaster Recovery

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department: INFORMATION TECHNOLOGY Subcommunity: SYSTEM-WIDE 1901901520 Project Number: **BVCP Area:** SYSTEM-WIDE

**CEAP Required:** Νo **CEAP Status:** 

# **Project Description**

The project reflects the hardware, software and support needed to ensure reliable high speed backup of files, databases and application stored on the city's enterprise servers and data storage sub-systems. Note that these systems are required not only for disaster preparedness and recovery purposes, but to meet legal records retention requirements. No major changes are planned to this system until late 2018 / early 2019.

#### **Project Phasing**

This is an ongoing program.

# **Public Process**

# Interdepartmental and Interagency Collaboration

### Change From Past CIP

Updated to reflect latest estimates for timing and cost

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Computer Replacement	\$0	\$0	\$41,895	\$80,339	\$0 Funding	\$0 to Completion	\$0 n \$0

Future Unfunded \$0

Total Funding Plan: \$122,234

Additional Annual Operating and Maintenance

Additional Annual **Funding Source for** 

O&M: O&M:



Project Name: Database Hardware Replacement

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:INFORMATION TECHNOLOGYSubcommunity:SYSTEM-WIDEProject Number:1901901530BVCP Area:SYSTEM-WIDE

CEAP Required: No CEAP Status:

# **Project Description**

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

### Project Phasing

This is an ongoing program.

# **Public Process**

Interdepartmental and Interagency Collaboration

Change From Past CIP

Updated to reflect latest estimates for timing and cost

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Computer Replacement	\$45,900	\$10,500	\$0	\$0	\$31,482	\$53,604	\$13,401

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$154,887

Additional Annual Operating and Maintenance

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



**Project Name:** End User Device Replacement

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department: INFORMATION TECHNOLOGY Subcommunity: SYSTEM-WIDE **Project Number:** 1901901505 **BVCP Area:** SYSTEM-WIDE

**CEAP Status: CEAP Required:** No

# **Project Description**

Funding for replacement of PCs

# Project Phasing

Acquisition: \$ for all years

For purchase of Hardware with useful life of 3 - 5 years.

# **Public Process**

### Interdepartmental and Interagency Collaboration

City-wide Enterprise service supporting all city departments.

### Change From Past CIP

Adjusted to reflect planned replacement timing of assets

### Capital Funding Plan

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

Future Unfunded \$0

**Total Funding Plan:** \$5,848,997

Additional Annual Operating and Maintenance

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



Project Name: Network Hardware Replacement

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Subcommunity: Department: INFORMATION TECHNOLOGY SYSTEM-WIDE **BVCP Area:** Project Number: 1901901511 SYSTEM-WIDE

**CEAP Required: CEAP Status:** Νo

### **Project Description**

This is an ongoing project and includes the hardware and related software used to provide and support a reliable and secure high-speed data and voice communications infrastructure to connect City computing devices to internal data repositories and computing services, while supporting connectivity to the Internet and other external data resources and services. Project involves maintenance and end of life equipment replacement. Most elements of the network infrastructure have a useful life of six years. This is the maximum lifecycle recommended by the equipment vendor and industry best practices. From 2014 – 2018, approximately 10% of the city's network hardware will be replaced as part of on-going system maintenance plans. In 2019, nearly 50% of the system is due for replacement resulting in significant changes to the city's overall network infrastructure at that

## **Project Phasing**

This is an ongoing program.

#### **Public Process**

Interdepartments	l and Interagency Collaboration
milerueparlinenta	i anu interauenty Conaporation

City-wide enterprise project supporting all city departments.

#### **Change From Past CIP**

Updated to reflect most current information available on replacement

Capital F	-undin/	4 Plan
Capital r	- un un n	и г кан

Capital Fullding Flair							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Computer Replacement	\$171,750	\$111,090	\$219,232	\$241,423	\$1,034,092	\$630,026	\$173,537

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$2,581,150

Additional Annual Operating and Maintenance

Additional Annual

O&M:

**Funding Source for** 

O&M:



Project Name: Security Administration

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:INFORMATION TECHNOLOGYSubcommunity:SYSTEM-WIDEProject Number:1901901517BVCP Area:SYSTEM-WIDE

CEAP Required: N/A CEAP Status:

### **Project Description**

This is an ongoing program. Equipment used to provide and support network devices and software needed to ensure the city's network, server and computing infrastructure are secured against external Cyber-threats such as viruses, malware and hackers in compliance with FBI, CIP (Critical Infrastructure Protection) and PCI (Purchasing Card Industry) security standards. Project includes maintenance and end-of life-equipment replacement. A majority of the systems due for replacement during 2016. Planning of future enhancements will be included in the upcoming IT Strategic Plan redevelopment process.

# **Project Phasing**

This is an ongoing program.

# **Public Process**

# Interdepartmental and Interagency Collaboration

### **Change From Past CIP**

Updated to reflect latest timing and cost information

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Computer Replacement	\$64,823	\$8,117	\$1,012	\$0	\$33,058 Funding 1	\$6,381 to Completion	\$1,230 n \$0

Future Unfunded \$0

Total Funding Plan: \$114,621

Additional Annual Operating and Maintenance

Additional Annual Funding Source for

O&M: O&M:



Project Name: Server Hardware Replacement

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department: INFORMATION TECHNOLOGY Subcommunity: SYSTEM-WIDE Project Number: **BVCP Area:** 1901901515 SYSTEM-WIDE

**CEAP Required: CEAP Status:** No

### **Project Description**

This is an ongoing program. Hardware and related software necessary to provide and support the computing infrastructure that delivers critical services, including enterprise software applications (e.g. financial, payroll, permitting and licensing, electronic mail, etc.), critical departmental applications (e.g. police and fire records, court case management, recreation registration, etc.) enterprise data storage resources, internal/external web systems, and electronic document management repositories. Project includes maintenance and end of life equipment replacement.

# **Project Phasing**

This is an ongoing program.

#### **Public Process**

### Interdepartmental and Interagency Collaboration

### Change From Past CIP

Updated to reflect latest information on cost and timing

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Computer Replacement	\$508,880	\$7,875	\$0	\$77,322	\$35,857	\$652,282 to Completion	\$0 a \$0

Future Unfunded \$0

Total Funding Plan: \$1,282,216

**Additional Annual Operating and Maintenance** 

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

O&M:

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City of Boulder

# OPEN SPACE AND MOUNTAIN PARKS

2016-2021 Capital Improvement Program

# **Overview of Department Mission**

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

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

# **Funding Overview**

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

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



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

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

# Current Focus for Capital Planning and Projects in 2016

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

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

# 2013 Flood Impact

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

# Open Space and Mountain Parks



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

# Highlights

Projects Expected to be Completed in 2015

Land and Visitor Services

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



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

# Ecological Systems

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

### Cultural Resources

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



Hartnagle Homestead after restoration.

# Open Space and Mountain Parks



repairs/upgrades were implemented.

· Continued repair of historic buildings on farmsteads

# Environmental Planning

Draft North Trail Study Area Plan completed

# Priority Projects for 2016

# Land and Visitor Services

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

## Ecological Systems

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



### Cultural Resources

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

# Environmental Planning

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

# Highlights of 2017-2021 Projects

#### Land and Visitor Services

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

# Ecological Systems

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

#### Cultural Resources

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

# Environmental Planning

• Complete Open Space and Mountain Parks Master Plan



#### **Board Action**

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

# **Guiding Principles and Project Prioritization**

CIP Guiding Principles:

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

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

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

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



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

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

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

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

# Prioritization

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

# Projects not in Master Plans

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



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

# Projects Not Previously Identified in the CIP

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

# **Operation and Maintenance Impacts**

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



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

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

# Deferred Eliminated, or Changed Projects

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

# **Unfunded Projects and Emerging Needs**

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

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

				201	6 Approved	201	17 Projected	201	18 Projected	201	9 Projected	202	20 Projected	202	21 Projected	
		Co		•	44 000 000	•	7045000		7 455 000		7 000 000		7 000 000	•	T 000 000	Amount
OPEN SPACE & MOUNTAIN PARKS	Department Total				11,900,930		7,945,000			\$	7,080,000	\$	7,390,000	\$	7,290,000	
CIP-CAPITAL ENHANCEMENT			11,324,600		4,074,600	\$	1,975,000	\$	1,475,000	\$	1,100,000	\$	1,400,000	\$	1,300,000	•
	Boulder Crk Above 95th	\$	500,000		500,000		-	Ψ.	-	\$		\$	-	Ψ.		\$ -
	ETSA - Plan and Implementation	\$	650,000		-	Ψ.	-	\$	200,000	-	50,000		200,000	_	200,000	
	Facility Modifications-Space	\$	900,000		200,000		200,000		200,000		100,000		100,000		100,000	
	Flood Eng. Trails	\$	572,600		572,600			\$		\$		\$		\$	•	\$ -
	Goodhue Ditch Fish Passage	\$	300,000			\$	300,000			\$		\$	-	Ψ	-	\$ -
	NTSA - Plan and Implementation	\$	700,000		100,000		200,000		200,000		100,000		50,000		50,000	
	OSMP Innovations	\$	550,000			\$	75,000		175,000		100,000		100,000		100,000	•
	OSMP Master Plan Update	\$	852,000	\$	252,000	\$	200,000	\$	100,000	\$	100,000		100,000	\$	100,000	\$ -
	S.Bldr Crk at E.Bldr Ditch Const	\$	300,000	\$	-	\$	300,000	\$	-	\$	-	\$	-	\$	-	\$ -
	South Boulder Creek Instream	\$	2,000,000	\$	2,000,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
	STSA - Plan and Implementation	\$	300,000	\$	-	\$	-	\$	-	\$	-	\$	200,000	\$	100,000	\$ -
	Visitor Infrastructure System Wide	\$	2,000,000	\$	100,000	\$	200,000	\$	200,000	\$	500,000	\$	500,000	\$	500,000	\$ -
	WTSA Implementation	\$	1,700,000	\$	350,000	\$	500,000	\$	400,000	\$	150,000	\$	150,000	\$	150,000	\$ -
CIP-CAPITAL MAINTENANCE	Subtotal	\$	3,036,330	\$	1,626,330	\$	270,000	\$	280,000	\$	280,000	\$	290,000	\$	290,000	\$ -
	Agriculture Facilities Projects	\$	720,000	\$	110,000	\$	110,000	\$	120,000	\$	120,000	\$	130,000	\$	130,000	\$ -
	Boulder & S Bldr Crk Flood Repair	\$	100,000	\$	100,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
	Cultural Resource/Facility Restorat	\$	500,000	\$	-	\$	100,000	\$	100,000	\$	100,000	\$	100,000	\$	100,000	\$ -
	Farm Site Improvements	\$	360,000	\$	60,000	\$	60,000	\$	60,000	\$	60,000	\$	60,000	\$	60,000	\$ -
	Flood Trails	\$	991,000	\$	991,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
	Foothills Nature Center	\$	205,330	\$	205,330	\$		\$	-	\$	-	\$	-	\$		\$ -
	Hartnagle House Restoration	\$	100,000	\$	100,000	\$		\$	-	\$	-	\$	-	\$		\$ -
	South Mesa Trailhead Bridge	\$	60,000	\$	60,000	\$	-	\$		\$	-	\$	-	\$	-	\$ -
CIP-LAND ACQUISITION	Subtotal	\$	34,200,000	\$	5,700,000	\$	5,700,000	\$	5,700,000	\$	5,700,000	\$	5,700,000	\$	5,700,000	\$ -
	Mineral Rights Acquisition	\$	600,000	\$	100,000	\$	100,000	\$	100,000	\$	100,000	\$	100,000	\$	100,000	\$ -
	OSMP Real Estate Acquisition	\$	32,400,000	\$	5,400,000	\$	5,400,000	\$	5,400,000	\$	5,400,000	\$	5,400,000	\$	5,400,000	\$ -
	Water Rights Acquisition	\$	1,200,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$ -
CIP-NEW	Subtotal	\$	500,000	\$	500,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -
FACILITY/INFRASTRUCTURE																
	<b>Boulder Creek Bikepath Extension</b>	\$	500,000	\$	500,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -

# **Open Space and Mountain Parks**



# Mapping

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



**Project Name:** Agriculture Facilities Projects

Project at a Glance

CIP-CAPITAL MAINTENANCE Project Type:

Department: OPEN SPACE & MOUNTAIN Subcommunity: SYSTEM-WIDE

PARKS

**Project Number:** 555AG15001 **BVCP Area:** SYSTEM-WIDE

**CEAP Status: CEAP Required:** No N/A

#### **Project Description**

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

#### **Project Phasing**

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

#### **Public Process**

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

### Interdepartmental and Interagency Collaboration

The city's Utilities staff may be involved with some water infrastructure projects as they are often shareholders in the same local ditch companies as OSMP.

# Change From Past CIP

This is a new program to be funded annually in the OSMP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	\$100,000	\$110,000	\$110,000	\$120,000	\$120,000	\$130,000	\$130,000

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$820,000

Additional Annual Operating and Maintenance

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

O&M:

Additional Annual O&M Description:

This maintenance work will reduce future O&M costs.



Project Name: Boulder Crk Above 95th Restoration

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: OPEN SPACE & MOUNTAIN Subcommunity: AREA III

**PARKS** 

Project Number:555ES16002BVCP Area:AREA IIICEAP Required:NoCEAP Status:N/A

### **Project Description**

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

#### **Project Phasing**

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

#### **Public Process**

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

New

#### Interdepartmental and Interagency Collaboration

Change From Past CIP

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

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	\$0	\$500,000	\$0	\$0	\$0	\$0	\$0

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$500,000

Additional Annual Operating and Maintenance

Additional Annual 0 Funding Source for

O&M:

Additional Annual O&M Description:

Minimal post project monitoring and weed mgmt by staff.

AREA III



Project Name: Boulder Creek Bikepath Extension

Project at a Glance

Project Type: CIP-NEW FACILITY/INFRASTRUCTUR

**Department:** OPEN SPACE & MOUNTAIN **Subcommunity:** 

PARKS

Project Number:555TA16001BVCP Area:AREA IIICEAP Required:NoCEAP Status:N/A

### **Project Description**

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

#### **Project Phasing**

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

#### Public Process

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

### Interdepartmental and Interagency Collaboration

#### Change From Past CIP

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

New Project

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	\$10,000	\$500,000	\$0	\$0	\$0	\$0	\$0
					Fundin	g to Complet	tion \$0

Future Unfunded \$0

Total Funding Plan: \$510,000

# Additional Annual Operating and Maintenance

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

# Additional Annual O&M Description:

County will manage the trail maintenance.



Project Name: Boulder & S Bldr Crk Flood Repair

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department: OPEN SPACE & MOUNTAIN Subcommunity: AREA III

**PARKS** 

Project Number:555ES15002BVCP Area:AREA IIICEAP Required:NoCEAP Status:N/A

### **Project Description**

Project will restore riparian habitat in the Boulder Creek and South Boulder Creek confluence area. The September 2013 flood impacted the creeks through this area by eroding banks and depositing sediment in the channel. The work will entail restoring streambank and streambed structure, creating aquatic habitat and planting riparian trees and shrubs to create a sustainable riparian area.

### **Project Phasing**

Construction - \$100k

2016 funds are additional construction funds added to prior year design and construction funds.

#### Public Process

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

#### Interdepartmental and Interagency Collaboration

Change From Past CIP
Added 2016 funding.

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

Division, affected landowners.

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	\$250,000	\$100,000	\$0	\$0	\$0	\$0	\$0

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$350,000

Additional Annual Operating and Maintenance

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

# Additional Annual O&M Description:

Monitoring and weed control during establishment by staff.



Project Name: Cultural Resource/Facility Restorat

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

**Department:** OPEN SPACE & MOUNTAIN **Subcommunity:** SYSTEM-WIDE

PARKS

**Project Number:** 555CR15001 **BVCP Area:** SYSTEM-WIDE

CEAP Required: No CEAP Status: N/A

### **Project Description**

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

#### **Project Phasing**

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

#### **Public Process**

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

### Interdepartmental and Interagency Collaboration

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

# Change From Past CIP

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

### Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021		
Open Space	\$60,000	\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000		
			Funding to Completion 50						

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$560,000

# Additional Annual Operating and Maintenance

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Additional Annual O&M: Unknown

Funding Source for

O&M:

Additional Annual O&M Description:

Improvements to facilities will likely reduce O&M needs



Project Name: ETSA - Plan and Implementation

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: OPEN SPACE & MOUNTAIN Subcommunity: AREA III

PARKS

Project Number:555ETSA001BVCP Area:AREA IIICEAP Required:NoCEAP Status:N/A

### **Project Description**

The East Trail Study Area (TSA) encompasses approximately 11,000 acres of OSMP including Sawhill Ponds, the East Boulder Trail, the Bobolink and Teller Farm trailheads. It extends general east of the City of Boulder, southeast of the Diagonal Highway and north of US 36. The East Trail Study Area (TSA) Plan seeks to improve visitor experiences and increase the sustainability of trails and trailheads while conserving the area's natural, cultural and agricultural resources. Outcomes may include:

- -strategies to provide high-quality visitor experiences for a diversity of recreational opportunities,
- -visitor infrastructure enhancements, such as trail connections, and trail and trailhead improvements,
- -actions that sustain trails and surrounding landscapes. Such as:
- --projects to reduce trail erosion, the re-routing of trails around wildlife habitats,
- -- the removal of redundant paths and
- -- the restoration of disturbed areas.
- -protection of sensitive ecological areas and the restoration of disturbed areas.

#### **Project Phasing**

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

#### **Public Process**

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

### Interdepartmental and Interagency Collaboration

### Change From Past CIP

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

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

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	\$0	\$0	\$0	\$200,000	\$50,000	\$200,000	\$200,000

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$650,000

Additional Annual Operating and Maintenance

Additional Annual TBD Funding Source for O&M:

Additional Annual O&M Description:

Monitor, maintain, rehabilitate trails when needed.



Project Name: Facility Modifications-Space Needs

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: OPEN SPACE & MOUNTAIN Subcommunity: SYSTEM-WIDE

PARKS

Project Number:555FA16001BVCP Area:AREA IIICEAP Required:NoCEAP Status:N/A

### **Project Description**

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

### **Project Phasing**

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

### **Public Process**

N/A

### Interdepartmental and Interagency Collaboration

### Change From Past CIP

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

New Project

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Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021	
Open Space	\$0	\$200,000	\$200,000	\$200,000	\$100,000	\$100,000	\$100,000	
					Eurodina	to Completie	n 00	

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$900,000

### Additional Annual Operating and Maintenance

Additional Annual TBD Funding Source for O&M:

### **Additional Annual O&M Description:**

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



Project Name: Farm Site Improvements

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department: OPEN SPACE & MOUNTAIN Subcommunity: SYSTEM-WIDE

PARKS

Project Number: 555AG16001 BVCP Area: SYSTEM-WIDE

CEAP Required: No CEAP Status: N/A

# **Project Description**

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

### **Project Phasing**

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

### **Public Process**

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

### Interdepartmental and Interagency Collaboration

### Change From Past CIP

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

This is a new program to be funded annually

#### Capital Funding Plan

Suprem runding rian							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	\$0	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$360,000

# Additional Annual Operating and Maintenance

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

## **Additional Annual O&M Description:**

The maintenance will lessen O&M requirements.

AREA III



Project Name: Flood Eng. Trails

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

**Department:** OPEN SPACE & MOUNTAIN **Subcommunity:** 

PARKS

Project Number:555BOULD33BVCP Area:AREA IIICEAP Required:NoCEAP Status:N/A

## **Project Description**

This CIP project titled Flood Engineered Trails is a group of repairs that are intended to correspond with the related FEMA project, or worksheet, for OSMP trail reconstruction when the trail is replaced at least partially outside of the existing trail alignment.

Locations included in this project include the Lower Big Bluestem Trail repair, the South Mesa Trail repair and smaller trails that will be partially reconstructed outside of their current alignment.

### **Project Phasing**

2016 Expected:

Lower Big Bluestem Trail Repairs; Construction - \$155.3k

South Mesa Trail Repair: Construction - \$317.3k Small Trail Repairs: Construction - \$100k

## **Public Process**

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

### Interdepartmental and Interagency Collaboration

Change From Past CIP

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

Added 2016 flood recovery locations

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Lottery	\$0	\$155,300	\$0	\$0	\$0	\$0	\$0
					Funding	g to Complet	ion \$0
					F	uture Unfund	led \$0
Open Space	\$497,650	\$417,300	\$0	\$0	\$0	\$0	\$0
					Funding	g to Complet	ion \$0
					F	uture Unfund	led \$0

Total Funding Plan: \$1,070,250

Additional Annual Operating and Maintenance

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

Additional Annual O&M Description:

Trail reconstruction will reduce O&M cost



Project Name: Flood Trails

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department: OPEN SPACE & MOUNTAIN Subcommunity: AREA III

PARKS

Project Number:555BOULD24BVCP Area:AREA IIICEAP Required:NoCEAP Status:N/A

## **Project Description**

This project is a grouping of flood recovery locations intended to correspond with the related FEMA project (worksheet) for OSMP trail reconstruction when the trail is replaced in the existing trail alignment.

Specific projects that are continued or started in 2016 include: Chautauqua trail repairs, Shanahan trail repairs, and other smaller trail repairs.

## **Project Phasing**

Chautauqua Trail Repairs: Construction - \$75k

Shanahan Trail Repair: Design - \$30k, Construction - \$786k

Small Trail Repairs: Construction - \$100k

### **Public Process**

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

## Interdepartmental and Interagency Collaboration

## Change From Past CIP

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

Added 2016 funding for 2016 flood recovery locations.

### Capital Funding Plan

Capital Fallating Flati								
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021	
Open Space	\$1,432,550	\$991,000	\$0	\$0	\$0	\$0	\$0	
					Euro elim	- to Commission	0.00	

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$2,423,550

Additional Annual Operating and Maintenance

Additional Annual 0 F

O&M:

Funding Source for

## **Additional Annual O&M Description:**

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



Project Name: Foothills Nature Center

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department: OPEN SPACE & MOUNTAIN Subcommunity: NORTH BOULDER

PARKS

Project Number:555CR16001BVCP Area:AREA IIICEAP Required:NoCEAP Status:N/A

## **Project Description**

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

### **Project Phasing**

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

### **Public Process**

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

Interdepartmental and Interagency Collaboration		Change From Past
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None New

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Lottery	\$0	\$205,330	\$0	\$0	\$0	\$0	\$0

Funding to Completion \$0 Future Unfunded \$0

CIP

Total Funding Plan: \$205,330

Additional Annual Operating and Maintenance

Additional Annual 0 Funding Source for

O&M: O&M:

### Additional Annual O&M Description:

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



Project Name: Goodhue Ditch Fish Passage

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: OPEN SPACE & MOUNTAIN Subcommunity: AREA III

**PARKS** 

Project Number: 555ES16001 **BVCP Area:** AREA III **CEAP Status: CEAP Required:** Νo N/A

## **Project Description**

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

### Project Phasing

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

## **Public Process**

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

## Interdepartmental and Interagency Collaboration

Change From Past CIP

New Project

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

the affected public.

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	\$0	\$0	\$300,000	\$0	\$0	\$0	\$0
					Eundin	a to Complet	ion CO

Funding to Completion \$0 Future Unfunded \$0

**Total Funding Plan:** \$300,000

Additional Annual Operating and Maintenance

**Additional Annual Funding Source for** 

O&M: O&M:

Additional Annual O&M Description:

AREA III



Project Name: Hartnagle House Restoration

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

**Department:** OPEN SPACE & MOUNTAIN **Subcommunity:** 

PARKS

Project Number:555CR15002BVCP Area:AREA IIICEAP Required:NoCEAP Status:N/A

## **Project Description**

The Hartnagle House was built in the early 1900's and was part of a homestead begun by early Boulder pioneers. It has been vacant for many years and will need major rehabilitation before it can be used as a residence for farmers who will use the outbuildings for their organic farm business.

## **Project Phasing**

Construction - \$100k

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

#### Public Process

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

### Interdepartmental and Interagency Collaboration

Change From Past CIP

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

2016 funding added.

## Capital Funding Plan

Suprair anding rian							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	\$65,000	\$100,000	\$0	\$0	\$0	\$0	\$0

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$165,000

**Additional Annual Operating and Maintenance** 

Additional Annual 0

O&M:

Funding Source for

### Additional Annual O&M Description:

This work will reduce future ops and maintenance needs.



Project Name: Mineral Rights Acquisition

Project at a Glance

Project Type: CIP-LAND ACQUISITION

Department: OPEN SPACE & MOUNTAIN Subcommunity: SYSTEM-WIDE

**PARKS** 

Project Number: 555MRA001 BVCP Area: SYSTEM-WIDE

CEAP Required: No CEAP Status: N/A

## **Project Description**

This on-going program provides funding to purchase underlying mineral interests from private property owners as they become available on the real estate market. Many of these interests in minerals, gas, oil and aggregates were severed from the lands before properties were purchased by the city and could cause future management issues. The definition of a CIP project includes "the purchase of the physical assets of the community." By purchasing the rights to the mineral, the city is purchasing a physical asset. Funds also provide for research, mapping and analyzing potential acquisitions. This project is for ongoing funding program. In addition, should water rights or real property become available to purchase and funds allocated for that purpose are insufficient, mineral rights acquisition funds may be utilized to make up the deficiency.

#### **Project Phasing**

Funding is for mineral acquisitions and associated costs only.

## **Public Process**

None

Interdepartmental and Interagency Collaboration

Change From Past CIP

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

None

Capital Funding Plan

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Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	\$561,184	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$1,161,184

Additional Annual Operating and Maintenance

Additional Annual 0

O&M:

**Funding Source for** 

O&M:

Additional Annual O&M Description:

Included in annual appropiation for operations



Project Name: NTSA - Plan and Implementation

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

**Department:** OPEN SPACE & MOUNTAIN **Subcommunity:** 

PARKS

Project Number:555NTSA001BVCP Area:AREA IIICEAP Required:NoCEAP Status:N/A

## **Project Description**

The NTSA encompassess approximately 9,500 acres and includes the North Foothills area north of Lee Hill Road and the Boulder Valley Ranch area extending east to SH 119/Diagional Highway. The Plan will delineate some new trails and major maintenance for some designated trails and closure and reclamation of the other undesignated tails, trailhead improvements and upgraded and or additional regulatory, way-finding and interpretive signs. The Plan will be completed in 2015 with implementation beginning in 2016 taking up to ten years to complete.

## **Project Phasing**

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

### **Public Process**

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

## Interdepartmental and Interagency Collaboration

## Change From Past CIP

Coordination with the city Parks and Recreation Department for the Boulder Resevoir Master Plan, with Boulder County Parks and Open Space on neighboring properties and with CDOT on properties adjacent to their facilities, including US36. Funding added in 2018, 2019 and 2021 - \$200k total

AREA III

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	\$100,000	\$100,000	\$200,000	\$200,000	\$100,000	\$50,000	\$50,000

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$800,000

## Additional Annual Operating and Maintenance

Additional Annual TBD Funding Source for O&M:

## Additional Annual O&M Description:

Monitor, maintain, rehabilitate trails when needed



Project Name: OSMP Innovations

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: OPEN SPACE & MOUNTAIN Subcommunity: AREA III

PARKS

Project Number:555CO16001BVCP Area:AREA IIICEAP Required:NoCEAP Status:N/A

## **Project Description**

Explore and encourage the use of innovations on OSMP property, to evaluate different approaches to design and management of the OSMP system. For example, an initial biomimicry innovation project could utilize biological concepts to rethink road and trail design on the Bluebell Trail in Chautauqua.

The use of innovations will be explored further starting in 2016 and continuing with the first year of funding in 2017.

### **Project Phasing**

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

## **Public Process**

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

## Interdepartmental and Interagency Collaboration

Change From Past CIP

New

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

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	Fund(s)	Revised 2015 Budget - Current	2016 Requested Funding	2017	2018	2019	2020	2021
	Open Space	\$0	\$0	\$75,000	\$175,000	\$100,000	\$100,000	\$100,000

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$550,000

**Additional Annual Operating and Maintenance** 

Additional Annual TBD Funding Source for

O&M: O&M:

Additional Annual O&M Description:



Project Name: OSMP Master Plan Update

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: OPEN SPACE & MOUNTAIN Subcommunity: SYSTEM-WIDE

PARKS

**Project Number:** 555OSMP001 **BVCP Area:** SYSTEM-WIDE

CEAP Required: No CEAP Status: N/A

## **Project Description**

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

### **Project Phasing**

Planning - 2016 and 2017

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

#### **Public Process**

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

### Interdepartmental and Interagency Collaboration

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

### Change From Past CIP

New Project

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	\$0	\$252,000	\$200,000	\$100,000	\$100,000	\$100,000	\$100,000

O&M:

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$852,000

**Additional Annual Operating and Maintenance** 

Additional Annual TBD Funding Source for

&M:

Additional Annual O&M Description:

Not known at this time.



Project Name: OSMP Real Estate Acquisition

Project at a Glance

Project Type: CIP-LAND ACQUISITION

Department: OPEN SPACE & MOUNTAIN Subcommunity: SYSTEM-WIDE

PARKS

Project Number: 555REA001 BVCP Area: SYSTEM-WIDE

CEAP Required: No CEAP Status: N/A

## **Project Description**

This project is the acquisition of additional acres of open space, subject to available funding within the Open Space and Mountain Parks acquisition plan area as approved by OSBT and the City Council.

#### Project Phasing

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

None

### **Public Process**

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

## Interdepartmental and Interagency Collaboration

Change From Past CIP

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

Capital Funding Plan

Fund(s) Revised 2016 2017 2018 2019 2020 2021

2015 Requested Budget - Funding Current

Year

Open Space \$8,844,322 \$5,400,000 \$5,400,000 \$5,400,000 \$5,400,000 \$5,400,000

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$41,244,322

Additional Annual Operating and Maintenance

Additional Annual Minimal Funding Source for

O&M: O&M:

Additional Annual O&M Description:

Incremental maintenance costs for new properties



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

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: OPEN SPACE & MOUNTAIN Subcommunity: EAST BOULDER

PARKS

**Project Number:** 555ES16003 **BVCP Area:** AREA III **CEAP Status: CEAP Required:** N/A Νo

## **Project Description**

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

#### **Project Phasing**

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

## **Public Process**

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

### Interdepartmental and Interagency Collaboration

Change From Past CIP

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

affected public.

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	\$0	\$0	\$300,000	\$0	\$0	\$0	\$0
					Eunding	r to Completi	on 90

New

Funding to Completion \$0

Future Unfunded \$0

**Total Funding Plan:** \$300,000

Additional Annual Operating and Maintenance

**Additional Annual Funding Source for** 

O&M: O&M:

Additional Annual O&M Description:

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



Project Name: South Boulder Creek Instream Flow

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: OPEN SPACE & MOUNTAIN Subcommunity: AREA III

**PARKS** 

 Project Number:
 555SBIF001
 BVCP Area:
 AREA III

 CEAP Required:
 No
 CEAP Status:
 N/A

## **Project Description**

2016: This project is ongoing through 2016 at which point Gross Reservoir is to be expanded and the City of Boulder's portion of the Gross Reservoir enlargement costs will be \$2,000,000. Total CIP project cost for this project is \$2,400,000.

History 2010-2015: This project is being lead by Denver Water and implements an Intergovernmental Agreement (IGA) to establish and operate an environmental pool to store 5,000 acre-feet of water shared between the City of Boulder and the City of Lafayette to be released for instream flow purposes for the benefit of the water dependent environment of South Boulder Creek. The IGA parties include the City of Boulder, Denver Water and the City of Lafayette and was signed on February 24, 2010. The IGA outlines the responsibilities of the parties in the implementation of the "environmental pool" including financial and operational considerations. The IGA specifies that both the City of Boulder and the City of Lafayatte's cost share of the environmental pool is \$2 million each or \$4 million combined. Denver Water is contributing approximately \$2.4 million towards the environmental pool.

In order to most effectively use the water in this environmental pool for instream flow, several modifications to ditch diversions structures need to be built on South Boulder Creek to allow for fish passage. These project components include the design and construction of diversion dam bypass structures to pass water down the creek and several stream gauges to administer in-stream flow rates. The City of Boulder's portion of the costs are estimated to be \$400,000 with \$150,000 set aside in 2013, \$100,000 in 2014 and \$150,000 in 2015. The project completion date is based on Denver Water's projection that will begin construction of the expanded reservoir in 2016.

## **Project Phasing**

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

### **Public Process**

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

### Interdepartmental and Interagency Collaboration

Change From Past CIP

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

None

Capital Funding Plan								
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021	
Open Space	\$396,177	\$2,000,000	\$0	\$0	\$0	\$0	\$0	
					- "			

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$2,396,177

Additional Annual Operating and Maintenance

Additional Annual 0 Funding Source for

O&M: O&M:

Additional Annual O&M Description:



Project Name: South Mesa Trailhead Bridge Replace

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department: OPEN SPACE & MOUNTAIN Subcommunity: AREA III

PARKS

Project Number:555PM15001BVCP Area:AREA IIICEAP Required:NoCEAP Status:N/A

## **Project Description**

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

### **Project Phasing**

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

## **Public Process**

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

## Interdepartmental and Interagency Collaboration

## Change From Past CIP

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

Added 2016 funding

## Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	\$553,000	\$60,000	\$0	\$0	\$0	\$0	\$0
					Funding to	Completion	\$0

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$613,000

Additional Annual Operating and Maintenance

Additional Annual 0

O&M:

**Funding Source for** 

O&M:

Additional Annual O&M Description:

Replacing existing structure - no added O&M



Project Name: STSA - Plan and Implementation

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: OPEN SPACE & MOUNTAIN Subcommunity: AREA III

PARKS

Project Number:555STSA001BVCP Area:AREA IIICEAP Required:NoCEAP Status:N/A

## **Project Description**

The South Trail Study Area (TSA) encompasses approximately 10,000 acres of OSMP lands. This planning area includes both the Marshall Mesa/Southern Grasslands area and the Eldorado Mountain/Doudy Draw areas for which TSA plans were completed in 2005 and 2006 respectively. This plan will add the city-owned lands managed as open space in Jefferson County and city open space acquired since 2006. The TSA is located south of Colorado Highway 170 (Eldorado Springs Drive/Marshall Road). The South Trail Study Area (TSA) Plan seeks to improve visitor experiences and increase the sustainability of trails and trailheads while conserving the area's natural, cultural and agricultural resources. Outcomes may include:

- -strategies to provide high-quality visitor experiences for a diversity of recreational opportunities,
- -visitor infrastructure enhancements, such as trail connections, and trail and trailhead improvements,
- -actions that sustain trails and surrounding landscapes. Such as:
- --projects to reduce trail erosion, the re-routing of trails around wildlife habitats,
- -- the removal of redundant paths and
- -- the restoration of disturbed areas.
- -protection of sensitive ecological areas and the restoration of disturbed areas.

### **Project Phasing**

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

#### **Public Process**

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

### Interdepartmental and Interagency Collaboration

Change From Past CIP
New Project

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

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	\$0	\$0	\$0	\$0	\$0	\$200,000	\$100,000
							00

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$300,000

**Additional Annual Operating and Maintenance** 

Additional Annual TBD Funding Source for O&M:

Additional Annual O&M Description:

Monitor, maintain, and rehabilitate trails as needed.



Project Name: Visitor Infrastructure System Wide

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: OPEN SPACE & MOUNTAIN Subcommunity: SYSTEM-WIDE

PARKS

 Project Number:
 555VISW001
 BVCP Area:
 AREA III

 CEAP Required:
 No
 CEAP Status:
 N/A

## **Project Description**

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

## **Project Phasing**

Construction - All funds are for planning and construction of capital maintenance and smaller new facilities, typically trails or trailheads.

2016 Construction- \$100k 2017-18 Construction- \$200k/year 2019-21 Construction- \$500k/year

## Public Process

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

### Interdepartmental and Interagency Collaboration

### Change From Past CIP

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

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

#### Capital Funding Plan

Capital Callang Call							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	\$0	\$100,000	\$200,000	\$200,000	\$500,000	\$500,000	\$500,000
						ta Camplatia	

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$2,000,000

# Additional Annual Operating and Maintenance

Additional Annual 0 Funding Source for O&M:

## **Additional Annual O&M Description:**

Monitor, Maintain, rehabiliate trails when needed



**Project Name:** Water Rights Acquisition

Project at a Glance

Project Type: CIP-LAND ACQUISITION

Department: OPEN SPACE & MOUNTAIN Subcommunity: SYSTEM-WIDE

PARKS

**Project Number:** 555WRA001 **BVCP Area:** SYSTEM-WIDE

**CEAP Status: CEAP Required:** No N/A

## **Project Description**

This on-going project provides funding to purchase additional water from private owners or others for use on Open Space and Mountain Parks for agricultural and environmental purposes. By purchasing the water rights, the city is purchasing a physical asset. Program funding includes water acquisitions in the Coal Creek, South Boulder, Boulder and Lefthand Creek watersheds. Funding will also be used for professional fees, legal and engineering fees, analysis and mapping necessary to manage and protect the water rights portfolio. Because of continuing wildlife and habitat concerns, the Open Space and Mountain Parks Resource Operations staff will continue to work with other city departments to assist in enhancing in-stream flow where possible. Senior water rights can exceed \$100,000 per share. Additionally, the department has annual expenditures for the attorney fees and engineering fees that are required, as noted in this project's description, to defend the departments water rights portfolio. This project is for an ongoing funding program. In addition, should mineral rights or real property become available to purchase and funds allocated for that purpose are insufficient, water rights acquisition funds may be utilized to make up the deficiency.

#### **Project Phasing**

All funds are for water rights acquisition and associated costs.

### **Public Process**

None

### Interdepartmental and Interagency Collaboration

Change From Past CIP

None

O&M:

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

required.

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Open Space	\$529,115	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000 to Completio	\$200,000

Funding to Completion \$0 Future Unfunded \$0

**Total Funding Plan:** \$1,729,115

Additional Annual Operating and Maintenance

Additional Annual Minimal **Funding Source for** 

O&M:

Additional Annual O&M Description:

Included in annual appropriations for operations



Project Name: WTSA Implementation

Project at a Glance

CIP-CAPITAL ENHANCEMENT Project Type:

Department: OPEN SPACE & MOUNTAIN

PARKS

**BVCP Area: Project Number:** 555WTSA001 AREA III **CEAP Status: CEAP Required:** N/A No

## **Project Description**

This funding is for implementation of trail projects that were identified in the West Trail Study Areas.

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

### Project Phasing

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

Subcommunity:

### **Public Process**

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

## Interdepartmental and Interagency Collaboration

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

## **Change From Past CIP**

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

AREA III

Capital Funding Plan								
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021	
Open Space	\$383,471	\$300,000	\$500,000	\$400,000	\$150,000	\$150,000	\$150,000	
Open Space	Year	\$300,000	\$500,000	\$400,000	,	\$150,000	,	)

Funding to Completion \$0 Future Unfunded \$0

**Total Funding Plan:** \$2,033,471

Additional Annual Operating and Maintenance

**Additional Annual** 

O&M:

**Funding Source for** 

O&M:

Additional Annual O&M Description:

Trail repairs will reduce on-going O&M.

City of Boulder
PARKS AND RECREATION
2016-2021 Capital Improvement Program

# **Overview of Department Mission**

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

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

## **Funding Overview**

.25 Cent Sales Tax Fund

With the renewal of this tax in November 2012, the revenues from this funding source were pledged "to fund Parks and Recreational services, development, renovation and refurbishment, and parkland acquisition for passive and active recreational uses" (.25 Cent Sales Tax ballot language).



## Permanent Parks and Recreation Fund

The Permanent Parks and Recreation Fund consists of a .9 mill levy of assessed valuation of all taxable property in the city, gifts and donations to the fund, and proceeds from the sale of park or recreation property or equipment. The fund also includes revenues from a portion of a development excise tax assessed on each new residential unit constructed or annexed to the city except for those units that are designated as permanently affordable. The City Charter requires that the "...Fund shall not be used for any purpose other than the acquisition of park land or the permanent improvement of park and recreation facilities." (Charter Sec 161)

## Lottery Fund

The Lottery Fund is based on proceeds from the Conservation Trust Fund that is distributed by the State of Colorado on a per capita basis to entities. Funding can be used for the acquisition, development and maintenance of new conservation sites, capital improvements for recreational purpose.

## Capital Development Fund

The capital development fund accounts for citywide development impact fee collections allocated to growth-related parks and recreation facility development.

## Boulder Junction Improvement Fund

The Boulder Junction Improvement Fund was created in 2011 for the Boulder Junction Key Public Improvements. Funding is provided from development related revenues generated in the Boulder Junction Area that will be reinvested into key public improvements in this area.

## Capital Improvement Bond Fund

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

# Current Focus for Capital Planning Projects in 2016

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

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



facilities as the results of recent plans and studies.

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

# 2013 Flood Impact

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

# Highlights

Projects Expected to be Completed in 2015

Boulder Reservoir Infrastructure Improvements: In 2015, major utility upgrades were completed with the construction of a new sanitary sewer system and water line. Additional improvements include dock renovations, parking lot repair and various interior and exterior building improvements



Boulder Reservoir, North Shore.

- Pearl Street Mall Irrigation Replacement: Completed renovation of critical irrigation infrastructure and tree replacement to maintain and enhance the Pearl Street Mall
- Flatirons Golf Course Irrigation Replacement: Completed the irrigation replacement with a new



innovative system that allows increased water efficiency, operational efficiencies and improved playability of the course

- Valmont City Park Planning: Completed the concept plan for the park through research, community engagement and community partnerships. The new plan reflects the current needs and trends of the community for parks and recreation facilities and will allow future funding opportunities to be discovered to allow implementation
- Parks and Recreation Facility Renovations: Crestview Park has been renovated with turf and irrigation upgrades, ADA compliance and replacement of park amenities as part of the ongoing Capital Bond Funding
- Park Shelter Replacements / Improvements: A new reservation pavilion will be installed at Harlow Platts Park to serve the park users by allowing for reservations and special events.

## Priority Projects for 2016

- Aquatics Facility Upgrades: Renovations and enhancements for indoor aquatics facilities will start in 2016 with North Boulder Recreation Center pool repairs and enhancements that were identified as part of the Aquatics Study completed in 2014. These projects will be funded from both parks and recreation CIP as well as FAM
- Historic Railroad Coach Restoration: Renovation of the city-owned railroad coach currently
  located at the Railroad Museum in Golden, CO. The coach has antique wood siding that is in
  critical need of repair to maintain the coach at an acceptable standard as indicated in a recent
  grant from the State Historical Fund. Delaying this project would cause further deterioration
  and more costly repairs at a later date
- Coot Lake Restoration: Stabilization and restoration of the north bank of Coot Lake that currently poses a critical safety issue and continued degradation of the resource values of the lake. The project will include trail restoration, bank stabilization and vegetative restoration of this important and highly used natural area within the city's system
- Emerald Ash Borer Response Measures: As a result of the recent discovery of the Emerald Ash Borer (EAB), a response plan is currently in development to slow the spread of the pest and maintain a safe community from the potential hazards of multiple dead and dying trees within the urban core of the community. This project would provide annual funding to hire contractors for removal and replacement of the trees affected by the EAB to re-establish streetscapes and park areas. Urban Forest Strategic Management Plan: Comprehensive plan to provide specific management direction through policies that will balance the long-term



sustainability of the urban forest

- Recreation Facility Strategic Plan: Planning study and analysis to guide the future repair, renovation and improvement of recreation facilities through an assessment of the existing physical systems, operational efficiencies, improvements and remodeling strategies to ensure the facilities are meeting the needs and demands of the community comparable to other facilities.
- Scott Carpenter Park: In 2016 the department will be working with the community to develop a site plan for Scott Carpenter Park that will inform the location and priorities for capital improvements to one of Boulder's parks that serves the entire community. Several amenities within the park are of critical importance and must be carefully redesigned to provide long—term benefit to the community including the pool, playground, baseball field and the skate park. Based on the approval of the site plan next year, the department will be seeking partnership opportunities and leveraging existing capital funds, including the use of impact fees for those capital improvements that can be attributed to growth in the community.

## Highlights of 2017–2021 Projects

- Athletic Field Improvements: The upgrade of existing natural grass fields and the conversion of select fields to artificial turf will increase the capacity of field use within the community by extending the season of use of the fields and allow more programmed uses resulting in improved benefits from field rentals and tournament play. The department has recently conducted feasibility studies and intends to design and construct priority field improvements at locations determined through the athletic field study
- Aquatics Upgrades: Renovations and enhancements for indoor aquatics facilities will start in continue with East Boulder Recreation Center pool repairs and enhancements planned for 2018 and South Boulder Recreation Center or Spruce Pool for 2020.

# **Board Action**

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



# **Guiding Principles and Project Prioritization**

# **CIP Guiding Principles**

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

- Safety/Compliance (S): Projects represent important deficiencies or safety and compliance
  concerns. Project may focus on annual infrastructure repair and replacement and/or
  refurbishment of park play equipment and amenities, irrigation systems, landscape and turf
  upgrades and facility improvements
- Commitment (C): Projects that are required by law or a ballot initiative, or are in-process of development as part of a prior development agreement and/or are required to be completed within a specific period of time
- Efficiencies (E): The department will consistently seek efficiency improvements in both operational and capital investments. Projects will represent important operational and/or maintenance efficiencies resulting in improved life cycles, cost efficiencies and savings in resources, energy or water usage (e.g., Flatirons Golf Course Irrigation System Replacement, Computerized Irrigation System)
- Revenue (R): The department will invest in facilities and programs that generate revenues to support valued recreational opportunities in the Boulder community. Projects will enhance the department's ability to earn revenue beyond initial investment and operational costs and may include possible collaboration/ partnership opportunities leveraging outside funding sources.

### Prioritization

A principle objective of the current Parks and Recreation Master Plan Update focuses on maintaining existing parks and recreation facilities by "taking care of what we have." As a result, the department has prioritized CIP projects based on meeting essential safety and compliance considerations, as well as maintaining existing facilities through ongoing annual repair and refurbishment programs and life-cycle replacement programs of park playground equipment and irrigation infrastructure systems.

In most cases, projects identified in the 2016–2021 CIP are intended to improve ongoing maintenance needs by reducing the backlog of deferred maintenance projects that have increased maintenance over time. Projects such as Aquatics Facility Maintenance and court and asphalt Replacements strive to improve long-term operational needs and protect existing assets while



reducing annual maintenance costs.

A second important objective is to improve efficiencies in operational and capital investments resulting in extending life cycles of equipment and facilities whenever possible. The proposed CIP projects contribute to improving citywide energy efficiency and water conservation efforts addressing existing parks and recreational facilities. Projects are also consistent with the community's overall green house gas (GHG) and carbon footprint reduction objectives. Projects such as the Recreation Facility Strategic Plan will address department–wide efficiencies aimed at improving operational practices and seeking alternative funding opportunities needed to support the department's mission.

In addition, due to new federal ADA regulations, the department is required to respond to specific mandates and timelines to audit all parks and recreational facilities and to improve identified facilities to meet new federal ADA regulations. The ADA Compliance Improvements project will continue to address the new federal mandates and ensure the department remains in compliance with access issues for parks and recreational facilities.

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

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



Projects Not in Master Plan None

# Projects not Previously Identified in the CIP

- Athletic Field Improvements: As recommended in the department's master plan and the
  Athletic Field Study, the Parks and Recreation Department intends to improve existing natural
  turf athletic fields and to replace some targeted existing turf fields with new synthetic turf in
  select park sites
- Aquatic Facility Repairs and Enhancements: As part of recommendations of the master plan and the recently completed Aquatics Facility Study the department has identified deferred maintenance needs within the existing facilities
- Turf Repairs and Replacement: These projects will provide upgrades to existing park natural turf areas and reduce the overall backlog of work identified in the master plan and the Asset Management Plan
- Flatiron Golf Restroom: Currently the course is in need of repairs to the restrooms on the course as well as improved cart paths
- Parking Lot Repairs: The department's master plan includes a key theme of "taking care of what we have" which directs the department to focus on the necessary preventative and restorative maintenance of infrastructure throughout the parks and recreation system
- General Park Structure Repairs & Replacements: Based on the master plan and the asset management plan a number of park structures from shelters to key buildings have a backlog of deferred maintenance needs. This project will accelerate the repairs and replacement of these facilities to meet design criteria for safe and functional facilities
- South Boulder Reservoir and Tom Watson Site Plan: This project will provide for community engagement and design / planning services to develop plans and estimates for future improvements at both important facilities. The improvements will continue to support growth in the north of Boulder as well as improve visitor experiences at two aging facilities
- Scott Carpenter / Mapleton Site Plans: Development of site plans and cost estimates for capital repairs to existing facilities per the athletic field study and related city services proposed to be relocated or expanded
- Park Operations Yards Master Plan and Maintenance Facility Site Plans: Development of site plans and cost estimates for capital repairs to existing maintenance facilities per the master plan, the General Maintenance and Management Plan and the Yards recommendation.



# **Operation and Maintenance Impacts**

The department prioritizes capital projects based upon maintaining existing assets and decreasing the maintenance backlog of the department's portfolio of parks and facilities. Therefore, the majority of projects included in the department's Capital Improvement Program will decrease maintenance costs due to replacement of aging infrastructure and efficiencies associated with new and improved facilities and systems. All of these projects will actually reduce the O&M costs over time. However, as the department fulfills commitments relative to long-term planning needs such as the Boulder Junction Pocket Park and Violet Neighborhood Park in the future, the department will need to further prioritize and explore funding opportunities to maintain these new facilities.

## Deferred, Eliminated, or Changed Projects

Due to the September flood of 2013, the department had to focus on some of the critical damages to parks and recreation infrastructure. Overall the department sustained about \$2million in damages to infrastructure some of the costs of which are eligible for FEMA reimbursement. Some of the regularly scheduled infrastructure renovations had to be delayed due to this unexpected increase in work load and funding needs. However, as funds are reimbursed by FEMA, the department will have the opportunity to return to the normal prioritization of infrastructure renovations as scheduled through the department's asset management program and typically funded through the CIP. Projects that were deferred include:

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

# **Unfunded Projects and Emerging Needs**

In the long-term, additional funding will need to be secured to develop any new major facilities as well as improve service standards for maintenance operations and to fund deferred maintenance. The department's Master Plan includes a list of priority items to complete based on various funding levels. Staff continues to evaluate deferred maintenance needs, including park sites and recreation facility needs and have implemented an Asset Management Plan (AMP) to assist in capital planning and day-to-day operations. The current maintenance and facility improvements backlog, including major repairs and replacements, is significant. The department anticipates that



this backlog will continue until funding levels reach appropriate amounts to accommodate life-cycle projections for the department's assets.

The current budget reflects an economic reality that is not predicted to shift anytime soon, and it is within this reality that the department must plan for the future. With maintenance backlog estimated at over \$27 million on approximately \$200 million in assets, the department faces difficult trade-off decisions about how to manage and operate its facilities and provide its programs. City guidelines regarding capital improvement prioritize the maintenance of current assets over the development of new facilities, and through the Master Planning process, the community has indicated strong support for this concept. Even with the indications of a modest economic turnaround and the passage of the .25 Cent Sales Tax renewal, the department must focus on maintaining and improving all deteriorating assets. Simultaneously the department must respond to the community's shifting values related to new facilities by providing adequate facilities to meet those needs and by making them accessible to the entire community.

To mitigate the impacts of limited funding, staff is:

- Working collaboratively with Facilities and Asset Management (FAM) to prioritize funding for deferred, major and ongoing facility maintenance
- Deferring low priority improvements and new capital projects that cannot be funded operationally
- Reevaluating work plans and investing in projects that mitigate ongoing maintenance and operational expenses
- Redirecting funding or accelerating projects to achieve energy efficiencies at recreation facilities
- Developing a long-term capital investment strategy to identify partnerships and non-traditional funding sources to support desired new facilities and enhancements to existing facilities.

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

Key unfunded projects include:

• Work collaboratively with Boulder Fire Department to coordinate Fire Station #3 with potential move to Mapleton including identification of funding for relocation of athletic fields to Stazio

# Parks and Recreation



or Valmont and upgrade of Mapleton Park to a community park serving the surrounding area

- Full replacement of Scott Carpenter Outdoor Pool
- System-wide compliance with federal standards for the Americans with Disabilities Act (ADA)
- Increased capacity and additional facilities for youth and adult sports
- Expansion and enhancement of recreation centers and aquatics facilities that accommodate increased demand for lap swimming, fitness equipment and classroom space
- Boulder Reservoir infrastructure upgrades to increase operational efficiencies and improve public amenities
- Park infrastructure upgrades for the Civic Area and Pearl Street Mall
- Major parking lot renovations at key facilities
- Infrastructure associated with Valmont City Park Phase 2 development.

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

		Esti	Estimated Total 2016 Approved   2017 Projected   2018 Projected   2019 Projected   2020 Projected   2021 Projected	2016	Approved	2017	Projected	2018	Projected	2019	Projected	2020 Project	ted 20	121 Projected	Unfunded	ded
		Cost	ıt												Amount	Ħ
PARKS & RECREATION	Department Total	<b>⇔</b>	32,872,000	\$	4,458,000	₩	5,920,000	\$	5,217,000	\$	6,500,000	\$ 5,277,000	\$ 00	5,500,000	₩	ľ
CIP-CAPITAL ENHANCEMENT	Subtotal	↔	11,500,000	49	1,750,000	₩	1,850,000	₩.	3,100,000	\$	1,600,000	\$ 1,600,000	00	1,600,000	₩	ľ
	Aquatic Facility Enhancements	₩.	2,900,000	€9	400,000	€9	•	\$	2,000,000	₩	•	\$ 500,000	\$		€9	ľ
	Athletic Field Development	49	4,500,000	₩.	200,000	\$	1,000,000	₩.	200,000	\$	1,000,000	\$ 500,000	\$ 000	1,000,000	€9	ľ
	Lighting Ordinance	69	200,000	₩.	250,000	€9	250,000	₩		\$	'	\$	'		€9	ľ
	Playground and Irrigation Repairs	69	3,600,000	€9	000,009	€9	000,009	\$	000,009	€9	000,009	\$ 600,000	\$ 000	000,000	\$	ľ
CIP-CAPITAL MAINTENANCE	Subtotal	↔	17,048,000	69	1,558,000	69	3,620,000	\$	1,393,000	\$	2,900,000	\$ 3,677,000	\$ 00	3,900,000	₩	Ċ
	ADA Compliance Initiatives	₩.	1,100,000	€9	100,000	€9	200,000	₩	200,000	₩.	200,000	\$ 200,000	000	200,000	↔	ľ
	Aquatics Facility Repairs	49	1,288,000	€>	238,000	€9	•	₩	273,000	₩	•	\$ 777,000	\$ 000		€9	ľ
	Boulder Reservoir South	49	4,500,000	€>	•	\$	1,000,000	₩.		₩	•	\$ 1,500,000	\$ 00	2,000,000	€9	ľ
	Court Repairs and Resurfacing	69	1,500,000	₩.	250,000	₩	250,000	\$	250,000	₩.	250,000	\$ 250,000	\$ 00	250,000	\$	•
	EAB Response Measures	49	2,160,000	₩.	220,000	€9	220,000	₩.	220,000	₩	200,000	\$ 500,000	\$ 000	200,000	\$	ľ
	Flatiron Golf Course Repairs	69	300,000	↔	300,000	₩.	•	₩.		₩	'	₩	'		€9	ľ
	Park Structure Repairs and	49	1,500,000	€9	1	€9	200,000	₩.		₩.	200,000	\$	'	200,000	₩	ľ
	Parking Lot Repairs	69	1,500,000	€9	250,000	€9	250,000	\$	250,000	€9	250,000	\$ 250,000	\$ 000	250,000	₩	ľ
	Recreation Facility Repairs	₩.	2,000,000	€9	•	₩	1,000,000	₩.		\$	1,000,000	\$	٠		€9	ľ
	Turf Repairs and Replacement	49	1,200,000	€>	200,000	€9	200,000	₩	200,000	₩	200,000	\$ 200,000	\$ 000	200,000	\$	ľ
CIP-CAPITAL PLANNING	Subtotal	↔	200,000	₩.	400,000	<del>69</del>	100,000	<del>\$</del>	1	€9	•	↔	<b>⇔</b>		₩	ľ
	Reservoir/Tom Watson Site Plan	↔	200,000	€9	200,000	€9	'	₩.	•	₩.	'	₩.	٠		€9	ľ
	Scott Carpenter/Mapleton Site	₩.	100,000	€9	100,000	€9	'	₩.		₩.	•	₩.	'		€9	ľ
	Urban Forest Management Plan	49	100,000	€9	100,000	€9	'	₩.		₩.	'	₩.	'		€9	ľ
	Yard/Maintenance Facility Site	49	100,000	€9	•	€9	100,000	₩.	•	₩.	•	₩.	'		€9	ľ
CIP-LAND ACQUISITION	Subtotal	↔	1,874,000	₩.	•	<del>69</del>	1	₩.	374,000	\$	,500,000	₩.	<b>⇔</b>		₩.	ľ
	Boulder Junction Rail Plaza	↔	1,874,000	₩.	•	↔	'	₩.	374,000	\$	1,500,000	₩.	٠		₩.	ľ
CIP-NEW FACILITY/INFRASTRUCTURE	Subtotal	<del>⇔</del>	1,950,000	₩.	750,000	↔	350,000	₩.	350,000	₩	200,000	₩	1		↔	
	Boulder Junction Pocket Park	↔	1,450,000	₩.	750,000	↔	350,000	↔	350,000	↔	•	₩.	<b>↔</b>		₩.	ľ
	Violet Park	↔	200,000	€9	•	€9	•	₩.	•	€9	200,000	₩.	1		€9-	•



# Mapping

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



Project Name: ADA Compliance Initiatives

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PARKS & RECREATIONSubcommunity:SYSTEM-WIDEProject Number:5153302200BVCP Area:SYSTEM-WIDE

CEAP Required: No CEAP Status:

### **Project Description**

In response to the new Department of Justice ADA regulations, the Parks and Recreation Department was required to complete an audit of all park and recreational facilities by March 2012. The initial audit began in 2011 to assess up to 10 recreational facilities and 20 park sites and was completed in late 2012. The audit and assessment led to the development of a transition plan for the department that will prioritize the schedule for improvements for ADA compliance within parks and facilities. Upon completion of the plan, the department now has a comprehensive list, priorities and costs for the system-wide ADA improvements. Funding has then been set aside annually to complete required ADA improvements in order to meet new federal mandated deadlines for compliance. Many years of funding will need to be allocated to provide full ADA compliance. Therefore, the department is utilizing the transition plan to identify key priorities each year.

#### **Project Phasing**

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

#### **Public Process**

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

### Interdepartmental and Interagency Collaboration

### Change From Past CIP

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

Included funding in the out years

#### Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Permanent Parks & Recreation	\$0	\$100,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$1,100,000

### Additional Annual Operating and Maintenance

Additional Annual None Funding Source for O&M:

# Additional Annual O&M Description:

funds are used to improve access to existing facilities



Project Name: Aquatic Facility Enhancements

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department:PARKS & RECREATIONSubcommunity:SYSTEM-WIDEProject Number:5152185510BVCP Area:SYSTEM-WIDE

CEAP Required: No CEAP Status:

## **Project Description**

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

### Project Phasing

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

#### **Public Process**

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

### Interdepartmental and Interagency Collaboration

### Change From Past CIP

Projects are coordinated with FAM for upgrades and project management tasks

New project

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
.25 Cent Sales Tax	\$0	\$400,000	\$0	\$2,000,000	\$0	\$500,000	\$0

O&M:

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$2,900,000

Additional Annual Operating and Maintenance

Additional Annual None Funding Source for

O&M:

### Additional Annual O&M Description:

Projects will expand play opportunities at existing facilities



Project Name: Aquatics Facility Repairs

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PARKS & RECREATIONSubcommunity:SYSTEM-WIDEProject Number:5152186050BVCP Area:SYSTEM-WIDE

CEAP Required: No CEAP Status:

## **Project Description**

As part of recommendations of the master plan and the recently completed Aquatics Facility Study the department has identified deferred maintenance needs within the existing facilities. The Parks and Recreation Department manages and operates 11 pools within the city including indoor and outdoor leisure pools, lap pools and hot tubs. As part of the Aquatics Facility Study ongoing maintenance and repairs to recreation facilities have been prioritize starting with the three indoor facilities. Pools are an integral component in providing health and wellness programs as well as generating revenues for the city.

### **Project Phasing**

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

#### **Public Process**

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

### Interdepartmental and Interagency Collaboration

### Change From Past CIP

Projects are coordinated with FAM for upgrades and project management tasks

Previously funded in Repairs and Renovation, not in CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
.25 Cent Sales Tax	\$0	\$238,000	\$0	\$273,000	\$0	\$777,000	\$0

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$1,288,000

## Additional Annual Operating and Maintenance

Additional Annual None Funding Source for O&M:

## Additional Annual O&M Description:

Funds are used to improve access to existing aquatic facilities



**Project Name:** Athletic Field Development

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: PARKS & RECREATION Subcommunity: SYSTEM-WIDE

**BVCP Area: Project Number:** 5153302060 AREA I

**CEAP Required: CEAP Status:** No

### **Project Description**

As recommended in the department's master plan and the Athletic Field Study, the Parks and Recreation Department intends to improve existing natural turf athletic fields and to replace some targeted existing turf fields with new synthetic turf in select park sites. The upgrade of existing natural grass fields and the conversion of select fields to artificial turf will increase the capacity of field use within the community by extending the season of use of the fields and allow more programmed uses resulting in improved benefits from field rentals and tournament play. The department has recently conducted feasibility studies and intends to design and construct priority field improvements at locations determined through the athletic field study. Specific park sites could include Stazio Complex, Foothills Community Park, Pleasantview Sports Complex, East Boulder Community Park or Harlow Platts Park.

This project allows the department to focus on youth engagement and activity as indicated in the department's master plan and Athletic Field Study by providing appropriate facilities and opportunities for youth sports. Additionally, this project will provide efficiency and improvement in maintenance and operations in order to allow the department more flexibility in maintenance of athletic fields throughout the community.

#### Project Phasing

Improvements to existing fields will be done on an annual basis

### **Public Process**

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

## Interdepartmental and Interagency Collaboration

Change From Past CIP

Projects are coordinated with FAM for upgrades and project management tasks

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Permanent Parks & Recreation	\$0	\$500,000	\$1,000,000	\$500,000	\$1,000,000	\$500,000	\$1,000,000

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$4,500,000

**Additional Annual Operating and Maintenance** 

Additional Annual

O&M:

None

**Funding Source for** O&M:

Additional Annual O&M Description:

Funds are used to improve existing facilities



Project Name: Boulder Junction Pocket Park

Project at a Glance

Project Type: CIP-NEW FACILITY/INFRASTRUCTUR

**Department:** PARKS & RECREATION **Subcommunity:** CROSSROADS

Project Number: 5153501100 BVCP Area: AREA I

CEAP Required: No CEAP Status:

## **Project Description**

The Parks and Recreation Department has identified funding to address the future pocket park land acquisition and development associated with the Boulder Junction redevelopment project. This project is a long range infill redevelopment that will include civic public spaces and/or pocket parks that will require Parks and Recreation input, technical expertise and perhaps funding contributions. The proposed pocket improvement will include land acquisition for a 3/4-acre civic park, construction of Goose Creek multi-use path connection, grading and drainage improvements, hard-scape pavers, retaining walls, landscape, irrigation and civic park amenities to support the park space.

### Project Phasing

Project development is coordinated with on going site improvements.

### **Public Process**

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

#### Interdepartmental and Interagency Collaboration

Change From Past CIP

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

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Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021	
Bldr Junction Cap Imprvmt	\$501,053	\$750,000	\$350,000	\$350,000	\$0	\$0	\$0	

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$1,951,053

Additional Annual Operating and Maintenance

Additional Annual 6,668 Funding Source for

O&M: O&M:

### Additional Annual O&M Description:

Annual maintenance will include irrigation, mowing, and maintenance.



Project Name: Boulder Junction Rail Plaza

Project at a Glance

Project Type: CIP-LAND ACQUISITION

Department: PARKS & RECREATION Subcommunity: CROSSROADS

Project Number: 5153501050 BVCP Area: AREA I

CEAP Required: No CEAP Status:

# **Project Description**

This project was included in the list of Key Public Improvements as part of the Transit Village Area Plan (TVAP) - Implementation Plan. This project includes the land acquisition costs for the development of the Rail Plaza in 2019, pending coordination with private development in the location of the plaza.

#### **Project Phasing**

Project development is coordinated with on going site improvements.

#### **Public Process**

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

# Interdepartmental and Interagency Collaboration Change From Past CIP

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

Ca	m 11	al	 nd	ina	ы	an.

Capital Fulluling Flair							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Bldr Junction Cap Imprvmt	\$0	\$0	\$0	\$374,000	\$1,500,000	\$0	\$0

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$1,874,000

Additional Annual Operating and Maintenance

Additional Annual Funding Source for

O&M: O&M:



Project Name: Boulder Reservoir South Improvement

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

 Department:
 PARKS & RECREATION
 Subcommunity:
 AREA III

 Project Number:
 Multiple
 BVCP Area:
 AREA III

CEAP Required: Yes CEAP Status:

#### **Project Description**

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

#### **Project Phasing**

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

#### Public Process

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

# Interdepartmental and Interagency Collaboration

### Change From Past CIP

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

New project

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
.25 Cent Sales Tax	\$0	\$0	\$500,000	\$0	\$0	\$750,000	\$1,000,000
					Funding	to Completio	n \$0
					Fu	uture Unfunde	d \$0
Permanent Parks & Recreation	\$0	\$0	\$500,000	\$0	\$0	\$750,000	\$1,000,000
					Funding	to Completio	n \$0

Future Unfunded \$0

Total Funding Plan: \$4,500,000

Additional Annual Operating and Maintenance

Additional Annual O&M: None Funding

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

Funds are used to improve access to existing buildings



Project Name: Court Repairs and Resurfacing

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department: PARKS & RECREATION Subcommunity: SYSTEM-WIDE

Project Number: 5152182080 BVCP Area:

CEAP Required: No CEAP Status: N/A

#### **Project Description**

This project will provide major repairs and replacement of many of the city's basketball and tennis courts as mandated by the city's asset management program to ensure a safe and functional playing surface for many of the court sports. The department manages tennis courts and mixed courts open free to the public for recreational health and wellness activities. As these courts age they require resurfacing and preventative maintenance to extend the useful life-cycle of these assets.

#### **Project Phasing**

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

#### Public Process

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

# Interdepartmental and Interagency Collaboration

# Change From Past CIP

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

Previously included in Repairs and Renovation money, not in CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
.25 Cent Sales Tax	\$0	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000
							00

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$1,500,000

## Additional Annual Operating and Maintenance

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

#### Additional Annual O&M Description:

Funds are used to maintain existing courts at desired condition



Project Name: EAB Response Measures

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PARKS & RECREATIONSubcommunity:SYSTEM-WIDEProject Number:5152183100BVCP Area:SYSTEM-WIDE

CEAP Required: No CEAP Status:

#### **Project Description**

In late September 2013, the department's Forestry staff discovered an Emerald Ash Borer (EAB) infestation within the city. The subsequent delimitation survey showed that EAB is well established within a corridor in central Boulder. Over the next 15 years, EAB management, including tree removal, tree replacement, wood disposal and pesticide treatments will have a significant direct budgetary impact to the city and private residents. The loss of tree canopy will have considerable economic, social, and environmental impacts for decades. In September, an Information Item detailing the 2015 Emerald Ash Borer management plan will be presented to City Council.

As a result of the recent discovery of the Emerald Ash Borer (EAB), a response plan has been developed to slow the spread of the pest and maintain a safe community from the potential hazards of multiple dead and dying trees within the urban core of the community. This project would provide funding to educate the community on safe EAB treatment, hire contractors for removal and replacement of the trees affected by the EAB to re-establish streetscapes and park areas that contribute to many of the sustainability goals of the city. This project will include renovation of parking areas, streetscapes, park areas and other sites to remove and replace the trees.

#### Project Phasing

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

#### Public Process

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

#### Interdepartmental and Interagency Collaboration

Change From Past CIP

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

Increased funding in out years

### Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
.25 Cent Sales Tax	\$230,000	\$220,000	\$220,000	\$220,000	\$500,000	\$500,000	\$500,000
					Funding to	Completion	\$0

Future Unfunded \$0

Total Funding Plan: \$2,390,000

Additional Annual Operating and Maintenance

Additional Annual None Funding Source for

O&M: O&M:

Additional Annual O&M Description:

Annual funds are utilized to remove and replace existing Ash trees



Project Name: Flatiron Golf Course Repairs

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department: Subcommunity: SOUTHEAST BOULDER PARKS & RECREATION

Project Number: **BVCP Area:** 5153304150 AREA I

**CEAP Required: CEAP Status:** No

#### **Project Description**

The Flatirons Golf Course is the city's only course and provides a unique and highly valued service to the resident's. The department's master plan as well as other supporting plans prioritizes the maintenance and management of the course to ensure the community's needs are met in a safe and aesthetic facility. Currently the course is in need of repairs to the many cart paths along the course to ensure safety and accessibility to all users. Additionally, the restrooms on the course are in need of repairs and renovations to ensure functionality of the golfers on the course. This project allows the golf course to remain competitive in a growing market.

#### **Project Phasing**

This project will be completed within one year.

#### **Public Process**

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

### Interdepartmental and Interagency Collaboration

Change From Past CIP

This work will be coordinated with other departments as needed.

Added \$100,000 in 2016

#### Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Permanent Parks & Recreation	\$0	\$300,000	\$0	\$0	\$0	\$0	\$0

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$300,000

**Additional Annual Operating and Maintenance** 

Additional Annual None

**Funding Source for** O&M: O&M:



**Project Name:** Lighting Ordinance Implementation

Project at a Glance

CIP-CAPITAL ENHANCEMENT Project Type:

Department: PARKS & RECREATION Subcommunity: SYSTEM-WIDE **BVCP Area: Project Number:** 5152182070 SYSTEM-WIDE

**CEAP Required: CEAP Status:** No

#### **Project Description**

Boulder's park system is foundational to the mission of the Parks and Recreation Department. Upon completion of the department's master plan in 2014, the department committed to ongoing renovations of playgrounds and irrigation systems to ensure safe, functional and attractive facilities. The specific playground and park irrigation system that will be renovated will be decided on an annual basis through an asset management life-cycle program and communicated to the public through an extensive public engagement process. Projects are necessary to comply with goals and commitments identified in the department's master plan and to maintain quality and safety standards as facilities age. The department evaluates and prioritizes needs based on criteria including safety and code compliance, age of the equipment, location in the city, and opportunities for efficiencies, collaboration or partnerships with other departments or the surrounding neighborhood.

#### Project Phasing

This project will include design and replacement of existing lighting.

#### **Public Process**

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

#### Interdepartmental and Interagency Collaboration

Change From Past CIP

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

No changes

## Capital Funding Plan

Capital Fullding Flair							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
.25 Cent Sales Tax	\$0	\$250,000	\$250,000	\$0	\$0	\$0	\$0

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$500,000

Additional Annual Operating and Maintenance

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

O&M:



Project Name: Parking Lot Repairs

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Subcommunity: SYSTEM-WIDE Department: PARKS & RECREATION Project Number: **BVCP Area:** 5152182040 SYSTEM-WIDE

**CEAP Required: CEAP Status:** No

#### **Project Description**

The department's master plan includes a key theme of "taking care of what we have" which directs the department to focus on the necessary preventative and restorative maintenance of infrastructure throughout the parks and recreation system. Many of the parking lots throughout the city's parks and facilities are in need of repair and replacement in order to continue to maintain safety, functionality and accessibility. FAM has placed parking lot repairs as a priority on their proposed CIP project. This project will provide appropriate resurfacing and repair necessary to meet standards and compliance and to extend the life-cycle of these assets.

#### Project Phasing

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

#### **Public Process**

## Interdepartmental and Interagency Collaboration

#### Change From Past CIP

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

Included funding for each year at a consistent dollar amount

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
.25 Cent Sales Tax	\$0	\$250,000	\$250,000	\$250,000	\$250,000 Funding	\$250,000 to Completio	\$250,000 n \$0

Future Unfunded \$0

Total Funding Plan: \$1,500,000

#### Additional Annual Operating and Maintenance

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

O&M:

## Additional Annual O&M Description:

Funds are used to maintain existing courts at desired condition



Project Name: Park Structure Repairs and Replace

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PARKS & RECREATIONSubcommunity:SYSTEM-WIDEProject Number:5152182015BVCP Area:SYSTEM-WIDE

CEAP Required: No CEAP Status:

# **Project Description**

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

#### **Project Phasing**

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

#### **Public Process**

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

## Interdepartmental and Interagency Collaboration

## Change From Past CIP

Projects are coordinated with FAM where appropriate.

Previously included in Repairs and Renovation money, not in CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
.25 Cent Sales Tax	\$0	\$0	\$500,000	\$0	\$500,000	\$0	\$500,000

O&M:

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$1,500,000

Additional Annual Operating and Maintenance

Additional Annual None Funding Source for

O&M: Additional Annual O&M Description:

Funds are used to maintain existing courts at desired condition



Project Name: Playground and Irrigation Repairs

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

 Department:
 PARKS & RECREATION
 Subcommunity:
 SYSTEM-WIDE

 Project Number:
 Multiple
 BVCP Area:
 SYSTEM-WIDE

CEAP Required: No CEAP Status:

#### **Project Description**

Boulder's park system is foundational to the mission of the Parks and Recreation Department. Upon completion of the department's master plan in 2014, the department committed to ongoing renovations of playgrounds and irrigation systems to ensure safe, functional and attractive facilities. The specific playground and park irrigation system that will be renovated will be decided on an annual basis through an asset management life-cycle program and communicated to the public through an extensive public engagement process. Projects are necessary to comply with goals and commitments identified in the departments master plan and to maintain quality and safety standards as facilities age. The department evaluates and prioritizes needs based on criteria including safety and code compliance, age of the equipment, location in the city, and opportunities for efficiencies, collaboration or partnerships with other departments or the surrounding neighborhood.

#### **Project Phasing**

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

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

#### **Public Process**

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

# Interdepartmental and Interagency Collaboration

#### Change From Past CIP

Projects are coordinated with other departments to identify overlapping work

Increased in .25 cent sales tax fund and shared savings.

Increased in lottery fund, decreased

Conital Funding Blog

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
.25 Cent Sales Tax	\$0	\$239,700	\$239,700	\$239,700	\$239,700	\$239,700	\$239,700
					Ü	to Completio	
					Fu	ture Unfunde	d \$0
Lottery	\$0	\$360,300	\$360,300	\$360,300	\$360,300	\$360,300	\$360,300
					Funding	to Completio	n \$0

Future Unfunded \$0

Total Funding Plan: \$3,600,000

# Additional Annual Operating and Maintenance

Additional Annual O&M: None Funding

## Source for O&M: Additional Annual O&M Description:

Funds are used to maintain existing facilities at desired condition



**Project Name:** Recreation Facility Repairs

Project at a Glance

CIP-CAPITAL MAINTENANCE Project Type:

Department: PARKS & RECREATION Subcommunity: NORTH BOULDER

**BVCP Area: Project Number:** 5152186150 AREA I

**CEAP Required: CEAP Status:** No

#### **Project Description**

The department's master plan indicates several key themes that relate to health and wellness, youth activity, community engagement and asset management. To continue supporting these key themes, the department will be providing repairs, renovations and upgrades to recreation centers. In 2016, the department will complete a strategic plan for all recreation centers that illustrates implementation priority for critical projects. Pending the outcome and strategies of the Recreation Facility Strategic Plan, this project will fund the initial implementation projects outlined within the plan. A critical project that has been identified previously includes renovating the front desk area at the North Boulder Recreation Center to increase operational efficiency of user access and safety of center customers.

#### **Project Phasing**

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

#### **Public Process**

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

### Interdepartmental and Interagency Collaboration

#### Change From Past CIP

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

New project

#### Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
.25 Cent Sales Tax	\$0	\$0	\$1,000,000	\$0	\$1,000,000	\$0	\$0
					Funding to	o Completio	n \$0

Future Unfunded \$0

**Total Funding Plan:** \$2,000,000

Additional Annual Operating and Maintenance

**Additional Annual** O&M:

None

**Funding Source for** O&M:

#### **Additional Annual O&M Description:**

Funds are used to maintain existing courts at desired condition



Project Name: Reservoir/Tom Watson Site Plan

Project at a Glance

Project Type: CIP-CAPITAL PLANNING STUDIES

 Department:
 PARKS & RECREATION
 Subcommunity:
 AREA III

 Project Number:
 5153305055
 BVCP Area:
 AREA III

CEAP Required: No CEAP Status:

#### **Project Description**

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

#### Project Phasing

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

#### **Public Process**

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

#### Interdepartmental and Interagency Collaboration

Change From Past CIP

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

New project

#### Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Permanent Parks & Recreation	\$0	\$200,000	\$0	\$0	\$0	\$0	\$0

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$200,000

Additional Annual Operating and Maintenance

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

#### Additional Annual O&M Description:

Future O&M will depend on final planning recommendations.



**Project Name:** Scott Carpenter/Mapleton Site Plan

Project at a Glance

Project Type: CIP-CAPITAL PLANNING STUDIES

Department: Subcommunity: CROSSROADS PARKS & RECREATION

**Project Number:** 5153302300 **BVCP Area:** AREA I

**CEAP Required: CEAP Status:** Yes

#### **Project Description**

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

### **Project Phasing**

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

#### **Public Process**

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

#### Interdepartmental and Interagency Collaboration

#### **Change From Past CIP**

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

New project

Capital	Funding	Plan
- "		

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Permanent Parks & Recreation	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$100,000

#### Additional Annual Operating and Maintenance

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

O&M:

## Additional Annual O&M Description:

Future O&M will depend on final planning recommendations.



Project Name: Turf Repairs and Replacement

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PARKS & RECREATIONSubcommunity:SYSTEM-WIDEProject Number:5152182065BVCP Area:SYSTEM-WIDE

CEAP Required: No CEAP Status:

#### **Project Description**

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

#### Project Phasing

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

#### Public Process

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

Interdepartmental and Interagency Collaboration	Change From Past CIP
Projects are coordinated with other departments where	Previously included in Repairs and Renovation money, not in

Projects are coordinated with other departments where appropriate

CIP

Sapital Funding Plan											
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021				
.25 Cent Sales Tax	\$0	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000				

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$1,200,000

### Additional Annual Operating and Maintenance

Additional Annual None Funding Source for O&M:

#### Additional Annual O&M Description:

None anticipated, funds are used to enhance existing areas



**Project Name:** Urban Forest Management Plan

Project at a Glance

CIP-CAPITAL PLANNING STUDIES Project Type:

Department: PARKS & RECREATION Subcommunity: SYSTEM-WIDE **BVCP Area: Project Number:** 5153303050 SYSTEM-WIDE

**CEAP Required: CEAP Status:** No

#### **Project Description**

The Parks and Recreation Department has recognized a need to develop a comprehensive plan to provide specific management direction through policies that will balance the long-term sustainability of the urban forest with the outcomes of the community's sustainability framework. This funding will complete the Urban Forest Management Plan began in 2015. The U.S. Forest Service estimates there are over 656,000 trees within the City of Boulder with a combined value of \$1.2 billion. The department's Forestry division currently manages over 38,000 trees within parks and streetscapes throughout the community. Due to ongoing threats and constraints to the health and viability of the urban forest, this long-range management plan will allow the City to more effectively and efficiently manage the forest based upon the goals of the community and relevant city plans. This management plan will include a complete inventory of the City's urban forest, current and recommended management practices, opportunities and constraints, partnerships and implementation strategies. In 2014, initial planning and management strategies will be developed in conjunction with the Emerald Ash Borer response that will help inform the planning scheduled for 2015.

#### **Project Phasing**

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

#### **Public Process**

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

#### Interdepartmental and Interagency Collaboration

#### **Change From Past CIP**

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

Added 2016 budget

Capital Funding Plan	Capital Funding Plan										
Fund(s)	Revised 2015 Budget - Gurrent Year	2016 Requested Funding	2017	2018	2019	2020	2021				
Permanent Parks & Recreation	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0				

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$100,000

Additional Annual Operating and Maintenance

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

O&M:

Additional Annual O&M Description:

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



Project Name: Violet Park

Project at a Glance

Project Type: CIP-NEW FACILITY/INFRASTRUCTUR

Department: PARKS & RECREATION Subcommunity: NORTH BOULDER

5152102500 **BVCP Area:** Project Number: AREA I

**CEAP Required: CEAP Status:** Yes

#### **Project Description**

Violet Park is an undeveloped neighborhood park located along Violet Avenue east of Broadway in North Boulder. The park was acquired several years ago to satisfy the level of service requirements for the City to meet the needs of the growing community by providing park land and amenities to North Boulder. This project will allow funding for the initial development of the park in conjunction with the planned Fourmile Canyon Creek Greenway improvements through this reach of the creek. The Greenway Project will provide funding for the multi-use path while the park funding will allow for initial phase of development of the park. By combining the projects, the City will realize an economy of scale with both projects developing concurrently. Funding for ongoing Operations and Maintenance costs has not yet been identified. It is anticipated that this will be identified prior to completion of the project in 2019.

#### **Project Phasing**

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

#### **Public Process**

Interdepartmental and Interagency Collaboration

Change From Past CIP

No Changes

Capital Funding Plan								
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021	
General	\$0	\$0	\$0	\$0	\$500,000	\$0	\$0	
					Funding	to Comple	tion \$0	

Future Unfunded \$0

Total Funding Plan: \$500,000

**Additional Annual Operating and Maintenance** 

**Additional Annual** 

O&M:

2,529

**Funding Source for** 

O&M:

Additional Annual O&M Description:

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



Project Name: Yard/Maintenance Facility Site Plan

Project at a Glance

Project Type: CIP-CAPITAL PLANNING STUDIES

**Department:** PARKS & RECREATION **Subcommunity:** EAST BOULDER

Project Number: 5153302310 BVCP Area: AREA I

CEAP Required: No CEAP Status:

# **Project Description**

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

#### **Project Phasing**

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

#### **Public Process**

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

#### Interdepartmental and Interagency Collaboration

Change From Past CIP

This plan will coordinate closely with all YARDS service related departments

New project

Capita		

Supremi and and and								
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021	
Permanent Parks & Recreation	\$0	\$0	\$100,000	\$0	\$0	\$0	\$0	

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$100,000

# Additional Annual Operating and Maintenance

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

Oalvi.

Additional Annual O&M Description:

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

City of Boulder
POLICE
2016–2021 Capital Improvement Program

# **Overview of Department Mission**

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

# **Funding Overview**

The Police Department is funded by the General Fund. Currently there is no specific capital funding source for General Fund departments and capital needs are addressed on a case by case basis, as funds are available. Strategies for addressing unfunded capital needs are being developed (see Appendix B).

Potential sources of funding for the capital projects noted below include each of the following or any combination of:

- An increase in sales and use tax,
- An increase in property tax mill levy,
- Bond funding, or
- Use of existing operating funding to build a capital fund or pool of money available for capital projects.

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



Funding from the Capital Improvement Bond (CIB) Fund supported projects managed by the Police

Department. CIB funding is indicated by the following symbol:



# Current Focus for Capital Planning and Projects in 2016

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

# **Highlights**

Projects Expected to be Completed in 2015

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

Priority Projects for 2016

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

Highlights of 2017–2021 Projects
None

# **Guiding Principles and Project Prioritization**

**CIP Guiding Principles** 

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



#### Prioritization

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

Projects Not in Master Plan None

# Projects Not Previously Identified in the CIP

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

# **Operation and Maintenance Impacts**

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

# Deferred, Eliminated, or Changed Projects

None

# **Unfunded Projects and Emerging Needs**

In the future, the Boulder Police Department (BPD) will incorporate new initiatives into the planning and budget processes as city resources allow. Examples include:

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

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

		Estim	nated Total	2016	Approved	2017 Projected	d  2	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded
		Cost										Amount
POLICE	Department Total	\$	950,000	\$	950,000	\$	-	\$ -	\$ -	\$ -	\$ -	\$
CIP-CAPITAL MAINTENANCE	Subtotal	\$	950,000	\$	950,000	\$	-	\$ -	\$ -	\$ -	\$ -	\$
	Records Management System	\$	950,000	\$	950,000	\$	-	\$ -	\$ -	\$ -	\$ -	\$

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Project Name: Records Management System (RMS)

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:POLICESubcommunity:SYSTEM-WIDEProject Number:255RMS2015BVCP Area:SYSTEM-WIDE

CEAP Required: No CEAP Status:

#### **Project Description**

The Records Management System (RMS) is an important tool to more efficiently use the current technology to document crime, analyze crime trends, and determine appropriate police response. The acquisition of the new RMS is a priority project since the current RMS runs on Windows XP, an outdated operating system. The department has received approval from the U.S. Department of Justice to use up to \$950,000 of Asset Forfeiture Funds to purchase a new RMS.

#### **Project Phasing**

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

#### **Public Process**

NONE

Interdepartmental and Interagency Collaboration		Change From Past
---	--	------------------

NONE Request for Proposal sent out

Ca	pital	Funding	Plan
_			

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
General	\$0	\$950,000	\$0	\$0	\$0	\$0	\$0
					Funding t	o Completion	\$0

Future Unfunded \$0

t CIP

Total Funding Plan: \$950,000

Additional Annual Operating and Maintenance

Additional Annual \$100,000 Funding Source for

O&M: 08

#### Additional Annual O&M Description:

This would be for the maintenance agreement and future replacement.

City of Boulder

TRANSPORTATION

2016-2021 Capital Improvement Program

**Overview of Department Mission** 

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

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

**Funding Overview** 

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

Airport Fund

The Airport Fund accounts for the operations of the city-owned municipal airport and supports airport investment. It is supported primarily by lease revenue and entitlement funds from the Federal Aviation Administration (FAA).

Transportation Fund

The Transportation Fund accounts for construction, operation and maintenance of all major

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thoroughfares, local streets, bikeways, walkways and other transportation systems. Funding for city transportation projects comes from several different sources: an ongoing 0.6 percent dedicated sales tax, Highway Users Tax, County Road and Bridge funds, State Highway Maintenance and Landscape Funds, and Moving Ahead for Progress in the 21st Century Act (MAP–21) federal funds. In November of 2013, Boulder voters passed two tax initiatives that increase the transportation fund by .15 percent dedicated sales tax annually for the next 16 years. This is the second year of incorporating the additional funding into the CIP budget process.

# Transportation Development Fund

The Transportation Development Fund accounts for development fees to be utilized for the construction of transportation capital improvements related to new development and growth. Funding for the Transportation Development Fund is provided primarily through the transportation excise tax (TET) revenues. The TET was instituted in the 1980s to fund transportation improvements related to growth and is paid by commercial and residential development.

#### Boulder Junction Improvement Fund

The Boulder Junction Improvement Fund was created in 2011 for the Boulder Junction Key Public

Improvements. Funding is provided from development related revenues generated in the Boulder Junction Area that will be reinvested into Key Public Improvements in this area.

Transportation Excise and Transportation and General Fund Construction Use Taxes collected from development in the area are being used on these improvements in addition to other money budgeted in the Transportation CIP and funds obtained from federal transportation grants (Pearl N. Multiway Boulevard and Multi-use Path). Other department funding sources are



Boulder Junction Improvements at Junction Place and Goose Creek.

also being used for these projects including Public Works Utilities (infrastructure upgrades) and Parks and Recreation (Boulder Junction Fund- new park facilities).

## Capital Bond Fund

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



# Current Focus for Capital Planning and Projects in 2016

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

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

# Highlights

Projects Expected to be Completed in 2015

- Pearl Parkway Multi-use Path TIP Project North side of Pearl from 30<sup>th</sup> to 47<sup>th</sup> and Multi-way Boulevard from 30<sup>th</sup> east to the railroad tracks.
- Diagonal 28th Street to East of 30th Street reconstruction and multi-modal improvements
- Foothills/Valmont Operational Improvements
- 63<sup>rd</sup> Street widening between Arapahoe and Valmont including a structure replacement over the Leggett ditch
- 28<sup>th</sup> Street Improvements from Pearl to Valmont including the completion of multi-use paths on both sides of 28<sup>th</sup> Street and the third bus/bike/right-turning vehicle lane
- 28th Street Multi-Use Path and On-Street Bicycle Facility Improvements from Iris to Yarmouth
- Baseline Underpass east of Broadway and associated Multi-use Path and sidewalk
   Improvements
- 29<sup>th</sup>/Valmont Safety Project with Federal Hazard Elimination Grant installation of a traffic signal and associated pedestrian improvements.

## Priority Projects for 2016

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



local match for these projects.

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

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

  Transportation Corridor Scoping public process and design

# Highlights of 2017-2021 Projects

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

# **Board Action**

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



Capital Improvements Programs.

# **Guiding Principles and Project Prioritization**

**CIP Guiding Principles** 

Airport Fund

The Airport Master Plan was updated in 2007, and its purpose is to assess current and future needs of the airport and provide a plan for facility and management improvements for the next 20 years. Recommended projects were identified and categorized into a Fiscally Constrained Plan, Action Plan, and a Vision Plan. Investments are focused on maintaining infrastructure and facilities. The Airport Fund is one of a handful of general aviation airports in Colorado which is not supported by a general fund. The airport is supported through user fees that leverage external funding from federal and state sources for improvements and capital maintenance. In addition to flight training and recreational use, the airport provides an emergency response role and fulfills the demand of the aviation business sector such as weather research and aviation—related design and manufacturing that would move outside of Boulder without the airport. The airport served as a key city facility in the September, 2013 flood emergency response effort.

# Transportation Funds

All proposed projects in the 2016–2021 CIP are consistent with the TMP, updated in 2014, and its budget guiding principles. The citywide CIP Guiding Principles share many of the same traits as the TMP Budget Guiding Principles including focusing on maintenance and safety of the existing system, leveraging external funding, and supporting community sustainability goals.

Maintenance of the existing system continues as the highest funding priority of the TMP and is reflected throughout the Transportation CIP and operating budget.

Transportation projects meet legal mandates such as ADA requirements for transportation improvements, and for purchasing and contract administration for projects receiving state/federal grants. Public safety is a key focus of all transportation projects – designs meet local, state and federal standards, and some funding is specifically for hazard eliminations like the 29<sup>th</sup>/Valmont project.

Leveraging funding is prevalent in the transportation CIP and extensive outside money is acquired using the limited city transportation dollars. Transportation also promotes community



partnerships by working with other agencies such as RTD, Boulder County, CU and CDOT. Transportation coordinates projects with other departments including community planning and sustainability, water/wastewater/storm, parks and recreation, and open space to implement improvements simultaneously to save construction and future maintenance costs. Transportation works to maintain adequate reserves and flexibility in the CIP and operating budgets to respond to emergencies and revenue fluctuations.

#### Prioritization

Aligning with the policies of the TMP is an important aspect of the Transportation Budget's guiding principles. The TMP calls for developing a balanced multimodal system that offers transportation choices. In council/board budget processes, a list of budget guiding principles has been developed and updated to reflect the positive vote in November, 2013 to approve a new tax for transportation maintenance. It includes priorities and strategies that are used to develop the Transportation CIP. The newly revised principles are:

## Transportation Budget Guiding Principles - Credible, Clear and Consistent

- As top priority, maintain and operate the existing, valuable multi-modal system, including investments in safety
- As additions are made to the system, address ongoing operation and maintenance needs
- Continue to advance innovations in the design, construction, operation and maintenance of the system
- Strategically enhance the Complete Street network, prioritizing projects that have maximum impact improving safety, mobility and efficiency
- Advance corridor studies integrating the city's Sustainability Framework and Resiliency
- Leverage external funds extending the ability of local dollars to implement city goals
- Continuously strive for efficiency and effectiveness in how work is accomplished
- Assure budget decisions are sustainable over time
- Keep in mind the goal of identifying long-term, sustainable funding that is tied to vehicle use

# Boulder Junction Improvement Fund Guiding Principles

As a part of the adopted Transit Village Area Plan (TVAP) (September 2007, Revised August 2010) and related 2007 TVAP Implementation Plan, several Key Public Improvements were identified for public funding with the following key guiding principles:

• Identify mechanisms to fairly distribute public improvement benefits and burdens among all

# **Transportation and Municipal Airport**



area property owners.

- Complete key connections and improvements needed ahead of new development.
- The publicly-funded Key Public Improvements should benefit the city as a whole or implement the vision and goals for the TVAP area.
- The proposed transportation connections in this area are consistent with the adopted TVAP Transportation Connections Plan and the TMP.

## Projects Not in Master Plans

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

# Projects Not Previously Identified in the CIP

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

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

# **Operation and Maintenance Impacts**

The City Council approved placing two tax initiatives on the November, 2013 ballot and both were passed by the Boulder voters. One tax is a bridge for six years, starting in 2014, and the other



tax is for the following ten years, starting in 2020. The two together result in 0.15 percent tax increase annually that will fund deferred and newly identified transportation maintenance needs and some key public improvements.

The Transportation division has been adding a significant portion of the transportation sales tax increases over the last few years into the maintenance and operations of the system and this provided a significant boost with the tax passed in November 2013.

# Deferred, Eliminated, or Changed Projects

# Transportation Fund

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

## Transportation Development Fund

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

# **Unfunded Projects and Emerging Needs**

The unfunded projects list in the Transportation Fund is informed by the area/corridor planning processes including next phase Civic Area planning, Envision East Arapahoe and 30<sup>th</sup> Street/Colorado Avenue planning. The transportation project needs identified in the plans are currently unfunded. Planning and design efforts would help inform future capital bond initiatives and potential leveraged funding opportunities, such as through competitive TIP or state grant opportunities. Also, Boulder Junction implementation may potentially have additional transportation connections needs that are not currently funded beyond the first phase of high priority Key Public Improvements in the Phase 1 area.

Quiet zone implementation to allow for quieter railroad crossings continues to come up as a community desire and is not currently funded. The current evaluation identifies approximately \$5 million in capital improvements needed for the city's railroad crossings to be Quiet Zone compliant.

# **Transportation and Municipal Airport**



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

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

		Co		. о дррготоц			To I Tojecteu	 3 Frojecteu	20/	zo i rojecteu	202	21 Projected	Amount	
W/TRANSPORTATION	Department Total	\$	56,338,000	\$ 8,774,500	\$ 7,788,500	\$	15,692,500	\$ 6,527,500	\$	11,027,500	\$	6,527,500	\$	-
CIP-CAPITAL ENHANCEMENT	Subtotal	\$	13,772,000	\$ 3,884,500	\$ 1,877,500	\$	6,127,500	\$ 627,500	\$	627,500	\$	627,500	\$	-
	19th St (Norwood to Sumac)	\$	257,000	\$ 257,000	\$ -	\$	-	\$ -	\$	-	\$	-	\$	-
	Arap Comp St Recon/Bldr Crk	\$	2,500,000	\$ 2,500,000	\$ -	\$	-	\$ -	\$	-	\$	-	\$	-
	Broadway Recon Violet to 36	\$	7,050,000	\$ 500,000	\$ 1,250,000	\$	5,300,000	\$ -	\$	-	\$	-	\$	-
	Greenways Program	\$	585,000	\$ 97,500	\$ 97,500	\$	97,500	\$ 97,500	\$	97,500	\$	97,500	\$	-
	Misc Development Coordination	\$	300,000	\$ 50,000	\$ 50,000	\$	50,000	\$ 50,000	\$	50,000	\$	50,000	\$	-
	Signal Maintenance & Upgrade	\$	200,000	\$ -	\$ -	\$	200,000	\$ -	\$	-	\$	-	\$	-
	TIP Local Match TMP	\$	2,880,000	\$ 480,000	\$ 480,000	\$	480,000	\$ 480,000	\$	480,000	\$	480,000	\$	-
CIP-CAPITAL MAINTENANCE	Subtotal	\$	14,402,000	\$ 1,694,000	\$ 1,694,000	\$	1,864,000	\$ 1,550,000	\$	6,050,000	\$	1,550,000	\$	-
	Deficient Street Light Pole Replace	\$	893,000	\$ 265,000	\$ 265,000	\$	-	\$ 121,000	\$	121,000	\$	121,000	\$	-
	Major Capital Reconstruction	\$	4,800,000	\$ 800,000	\$ 800,000	\$	800,000	\$ 800,000	\$	800,000	\$	800,000	\$	-
	Ped Facilities Repair, Replace,	\$	3,774,000	\$ 629,000	\$ 629,000	\$	629,000	\$ 629,000	\$	629,000	\$	629,000	\$	-
	Rehab Runway & Eastern Taxiway	\$	4,935,000	\$ -	\$ -	\$	435,000	\$ -	\$	4,500,000	\$	-	\$	-
CIP-CAPITAL PLANNING	Subtotal	\$	589,000	\$ 338,000	\$ 100,000	\$	151,000	\$ -	\$	-	\$	-	\$	-
TUDIES														
	Bldr County/City Joint TIP Projects		289,000	138,000	-	\$	151,000		\$		\$		\$	
	East Arapahoe Transp Corridor	\$	100,000	100,000	-	Ψ.	-	\$ -	\$		\$		\$	
	Trans Corridor 30th & Colorado	\$	200,000	\$ 100,000	\$ 100,000	\$	-	\$ -	\$	-	\$		\$	-
CIP-NEW ACILITY/INFRASTRUCTURE	Subtotal	\$	27,575,000	\$ 2,858,000	\$ 4,117,000	\$	7,550,000	\$ 4,350,000	\$	4,350,000	\$	4,350,000		-
	28th St - Valmont to Iris (Baseline)	\$	1,330,000	1,330,000		\$		\$	\$		\$		\$	-
	30th St and Colorado Bike/Ped	\$	7,500,000	\$ 500,000	\$ 1,300,000	\$	5,700,000	\$ -	\$	-	\$	-	\$	-
	Bikeway Facilities - Enhancements	\$	1,350,000	\$ 225,000	\$ 225,000	\$	225,000	\$ 225,000	\$	225,000	\$	225,000	\$	-
	BJ Traffic Signal Bluff St & 30th	\$	228,000	\$ -	\$ 228,000	\$	-	\$ -	\$	-	\$	-	\$	-
	BJ Traffic Signal Jct & Valmont	\$	304,000	\$ -	\$ 304,000	\$	-	\$ -	\$	-	\$	-	\$	-
	Boulder Junction - Develop Coord	\$	150,000	\$ 75,000	\$ 75,000	\$	-	\$ -	\$	-	\$	-	\$	
	Boulder Slough Multiuse Path 30th	\$	480,000	\$ 120,000	\$ 360,000	\$	-	\$ -	\$	-	\$	-	\$	-
	Ped Facs Enh Missing Links	\$	750,000	\$ 125,000	\$ 125,000	\$	125,000	\$ 125,000	\$	125,000	\$	125,000	\$	-
	TIP Local Match/TMP	\$	15,483,000	\$ 483,000	\$ 1,500,000	\$	1,500,000	\$ 4,000,000	\$	4,000,000	\$	4,000,000	\$	-

# Transportation and Municipal Airport



# Mapping

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



Project Name: 19th St (Norwood to Sumac)

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

**Department:** PW/TRANSPORTATION **Subcommunity:** NORTH BOULDER

Project Number: 310TR154NG BVCP Area: AREA I

CEAP Required: CEAP Status:

#### **Project Description**

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

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

#### Project Phasing

2016: Planning: \$257,000

#### **Public Process**

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

#### Interdepartmental and Interagency Collaboration

**Change From Past CIP** 

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

		ing	

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021	
Transportation	\$0	\$257,000	\$0	\$0	\$0	\$0	\$0	

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$257,000
Additional Annual Operating and Maintenance

Additional Annual

O&M:

Funding Source for

O&M:



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

Project at a Glance

Project Type: CIP-NEW FACILITY/INFRASTRUCTUR

Department: PW/TRANSPORTATION Subcommunity: MULTIPLE SUBCOMMUNITIES

Project Number: 310TD019NC BVCP Area: AREA I

CEAP Required: Yes CEAP Status: Completed 2001

#### **Project Description**

The 28th Street (Baseline to Iris) funding is for the implementation of complete street elements for all modes of transportation on the 28th Street corridor between Baseline and Iris. Recommended improvements include: urban design, landscaping, and streetscape elements throughout the corridor; transit amenities including queue jumps, transit stops and site furniture; bicycle and pedestrian facilities including constructing multi-use paths; adding raised crossings at free right turn lanes; and traffic efficiency elements including adding left turn lanes at various intersections and widening the Boulder Creek Bridge.

The CEAP for the southern section (Baseline to Arapahoe) and the northern section (Pearl to Iris) have been approved by City Council. Any of the middle section improvements from Arapahoe to Pearl will implement the Council approved BVRC Connections Plan.

This project requires coordination with the Utility Division for utility upgrades and modifications, with RTD for construction impacts to existing routes and on transit improvements, CDOT on design proposals because 28th Street is a State Highway, CU for any work along their frontage, Arts Commission on the solicitation and review of public art incorporated into the project, the Planning Department for proposed development projects and land use modifications as possible, and the Real Estate Division for the purchase of easements and ROW needed for the project.

#### **Project Phasing**

2015: Planning: \$0

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

#### **Public Process**

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan								
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021	
Transportation Development	\$1,888,853	\$470,000	\$0	\$0	\$0	\$0	\$0	

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$2,358,853

Additional Annual Operating and Maintenance

Additional Annual

O&M:

Funding Source for O&M:



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

Project at a Glance

CIP-NEW FACILITY/INFRASTRUCTUR Project Type:

Department: PW/TRANSPORTATION Subcommunity: Project Number: **BVCP Area:** 310TR743NC **CEAP Required: CEAP Status:** 

**Project Description** 

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

**Project Phasing** 

2014 Carryover

**Public Process** 

Interdepartmental and Interagency Collaboration

**Change From Past CIP** 

Capital Funding Plan Fund(s) Revised 2016 2017 2018 2019 2020 2021 2015 Requested Budget -Funding Current Year

Transportation \$2,572,762 \$860,000 \$0 \$0 \$0 \$0 \$0

> Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$3,432,762

Additional Annual Operating and Maintenance

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



Project Name: 30th St and Colorado Bike/Ped Under

Project at a Glance

Project Type: CIP-NEW FACILITY/INFRASTRUCTUR

 Department:
 PW/TRANSPORTATION
 Subcommunity:
 UNIVERSITY

 Project Number:
 310TR153NG
 BVCP Area:
 AREA I

CEAP Required: CEAP Status:

# **Project Description**

The University of Colorado's development of their East Campus will significantly increase bicycle, pedestrian and transit travel between the main and east campuses including the Colorado Avenue and 30th Street corridors. This connection will join the two campus areas with a safe grade separated crossing/underpass crossing Colorado Avenue and 30th Street. This project is included in the Transportation Master Plan. This project will provide direct access to transit stops serving the STAMPEDE, BOUND and 209 transit services and connect the University neighborhoods with the Park East and other neighborhoods in East Boulder. 30th Street is identified as a Regional Corridor in the DRCOG Regional Bicycle Corridor System. Colorado Avenue is within a 1/4 mile of the identified Boulder Creek Community Corridor of the DRCOG Regional Bicycle Corridor System and fulfills the function of that facility as a connection between the two campuses of the University of Colorado a major regional employer and institution. The final configuration will be determined through the city's public involvement and design analysis process.

### **Project Phasing**

2015 - 2017: Planning: \$2,000,000 2017: Acquisition: \$300,000 2018: Construction: \$5,700,000

#### **Public Process**

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

# Interdepartmental and Interagency Collaboration

Change From Past CIP

**Funding Source for** 

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

	Fund	

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021	•
Transportation	\$500,000	\$500,000	\$1,300,000	\$5,700,000	\$0	\$0	\$0	
					Funding t	o Completion	90	

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$8,000,000

Additional Annual Operating and Maintenance

Additional Annual

O&M: O&M:



**Project Name:** Arap Comp St Recon/Bldr Crk Underpa

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: Subcommunity: PW/TRANSPORTATION CENTRAL BOULDER

**Project Number:** 310TR156NC **BVCP Area:** AREA I

**CEAP Required: CEAP Status:** No

### **Project Description**

This project will entail reconstruction of the street into concrete from 15th Street to Broadway, including pavement removal and reconstruction, undergrounding utility improvements, including storm sewer installation, reconstruction of deteriorated sidewalks, installation of ADA-compliant curb ramps, urban design and landscaping elements. This project will be combined with the culture, community and safety tax 13th/Arapahoe Underpass project. The 13th and Arapahoe underpass project will construct a new box culvert to serve as a grade-separated pedestrian/bike underpass. The box culvert will be east of the existing bridge and the multi-use path currently under the bridge span would be removed.

#### Project Phasing

This project is estimated to cost \$2.5 million.

#### **Public Process**

Staff will hold public meetings and meet with adjacent property owners to acquire input for the project.

#### Interdepartmental and Interagency Collaboration

**Change From Past CIP** 

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

	0.00
Capital Funding P	

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Transportation	\$0	\$2,500,000	\$0	\$0	\$0	\$0	\$0
					Funding to	o Completion	\$0

Future Unfunded \$0

Total Funding Plan: \$2,500,000

Additional Annual Operating and Maintenance

**Additional Annual** O&M:

**Funding Source for** 

O&M:



Project Name: Bikeway Facilities - Enhancements

Project at a Glance

Project Type: CIP-NEW FACILITY/INFRASTRUCTUR

Department:PW/TRANSPORTATIONSubcommunity:SYSTEM-WIDEProject Number:310TR692OCBVCP Area:SYSTEM-WIDE

CEAP Required: No CEAP Status: N/A

#### **Project Description**

The bikeway facilities funding is an ongoing program for smaller bikeway facilities. The construction of bike facilities is included in almost all transportation CIP projects. This program provides additional funding for smaller bikeway projects and/or projects not specifically associated with other capital projects.

Projects constructed with this funding meet the Transportation Master Plan goal of developing an integrated multimodal transportation system. Projects will be consistent with the current TMP Bicycle System Plan and the projects are prioritized yearly. This program also allows for construction of opportunistic improvements and construction of other identified bike projects. Types of projects include providing missing links and enhanced crossings.

Annual funding was increased starting in 2014 due to the passage of the 2013 Transportation Tax.

#### **Project Phasing**

In 2015 and 2016, funds will be spent on completing the southern confluence path connection along Valmont Road to Indian Road and for path connections to the east of the Valmont Bikepark. In further out years, funds will be spent on completing multi-use path connections in the confluence area as well as identifying and construction improvements to improve connectivity to the future US 36 Bikeway.

### **Public Process**

Transportation

#### Interdepartmental and Interagency Collaboration

This program is coordinated with other departments depending on the particular project. Currently projects are being coordinated with the Greenways program when a project is within the Greenways system, and the Open Space Department and the Parks Department if a project is on or adjacent to Open Space property or Parks property. Additionally, the confluence path project will be coordinated with CDOT's US36 Wetlands Mitigation Project in this same area, the Open Space/Mountain Parks Department because the proposed paths are on Open Space property and Boulder County on permitting including flood permitting as the project is outside of the city limits but on city property.

#### Change From Past CIP

Annual funding increased by \$100,000 due to 2013 Transportation Tax

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021

\$225,000

\$225,000

\$225,000

Funding to Completion \$0

Future Unfunded \$0

\$225,000

\$225,000 \$225,000

Total Funding Plan: \$1,729,813

Additional Annual Operating and Maintenance

Additional Annual Funding Source for O&M:

\$379,813

Additional Annual O&M Description:

Minimal incremental increases in on-going maintenance costs.



Project Name: Broadway Recon Violet to 36

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

**Department:** PW/TRANSPORTATION **Subcommunity:** NORTH BOULDER

Project Number: 310TR152NG BVCP Area: AREA I

CEAP Required: CEAP Status:

### **Project Description**

This section of Broadway is in deteriorated condition but also has high levels of bicycling, walking, vehicular and transit travel. This section of roadway is a gateway to north Boulder and the downtown and there has been a major redevelopment of the

area with additional residential and commercial space. it's anticipated that there will be more redevelopment in the future. The Low Street bicycling network evaluation has identified this corridor for bicycling and pedestrian improvements to accommodate a range of bicyclists and ability levels. The proposed improvements will reconstruct the deteriorated pavement condition of the roadway, provide underground utility upgrades and provide additional bicycle, pedestrian and transit improvements to address and future travel needs. Connections to adjacent intersecting transportation facilities will be made.

#### **Project Phasing**

2015 - 2017: Planning: \$1,750,000 2017: Acquisition: \$250,000 2018: Construction: \$5,300,000

#### **Public Process**

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

#### Interdepartmental and Interagency Collaboration

Change From Past CIP

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

#### Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Transportation	\$1,250,000	\$500,000	\$1,250,000	\$5,300,000	\$0	\$0	\$0
					Funding to	. Completion	sn.

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$8,300,000

Additional Annual Operating and Maintenance

Additional Annual Funding Source for

O&M: O&M:



Project Name: BJ Traffic Signal Bluff St & 30th

Project at a Glance

Project Type: CIP-NEW FACILITY/INFRASTRUCTUR

Department: PW/TRANSPORTATION Subcommunity: CROSSROADS

**BVCP Area: Project Number:** 310BJ002NC AREA I

**CEAP Required: CEAP Status:** No

#### **Project Description**

This project includes fronting the design/construction cost of a new traffic signal at the Intersection of Bluff Street and 30th Street. This project was included in the list of Key Public Improvements for public funding as part of the Transit Village Area Plan (TVAP) - Implementation Plan, and is also a part of the TVAP Connections Plan and the Transportation Master Plan. This project supports both TVAP and TMP plan goals of creating a fine-grained, multimodal network of transportation connections that supports a pedestrian friendly environment, creates safe and convenient access to transit, and supports necessary connections for area redevelopment. In particular, this new traffic signal will facilitate transit and traffic movements, provide safe pedestrian crossings, and facilitate connections from surrounding neighborhoods and future redevelopment projects. Implementation is anticipated to be coordinated with adjoining private redevelopment. Reimbursement for a portion of these City

This project is anticipated to occur in 2017, in conjunction with future private redevelopment near this intersection. The timing of private development projects is uncertain, which creates some uncertainties in this public project implementation.

#### **Project Phasing**

2017: Planning: \$25,000 2017: Acquisition: \$0 2017: Construction: \$203,000

funds may be obtained from private area redevelopment.

#### **Public Process**

The development and adoption of the TV AP was the result of a 3-year planning process that included design charrettes, open houses and numberous meetings with property owners in the area. The plan was approved by the Planning Board and City

# Interdepartmental and Interagency Collaboration

The TVAP was a coordinated multi-department design effort between Planning, Public Works (Transportation and Utilities), Housing and Human Services, Parks and Recreation, Downtown and University Hill Management Divisions and Parking Services and other departments. These departments continue to collaborate on private development coordination issues in Boulder Junction, implementation of key public improvements and coordination with RTD on the development of a bus transfer facility (as part of Depot Square development), possible other future transit-oriented development and future northwest rail facilities.

# Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Bidr Junction Cap Imprvmt	\$0	\$0	\$228,000	\$0	\$0	\$0	\$0

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$228,000

Additional Annual Operating and Maintenance

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

Additional Annual O&M Description:

Project may result in minimal incremental increases in on-going maint



Project Name: BJ Traffic Signal Jct & Valmont

Project at a Glance

Project Type: CIP-NEW FACILITY/INFRASTRUCTUR

Department: PW/TRANSPORTATION Subcommunity: CROSSROADS

Project Number: 310BJ003NC BVCP Area: AREA I

CEAP Required: No CEAP Status:

#### **Project Description**

This project includes fronting the design/construction cost of a new traffic signal at the intersection of proposed Junction Place and Valmont Road.

The development and adoption of the TVAP was the result of a 3-year planning process that included design charrettes, open houses and numerous meetings with property owners in the area. The plan was approved by the Planning Board and City Council.

The TVAP was a coordinated multi-department design effort between Planning, Public Works (Transportation and Utilities), Housing and Human Services, Parks and Recreation, Downtown and University Hill Management Divisions and Parking Services and other departments. These departments continue to collaborate on private development coordination issues in Boulder Junction, implementation of key public improvements and coordination with RTD on the development of a bus transfer facility (as part of Depot Square development), possible other future transit-oriented development and future northwest rail facilities.

This project was included in the list of Key Public Improvements for public funding as part of the Transit Village Area Plan (TVAP) – Implementation Plan, and is also a part of the TVAP Connections Plan and the Transportation Master Plan. This project supports both TVAP and TMP plan goals of creating a sine-grained, multimodal network of transportation connections that supports a pedestrian friendly environment, creates safe and convenient access to transit, and supports necessary connections for area redevelopment. In particular, this new traffic signal will facilitate transit and traffic movements, provide safe pedestrian crossings, and facilitate connections from surrounding neighborhoods and future redevelopment projects. Implementation is anticipated to be coordinated with adjoining private redevelopment. Reimbursement for a portion of these City funds may be obtained from private area redevelopment.

This project is anticipated to occur in 2017, in conjunction with future private redevelopment near this intersection. The timing of private development projects is uncertain, which creates some uncertainties in this public project implementation.

#### **Project Phasing**

2017: Planning: \$25,000 2017: Acquisition: \$0 2017: Construction: \$279,000

### Public Process

### Interdepartmental and Interagency Collaboration

# Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Bldr Junction Cap Imprvmt	\$0	\$0	\$304,000	\$0	\$0	\$0	\$0

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$304,000
Additional Annual Operating and Maintenance

Additional Annual Funding Source for

O&M: O&M:

**Additional Annual O&M Description:** 

Project may result in minimal incremental increases in on-going maint



**Project Name:** Bldr County/City Joint TIP Projects

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: PW/TRANSPORTATION Subcommunity: **GUNBARREL** Project Number: 310TR157NG **BVCP Area:** AREA II

**CEAP Required: CEAP Status:** 

### **Project Description**

In addition to the city TIP projects, the city is also a funding partner on two Boulder County TIP projects. This funding is identified in the 2016-2021 CIP under the Boulder County/City Joint TIP Projects line item. The total city contribution is \$289k. The two projects are bike/pedestrian infrastructure improvements:

- 71st St Multi-Use Path (Winchester to Idylwild Trail) \$151k
- Williams Fork Trail Multi-Use Path (63rd to Twin Lakes) \$138k

#### **Project Phasing**

2016 - Planning 2017 - Planning/Acquisition

2018 - Construction

### **Public Process**

	ncv Collaboration

# Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Transportation	\$50,000	\$138,000	\$0	\$151,000	\$0	\$0	\$0
					Fundin	g to Complet	tion \$0

Future Unfunded \$0

Total Funding Plan: \$339,000

Additional Annual Operating and Maintenance

**Additional Annual Funding Source for** 

O&M: O&M:



Project Name: Boulder Junction - Develop Coord

Project at a Glance

Project Type: CIP-NEW FACILITY/INFRASTRUCTUR

Department: PW/TRANSPORTATION Subcommunity: CROSSROADS

Project Number: 310BJ001OC BVCP Area: AREA I

CEAP Required: No CEAP Status:

#### **Project Description**

This project began in 2011, and funding is for ongoing planning and development coordination within the Phase I area of Boulder Junction, bounded by 30th Street, BNSF Railroad, Valmont Road and the Irrigation Ditch/Boulder Slough (south of Pearl Parkway). Over the life of this project, work includes base mapping for the Phase I Boulder Junction area, conceptual design and cost estimate updates for identified and unidentified possible Key Public Improvements, engineering support, Pearl electrical undergrounding costs and coordination, and coordination of various public improvements with area provide development projects.

This project is necessary as part of implementation and coordination associated with the city-funded Key Public Improvements as part of the Transit Village Area Plan (TVAP)—Implementation Plan and related private development in the Boulder Junction area. The transportation connections as part of the TVAP Connections Plan are also included in the Transportation Master Plan, and support both plan goals of creating a fine-grained, multimodal network of transportation connections that support a pedestrian friendly environment, create safe and convenient access to transit, and support necessary connections for area redevelopment.

### Project Phasing

Close coordination with Community Planning and Sustainability, Public Works – Utilities, and the Parks Department in order to have a comprehensive and coordinated plan between the departments and agencies for the development of the corridors. The University of Colorado at Boulder is a major property owner on both of these corridors and the proposed build out of the campus will require a connected transportation system between the various housing, classroom and office spaces that will exist in this area.

#### **Public Process**

The development and adoption of the TVAP was the result of a 3-year planning process that included design charrettes, open houses and numerous meetings with property owners in the area. The plan was approved by the Planning Board and City Council

### Interdepartmental and Interagency Collaboration

The TVAP was a coordinated multi-department design effort between Planning, Public Works (Transportation and Utilities), Housing and Human Services, Parks and Recreation, Downtown and University Hill Management Divisions and Parking Services and other departments. These departments continue to collaborate on private development coordination issues in Boulder Junction, implementation of key public improvements and coordination with RTD on the development of a bus transfer facility (as part of Depot Square development), possible other future transit-oriented development and future northwest rail facilities.

#### **Change From Past CIP**

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Bldr Junction Cap Imprvmt	\$86,017	\$75,000	\$75,000	\$0	\$0	\$0	\$0

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$236,017

Additional Annual Operating and Maintenance

O&M:

Additional Annual

O&M:

**Funding Source for** 



Project Name: Boulder Slough Multiuse Path 30th

Project at a Glance

Project Type: CIP-NEW FACILITY/INFRASTRUCTUR

Department: PW/TRANSPORTATION Subcommunity: CROSSROADS

Project Number: 310TR151NG BVCP Area: AREA I

CEAP Required: CEAP Status:

### **Project Description**

Construction of a 10 foot wide multi-use path along the Boulder Slough from 30th Street to 3100 Pearl and a bicycle/pedestrian bridge crossing the Boulder Slough for bidirectional bicycle/pedestrian travel connecting to the multi-use path west and east of this project. Installation of signage and wayfinding with destinations and distances noted.

#### Project Phasing

2015: Planning: \$120,000 2016: Acquisition: \$120,000 2017: Construction: \$360,000

#### **Public Process**

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

# Interdepartmental and Interagency Collaboration

Change From Past CIP

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

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Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021	
Transportation	\$120,000	\$120,000	\$360,000	\$0	\$0	\$0	\$0	
					Fundin	g to Complet	tion \$0	

unding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$600,000

Additional Annual Operating and Maintenance

Additional Annual Funding Source for

O&M: O&M:



Project Name: Deficient Street Light Pole Replace

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PW/TRANSPORTATIONSubcommunity:SYSTEM-WIDEProject Number:310TR001OCBVCP Area:SYSTEM-WIDE

CEAP Required: No CEAP Status: N/A

### **Project Description**

This project will provide funds to be paid to Xcel Energy for the replacement of Xcel Energy street light poles that are structurally deficient due to corrosion or physical impact damage. On site inspection by Xcel has revealed 155 poles that require immediate replacement. 54 poles require replacement within one year. 217 poles require replacement within two to three years, and 99 poles require replacement within five to six years. Based on historic cost data, Xcel estimates the average replacement cost to be \$2,439 per pole. This street light repair project has been mandated by Xcel Energy and is consistent with their practice in communities throughout the front range at this time.

### **Project Phasing**

2015 - 2021: Construction: \$1,214,000

### **Public Process**

### Interdepartmental and Interagency Collaboration

#### Change From Past CIP

Capital Funding Plan								
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021	
Transportation	\$466,000	\$265,000	\$265,000	\$0	\$121,000 Funding	\$121,000 to Completion	\$121,000 n \$0	

Future Unfunded \$0

Total Funding Plan: \$1,359,000

Additional Annual Operating and Maintenance

Additional Annual Funding Source for

O&M: O&M:

Additional Annual O&M Description:

Funding will repair existing poles, lessening on-going costs



Project Name: East Arapahoe Transp Corridor Study

Project at a Glance

Project Type: CIP-CAPITAL PLANNING STUDIES

Department: PW/TRANSPORTATION Subcommunity: MULTIPLE SUBCOMMUNITIES

Project Number: 310TR480NC BVCP Area: AREA I

CEAP Required: No CEAP Status:

### **Project Description**

The city is beginning a multi-departmental Envision East Arapahoe planning effort on Arapahoe between Folsom and the eastern city limits. This initial planning process is expected to be completed in 2014 and is anticipated to conceptually identify some key transportation projects. As a result of the city-wide process that will result on East Arapahoe, transportation anticipates this funding in 2015 and 2016 will be used to further study and complete a next level of planning and coordination with agency partners such as CDOT, RTD and CU to identify the individual projects and the associated costs and priorities so that the projects can be included and implemented in later capital project funding.

### **Project Phasing**

2016: Planning: \$100,000

#### **Public Process**

### Interdepartmental and Interagency Collaboration

Close coordination with Community Planning & Sustainability to better integrate land use and transportation; Public Works - Utilities on replacement, modifications and updates to the city's utilities systems; the Parks Department along the golf course frontage; CDOT for design review and approval (Arapahoe is a CDOT owned facility); University of Colorado - Boulder along CU's frontage and to enhance connections to the planned redevelopment on CU's East Campus; and RTD on current transit facilities, future planned bus rapid transit and associated stop design and amenities.

# Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Transportation	\$146,183	\$100,000	\$0	\$0	\$0	\$0	\$0

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$246,183

**Additional Annual Operating and Maintenance** 

Additional Annual

&M:

Funding Source for O&M:



Project Name: Major Capital Reconstruction

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department: PW/TRANSPORTATION Subcommunity: SYSTEM-WIDE

 Project Number:
 310TR003OC
 BVCP Area:

 CEAP Required:
 No
 CEAP Status:

#### **Project Description**

The Major Capital Reconstruction project provides funding to repair existing transportation assets that are close to or at the end of their useful life. Repairs could be for roadway, bikeway, pedestrian or transit capital assets. This funding is a result of the transportation tax that passed in November of 2013. The majority of the tax dollars were for maintenance of our existing transportation assets. This project will allow major assets to be replaced or repaired and the specific project identification process and prioritization will start with the initial funding year of 2015.

A portion of the 2015 budget, the first year of funding this category, will be used to evaluate and prioritize the various capital repairs such as major street reconstruction, bridge crossings and retaining walls. This item is similar to the 2011 capital bond category titled "Replace substandard bridges, structures, signs and systems." This funding will provide the ability to complete the capital repairs that are not eligible for grant funding or to be used as leveraged funds for this type of project as opportunities rise.

#### **Project Phasing**

\$800,000 annually

#### **Public Process**

Public processes will be identified as the individual projects are identified. If assets are replaced in the same capacity as they exist today, the public will be notified about the construction impacts. If there are substantive changes to the asset, a public process will be identified and completed.

### Interdepartmental and Interagency Collaboration

Change From Past CIP

Transportation will coordinate with the Utilities Department on upgrades, modifications or improvements to existing utilities as identified in each project; the Planning Department to coordinate with any adjacent planned development; and other impacted departments and agencies depending on the location of the repairs, such as the Parks Department, DUHMD, CU or CDOT if the project exists on their property or adjacent to their property.

Capital Fun	ding Plan

Suprair anding rian							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Transportation	\$750,000	\$800,000	\$800,000	\$800,000	\$800,000	\$800,000	\$800,000

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$5,550,000

Additional Annual Operating and Maintenance

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

Additional Annual O&M Description:

Repair of existing assets will reduce on-going maintenance costs



Project Name: Misc Development Coordination

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: PW/TRANSPORTATION Subcommunity: SYSTEM-WIDE **BVCP Area:** Project Number: 310TD004OC SYSTEM-WIDE

**CEAP Required: CEAP Status:** 

### **Project Description**

This ongoing funding is intended to construct infrastructure improvements in coordination with or prompted by potential private development. Throughout the year, situations arise where infrastructure improvements required in the vicinity of a proposed development should be made at the same time as the development, and for which a developer cannot be required to construct. Improvements that are typically included are bike and pedestrian, functional efficiency, safety, system preservation, and transit system improvements. This project is growth related because it addresses needs from new development. A major goal in the Transportation Master Plan is to create an integrated multimodal system and one that is supportive of land use patterns. In 2014 and 2015, the money will be used for issues that arise during the year that are small items required to be constructed as a result of development or to coordinate with a development project. The projects are not known at this time.

# **Project Phasing**

\$50,000 annually

#### **Public Process**

Projects generally require coordination with adjacent neighborhoods and property owners.

#### Interdepartmental and Interagency Collaboration

**Change From Past CIP** 

Close coordination with the Development Review work group and the Planning Department is required as this money is to fund improvements or connections adjacent to or required by development that are not the responsibility of the developer.

Capital Funding Plan								
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021	
Transportation Development	\$47,491	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$347,491

**Additional Annual Operating and Maintenance** 

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

### Additional Annual O&M Description:

May result in minimal incremental increases in ongoing maintenance



Project Name: Ped Facs Enh Missing Links Crossing

Project at a Glance

Project Type: CIP-NEW FACILITY/INFRASTRUCTUR

Department: PW/TRANSPORTATION Subcommunity: MULTIPLE SUBCOMMUNITIES

Project Number: 310TR112OC BVCP Area: SYSTEM-WIDE

CEAP Required: No CEAP Status:

#### **Project Description**

The Pedestrian Facilities budget is an ongoing funding program that includes the installation of missing sidewalk links and pedestrian crossing/safety treatments and potentially social paths and sidewalk widening improvements. The list of identified missing sidewalk links has been prioritized for construction. Crossing treatment improvements are prioritized citywide and include median refuge islands, crosswalk lighting, flashing signs, neck-downs, signing, lighting and/or pedestrian signals. This program meets the Transportation Master Plan goal of creating an integrated, multimodal transportation system emphasizing the role of the pedestrian mode as the primary mode of travel as it is the beginning and end of every travel trip. Last year the program budget went towards a portion of the construction cost for the pedestrian crossing on Spine Rd. at Gunpark Dr. and design and construction of the Valmont Rd. path pedestrian bridge. In 2014, the money will be spent on pedestrian crossing location at Spine Road and Chapparal Court, Table Mesa and Yale, and Broadway and Poplar. This funding was increased by \$50,000 starting in 2014 due to the passage of the 2013 Transportation Tax.TAB approved the Proposed Prioritized list of Missing Sidewalk Links on May 10, 2004. TAB made a recommendation to support the use of the Pedestrian Crossing Treatment Installation Guidelines in 2005 and the document went to the City Council as an information item in 2006. These guidelines were updated in 2012. The public process for installing missing sidewalk links is on-going and may involve a process for one or more locations per year. Staff works with neighborhoods and adjacent property owners on individual improvements.

Coordination with the Parks Department – City Forester – is required when the missing links are impacting existing street trees and the Utilities Department to address any utility conflicts.

### **Project Phasing**

#### **Public Process**

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Transportation	\$230,950	\$125,000	\$125,000	\$125,000	\$125,000	\$125,000 to Completion	\$125,000

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$980,950

**Additional Annual Operating and Maintenance** 

Additional Annual Funding Source for

O&M: O&M:

Additional Annual O&M Description:

Adjacent property owners are responsible for sidewalk maintenance.



Project Name: Ped Facilities Repair, Replace, ADA

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PW/TRANSPORTATIONSubcommunity:SYSTEM-WIDEProject Number:310TR773OCBVCP Area:SYSTEM-WIDE

CEAP Required: No CEAP Status:

# **Project Description**

This ongoing program allows for repair, replacement and construction of existing and new sidewalks and construction of access ramps. Sidewalk repair priorities have been established in the Sidewalk Repair Program and yearly funding is spent accordingly. Compliance with ADA is resulting in additional expenditures for access ramps and driveway modifications. This program meets the Transportation Master Plan goal of creating an integrated, multimodal transportation system, emphasizing the role of the pedestrian mode as the primary mode of travel as it is in the beginning and end of every travel trip. The program also meets federal ADA requirements of working towards bringing sidewalks and access ramps up to the current federal standards. And, the TMP investment policies identify maintenance as the highest priority item to find.

# **Project Phasing**

In 2014, \$629,000 will be spent on design, survey, project management, and construction for the 2014 annual Sidewalk Repair Program in the downtown area. This area, generally between 9th Street and 20th Street from Arapahoe Road to Spruce Street, is expected to be complete this year. In 2015 the program will begin work in the area west of Broadway between Arapahoe Road and Baseline Road.

#### **Public Process**

A neighborhood meeting is held for identified repair area owners in advance of the work starting and individual notices are mailed out yearly to the adjacent property owners.

#### Interdepartmental and Interagency Collaboration

Coordination with the Parks Department – City Forester is required adjacent to city street trees to minimize impacts to the trees. Coordination with the city Utility Division regarding water meter location and relocation if possible. The work in the downtown area will be coordinated with DUHMD and the Parks Department because they maintain various elements in this area.

#### **Change From Past CIP**

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Transportation	\$1,049,185	\$629,000	\$629,000	\$629,000	\$629,000	\$629,000	\$629,000
					Funding	to Completio	n \$0

Future Unfunded \$0

Total Funding Plan: \$4,823,185

Additional Annual Operating and Maintenance

Additional Annual Funding Source for

O&M: O&M:

### Additional Annual O&M Description:

Adjacent property owners are generally responsible for sidewalk maint



**Project Name:** Rehab Runway & Eastern Taxiway

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department: PW/TRANSPORTATION Subcommunity: EAST BOULDER

**BVCP Area:** Project Number: 310AP001NG AREA I

**CEAP Required:** No **CEAP Status:** 

# **Project Description**

Project includes subgrade stabilization, re-paving and re-painting of Runway 8/26 and eastern half of Taxiway Alpha. Design will begin in 2018 and construction is scheduled to begin in 2020.

# **Project Phasing**

Planning - \$435,000 Construction - \$4,500,000 No phases in 2015

### **Public Process**

# Interdepartmental and Interagency Collaboration

### Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Airport	\$0	\$0	\$0	\$435,000	\$0	\$4,500,000	\$0
					Funding	to Completion	\$0

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$4,935,000

Additional Annual Operating and Maintenance

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

O&M:



Project Name: Signal Maintenance & Upgrade

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department:PW/TRANSPORTATIONSubcommunity:SYSTEM-WIDEProject Number:310TR778OCBVCP Area:SYSTEM-WIDE

CEAP Required: No CEAP Status:

#### **Project Description**

The Signal Maintenance and Upgrade project is an on-going program that is used for the installation of growth-related new traffic signals and signal upgrades. Budgeting as a capital project at \$200,000 every four years as opposed to budgeting one-quarter of this amount every year is consistent with the program implementation, as this is approximately the cost to signalize or upgrade one intersection. Funding was available in 2014 and will be again in 2018.

The decision to install a new traffic signal is made on the basis of a signal warrant study, which uses data collected at the study location (peak period traffic volumes and delay, accident history) to determine if the benefits of a traffic signal at that location (potential for reduced side street delay during peak periods, increased pedestrian and cyclist access, potential for reduction in right-angle accidents) outweigh the downside (increased main street delay, increased side street delay during off-peak periods, increased pedestrian and cyclist delay during off-peak periods, potential for increase in rear-end accidents). Locations in Boulder that have been identified as potential future signal locations are studied periodically. If there are multiple locations where new signals are desired, they are prioritized based on the magnitude of the identified benefit at each location.

Signalized intersections meet the Transportation Master Plan goals of helping to create a fine-grained, multimodal network of transportation connections that support a bicycle and pedestrian friendly environment by providing better and safer access across busy streets at peak times.

This funding could also be used for growth related reconstruction of existing traffic signals, to provide operational benefits (such as adding double left-turns), or to address deficiencies (such as aging, corroded poles).

#### **Project Phasing**

No phases identified

#### **Public Process**

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Transportation Development	\$200,000	\$0	\$0	\$200,000	\$0	\$0	\$0

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$400,000

Additional Annual Operating and Maintenance

Additional Annual

O&M:

Funding Source for O&M:



**Project Name:** Trans Corridor 30th & Colorado

Project at a Glance

Project Type: CIP-CAPITAL PLANNING STUDIES

Department: PW/TRANSPORTATION Subcommunity: MULTIPLE SUBCOMMUNITIES

310TR479OC **BVCP Area: Project Number:** AREA I

**CEAP Required: CEAP Status:** No

### **Project Description**

The city is anticipated to begin a multi-departmental 30th Street and Colorado Avenue Corridor planning effort in 2015. This planning process is expected to begin in 2015 and is anticipated to conceptually identify some key transportation projects. As a result of the city-wide process that will result on 30th Street and on Colorado Avenue, transportation anticipates this funding in 2016 and 2017 will be used to further study and complete a next level of planning to identify the individual projects and the associated costs and priorities so that the projects can be included and implemented in later capital project funding. This process will be identified to coordinate with the TIP Funding Grant received for this project.

#### **Project Phasing**

\$100,000

#### **Public Process**

### Interdepartmental and Interagency Collaboration

Close coordination with Community Planning and Sustainability, Public Works - Utilities, and the Parks Department in order to have a comprehensive and coordinated plan between the departments and agencies for the development of the corridors. The University of Colorado at Boulder is a major property owner on both of these corridors and the proposed build out of the campus will require a connected transportation system between the various housing, classroom and office spaces that will exist in this area.

# Change From Past CIP

Capital Funding Plan					
Fund(s)	Revised 2015	2016 Requested	2017	2018	

Budget -Funding Current

Year \$0 \$100,000 \$100,000

\$0 Funding to Completion \$0

Future Unfunded \$0

2020

2021

\$0

2019

\$0

Total Funding Plan: \$200,000

**Additional Annual Operating and Maintenance** 

**Additional Annual** 

Transportation

**Funding Source for** 

O&M:



**Project Name:** TIP Local Match TMP Implementation

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: PW/TRANSPORTATION Subcommunity: SYSTEM-WIDE

**BVCP Area:** Project Number: 310TD052OG AREA I

**CEAP Required: CEAP Status:** 

#### **Project Description**

This ongoing funding is for the implementation of projects identified in the Transportation Master Plan that will be prioritized in the current update to the master plan. This money will also be used as local match to leverage potential federal and state funding for projects submitted in future year's DRCOG TIP submittal process (the next process starts in 2014 with funding available in 2015) or other funding match opportunities, developing conceptual plans for projects prior to submitting for possible external funding, or for smaller high priority projects identified through the TMP process. If the city succeeds in acquiring external project funds, this money will become the city's funding match. And, in this case, new projects will be created in the CIP that will include the external funding and the city's match.

This budget item allows flexibility to be ready to implement high priority projects that are identified through the TMP update planned to be completed in 2014. The highest priority projects identified in the TMP that best meet the DRCOG scoring criteria are submitted to compete for federal funding. Prior to finalizing the list of projects to submit for DRCOG TIP funding, staff will work with TAB to identify the best projects and then submit the project list to council for their review prior to submitting for potential funding.

The annual funding amounts in this category have increased from last year's CIP to allow flexibility and to be ready to implement projects defined in the TMP update that will be completed in 2014.

#### **Project Phasing**

\$480,000 annually

### **Public Process**

Public process, CEAP and design to be determined in relationship to specific projects.

#### Interdepartmental and Interagency Collaboration Change From Past CIP

As the projects are identified and refined, necessary interdepartmental coordination will be identified.

#### Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Transportation Development	\$0	\$480,000	\$480,000	\$480,000	\$480,000	\$480,000	\$480,000

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$2,880,000

Additional Annual Operating and Maintenance

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

O&M:



Project Name: TIP Local Match/TMP Implementation

Project at a Glance

Project Type: CIP-NEW FACILITY/INFRASTRUCTUR

Department: PW/TRANSPORTATION Subcommunity: MULTIPLE SUBCOMMUNITIES

 Project Number:
 310TR052OG
 BVCP Area:
 SYSTEM-WIDE

 CEAP Required:
 No
 CEAP Status:
 As appropriate

#### **Project Description**

This ongoing funding is for the implementation of projects identified in the Transportation Master Plan that will be prioritized in the current update to the master plan. This money will also be used as local match to leverage potential federal and state funding for project submitted in future years' DRCOG TIP submittal process (the next process starts in 2014 with funding available for 2015) or other funding match opportunities, developing conceptual plans for projects prior to submitting for possible external funding or for smaller high priority projects identified through the TMP process. If the city succeeds in acquiring external project funds, this money will become the city's funding match. And, in this case, new projects will be created in the CIP that will include the external funding and the city's match.

This budget item allows flexibility to be ready to implement high priority projects that are identified through the TMP update planned to be completed in 2014. The highest priority projects identified in the TMP that best meet the DRCOG scoring criteria are submitted to compete for federal funding. Prior to finalizing the list of projects to submit for DRCOG TIP funding, staff will work with TAB to identify the best projects and then submit the project list to council for their review prior to submitting for potential funding.

The annual funding amounts in this category have increased from last year's CIP to allow flexibility and to be ready to implement projects defined in the TMP update that will be completed in 2014.

#### **Project Phasing**

2015 - 2021: Planning: \$18,444,433

#### **Public Process**

Public process, CEAP and design to be determined in relationship to specific projects.

# Interdepartmental and Interagency Collaboration

Change From Past CIP

As the projects are completed and refined, necessary interdepartmental coordination will be identified.

# Capital Funding Plan

Fund(s) Revised 2016 2017 2018 2019 2020 2021

2015 Requested Budget - Funding Current

Year

Transportation \$1,170,433 \$483,000 \$1,500,000 \$4,000,000 \$4,000,000 \$4,000,000

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$16,653,43

#### **Additional Annual Operating and Maintenance**

Additional Annual Funding Source for

O&M: O&M:

City of Boulder
UTILITIES
2016-2021 Capital Improvement Program

# **Overview of Department Mission**

The Utilities Division is responsible for the oversight of water, wastewater, and stormwater and flood services. The mission of the Utilities Division is to provide quality water services, as desired by the community, in a manner which emphasizes efficient management of fiscal and natural resources and protects human and environmental health. These services include:

- Wastewater Collection and Treatment
- Water Resources Management and Delivery
- Potable Water Treatment
- Water Quality Protection
- Flood/Emergency Planning, Management and Response
- Stormwater Collection and Conveyance
- Infrastructure Construction and Maintenance

The Utilities Division is also responsible for the Greenways Program, which is described following this section.

# **Funding Overview**

Each of the city's three utility funds is established as a separate enterprise fund designed to finance and account for each utility's facilities and services. Funding for the Utilities Division capital improvement program (CIP) is derived primarily from monthly utility fees. Any revenue increases for 2016 will be reviewed by the Water Resources Advisory Board and considered by City Council. In addition to the monthly utility fees, significant revenue sources include Plant Investment Fees (PIFs) from new development or redevelopment and hydroelectric sales. Sales from monthly utility fees can be variable and reflect the overall growth of the service area and yearly weather fluctuations.

Other revenue sources include reimbursements from the Urban Drainage & Flood Control District



(UDFCD), for stormwater/flood management projects, Colorado Department of Transportation (CDOT) state and federal grants, and revolving loans from the Colorado Department of Public Health and Environment (CDPHE). These revenues are project specific and are highly variable depending on the external agency's funding situation and priorities.

Projects may be funded by issuing revenue bonds with the debt service financed by general utility charges. For the years 2015–2021, it is anticipated that new bonds will be issued for the following projects:

#### Water

- Betasso Water Treatment Plant Improvements (\$24 million in 2016) to fund improvements to maintain compliance with federal Safe Drinking Water Act regulations
- Southern Water Supply Pipeline II (Carter Lake Pipeline) and the 2018 Waterline Replacement budget (\$37.6 million in 2018)
- Barker Dam Outlet and Boulder Reservoir Water Treatment Facility (\$10.3 million in 2020) to fund repairs to the outlet works.

### Wastewater

- Sanitary Sewer Bond (\$10 million in 2015) to fund replacement of large diameter interceptor pipe
- Waste Water Treatment Facility (WWTF) improvements (\$18.5 million in 2020) to fund phosphorus treatment to meet Regulation 85 requirements.

# Stormwater and Flood Management

- Wonderland Creek and Four Mile Canyon Creek projects (\$23 million in 2015)
- South Boulder Creek Improvements (\$25 million in 2018) to fund improvements designed to mitigate flood hazards in the South Boulder Creek West Valley area.

The preliminary 2016 budget reflects the following revenue increases: 8 percent Water, 5 percent Wastewater, and 4 percent Stormwater/Flood Management. The following table summarizes the 2015 adopted revenue increase and proposed revenue increase projections for 2016–2018. The proposed 2016 increases are in bold.



Table 16-1 Proposed Utility Rate Increases

	2015	2016	2017	2018
Water	5%	8%	8%	8%
Wastewater	30%	5%	5%	5%
Stormwater/Flood Management	75%	4%	8%	8%

# Current Focus for Capital Planning and Projects in 2016

# Water Utility

- The Betasso Water Treatment Facility (WTF) will undergo significant capital investment to address pretreatment, residuals handling and asset management issues. Utilities has budgeted \$24,000,000 in 2016 to fund these improvements
- The Carter Lake Pipeline is a source water project identified to meet the following goals: improve water quality, operational security, and year round water supply to the Boulder reservoir WTF. The City of Boulder is one of several project partners. Utilities has budgeted \$34,000,000 for the project's construction in 2018.

# Wastewater Utility

- The WWTF Nitrogen Upgrades construction project will be bid in 2015, but construction will continue through 2016. This project will address more stringent effluent discharge requirements for nitrogen identified in CDPHE Regulation 85
- The IBM Lift Station Improvements construction project will be bid in 2015 but construction will continue through 2016. This project will involve major civil, mechanical and electrical issues to meet various CDPHE criteria
- The wastewater interceptor evaluation will continue in 2016. Utilities staff is investigating alternatives to realign a section of the large diameter pipe downstream of 61st Street to the WWTF.

# Stormwater and Flood Management Utility

- Flood mitigation and path improvements along Fourmile Canyon Creek at 19<sup>th</sup> Street are anticipated to be bid in 2016
- A CEAP for the Fourmile Canyon Creek stream reach upstream of Upland Avenue to west of Broadway is expected to be completed in 2016
- Flood mitigation plans are anticipated to be completed in 2016 for Boulder Creek and Bear



# Canyon Creek

- Stream bank restoration work on Boulder Creek at Eben Fine Park, which is being funded by the Community Culture and Safety tax is anticipated to be completed in 2016
- Area-wide rehabilitation, repairs, and capacity improvements to the storm sewers serving the University Hill and Downtown areas.



Stream bank restoration work on Boulder Creek at Eben Fine Park.

# 2013 Flood Impact

Flood Recovery efforts had a significant impact on the Utilities

Division. The costs to date for repair and restoration for all three Utilities including administrative costs is \$8.3 million. Two repair projects in the sanitary sewer system that are not yet completed include the stabilization of an interceptor at Boulder Creek and 61st Street and the removal of debris at an interceptor at the Wastewater Treatment Facility. Sections of multi-use path, which were damaged during the removal of sediment from Boulder Creek, are scheduled to be repaired this fall.

# Highlights

Water Utility

Projects Expected to be Completed in 2015

- Sunshine Transmission line replacement
- Betasso capital improvement project design
- Treated water transmission line design
- Distribution main replacement program
- Kossler Reservoir Concrete Facing Rehabilitation
- Barker Gravity Pipeline Repairs ongoing repairs in order of priority and availability
- Barker Dam Outlet Gate Test ongoing plan to test/inspect gates as reservoir level allows
- Green Lake No. 2 Assessment and Rehabilitation Study
- · Albion Dam Assessment and Rehabilitation Alternatives Study

# Priority Projects for 2016

• Betasso Water Treatment Facility construction



- Treated water transmission line construction
- Distribution Main Replacement program
- Source Water Facilities Rehabilitation program
- Carter Lake Pipeline planning & land acquisition
- Lakewood & Silver Lake Hydro
- Albion Dam repairs
- Boulder Reservoir inspection.

# Highlights of 2017–2021 Projects

- The Barker Gravity line, which conveys water from Barker Reservoir to Kossler Reservoir, is in need of repair. The pipeline will be replaced over a 15 year period at a cost of approximately \$20,000,000. Utilities has budgeted approximately \$1,200,000 in the CIP annually for this project
- Albion Dam is in need of repairs. The work involves re-facing the dam, and construction to extend the outlet works. Approximately \$4,000,000 has been allocated to this project in 2019
- The Barker Dam Outlet Works is in need of repairs. This work involves an alternatives evaluation to investigate the value of micro tunneling the left abutment
- The Carter Lake Pipeline is a source water project identified to meet the following goals: improve water quality, operational security, and year round water supply to the Boulder reservoir WTF. The City of Boulder is one of several project partners. Utilities has budgeted approximately \$34,000,000 for the project's construction in 2018
- The Betasso WTF will undergo significant capital investment to address pretreatment, residuals handling and asset management issues. Utilities has budgeted approximately \$24,000,000 in 2016 to fund these improvements
- The Boulder Reservoir WTF will undergo improvements to address aging filters, backup power, and residual handing issues. Utilities has budgeted approximately \$2,000,000 in 2020 to fund these improvements
- The Treated Water Transmission Main Replacement program will focus on the rehabilitation of water pipelines larger than 12-inch diameter
- The Distribution main replacement program will focus on the rehabilitation of water lines smaller than 12-inch diameter. This is an annual program funded at approximately \$3,500,000 per year.



# Wastewater Utility

# Projects Expected to be Completed in 2015

- Wastewater Collection System Condition Assessment Program (ongoing)
- Wastewater Collection System Rehabilitation Program (ongoing)
- Update to the Wastewater Collection System Master Plan (WWCSMP)
- Main Interceptor Realignment at 61<sup>st</sup> St and Boulder Creek
- Installation of 9 Permanent Collection System Flow Meters
- Design of realignment of main interceptor where it enters the WWTF, construction anticipated in 2016
- Wastewater Interceptor Evaluation (ongoing).

# Priority Projects for 2016

- WWTF Nitrogen Upgrades construction project
- IBM Lift Station Improvements construction project
- · Construction of main interceptor realignment at WWTF
- Wastewater Collection System Condition Assessment Program (ongoing)
- Wastewater Collection System Rehabilitation Program (ongoing)
- Wastewater Interceptor Evaluation (ongoing)
- Wastewater Collection System Flow Monitoring (ongoing).

# Highlights of 2017–2021 Projects

- In 2020, the WWTF will undergo additional improvements to meet more stringent effluent phosphorus standards associated with Regulation 85. Utilities has budgeted \$18,500,000 for these improvements, which will be required for the next permit cycle
- Utilities staff has indentified the need for a potential realignment of the large diameter wastewater interceptor downstream of 61<sup>st</sup> Street. Utilities has budgeted for a \$10,000,000 bond to fund this project.

### Stormwater and Flood Management Utility

# Projects Expected to be Completed in 2015

 Flood mapping studies are expected to be completed in 2015 and submitted to FEMA for Boulder Slough, and Upper Goose and Twomile Canyon Creeks and Skunk, Kings Gulch and



# Bluebell Canyon Creeks

- Flood mitigation major drainageway plans are anticipated to be completed by the end of 2015 for South Boulder Creek and Gregory Canyon Creek
- The Urban Drainage and Flood Control District (UDFCD) also completes maintenance projects
  along the major drainageways. In 2015 this includes a request for sediment removal along
  Wonderland Creek from Foothills Parkway to the confluence with Goose Creek. Selective
  thinning of non-native vegetation is also planned and coordinated through the UDFCD for Bear
  Canyon Creek. These maintenance projects will help maintain conveyance capacity in these
  drainageways
- A Stormwater Master Plan (SMP) Update will be completed in 2015 to integrate flood inundation data from the 2013 flood event
- A Storm sewer condition assessment program was initiated in 2015 to comprehensively clean and TV inspect the storm sewer collection system
- A storm sewer rehabilitation program was initiated in 2015 to rehabilitate, repair, or replace storm sewers as necessary based on defects identified in the condition assessment program
- A Storm sewer expansion program was initiated in 2015 to determine areas of the city where there is not adequate storm drainage infrastructure. Construction of new storm sewers is expected to commence in 2016.

# Priority Projects for 2016

- Wonderland Creek Foothills to Winding Trail
- Fourmile Canyon Creek at 19<sup>th</sup> Street
- Storm sewer rehabilitation and expansion programs.

# Highlights of 2017-2021 Projects

- Mitigation plans are currently underway for improvements along South Boulder Creek, Bear Canyon Creek, Gregory Creek and Boulder Creek. CIP projects will be based on the recommendations of the mitigation planning studies. Funding is shown for construction of improvements to mitigate flood hazards in the South Boulder Creek West Valley area using bond money shown in 2018
- Mitigation plans for Skunk, Bluebell, King's Gulch, Twomile and Upper Goose Creeks will be initiated in 2016 after mapping updates have been completed for these drainages. CIP projects will be based on the updated mapping and mitigation planning efforts.



### **Board Action**

The preliminary 2016 Utilities budget and 2016–2021 CIP was presented to the WRAB on April 27, 2015 as a discussion item. The WRAB hosted a public hearing and continued their discussion of the preliminary 2016 Utilities budget and 2016–2021 CIP on May 18, 2015. At the June 22, 2015 meeting WRAB hosted a public hearing during which the board voted 3–0 to recommend approval of the proposed CIP.

# **Guiding Principles and Project Prioritization**

The proposed Utilities Division CIP is consistent with the CIP guiding principles with the primary focus on sustaining and improving existing infrastructure systems, increasing efficiency and planning for adequate funding to care for essential systems. The projects identified in the 2016–2021 CIP are intended to implement these guiding principles and are consistent with the department master plans identified below.

In 2002 it was decided to develop an overarching master plan for each of the city's three utilities. More detailed plans have been developed for major functional areas. Recent master plans include recommendations for CIP projects over a 20-year time period. The project recommendations consider the prioritization listed below as well as information from the Utilities Division asset management system. This system includes replacement cost, useful life and condition rating which have been documented for each significant utility asset. This information informs the six-year CIP. Current Utilities Division master plans include:

# Water

- Source Water Master Plan 2009
- Treated Water Master Plan (TWMP) 2011
- Water Utility Master Plan (WUMP) 2011

#### Wastewater

- Wastewater Collection System Master Plan (WWCSMP) 2010
- Wastewater Utility Master Plan (WWUMP) 2010

# Stormwater/ Flood Management

• Stormwater Master Plan (SMP) -2007



- Comprehensive Flood and Stormwater (CFS) Master Plan 2004
- Various individual Drainageway mitigation plans

#### Prioritization

The overall program and funding priorities are reflected in the timing of projects over the six-year CIP time period. In addition to master plan and mitigation plan recommendations, the following factors were considered in determining the overall program and funding priorities:

#### Water and Wastewater

- Reliability of water and wastewater collection, delivery and treatment
- Water quality and other environmental regulations
- Worker health and safety
- Opportunity to collaborate with other city projects, such as transportation
- Opportunity to collaborate with other utility providers to leverage funds or obtain federal or state grants
- Potential for operation and maintenance cost savings
- Accommodating new growth and development.

# Stormwater and Flood Management

- Life safety (high hazard) mitigation
- Flood emergency response capability
- Critical facility (vulnerable population) hazard mitigation
- Property damage mitigation
- Collaboration with other Greenways Program Objectives
- Potential for operation and maintenance cost savings
- Accommodating new growth and development
- Opportunities to leverage outside funding.

Within current appropriations all projects proposed have sufficient funds for ongoing operations and maintenance, and 90 percent of the Water Utility and Wastewater Utility projects are focused on maintaining or improving existing assets. Other Water and Wastewater Utility projects are intended to construct facilities required to comply with new regulations. In the Stormwater and



Flood Management Utility, the majority of the project funding is focused on life safety and critical facility hazard mitigation issues.

# Projects Not in Master Plans

Most Utilities Division projects in the 2016–2021 CIP have been previously identified in associated master plans. However, several projects have been added based on information identified from the September 2013 flood disaster.

# **Projects Not Previously Identified in the CIP**

The following new projects have been identified in the 6-year CIP:

# Water Utility

- Green Lake 2 Dam
- Skyscraper Dam
- · Automated Meter Reading

### Wastewater Utility

New projects being identified in the 2015 master plan update.

# Stormwater and Flood Management Utility

• New projects being identified in the 2015 master plan update.

# **Operation and Maintenance Impacts**

The majority of the utilities expenditures are for rehabilitating and improving the capital infrastructure either through the capital improvements program (cash financed) or through annual debt payments for revenue bonds that have been issued to fund capital improvements. The infrastructure is core in carrying out the utilities' mission of delivering safe and reliable water to our customers, ensuring that water is available for fire protection, conveying and treating wastewater and stormwater and mitigating the effects of flood events. Rehabilitating and improving the capital infrastructure reduces the need to react to failures, associated expense and disruption to customers and the community.



### Construction Cost Inflation

Based on various cost inflation indexes, it is recommended to project a capital improvement construction costs inflationary rate of 4 percent during the 2016–2021 planning period. Using an average inflation calculation is in keeping with the principle of consistent rate increases over time rather than periodic large rate increases.

# Deferred, Eliminated, or Changed Projects

Water Utility

 Funding for the Betasso Water Treatment Facility (BWTF) was increased to \$24,000,000 in 2016 to combine various facility upgrades and to take advantage of a favorable bond rate climate. Previously, the BWTF was funded at \$12,000,000 in 2016 and \$14,000,000 in 2026.

# Stormwater & Flood Management Utility

- Funding for the South Boulder Creek project was increased to \$25,000,000 in 2018 to fund the proposed US 36 stormwater detention facility to prevent overtopping of US 36 during a 100-yr flood event. Previously, the South Boulder Creek project was funded for \$10,000,000 in 2018 and \$25,000,000 in 2021, which was outside the 2016-2021 planning horizon
- Funding shown for Boulder Creek in 2016 was reduced by \$250,000 and moved to 2018 so that detailed information can be used to identify projects as part of the mitigation plan that is currently being developed. More detailed information will be available in 2016.

# **Unfunded Projects and Emerging Needs**

The following unfunded projects have been identified:

Stormwater/ Flood Management

• South Boulder Creek Flood Mitigation Phases II and III - Unfunded

The Utilities Division has developed and maintains a 20-year CIP and associated financial plan. Large Utilities Division projects require many years for planning and a longer term horizon is needed to capture the time period required for overall project implementation. A 20-year plan provides a basis for longer term financial planning that is needed to support decision making regarding project timing, issuance and retirement of revenue bonds and rate increases. The above mentioned projects are indicated in the 20-year CIP.



Emerging needs have been identified as part of the recent Water Utility Master Plan. During the development of this master plan, a technical analysis was performed regarding the city's water treatment facilities and other infrastructure. The analysis indicates that this infrastructure should be adequate to meet water demand needs well into the future with little need for capacity expansion. However, a comprehensive analysis of existing assets pointed to the poor condition and aging of some mechanical and electrical equipment at the Betasso Water Treatment Facility. Betasso is the city's primary Water Treatment Facility and has deteriorated during almost 50 years of continuous operation despite on–going maintenance and rehabilitation. These issues, combined with inherent deficiencies in certain treatment processes, are the reasons that large capital funding is recommended in 2016–2017.

Regulatory changes are another source of uncertainty and create emerging needs. For example, as explained in the Highlights section of this memo, the city received a new discharge permit for the 75th Street Wastewater Treatment Facility in 2011 with new effluent limits. Complying with these limits will require a combination of regulatory negotiations, environmental studies and Wastewater Treatment Facility capital improvements.

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Table 16-2: 2016-2021 Funding Summary By Department

		Со			6 Approved	201		20°		201		202		202	21 Projected	Unfunded Amount	
PW/STORMWATER & FLOOD UTILITY	Department Total	\$	61,417,767	\$	5,209,921	\$	7,119,924	\$	33,256,596	\$	5,028,682	\$	5,673,278	\$	5,129,366	\$	-
CIP-CAPITAL ENHANCEMENT	Subtotal	\$	25,792,750	\$	3,365,021	\$	5,201,224	\$	6,688,096	\$	3,726,682	\$	3,682,578	\$	3,129,149	\$	-
	Bear Canyon Creek Flood	\$	500,000	\$	500,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Bluebell & King's Gultch	\$	600,000	\$	-	\$	100,000	\$	500,000	\$	-	\$	-	\$	-	\$	-
	Boulder Creek Flood Mitigation	\$	4,750,000	\$	-	\$	2,500,000	\$	2,250,000	\$	-	\$	-	\$	-	\$	-
	Fourmile - Upstream of Upland	\$	5,250,000	\$	500,000	\$	500,000	\$	1,000,000	\$	1,500,000	\$	1,250,000	\$	500,000	\$	-
	Greenways Program - Flood fund	\$	585,000	\$	97,500	\$	97,500	\$	97,500	\$	97,500	\$	97,500	\$	97,500	\$	-
	Greenways Program - Lottery	\$	752,646	\$	125,441	\$	125,441	\$	125,441	\$	125,441	\$	125,441	\$	125,441	\$	-
	Gregory Creek Flood Mitigation	\$	500,000	\$	500,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Local Drainage Improvements	\$	4,941,298	\$	730,080	\$	759,283	\$	789,655	\$	821,241	\$	854,090	\$	986,949	\$	-
	Skunk Creek Flood Mitigation	\$	600,000	\$	-	\$	100,000	\$	500,000	\$	-	\$	-	\$	-	\$	-
	Stormwater Quality Improvements	\$	1,076,390	\$	162,000	\$	169,000	\$	175,500	\$	182,500	\$	190,000	\$	197,390	\$	-
	Twomile Canyon Creek	\$	600,000	\$	-	\$	100,000	\$	500,000	\$	-	\$	-	\$	-	\$	-
	Upper Goose Creek Drainage	\$	5,637,416	\$	750,000	\$	750,000	\$	750,000	\$	1,000,000	\$	1,165,547	\$	1,221,869	\$	-
CIP-CAPITAL MAINTENANCE	Subtotal	\$	5,172,732	\$	594,900	\$	618,700	\$	643,500	\$	669,000	\$	1,330,700	\$	1,315,932	\$	-
	Storm Sewer Rehabilitation	\$	2,438,766	\$	270,400	\$	281,200	\$	292,500	\$	304,000	\$	632,700	\$	657,966	\$	-
	Transportation Coordination	\$	2,668,966	\$	324,500	\$	337,500	\$	351,000	\$	365,000	\$	633,000	\$	657,966	\$	-
	Utility Billing Computer System	\$	65,000	\$	-	\$	-	\$	-	\$	-	\$	65,000	\$	-	\$	-
CIP-LAND ACQUISITION	Subtotal	\$	3,627,285	\$	500,000	\$	550,000	\$	600,000	\$	633,000	\$	660,000	\$	684,285	\$	-
	Preflood Property Acquisition	\$	3,627,285	\$	500,000	\$	550,000	\$	600,000	\$	633,000	\$	660,000	\$	684,285	\$	-
CIP-NEW	Subtotal	\$	26,825,000	\$	750,000	\$	750,000	\$	25,325,000	\$	-	\$	-	\$	-	\$	-
FACILITY/INFRASTRUCTURE	South Boulder Creek Phase I	¢	26 925 000	¢	750,000	¢	750,000	¢	25 225 000	¢		\$		¢		¢	
	South boulder Creek Phase I	ф	26,825,000	Ф	750,000	Ф	750,000	\$	25,325,000	Ф	-	Ф	-	\$	-	\$	-

		Es <sup>s</sup>		20 <sup>-</sup>	16 Approved	201	7 Projected	20 <sup>-</sup>	18 Projected	201	9 Projected	20	20 Projected	202	21 Projected	Unfunded Amount	
PW/WASTEWATER UTILITY	Department Total	\$	58,052,128	\$	4,355,600	\$	5,987,421	\$	5,571,420	\$	7,335,868	\$	27,559,276	\$	7,242,543	\$	-
CIP-CAPITAL ENHANCEMENT	Subtotal	\$	29,573,075	\$	570,000	\$	2,050,397	\$	1,476,915	\$	2,877,582	\$	20,731,179	\$	1,867,002	\$	-
	Goose Creek SS Interceptor	\$	3,749,723	\$	-	\$	-	\$	25,000	\$	647,590	\$	1,346,988	\$	1,730,145	\$	-
	Marshall Landfill	\$	100,000	\$	100,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Wastewater Treatment Facility	\$	150,000	\$	150,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	WWTF Activated Sludge	\$	175,479	\$	-	\$	175,479	\$	-	\$	-	\$	-	\$	-	\$	-
	WWTF Electrical	\$	1,320,000	\$	120,000	\$	1,200,000	\$	-	\$	-	\$	-	\$	-	\$	-
	WWTF Instrumentation/Control	\$	2,866,016	\$	-	\$	674,918	\$	701,915	\$	729,992	\$	759,191	\$	-	\$	-
	WWTF Laboratory	\$	50,000	\$	50,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	WWTF Permit Improvements	\$	21,161,857	\$	150,000	\$	-	\$	750,000	\$	1,500,000	\$	18,625,000	\$	136,857	\$	-
CIP-CAPITAL MAINTENANCE	Subtotal	\$	28,479,053	\$	3,785,600	\$	3,937,024	\$	4,094,505	\$	4,458,286	\$	6,828,097	\$	5,375,541	\$	-
	Condition Assessment Program	\$	5,380,670	\$	811,200	\$	843,648	\$	877,394	\$	912,490	\$	948,989	\$	986,949	\$	-
	Sanitary Sewer Manhole	\$	1,829,626	\$	216,320	\$	224,973	\$	233,972	\$	243,331	\$	253,064	\$	657,966	\$	-
	Sanitary Sewer Rehabilitation	\$	18,294,276	\$	2,758,080	\$	2,868,403	\$	2,983,139	\$	3,102,465	\$	3,226,563	\$	3,355,626	\$	-
	Utility Billing Computer System	\$	65,000	\$	-	\$	-	\$	-	\$	-	\$	65,000	\$	-	\$	-
	WWTF Cogeneration	\$	184,481	\$	-	\$	-	\$	-	\$	-	\$	184,481	\$	-	\$	-
	WWTF Digester Complex	\$	2,200,000	\$	-	\$	-	\$	-	\$	200,000	\$	2,000,000	\$	-	\$	-
	WWTF Rehabilitation	\$	525,000	\$	-	\$	-	\$	-	\$	-	\$	150,000	\$	375,000	\$	-

Table 16-2: 2016-2021 Funding Summary By Department (Cont.)

			otal 2	016 Approved	20	17 Projected	20	18 Projected	201	9 Projected	20:	20 Projected	202	21 Projected	
W/WATER UTILITY	Department Total	Cost	774	¢ 22 440 254	¢	0.670.505	¢.	44 407 502	¢	14 106 676	¢	40 COO E24	Ć.	12 240 446	Amount
CIP-CAPITAL ENHANCEMENT	· ·							41,107,592							
CIP-CAPITAL ENHANCEMENT	Subtotal	, , , , , , , , ,		\$ 26,610,000		2,511,322	\$	, ,		1,668,882	\$	9,148,194	\$		\$
	Automated Meter Reading	\$ 684,		\$ -		-	7		\$				\$	684,285	
	Barker Dam and Reservoir	. ,	000			50,000	\$	-	\$	-	\$	- 455 500	\$		\$
	Barker Dam Outlet	\$ 9,566,0		\$ 100,000		-,	\$	•	Υ.	835,551	\$	8,455,509	\$		\$
	Betasso Water Treatment Facility	\$ 25,140,					\$		Ψ		\$	-	Ψ.		\$
	Green Lake 2 Dam	\$ 561,		*	\$		\$		\$		\$	75,000			\$
	Lakewood Dam	. ,	707	•	Ψ	-	-	124,707	\$		\$		\$		\$
	Lakewood Hydroelectric/PRV	\$ 430,	000	\$ 130,000	\$	-	\$	-	\$	300,000	\$	-	\$	-	\$
	NCWCD Conveyance - Carter Lake	\$ 40,801,	585	\$ 850,000	\$	2,036,322	\$	37,915,263	\$	-	\$	-	\$	-	\$
	Orodell Hydro/PRV Facility	\$ 75,	000	\$ 75,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$
	Pearl Street Hydro/PRV Facility	\$ 267,	664	\$ -	\$	-	\$	24,333	\$	243,331	\$	-	\$	-	\$
	Source Water Monitoring/Protection	\$ 400,	000	\$ 100,000	\$	100,000	\$	100,000	\$	100,000	\$	-	\$	-	\$
	Utility Billing Computer System	\$ 125,	000	\$ -	\$	-	\$	-	\$	-	\$	125,000	\$	-	\$
	Water System Security/Quality Imprv	\$ 540,	000	\$ 150,000	\$	150,000	\$	150,000	\$	90,000	\$	-	\$	-	\$
	Wittemyer Ponds	\$ 5,519,	34	\$ -	\$	-	\$	-	\$	100,000	\$	492,685	\$	4,926,849	\$
CIP-CAPITAL MAINTENANCE	Subtotal	\$ 39,299,	163	\$ 6,839,251	\$	6,168,263	\$	2,743,289	\$	9,277,794	\$	8,050,327	\$	6,220,239	\$
	Albion Dam	\$ 3,882,9	97	\$ 125,000	\$	-	\$	341,636	\$	3,416,361	\$		\$	-	\$
	Barker Gravity Pipeline Repair	\$ 7,003,	'48	\$ 667,416	\$	1,169,859	\$	1,216,653	\$	1,265,319	\$	1,315,932	\$	1,368,569	\$
	Barker - Kossler Penstock Repair	\$ 116,			\$			-	\$		\$		\$		\$
	Betasso Hydroelectric / PRF	\$ 860,		•	\$			480,000	\$		\$		\$	-	\$
	Betasso Storage Tank Rehabilitation			•	\$		\$		-		\$		\$		\$
	Boulder Reservoir	\$ 168,		\$ 50,000		•	\$		-		\$	118,434			\$
	Distribution Waterline Replacement	\$ 18,613,			\$	3,487,078	\$		\$		\$	3,922,489	\$		\$
	Farmer's Ditch	. , ,	160		-		\$	-		108,160			\$		\$
	Goose Lake Dam		000		\$		\$	75,000	,		\$		\$		\$
		. ,		•			-		-		\$		,		*
	Island Lake Dam	*,	000	•	\$		\$	50,000	-				\$		\$
	Kohler Storage Tank Roof	\$ 799,					\$	-	Υ.		\$		\$		\$
	Kossler Dam	. ,	000				\$	-	Ψ.		\$		\$		\$
	Lakewood Pipeline	\$ 316,		•	Ψ.		\$	-	\$	316,330			\$		\$
	Reservoir Water Treatment Facility	\$ 2,314,0		\$ 314,000	\$		\$	-	7		\$	2,000,000	\$		\$
	Silver Lake Dam	\$ 100,		*	\$		\$	100,000	-		\$		\$		\$
	Silver Lake Hydroelectric/PRV	\$ 155,		\$ 25,000			\$	80,000			\$		\$		\$
	Skyscraper Dam	\$ 171,	)71	\$ -	\$	-	\$		\$	-	\$	-	\$	171,071	\$
	Source Water Pressure Reducing,	\$ 1,294,0	82	\$ 150,000	\$	150,000	\$	150,000	\$	150,000	\$	343,472	\$	351,210	\$
	Sunshine Hydroelectric/PRV Facility	\$ 271,	375	\$ -	\$	271,875	\$	-	\$	-	\$	-	\$	-	\$
	Watershed Improvements	\$ 180,	000	\$ 80,000	\$	-	\$	-	\$	-	\$	100,000	\$	-	\$
	Zone 1 Transmission Pipes	\$ 500,	000	\$ -	\$	-	\$	250,000	\$	-	\$	-	\$	250,000	\$
	Zone 2 Transmission Pipes	\$ 500,	000	\$ -	\$	250,000	\$	-	\$	-	\$	250,000	\$	-	\$
	Zone 3 Transmission Pipes	\$ 1,450,0	000	\$ 1,200,000	\$	-	\$	-	\$	250,000	\$	-	\$	-	\$

# Table 16-2: 2016-2021 Funding Summary By Department (Cont.)

		Estimated Total	2016 Approved	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Unfunded
		Cost							Amount
PW/WATER UTILITY (Cont.)	Department Total	\$ 126,449,771	\$ 33,449,251	\$ 8,679,585	\$ 41,107,592	\$ 11,196,676	\$ 19,698,521	\$ 12,318,146	\$
CIP-NEW FACILITY/INFRASTRUCTURE	Subtotal	\$ 2,800,000	\$ -	\$ -	\$ 50,000	\$ 250,000	\$ 2,500,000	\$ -	\$
	Carter Lake Hydroelectric	\$ 2,800,000	\$ -	\$ -	\$ 50,000	\$ 250,000	\$ 2,500,000	\$ -	\$



# Mapping

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



**Project Name:** Bear Canyon Creek Flood Mitigation

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: PW/STORMWATER & FLOOD Subcommunity: MULTIPLE SUBCOMMUNITIES

UTILITY

**Project Number:** 610SW02300 **BVCP Area:** AREA I **CEAP Required: CEAP Status:** 2016 Yes

## **Project Description**

A flood mitigation plan is being developed which will identify feasible mitigation improvements. Projects requiring a CEAP will be identified after the mitigation plan is completed.

#### **Project Phasing**

Planning and Design \$100,000 in 2015 and 2016 Construction \$500,000 in 2017

## **Public Process**

mitigation plan reviewed by WRAB and Council

Interdepartmental and Interagency Collaboration Change From Past CIP

coordinate with CU none

**Capital Funding Plan** 

Fund(s) Revised 2016 2017 2018 2019 2020 2021 Requested 2015 Budget -Funding Current Year Stormwater & Flood Mgt \$100,000 \$0 \$0 \$0 \$0 \$500,000 \$0 Utility

Funding to Completion \$0

Future Unfunded \$0

**Total Funding Plan:** \$600,000 Additional Annual Operating and Maintenance

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

O&M:

Additional Annual O&M Description:

increasing capacity of culverts, no additional maintenance



Project Name: Bluebell & King's Gultch

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

**Department:** PW/STORMWATER & FLOOD **Subcommunity:** SOUTH BOULDER

UTILITY

Project Number:610SW00900BVCP Area:AREA ICEAP Required:YesCEAP Status:2017

## Project Description

A flood mitigation plan will be developed that will identify feasible mitigation improvements. Projects requiring a CEAP will be identified after the mitigation plan is completed.

#### Project Phasing

Planning \$60,000 in 2017

Design and Acquisition \$100,000 in 2018

Construction \$440,000 in 2018

#### **Public Process**

WRAB and Council review mitigation plan

Interdepartmental and Interagency Collaboration Change From Past CIP

none none

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Stormwater & Flood Mgt Utility	\$0	\$0	\$100,000	\$500,000	\$0	\$0	\$0

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$600,000

Additional Annual Operating and Maintenance

Additional Annual \$1,000 Funding Source for

O&M: O&M:



Project Name: Boulder Creek Flood Mitigation

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

**Department:** PW/STORMWATER & FLOOD **Subcommunity:** MULTIPLE SUBCOMMUNITIES

UTILITY

Project Number:610SW01500BVCP Area:AREA ICEAP Required:YesCEAP Status:2016

## **Project Description**

This project will provide funds for flood mitigation work along Boulder Creek. Projects requiring a CEAP will be identified after the mitigation plan is completed.

#### **Project Phasing**

\$600,000 in 2015 for Design \$2.5 M in 2017 for construction \$2.25 M in 2018 for construction

#### **Public Process**

WRAB and Council will review the Mitigation Plan

## Interdepartmental and Interagency Collaboration

Urban Drainage and Flood Control District is coordinating a watershed wide mitigation planning effort which includes Boulder County and Longmont.

## Change From Past CIP

funding moved from 2016 to 2018 and decreased by \$250,000

# Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Stormwater & Flood Mgt Utility	\$600,000	\$0	\$2,500,000	\$2,250,000	\$0	\$0	\$0

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$5,350,000

Additional Annual Operating and Maintenance

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

## Additional Annual O&M Description:



Project Name: Fourmile - Upstream of Upland Ave

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: PW/STORMWATER & FLOOD Subcommunity: NORTH BOULDER

UTILITY

Project Number:610SW02100BVCP Area:AREA ICEAP Required:YesCEAP Status:2016

# **Project Description**

This project will provide flood mitigation along Fourmile Canyon Creek west of 19th Street. Detention, sediment capture, controling spill flows, path connections and underpasses at Violet and Upland will be evaluated in the CEAP.

#### Project Phasing

The total estimated cost will be determined as part of the CEAP. A total of \$6.9 M is included in the 2016-2021 CIP from Flood and Greenways funding.

# **Public Process**

CEAP will be reviewed by the Greenways Advisory Committee

# Interdepartmental and Interagency Collaboration

coordinate with Parks, Transportation, Open Space

# Change From Past CIP

added funding in 2021

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Grenways Lottery	\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
					Funding t	o Completion	\$0
					Fut	ure Unfunded	\$0
Stormwater & Flood Mgt Utility & Greenways Contribution	\$0	\$585,200	\$585,200	\$1,085,200	\$1,585,200	\$1,335,200	\$585,200
					Funding t	o Completion	\$0
					Fut	ure Unfunded	\$0
Greenways Transportation	\$0	\$85,200	\$85,200	\$85,200	\$85,200	\$85,200	\$85,200
					Funding t	o Completion	\$0
					Fut	ure Unfunded	\$0

Total Funding Plan: \$6,872,400

Additional Annual Operating and Maintenance

Additional Annual \$10,000 O&M:

Funding Source for O&M:

Additional Annual O&M Description:

new easements and new potential path



Project Name: Gregory Creek Flood Mitigation

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

**Department:** PW/STORMWATER & FLOOD **Subcommunity:** CENTRAL BOULDER

UTILITY

Project Number:610SW02400BVCP Area:AREA ICEAP Required:YesCEAP Status:2016

## **Project Description**

A flood mitigation plan is being developed which will identify feasible mitigation improvements. Projects requiring a CEAP will be identified after the mitigation plan is completed.

#### **Project Phasing**

Planning \$ 60,000 in 2015

Design and Acquisition \$100,000 in 2016

Construction \$440,000 in 2017 Total Project Cost \$600,000

## **Public Process**

WRAB and Council will review the mitigation plan

## Interdepartmental and Interagency Collaboration Change From Past CIP

none none

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Stormwater & Flood Mgt Utility	\$100,000	\$500,000	\$0	\$0	\$0	\$0	\$0

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$600,000

Additional Annual Operating and Maintenance

Additional Annual \$1,000 Funding Source for

O&M: O&M:

Additional Annual O&M Description:

new easements will need to be maintained



**Project Name:** Local Drainage Improvements

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: PW/STORMWATER & FLOOD Subcommunity: MULTIPLE SUBCOMMUNITIES

UTILITY

Project Number: 610SW77000 **BVCP Area:** AREA I

**CEAP Status: CEAP Required:** Νo

## **Project Description**

This capital project will provide funds to improve local drainage problems, many of which came to light as a result of the 2013 flood disaster and have persisted ever since. Areas that are likely to receive nearterm attention are the west valley of South Boulder Creek and Chautauqua.

## **Project Phasing**

#### Public Process

No additional public process is anticipated.

#### Interdepartmental and Interagency Collaboration Change From Past CIP

Projects will be coordinated with the Transportation Division. New Project

Capital	Funding Pla	ın
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Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021	
Stormwater & Flood Mgt Utility	\$712,400	\$730,080	\$759,283	\$789,655	\$821,241	\$854,090	\$986,949	

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$5,653,698

Additional Annual Operating and Maintenance

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

O&M:

Additional Annual O&M Description:



Project Name: Preflood Property Acquisition

Project at a Glance

Project Type: CIP-LAND ACQUISITION

**Department:** PW/STORMWATER & FLOOD **Subcommunity:** MULTIPLE SUBCOMMUNITIES

UTILITY

Project Number: 610SW62200 BVCP Area: SYSTEM-WIDE

CEAP Required: No CEAP Status: NA

## **Project Description**

This project provides on-going funding for the purchase of properties in areas prone to flooding especially the city's high hazard regulatory area. Properties have been identified and prioritized along each of the city's major drainageways. Property owners have been contacted regarding the city's interest. The city periodically update its flood mapping to reflect changing conditions and improvements in flood modeling. The highest risk properties are identified for purchase, based on updated mapping for each of the drainageways.

The project is for an ongoing funding program.. Funding has been escalated to reflect inflation.

#### **Project Phasing**

This fund is used as properties come on the market that are identified as high hazard flood properties

#### **Public Process**

none

Interdepartmental and Interagency Collaboration

Change From Past CIP

none none

**Capital Funding Plan** 

Fund(s) Revised 2016 2017 2018 2019 2020 2021 2015 Requested

Budget - Funding

Current Year

**Stormwater & Flood Mgt** \$3,204,566 \$500,000 \$550,000 \$600,000 \$633,000 \$660,000 \$684,285

Utility

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$6,831,851

Additional Annual Operating and Maintenance

Additional Annual \$0 Funding Source for

O&M: O&M:

Additional Annual O&M Description:



Project Name: Restoration, Water Quality and Trai

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PW/GreenwaysSubcommunity:SYSTEM-WIDEProject Number:610GW00000BVCP Area:SYSTEM-WIDE

CEAP Required: No CEAP Status:

Project Description

Miscellaneous water quality, habitat restoration and trail improvements projects.

Project Phasing

## Public Process

Projects will be coordinated with Transportation, Utilities, Parks and Open Space or the developers of a property.

## Interdepartmental and Interagency Collaboration

Change From Past CIP

Projects are developed with input from the City's Transportation, Utilities, Open Space, and Parks Departments, Boulder County, as well as through coordination with developers.

Capital Funding Plan							
Fund(s) 2015	Revised	2016 Request	2017	2018	2019	2020	2021
2013	Budget - Current Year	ed Funding					
Greenways Lottery	\$25,440	\$25,440	\$25,440	\$25,440	\$25,440	\$25,440	\$25,440
					Funding	to Completio	on \$0
					Fu	ıture Unfunde	ed \$0
Greenways Stormwater & Flood	\$12,280	\$12,280	\$12,280	\$12,280	\$12,280	\$12,280	\$12,280
Mgt Utility					Funding	to Completio	n \$0
					Fu	ıture Unfunde	ed \$0
<b>Greenways Transportation</b>	\$12,280	\$12,280	\$12,280	\$12,280	\$12,280	\$12,280	\$12,280
					Funding	to Completio	n \$0
					Fu	ıture Unfunde	ed \$0

Total Funding Plan: \$350,000

Additional Annual Operating and Maintenance

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

Additional Annual O&M Description:

These projects are enhancements to existing conditions



**Project Name:** Skunk Creek Flood Mitigation

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: PW/STORMWATER & FLOOD Subcommunity: MULTIPLE SUBCOMMUNITIES

UTILITY

**Project Number:** 610SW00600 **BVCP Area:** AREA I **CEAP Required: CEAP Status:** 2017 Yes

## **Project Description**

A flood mitigation plan will be developed which will identify feasible mitigation improvements. Projects requiring a CEAP will be identified after the mitigation plan is completed.

#### **Project Phasing**

Planning \$60,000 in 2017

Design and Acquisition \$100,000 in 2017 Construction \$440,000 in 2018

#### **Public Process**

WRAB and Council will review mitigation plan

Interdepartmental and Interagency Collaboration Change From Past CIP

coordiante with CU none

Capital Funding Plan

Fund(s) Revised 2016 2017 2018 2019 2020 2021 2015 Requested Budget -Funding Current Year Stormwater & Flood Mgt \$0 \$0 \$100.000 \$500.000 \$0 \$0 Utility

> Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$600,000

**Additional Annual Operating and Maintenance** 

Additional Annual \$1,000 **Funding Source for** O&M:

O&M:

Additional Annual O&M Description:

will be covered by existing maintenance budgets



Project Name: South Boulder Creek Phase I

Project at a Glance

Project Type: CIP-NEW FACILITY/INFRASTRUCTUR

Department: PW/STORMWATER & FLOOD Subcommunity: MULTIPLE SUBCOMMUNITIES

UTILITY

Project Number:610SW00400BVCP Area:AREA IIICEAP Required:YesCEAP Status:No

## **Project Description**

This project is to mitigate flooding along South Boulder Creek from U.S. 36 to the confluence with Boulder Creek, based on recommendations in the Comprehensive Flood and Stormwater Master Plan. Flood mitigation alternatives have been evaluated and a draft recommendation is currently going through a public review process. The proposed alternative includes construction of a regional flood detention facility located just south of US36, along with downstream capacity improvements. This alternative would eliminate the overtopping of US36 during a 100-year storm event and greatly reduce downstream flood risks.

It is anticipated that the project will be designed and constructed in three phases, each approximately \$15-\$25 million. The recommended first phase would construct the regional flood detention facility at US36. Funding shown in the CIP is for the first phase.

#### **Project Phasing**

Planning and Environmental Clearances \$277,000 in 2016 and 2017 Design \$2,000,000 in 2017 and 2018 Construction \$25,000,000 in 2019

#### **Public Process**

This project will be reviewed through the Boulder Valley Comprehenisve Plan update.

#### Interdepartmental and Interagency Collaboration

The regional detention facility will impact Colorado
Deaprtment of Transportation, University of Colorado and
Open Space properties. Utilities staff will coordinate with
these other entities. Coordination will also occur through the
Boulder Valley Comprehensive Plan update.

# Change From Past CIP

Funding added in 2018 (bond) for a total construction budget of \$25M

Capital Funding Plan								
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021	
Stormwater & Flood Mgt Utility	\$451,683	\$750,000	\$750,000	\$25,325,000	\$0	\$0	\$0	

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$27,276,683

## Additional Annual Operating and Maintenance

Additional Annual \$10,000 Funding Source for O&M:

Additional Annual O&M Description:

Detention Berm will require on-going maintenance



Project Name: Storm Sewer Rehabilitation

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

**Department:** PW/STORMWATER & FLOOD **Subcommunity:** SYSTEM-WIDE

UTILITY

Project Number: 610SW76000 BVCP Area: SYSTEM-WIDE

CEAP Required: No CEAP Status: N/A

## **Project Description**

The project provides funds for the rehabilitation of existing storm sewers. This project is for an ongoing funding program. The program is funded at \$250,000 per year (2013) escalated by an inflation index for future years.

## **Project Phasing**

# **Public Process**

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Stormwater & Flood Mgt Utility	\$444,156	\$270,400	\$281,200	\$292,500	\$304,000	\$632,700	\$657,966

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$2,882,922

**Additional Annual Operating and Maintenance** 

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

Additional Annual O&M Description:



Project Name: Stormwater Quality Improvements

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: PW/STORMWATER & FLOOD Subcommunity: SYSTEM-WIDE

UTILITY

**Project Number:** 610SW77500 **BVCP Area:** SYSTEM-WIDE

CEAP Required: No CEAP Status: N/A

## **Project Description**

This project will fund stormwater quality projects as identified in the Stormwater Master Plan to improve water quality in Boulder Creek and its tributaries. This project is for an ongoing funding program. The program is funded at \$100,000 per year (2013) escalated by an inflation index for future years.

## **Project Phasing**

Ongoing Program

## **Public Process**

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Stormwater & Flood Mgt Utility	\$274,675	\$162,000	\$169,000	\$175,500	\$182,500	\$190,000	\$197,390

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$1,351,065

Additional Annual Operating and Maintenance

Additional Annual 0 Funding Source for O&M:



**Project Name:** Transportation Coordination

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

**Department:** PW/STORMWATER & FLOOD **Subcommunity:** SYSTEM-WIDE

UTILITY

Project Number: 610SW78000 BVCP Area: SYSTEM-WIDE

CEAP Required: No CEAP Status: N/A

## **Project Description**

This project will fund the reconstruction of existing storm sewers, the construction of new storm sewers and water quality improvements as part of on-going Transportation Division improvement projects. This project is for an ongoing funding program. The program is funded at \$250,000 per year (2013) escalated by an inflation index for future years.

## **Project Phasing**

## **Public Process**

Interdepartmental and Interagency Collaboration

**Change From Past CIP** 

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Stormwater & Flood Mgt	\$366,017	\$324,500	\$337,500	\$351,000	\$365,000	\$633,000	\$657,966

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$3,034,983
Additional Annual Operating and Maintenance

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

Additional Annual O&M Description:



Project Name: Twomile Canyon Creek

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: PW/STORMWATER & FLOOD Subcommunity: MULTIPLE SUBCOMMUNITIES

UTILITY

 Project Number:
 610SW00800
 BVCP Area:
 AREA I

 CEAP Required:
 Yes
 CEAP Status:
 2017

## Project Description

A flood mitigation plan will be developed which will identify feasible mitigation improvements. Projects requiring a CEAP will be identified after the mitigation plan is completed.

#### Project Phasing

Planning - \$60,000 in 2017

Design and Acquisition - \$100,000 in 2017 Construction - \$440,000 in 2018

### **Public Process**

WRAB and Council will review the mitigation plan

Interdepartmental and Interagency Collaboration Change From Past CIP

none none

**Capital Funding Plan** Fund(s) Revised 2016 2017 2018 2019 2020 2021 2015 Requested Budget -Funding Current Year Stormwater & Flood Mgt \$0 \$0 \$100.000 \$500.000 \$0 \$0 \$0 Utility

> Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$600,000

Additional Annual Operating and Maintenance

Additional Annual \$1,000 Funding Source for

O&M: O&M:



**Project Name:** Upper Goose Creek Drainage

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Subcommunity: Department: PW/STORMWATER & FLOOD CENTRAL BOULDER

UTILITY

**Project Number:** 610SW75000 **BVCP Area:** AREA I **CEAP Status: CEAP Required:** No Yes

## **Project Description**

This project will fund the construction of a drainage improvments in the Upper Goose Creek drainage basin located between 9th and 19th Streets. This project was identified as the highest priority in the 2007 Stormwater Maste Plan. Utilities will fund this project beginning in 2015 and continuing through 2029. The project has numerous components that will be completed in several phases. The projected funding needed in the phasing plan below simply refers to funding for the total of all project phases beyond 2019.

## **Project Phasing**

Planning \$ 2,000,000.00 Acquisition \$0 Construction \$ 15,905,163

### Public Process

Need to add info on public process.

#### Interdepartmental and Interagency Collaboration

Change From Past CIP

Coordination with the city's Transportation Division. Impacted parcels will not be known until flood mitigation alternatives are identified.

Capital	Error of its	aw Diam
Cabital		

Suprair anding Flan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Stormwater & Flood Mgt Utility	\$175,000	\$750,000	\$750,000	\$750,000	\$1,000,000	\$1,165,547	\$1,221,869

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$5,812,416

Additional Annual Operating and Maintenance

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

O&M:

Additional Annual O&M Description:



**Project Name:** Condition Assessment Program

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department: PW/WASTEWATER UTILITY Subcommunity: SYSTEM-WIDE Project Number: 610WW45100 **BVCP Area:** SYSTEM-WIDE

**CEAP Required:** No **CEAP Status:** N/A

## **Project Description**

The Wastewater Utility Condition Assessment Program is intended to provide an ongoing comprehensive assessment of the city's sanitary sewer collection system. There are approximately 360 miles of sanitary sewer pipe in the collection system. The program was funded at \$780,000 (2015) and will be escalated at 4% annually for the 2016-2021 CIP. This project is for an ongoing funding program.

## **Project Phasing**

This is an annual program funded between \$800,000 - \$1,000,000 per year for the 2016-2021 CIP.

## **Public Process**

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Wastewater Utility	\$780,000	\$811,200	\$843,648	\$877,394	\$912,490 Funding	\$948,989 to Completion	\$986,949 n \$0

Future Unfunded \$0

**Total Funding Plan:** \$6,160,670

Additional Annual Operating and Maintenance

**Additional Annual** O&M:

\$0

**Funding Source for** 

O&M:

Additional Annual O&M Description:

No increase; funded by existing budget



**Project Name:** Goose Creek SS Interceptor Rehab

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: Subcommunity: PW/WASTEWATER UTILITY EAST BOULDER

**Project Number:** 610WW43300 **BVCP Area:** AREA I **CEAP Required: CEAP Status:** N/A No

## **Project Description**

This project will provide funds for rehabilitation of the Goose Creek Sanitary Sewer Interceptor, which was identified as a Tier 1 rehabilitation project in the 2009 Wastewater Collection System Master Plan (WWCSMP). An "interceptor" sewer refers to a large diameter pipe with very few connections, as opposed to a "collector" sewer which is a medium diameter pipe with numerous smaller diameter sanitary service pipe connecitons. Utilities staff is in the process of updating the WWCSMP to incorportate data from the September 2013 flood event. This master plan update will evaluate whether this project remains one of the high priorities for the Wastewater Utility. The "underfunded" amount reflected below simply refers to funding for the project beyong 2019.

# **Project Phasing**

Planning: \$354,278 (2018,2021) Construction: \$3,400,000 (2019-2021)

## **Public Process**

## Interdepartmental and Interagency Collaboration

## **Change From Past CIP**

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Wastewater Utility	\$0	\$0	\$0	\$25,000	\$647,590	\$1,346,988	\$1,730,145

Funding to Completion \$0 Future Unfunded \$0

**Total Funding Plan:** \$3,749,723

Additional Annual Operating and Maintenance

**Additional Annual** O&M:

\$0

**Funding Source for** 

O&M:

Additional Annual O&M Description:



Project Name: Marshall Landfill

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: Subcommunity: PW/WASTEWATER UTILITY

Project Number: **BVCP Area:** 610WW07800 AREA III **CEAP Required: CEAP Status:** N/A

## **Project Description**

This project will fund the decommissioning of the Marshall Landfill Treatment Facility. The facility was originally constructed to eliminate groundwater contamination at the original landfill site. The money will be used for landfill cap maintenance and repair and demolition of the groundwater treatment facility.

Based on EPA approval, the groundwater collection system was shut down on Nov. 30, 2004. The treatment plant and collection system equipment will need to be preserved. In addition, there are approximately 180 sampling and monitoring wells located on the site, many of which are no longer used or necessary. Part of the shutdown process will entail sealing the unnecessary wells in place. This work would be required by the EPA as part of the Superfund site decommissioning process.

## **Project Phasing**

Planning \$20,000 (2016) Construction \$80,000 (2016)

# **Public Process**

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Wastewater Utility	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$100,000

Additional Annual Operating and Maintenance

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

O&M:

Additional Annual O&M Description:



**Project Name:** Sanitary Sewer Manhole Rehabilitati

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department: PW/WASTEWATER UTILITY Subcommunity: SYSTEM-WIDE Project Number: 610WW42000 **BVCP Area:** SYSTEM-WIDE

**CEAP Required: CEAP Status:** 

## **Project Description**

This project provides for the rehabilitation and improvement to the existing wastewater manholes that are part of the city's sewer system. The program is funded at \$100,000 per year (2013) escalated by an inflation index for future years. This project is for an ongoing funding program.

## **Project Phasing**

This is an annual program funded at approxiimately \$200,000 per year.

#### **Public Process**

Interdepartmental and Interagency Collaboration

## Change From Past CIP

Additional funding included

Capital	Funding	Plan
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Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Wastewater Utility	\$208,000	\$216,320	\$224,973	\$233,972	,	\$253,064	\$657,966
					Eurodina ta	Completion	ea

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$2,037,626

**Additional Annual Operating and Maintenance** 

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

O&M:



Project Name: Sanitary Sewer Rehabilitation

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PW/WASTEWATER UTILITYSubcommunity:SYSTEM-WIDEProject Number:610WW40000BVCP Area:SYSTEM-WIDE

CEAP Required: No CEAP Status:

## **Project Description**

This project provides for the rehabilitation and improvement to the existing collector sewer piping of the city's wastewater collection system. The program is funded at approximately \$2,000,000 per year (2015) escalated at 4% annually for the 2016-2021 CIP. This project is for an ongoing funding program.

Also included is funding for the rehabilitation of the city's sanitary interceptor sewer in 2015. Estimated costs associated with this project are \$10,000,000 and it is anticipated revenue bonds will be issues. The sanitary interceptor conveys 90% of the city's flow to the Wastewater Treatment facility (WWTF). City staff completed an inspection of approximately 6 miles of the interceptor in the spring of 2014 and found significant internal corrosion in numerous pipe sections. City staff will be completing inspection of an additional 10-12 miles of concrete sewer in 2014. The bond funds will be used to rehabilitate the worst condition sewer sections utilizing a combination of open cut and lining technologies.

#### **Project Phasing**

This project is funded annual at approximately\$2,000,000.

#### **Public Process**

## Interdepartmental and Interagency Collaboration

## Change From Past CIP

Addtnl funding for rehabilitation of the sanitary interceptor

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Wastewater Utility	\$3,000,161	\$2,758,080	\$2,868,403	\$2,983,139	\$3,102,465	\$3,226,563	\$3,355,626

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$21,294,437

## Additional Annual Operating and Maintenance

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



Project Name: Wastewater Treatment Facility Pumps

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department:PW/WASTEWATER UTILITYSubcommunity:AREA IIIProject Number:610WW60000BVCP Area:AREA IIICEAP Required:NoCEAP Status:N/A

## **Project Description**

This project will fund the rehabilitation of existing pumps at the 75th Street WWTF. The 2016 will be allocated based on asset management needs.

## **Project Phasing**

Construction: \$150,000 (2016)

## **Public Process**

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Wastewater Utility	\$0	\$150,000	\$0	\$0	\$0	\$0	\$0

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$150,000
Additional Annual Operating and Maintenance

Additional Annual Operating and Maintenance

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

Additional Annual O&M Description:



Project Name: WWTF Activated Sludge

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department:PW/WASTEWATER UTILITYSubcommunity:AREA IIIProject Number:610WW64000BVCP Area:AREA IIICEAP Required:NoCEAP Status:N/A

## **Project Description**

This project will fund the rehabilitation of the facility's turblex blowers.

## Project Phasing

Construction \$58,000 (2017)

## **Public Process**

Interdepartmental and Interagency Collaboration

## Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Wastewater Utility	\$389,376	\$0	\$175,479	\$0	\$0	\$0	\$0

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$564,855

Additional Annual Operating and Maintenance

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

Additional Annual O&M Description:



Project Name: WWTF Cogeneration

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PWWASTEWATER UTILITYSubcommunity:AREA IIIProject Number:610WW62900BVCP Area:AREA IIICEAP Required:NoCEAP Status:NA

## **Project Description**

This project is to provide funding for a major overhaul of the two cogeneration engines. Major engine rebuilds occur every 7 years and are funded at \$150,000 (in 2009 dollars) escalated at 4% annually.

## **Project Phasing**

Construction: \$185,000 (2020)

## **Public Process**

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Wastewater Utility	\$39,995	\$0	\$0	\$0	\$0	\$184,481	\$0

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$224,476
Additional Annual Operating and Maintenance

Additional Annual

O&M:

Funding Source for O&M:



Project Name: **WWTF Digester Complex** 

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department: PW/WASTEWATER UTILITY Subcommunity: AREA III Project Number: 610WW60700 **BVCP Area:** AREA III

**CEAP Required:** No **CEAP Status:** 

## **Project Description**

This project is to replace the VWVTF secondary digester floating cover. The cover has failed on several occasions in recent years.

## Project Phasing

Planning and design: \$200,000 (2019) Construction: \$2,000,000 (2020)

#### **Public Process**

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Wastewater Utility	\$0	\$0	\$0	\$0	\$200,000 Funding to	\$2,000,000 Completion	

Future Unfunded \$0

Total Funding Plan: \$2,200,000

Additional Annual Operating and Maintenance

**Additional Annual Funding Source for** 

O&M:



Project Name: WWTF Electrical

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department:PW/WASTEWATER UTILITYSubcommunity:AREA IIIProject Number:610WW63900BVCP Area:AREA IIICEAP Required:NoCEAP Status:N/A

## **Project Description**

This project will fund the rehabilitation of various exisiting electrical systems at the 75th Street WWTF. Maintaining the facility's electrical infrastructure is a critical component to ensure adequate treatment. This project will include the replacement of numerous major electrical components. The 2016 funding will cover the planning and design, and the 2017 funding will cover the construction.

### **Project Phasing**

Planning & design: \$120,000 (2016) Construction \$1,200,000 (2017)

## **Public Process**

## Interdepartmental and Interagency Collaboration

## **Change From Past CIP**

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Wastewater Utility	\$0	\$120,000	\$1,200,000	\$0	\$0 Funding t	\$0 o Completion	\$0 \$0

Future Unfunded \$0

Total Funding Plan: \$1,320,000

Additional Annual Operating and Maintenance

Additional Annual \$0

O&M:

Funding Source for O&M:

Additional Annual O&M Description:



Project Name: WWTF Instrumentation/Control

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department:PW/WASTEWATER UTILITYSubcommunity:AREA IIIProject Number:610WW63700BVCP Area:AREA IIICEAP Required:NoCEAP Status:N/A

## **Project Description**

This project will fund the rehabilitation and/or replacement of instrumentation & control facilities at the 75th Street WWTF. These recommendations are based on the 2013 Process Automation System (PAS) Strategic Plan. The PAS Strategic Plan identified \$6,000,000 worth of I&C improvements over a 10-year period.

## Project Phasing

Construction: \$1,127,000 (2015) Construction: \$2,800,000 (2016-2020)

## **Public Process**

## Interdepartmental and Interagency Collaboration

## **Change From Past CIP**

**Funding Source for** 

O&M:

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Wastewater Utility	\$1,127,477	\$0	\$674,918	\$701,915	\$729,992	\$759,191	\$0
					Funding	to Completion	n \$0

Future Unfunded \$0

Total Funding Plan: \$3,993,493

Additional Annual Operating and Maintenance

Additional Annual

O&M:

Additional Annual O&M Description:



**Project Name: WWTF Laboratory** 

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: PW/WASTEWATER UTILITY Subcommunity: AREA III **BVCP Area:** Project Number: 610WW61000 AREA III **CEAP Required: CEAP Status:** N/A

## **Project Description**

This project will provide funds for improvements to the 75th Street WWTF laboratory. The funds will be used to replace the laboratory's benches and casing. The funds will also be used to repair a leaky roof.

## **Project Phasing**

Construction \$60,000 (2016)

## **Public Process**

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Wastewater Utility	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan:

Additional Annual Operating and Maintenance

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

Additional Annual O&M Description:



Project Name: WWTF Permit Improvements

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

 Department:
 PW/WASTEWATER UTILITY
 Subcommunity:
 AREA III

 Project Number:
 610WW61700
 BVCP Area:
 AREA III

 CEAP Required:
 No
 CEAP Status:
 N/A

## **Project Description**

This project will address additional WWTF facilities required to meet new effluent regulations identified in the 2011 Colorado Discharge Permit System (CDPS) Permit. The WWTF must meet the new effluent limits by December 2017. The project was bid in May 2015. The 2015-2016 funding is for the project's construction.

### **Project Phasing**

Nitrogen Project Construction \$4,000,000 (2015 & 2016) Phosphorus Project Planning & Design: \$2,250,000 (2018 & 2019) Construction: \$18,500,000 (2020)

#### **Public Process**

## Interdepartmental and Interagency Collaboration

## Change From Past CIP

Funding for construction of improvement added in 2009

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Wastewater Utility	\$1,694,112	\$150,000	\$0	\$750,000	\$1,500,000	\$18,625,000	\$136,857

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$22,855,969

## Additional Annual Operating and Maintenance

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

# Additional Annual O&M Description:



Project Name: WWTF Rehabilitation

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PWWASTEWATER UTILITYSubcommunity:AREA IIIProject Number:610WW61500BVCP Area:AREA IIICEAP Required:NoCEAP Status:N/A

## **Project Description**

Projects identified from the Wastewater Utility Asset Management Planning Tool.

**Project Phasing** 

## **Public Process**

N/A

#### Interdepartmental and Interagency Collaboration

Change From Past CIP

Projects are coordinated with Boulder County land use and planning

## Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Wastewater Utility	\$0	\$0	\$0	\$0	\$0	\$150,000	\$375,000

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$525,000
Additional Annual Operating and Maintenance

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:



Project Name: Albion Dam

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PW/WATER UTILITYSubcommunity:OUTSIDE PLANNING AREAProject Number:610WA62800BVCP Area:OUTSIDE PLANNING AREA

CEAP Required: No CEAP Status: N/A

## **Project Description**

In 2015, the reservoir will require evacuation and implementation of a more permanent repair to the trash rack and pipe inlet area that can service until the dam rehabilitation project is scheduled.

## **Project Phasing**

This 2015 schedule will depend on run-off conditions and water levels in the reservoir as the summer progresses. An RFP for rehabilitiation alternatives will also issued in 2015.

## **Public Process**

Interdepartmental and Interagency Collaboration

## Change From Past CIP

**Funding Source for** 

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$80,000	\$125,000	\$0	\$341,636	\$3,416,361	\$0	\$0
					Funding t	o Comple	tion \$0

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Future Unfunded \$0

Total Funding Plan: \$3,962,997

Additional Annual Operating and Maintenance

Additional Annual

O&M: O&M:



Project Name: Automated Meter Reading

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department:PW/WATER UTILITYSubcommunity:SYSTEM-WIDEProject Number:610WA45400BVCP Area:SYSTEM-WIDE

CEAP Required: No CEAP Status: NA

## **Project Description**

This project will replace water meters with a system allowing for remote reading of usage.

## **Project Phasing**

Project to be phased over a five year period.

## **Public Process**

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$0	\$0	\$0	\$0	\$0	\$0	\$684,285

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$684,285

Additional Annual Operating and Maintenance

Additional Annual Funding Source for

O&M: O&M:



Project Name: Barker Dam and Reservoir

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department:PW/WATER UTILITYSubcommunity:OUTSIDE PLANNING AREAProject Number:610WA11000BVCP Area:OUTSIDE PLANNING AREA

CEAP Required: No CEAP Status: Not Required

## **Project Description**

This project will fund deficiency corrections at the existing Barker Dam, including security-related improvements. The repairs and improvements are required as part of the agency (SEO and FERC) Dam Safety Inspection Evaluations and while they are not an immediate safety concern, they are necessary to eliminate the potential of storage limitations being enforced or regulated.

### **Project Phasing**

The project will begin in 2015. Construction is anticipated to be complete in 2016.

#### **Public Process**

Interdepartmental and Interagency Collaboration

Change From Past CIP

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Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$4,425	\$65,000	\$50,000	\$0	\$0	\$0	\$0

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$119,425

**Additional Annual Operating and Maintenance** 

Additional Annual 0

O&M:

Funding Source for

O&M:

Additional Annual O&M Description:



Project Name: Barker Dam Outlet

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department:PW/WATER UTILITYSubcommunity:OUTSIDE PLANNING AREAProject Number:610WA10900BVCP Area:OUTSIDE PLANNING AREA

CEAP Required: Yes CEAP Status:

## **Project Description**

This project will provide funds for the replacement of the existing outlet works system of Barker Dam. The Barker Dam outlet facilities are over 100-years old and in need of significant rehabilitation. The current configuration of the outlet gates requires that Barker Reservoir be nearly emptied to perform a thorough inspection once every 5-10 years. Reconfiguration of the outlet facilities would potentially eliminate the need to empty the reservoir for gate inspection. As currently envisioned, the project would require construction of a vertical shaft near the north embankment, inlet tunnels and one outlet tunnel, an outlet distribution facility, a pipeline to Barker Gravity Line, and valve house. The outlet facilities would provide the opportunity to develop a hydroelectric generation facility as well. Alternative approaches to the project will be considered by city staff and technical consultants as part of a technical analysis to be initiated in 2017. Information regarding the alternative approaches will be provided as part of the CEAP.

This project will begin in 2016. The project is anticipated to complete construction in 2019.

#### Project Phasing

This project will begin in 2017. The project is anticipated to complete construction in 2020.

#### **Public Process**

CEAP is to be finalized in 2016 along with final approval of the project.

#### Interdepartmental and Interagency Collaboration

#### Change From Past CIP

Project schedule shifted out due to satisfactory gate inspections

Future Unfunded \$0

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$0	\$100,000	\$175,000	\$0	\$835,551 Funding	\$8,455,509 to Completion	

Total Funding Plan: \$9,566,060

Additional Annual Operating and Maintenance

Additional Annual \$0 Funding Source for

O&M: O&M:



Project Name: Barker Gravity Pipeline Repair

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PW/WATER UTILITYSubcommunity:OUTSIDE PLANNING AREAProject Number:610WA10600BVCP Area:OUTSIDE PLANNING AREA

CEAP Required: No CEAP Status:

## **Project Description**

This project will provide funds for ongoing repairs to the Barker Gravity Pipeline. A rehabilitation segment will be placed in 2016 and the results will be used to update the 15 year rehabilitiation cost estimates forecast for 2017 to 2031.

#### Project Phasing

A rehabilitation segment is planned in 2016 and the results will be used to update the 15 year rehabilitiation cost estimates forecast for 2017 to 2031.

#### **Public Process**

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$470,882	\$667,416	\$1,169,859	\$1,216,653	\$1,265,319	\$1,315,932	\$1,368,569

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$7,474,630

Additional Annual Operating and Maintenance

Additional Annual Funding Source for

BM: O&M:



**Project Name:** Barker-Kossler Penstock Repair

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department: PW/WATER UTILITY Subcommunity: OUTSIDE PLANNING AREA Project Number: 610WA10700 **BVCP Area: OUTSIDE PLANNING AREA** 

**CEAP Required:** Νo **CEAP Status:** 

## **Project Description**

This project will provide funds for analysis and targeted repairs for areas discovered in the inspection in 2017. An analysis will be performed on approximate remaining operational life including recommendations from metallurgical and corrosion experts.

## **Project Phasing**

Investigation of condition and maintenance/rehabilitiation requirements in 2017 with recommendations/results to be used for rehabilitiation program estimate for future years.

#### **Public Process**

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$0	\$0	\$116,986	\$0	\$0	\$0	\$0
					Fundin	g to Complet	ion \$0

Future Unfunded \$0

Total Funding Plan: \$116,986

Additional Annual Operating and Maintenance

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



Project Name: Betasso Hydroelectric / PRF

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PW/WATER UTILITYSubcommunity:OUTSIDE PLANNING AREAProject Number:610WA97400BVCP Area:OUTSIDE PLANNING AREA

CEAP Required: No CEAP Status: Not Required

### **Project Description**

This project will rehabiliate the Betasso Hydroelectric / Pressure Reducing Facility inclusing a required 10 year scheduled maintenance overhaul of the existing turbine-generator equipment, replacement of the HPU and replacement of the transformer.

#### Project Phasing

The turbine generator maintenance and HPU replacement is scheduled for replacement in 2017. Ongoing transformer monitoring will allow transformer replacement to be delayed until 2018.

#### **Public Process**

Interdepartmental and Interagency Collaboration Cha

Change From Past CIP

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Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$0	\$0	\$380,000	\$480,000	\$0	\$0	\$0
					Eunding	to Completi	on 60

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$860,000

Additional Annual Operating and Maintenance

Additional Annual 0 Funding Source for

M: O&M:

Additional Annual O&M Description:

No incrase, funded by existing operating budget



**Project Name:** Betasso Storage Tank Rehabilitation

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department: PW/WATER UTILITY Subcommunity: OUTSIDE PLANNING AREA **BVCP Area:** Project Number: 610WA67600 OUTSIDE PLANNING AREA

**CEAP Required: CEAP Status:** Not Required

### **Project Description**

The project includes rehabilitation and exterior painting of the Betasso Storage Tank. The improvements will address deterioration of the protective paint coating of the elevated steel tank due to weather and other environmental factors.

#### **Project Phasing**

Included with the Betasso CIP project between 2016 and 2018.

#### **Public Process**

See the larger Betasso CIP project.

### Interdepartmental and Interagency Collaboration

Change From Past CIP

See the larger Betasso CIP project.

Capital Funding Plan

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Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$0	\$0	\$292,465	\$0	\$0	\$0	\$0

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$292,465

**Additional Annual Operating and Maintenance** 

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

### Additional Annual O&M Description:

No increase, funded by existing operating budget.



Project Name: Betasso Water Treatment Facility

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department:PW/WATER UTILITYSubcommunity:OUTSIDE PLANNING AREAProject Number:610WA94700BVCP Area:OUTSIDE PLANNING AREA

CEAP Required: No CEAP Status: Not required

#### **Project Description**

This project is for rehabilitations and improvements to Betasso, the city's primary water treatment facility which has been in continuous operation for almost 50 years. Improvements will address pretreatment capacity, high water content in residuals and result in less hauling required to dispose of residuals. Additional projects include replacement of filter media, installation of plate settlers, electrical and backup power upgrades.

#### **Project Phasing**

Alternatives Analysis: Completed Preliminary Design: Summer 2015

Boulder County Special Use Permit Application: Summer 2015

Final Design: February 2016

Boulder County Permit and CDPHE applications.

Bonding: June 2016

Construction Start: Fall 2016 Construction Completion: Fall 2018

\$2,000,000 Water Fund (Design)

\$24,000,000 Bond Proceeds (Construction)

\$240,000 Bond Issuance Costs

#### **Public Process**

WRAB, PB and CC review of CIP/Budget.

City bonding process ealry 2016.

County neighborhood meetings early 2016 and late 2016.

County Special Use Permit review process and commisioner meetings.

### Interdepartmental and Interagency Collaboration

Change From Past CIP

Boulder County Land Use, Transportation and Open Space. CDPHE and Sugarloaf Fire District.

Increased funding includes future projects & leverages low bond rates

### Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$1,273,818	\$25,140,000	\$0	\$0	\$0	\$0	\$0

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$26,413,81

#### Additional Annual Operating and Maintenance

Additional Annual TBD Funding Source for O&M:

#### Additional Annual O&M Description:

Any extra fraction of an FTE will be offset by reduced residual costs



Project Name: Boulder Reservoir

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PW/WATER UTILITYSubcommunity:GUNBARRELProject Number:610WA61000BVCP Area:AREA I

CEAP Required: No CEAP Status:

### **Project Description**

Inspection of outlet pipes in 2016 to assess degree of corrosion. Funds in 2020 are for security upgrades at the reservoir.

#### **Project Phasing**

Work to be completed in 2016 and 2020.

#### **Public Process**

None

Interdepartmental and Interagency Collaboration

Change From Past CIP

None

Capital Funding Plan

Fund(s) Revised 2016 2017 2018 2019 2020 2021 2015 Requested Budget -Funding Current Year Water Utility \$0 \$0 \$118,434 \$0 \$50,000 \$0 \$0

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$168,434

Additional Annual Operating and Maintenance

Additional Annual Funding Source for

O&M: O&M:



Project Name: Carter Lake Hydroelectric

Project at a Glance

Project Type: CIP-NEW FACILITY/INFRASTRUCTUR

Department:PW/WATER UTILITYSubcommunity:OUTSIDE PLANNING AREAProject Number:610WA93000BVCP Area:OUTSIDE PLANNING AREA

CEAP Required: Yes CEAP Status:

### **Project Description**

Analyze potential for hydroelectric facility on the city's portion of the Carter Lake Pipeline and then design and build if preferred.

### Project Phasing

Alternatives analysis in 2018 with CEAP and then potentially design (2019) and construction (2020).

#### **Public Process**

Interdepartmental and Interagency Collaboration

#### Change From Past CIP

**Funding Source for** 

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$0	\$0	\$0	\$50,000	\$250,000	\$2,500,000	\$0

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$2,800,000

Additional Annual Operating and Maintenance

Additional Annual

O&M:



**Project Name:** Distribution Waterline Replacement

Project at a Glance

CIP-CAPITAL MAINTENANCE Project Type:

Department: PW/WATER UTILITY Subcommunity: SYSTEM-WIDE 610WA38900 **BVCP Area: Project Number:** SYSTEM-WIDE **CEAP Required: CEAP Status:** Nο Not Required

#### **Project Description**

The project describes on-going annual funding for waterline reconstruction in the city's distribution system. Many of the city's existing waterlines are corroded or otherwise deteriorated and must be replaced. The city currently experiences approximately 60 -80 main breaks per year and these cause unplanned outages in water service as well as disruption to vehicle travel and damage to public and private property. Although the number of main breaks is not considered excessive, the average age of the city's distribution system is over 40 years and it is anticipated that substantial funds are required to maintain a functioning water distribution system over time.

#### Project Phasing

Work is done annually and year round. Design, bidding and inspection is done in house for less than 10% of the budget. Remaining fuinds are used for construction.

#### **Public Process**

WRAB, PB and CC CIP/budget review. Neighborhoods are notified a couple of weeks in advance of the construction and on the water info website.

#### Interdepartmental and Interagency Collaboration

Change From Past CIP

2018

2019

City & County Transportation, City & County Open Space, City Development Review, City Planning, City Flood, City Wastewater, Xcel, Century Link, BNSF, Private Developers, BVSD, RTD, small water districts and Ditch Companies.

#### **Capital Funding Plan**

Fund(s) Requested 2015 Budget -Funding Current Water Utility \$3,556,517 \$3,352,960 \$3,487,078 \$0 \$3,771,624 \$3,922,489 \$4,079,389

2016

2017

Funding to Completion \$0

Future Unfunded \$0

2020

2021

**Total Funding Plan:** \$22,170,05

### Additional Annual Operating and Maintenance

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

Revised

O&M:

Additional Annual O&M Description:

No increase, funded by existing operating budget.



Project Name: Farmer's Ditch

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PW/WATER UTILITYSubcommunity:OUTSIDE PLANNING AREAProject Number:610WA55000BVCP Area:OUTSIDE PLANNING AREA

CEAP Required: No CEAP Status:

### **Project Description**

Improvements and freebord maintence of the ditch where segment vunerabilities were highlighted by the 2013 flood event.

### **Project Phasing**

Construction of impacted segments to be completed in 2015.

#### **Public Process**

Interdepartmental and Interagency Collaboration

### Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$150,000	\$0	\$0	\$0	\$108,160	\$0	\$0
					Funding	to Comple	tion \$0

Future Unfunded \$0

Total Funding Plan: \$258,160

Additional Annual Operating and Maintenance

Additional Annual Funding Source for

O&M: O&M:



Project Name: Goose Lake Dam

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PW/WATER UTILITYSubcommunity:OUTSIDE PLANNING AREAProject Number:610WA61200BVCP Area:OUTSIDE PLANNING AREA

CEAP Required: No CEAP Status: Not Required

### **Project Description**

To meet SEO Dam Safety requirements, in 2015 the city will conduct an inspection and assessment of the outlet system at Goose Lake Dam including the intake, conduit and valve system.

#### **Project Phasing**

Project will begin and be completed in 2015 subject to ability to drain the reservoir for inspection. Else outlet assessment will be shifted out and additional funding for underwater inspection may be required.

#### **Public Process**

Interdepartmental and Interagency Collaboration

Change From Past CIP

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Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$20,000	\$0	\$0	\$75,000	\$0	\$0	\$0
					Fundir	a to Complet	ion \$0

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$95,000

Additional Annual Operating and Maintenance

Additional Annual 0 Funding Source for

&M: O&M:



**Project Name:** Green Lake 2 Dam

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: PW/WATER UTILITY Subcommunity: OUTSIDE PLANNING AREA Project Number: 610WA62700 **BVCP Area:** OUTSIDE PLANNING AREA

**CEAP Required: CEAP Status:** Not Required

### **Project Description**

This project will provide funds for the evaluation of alternatives and design of the rehabilitation of Green Lake 2 Dam. Green Lake 2 Dam is in need of extensive rehabilitation to allow continued storage of water.

#### Project Phasing

Funding allocated in the current CIP is for analysis of alternatives in 2020 and then design plus construction in 2021/2022.

#### **Public Process**

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$24,719	\$0	\$0	\$0	\$0	\$75,000	\$486,773

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$586,492

Additional Annual Operating and Maintenance

**Additional Annual** 

**Funding Source for** 

O&M:

Additional Annual O&M Description:

No increase, funded by existing operating budget



Project Name: Island Lake Dam

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PW/WATER UTILITYSubcommunity:OUTSIDE PLANNING AREAProject Number:610WA62600BVCP Area:OUTSIDE PLANNING AREA

CEAP Required: No CEAP Status:

### **Project Description**

This project is to fund valve actuations improvements and instrumentation necessary at the dam.

### **Project Phasing**

Work to be initiated in 2018.

#### **Public Process**

None

Interdepartmental and Interagency Collaboration

Change From Past CIP

None

Capital Funding Plan

Fund(s) Revised 2016 2017 2018 2019 2020 2021 2015 Requested Budget -Funding Current Year Water Utility \$0 \$50,000 \$0 \$0 \$0 \$0 \$0

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$50,000

Additional Annual Operating and Maintenance

Additional Annual Funding Source for

O&M: O&M:



**Project Name:** Kohler Storage Tank Roof

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department: PW/WATER UTILITY Subcommunity: SOUTH BOULDER

**BVCP Area:** Project Number: 610WA67100 AREA I

**CEAP Required:** No **CEAP Status:** 

#### **Project Description**

Installation of an old roof on the Kohler Tank. Walls were completed during the summer of 2013.

### **Project Phasing**

Design: 2013

Wall Construction: Summer 2013 Roof Construction: Winter 2015/2016

#### **Public Process**

WRAB, PB and CC CIP/budget review. Neighborhood mailing 1 month before construction.

#### Interdepartmental and Interagency Collaboration Change From Past CIP

City roofing permit.

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$103,487	\$799,875	\$0	\$0	\$0	\$0	\$0

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan:

Additional Annual Operating and Maintenance

**Additional Annual Funding Source for** 

O&M: O&M:



Project Name: Kossler Dam

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PW/WATER UTILITYSubcommunity:OUTSIDE PLANNING AREAProject Number:610WA11900BVCP Area:OUTSIDE PLANNING AREA

CEAP Required: CEAP Status:

### **Project Description**

Kossler Dam Face Rehabilitation Project is to be completed in 2015. Temporary repairs will be required for the Kossler Reservoir Inlet Structure in 2016. Both the Inlet Structure and the Outlet Structure will require full rehabilitation/replacement within 10 years and is presently scheduled for 2022/2023.

### **Project Phasing**

#### **Public Process**

Interdepartmental and Interagency Collaboration

#### Change From Past CIP

Inlet Repairs added in 2016 and Inlet/Outlet Rehab in 2022/23

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$410,817	\$75,000	\$0	\$0	\$0	\$0	\$0
					Fundin	a to Complet	tion \$0

Future Unfunded \$0

Total Funding Plan: \$485,817

Additional Annual Operating and Maintenance

Additional Annual Funding Source for

O&M: O&M:



Project Name: Lakewood Dam

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department:PW/WATER UTILITYSubcommunity:OUTSIDE PLANNING AREAProject Number:610WA62000BVCP Area:OUTSIDE PLANNING AREA

CEAP Required: No CEAP Status:

### **Project Description**

This project will provide funds for security improvements at Lakewood Reservoir that are required to update to the level of all city facilities subject to public access and as recommended in the Source Water Master Plan and subsequent consultant reports.

#### Project Phasing

This project will begin in 2018. The project is anticipated to complete construction in 2019.

### **Public Process**

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$0	\$0	\$0	\$124,707	\$0	\$0	\$0

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$124,707

Additional Annual Operating and Maintenance

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



Project Name: Lakewood Hydroelectric/PRV

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department:PW/WATER UTILITYSubcommunity:AREA IIIProject Number:610WA90100BVCP Area:AREA III

CEAP Required: No CEAP Status:

### **Project Description**

10-year turbine generator overhaul in 2016.

### Project Phasing

Generator overhaul to be completed in 2016. Forecast PRV refurbishment in 2019.

#### **Public Process**

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$0	\$130,000	\$0	\$0	\$300,000	\$0	\$0
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Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$430,000

**Additional Annual Operating and Maintenance** 

Additional Annual Funding Source for

O&M: O&M:



Project Name: Lakewood Pipeline

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PW/WATER UTILITYSubcommunity:OUTSIDE PLANNING AREAProject Number:610WA78000BVCP Area:OUTSIDE PLANNING AREA

CEAP Required: Yes CEAP Status: Yes

### **Project Description**

The Sixth Internal Inspection of the Lakewood Pipeline is scheduled for 2015. This inspection should confirm the expected corossion rates indicated by the previous inspections and make a recommendation as to fitness for operational condition.

#### Project Phasing

Fall of 2015 is presently scheduled for the sixth Internal Inspection.

#### Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$255,400	\$0	\$0	\$0	\$316,330	\$0	\$0

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$571,730

Additional Annual Operating and Maintenance

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



**Project Name:** NCWCD Conveyance - Carter Lake Pipe

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: Subcommunity: OUTSIDE PLANNING AREA PW/WATER UTILITY **Project Number:** 610WA54700 **BVCP Area:** OUTSIDE PLANNING AREA

**CEAP Required: CEAP Status:** 

### **Project Description**

This project will provide funds for the planning, design and construction of a pipeline from Carter Lake to the Boulder Reservoir Water Treatment Facility. The pipeline is considered the best long-term solution to water quality, operational and security vulnerability issues related to drawing water directly from either the Boulder Feeder Canal or Boulder Reservoir. The Northen Colorado Water Conservancy District is the lead agency and the City of Boulder and the Left Hand Water District are project participants.

#### **Project Phasing**

CIP budget continues through 2016 for ROW and preliminary design costs. Final design and construction is scheduled for 2017/2018.

#### **Public Process**

The pipeline construction and alignment was approved by Boulder County under the 1041 permit process.

#### Interdepartmental and Interagency Collaboration

Change From Past CIP

Coordination with Boulder County and Northern Colorado Water Conservance District

Capital Funding Plar	Cap	ital	Fund	ing	Plan
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Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$500,000	\$850,000	\$2,036,322	\$37,915,263	\$0	\$0	\$0

Funding to Completion \$0 Future Unfunded \$0

**Total Funding Plan:** \$41,301,58

**Additional Annual Operating and Maintenance** 

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



Project Name: Orodell Hydro/PRV Facility

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department:PW/WATER UTILITYSubcommunity:OUTSIDE PLANNING AREAProject Number:610WA33100BVCP Area:OUTSIDE PLANNING AREA

CEAP Required: No CEAP Status:

#### **Project Description**

Integrate the existing external roll sea pressure reducing valves into the SCADA system so operators can better control and monitor flows down the Boulder Canyon treated water transmission lines. Currently the station only has two manual settings and cannot be controlled or monitored remotelly in an emergency.

#### **Project Phasing**

Previously funded design completed summer 2015 Construction winter 2015/2016 - \$75,000

#### **Public Process**

None.

WRAB, PB and CC CIP/budget process.

### Interdepartmental and Interagency Collaboration Change From Past CIP

Added this year to provide better system resiliency

#### Capital Funding Plan 2016 2017 2020 Fund(s) Revised 2018 2019 2021 2015 Requested Budget -Funding Current Year Water Utility \$0 \$0 \$0 \$0 \$75,000 \$0 \$0

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$75,000

Additional Annual Operating and Maintenance

Additional Annual \$0 Funding Source for

O&M: O&M:



Project Name: Pearl Street Hydro/PRV Facility

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department:PWWATER UTILITYSubcommunity:AREA IIIProject Number:610WA36000BVCP Area:AREA IIICEAP Required:NoCEAP Status:Not required

### **Project Description**

This project includes installation of a hydroelectric turbine and generator at the city's Pearl Street pressure reducing facility. Currently water pressure is reduced using a pressure reducing valve which wastes the available energy in the water. This energy will be captured to produce electricity with the addition of the turbine and generator.

#### **Project Phasing**

Design and Construction: Begin feasibility study in early 2018, design in late 2018 with construction completion in early 2020.

#### **Public Process**

WRAB, PB and CC review of CIP/Budget.

### Interdepartmental and Interagency Collaboration

Change From Past CIP

Boulder County Building Department, HHS for shared access considerations.

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Capital Fallang Flair								
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021	
Water Utility	\$0	\$0	\$0	\$24,333	\$243,331	\$0	\$0	

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$267,664

Additional Annual Operating and Maintenance

Additional Annual TBD Funding Source for O&M:

#### Additional Annual O&M Description:

TBD, operating costs will be offset by hydroelectric revenue



Project Name: Reservoir Water Treatment Facility

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PW/WATER UTILITYSubcommunity:GUNBARRELProject Number:610WA90000BVCP Area:AREA I

CEAP Required: No CEAP Status:

### **Project Description**

Replace the filter valve actuators, filter media, filter valves, residual lagoon asphalt and upgrade backup power.

#### Project Phasing

Replace filter valve actuators that are failing in 2016. Design in early 2020, finish construction in early 2021. 5% of budget for design, remainder for product acquisitiion and installation.

#### Public Process

WRAB, PB and CC CIP/budget review.

#### Interdepartmental and Interagency Collaboration

City of Boulder building permit.

### Change From Past CIP

Funding added for filter rehabs, residuals and backup power.

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$7,100	\$314,000	\$0	\$0	\$0	\$2,000,000	\$0
					Fundin	a to Completion	\$0

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$2,321,100

Additional Annual Operating and Maintenance

Additional Annual \$0 Funding Source for

BM: O&M:



Project Name: Silver Lake Dam

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PW/WATER UTILITYSubcommunity:OUTSIDE PLANNING AREAProject Number:610WA61500BVCP Area:OUTSIDE PLANNING AREA

CEAP Required: No CEAP Status:

### **Project Description**

To meet SEO Dam Safety requirements, a full outlet system inspection is required in 2015.

#### Project Phasing

Outlet Inspection to be completed in 2015 with reservoir lowered/drained and underwater inspection equipment as may be required.

### **Public Process**

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$75,000	\$0	\$0	\$100,000	\$0	\$0	\$0

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$175,000
Additional Annual Operating and Maintenance

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



Project Name: Silver Lake Hydroelectric/PRV

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PW/WATER UTILITYSubcommunity:OUTSIDE PLANNING AREAProject Number:610WA97000BVCP Area:OUTSIDE PLANNING AREA

CEAP Required: No CEAP Status:

### **Project Description**

Silver Lake Hydroelectric Facility has been increased in 2016 through 2018 for PLC upgrades and replacement of the turbine needles/seats

#### **Project Phasing**

In 2016 complete short term PLC upgrades and alternatives analysis for permanent upgrades, permanent PLC upgrades in 2017 and repalcement of the needles/seats in 2018.

#### **Public Process**

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$150,000	\$25,000	\$50,000	\$80,000	\$0	\$0	\$0
					Fundin	g to Complet	ion \$0

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$305,000

Additional Annual Operating and Maintenance

Additional Annual Funding Source for

M: O&M:



Project Name: Skyscraper Dam

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PW/WATER UTILITYSubcommunity:OUTSIDE PLANNING AREAProject Number:610WA64000BVCP Area:OUTSIDE PLANNING AREA

CEAP Required: No CEAP Status:

### **Project Description**

Funding is for infrastructure evaluation and gate replacement as recommended in the Source Water Master Plan.

### **Project Phasing**

Project to be initiated in 2021

#### **Public Process**

None

Interdepartmental and Interagency Collaboration

Change From Past CIP

None

Capital Funding Plan

Fund(s) Revised 2016 2017 2018 2019 2020 2021 2015 Requested Budget -Funding Current Year Water Utility \$0 \$0 \$0 \$171,071 \$0 \$0 \$0

> Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$171,071

Additional Annual Operating and Maintenance

Additional Annual

O&M:

**Funding Source for** 

O&M:



Project Name: Source Pumping and Hydro Rehab

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

**Department:** PW/WATER UTILITY **Subcommunity:** MULTIPLE SUBCOMMUNITIES

**Project Number:** 610WA94000 **BVCP Area:** SYSTEM-WIDE

CEAP Required: No CEAP Status:

### **Project Description**

Funding for capital maintenance for the ciritical hydroelectric, pressure reducing, and reversible pump-generator system components not identified as individual capital projects.

#### Project Phasing

Funding for this ongoing maintenance program to begin in 2016.

### **Public Process**

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$0	\$150,000	\$150,000	\$150,000	\$150,000	\$343,472	\$351,210

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$1,294,682

Additional Annual Operating and Maintenance

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



Project Name: Source Water Monitoring/Protection

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department:PW/WATER UTILITYSubcommunity:SYSTEM-WIDEProject Number:610WA44200BVCP Area:SYSTEM-WIDE

CEAP Required: No CEAP Status:

### **Project Description**

Flow release and water quality monitoring system instrumentation improvements for the source water system.

#### **Project Phasing**

Ongoing implementation starting in 2015 and to be completed in 2019 (5 years).

#### **Public Process**

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$0	\$0

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$500,000

Additional Annual Operating and Maintenance

Additional Annual Funding Source for

O&M: O&M:



Project Name: Sunshine Hydroelectric/PRV Facility

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PW/WATER UTILITYSubcommunity:AREA IIIProject Number:610WA34700BVCP Area:AREA IIICEAP Required:NoCEAP Status:Not Required

### **Project Description**

Project includes rehabilitation of the Sunshine Hydroelectric Pressure Reducing Station including flow meter and rehabilitation or replacement of the existing control system. The project is located adjacent to Sunshine Canyon south of Mount Sanitas.

#### **Project Phasing**

Design and Construction: Begin design in early 2017 with completion in early 2018.

#### Public Process

WRAB, PB and CC review of CIP/Budget.

Interdepartmental and Interagency Collaboration

Change From Past CIP

Shared access considerations with OSMP.

Capital Funding Plan

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Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$0	\$0	\$271,875	\$0	\$0	\$0	\$0

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$271,875

Additional Annual Operating and Maintenance

Additional Annual Operating and Maintenance

Additional Annual 0 Funding Source for O&M:

Additional Annual O&M Description:

No increase, funded by existing operating budget



**Project Name:** Water System Security/Quality Imprv

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department: Subcommunity: PW/WATER UTILITY SYSTEM-WIDE **Project Number:** 610WA44000 **BVCP Area:** SYSTEM-WIDE

**CEAP Required: CEAP Status:** 

#### **Project Description**

This project will provide funds for water system security upgrades. New Federal guidelines call for increased protection of drinking water systems from terrorist and other threats. City staff recently updated the water system security vulnerability assessment. Numerous recommendations for security vulnerability improvements have been made. Water quality monitoring will be installed in conjunction with security bimprovements where appropriate.

#### **Project Phasing**

Various cameras, fences, network connections and water quality monitory at treated water starnded facilities such as Devil's Thumb Tank, Booton Reservoir, Kohler Reservoir, Maxwell Reservoir and 101 Pearl.

#### **Public Process**

WRAB, PB and CC CIP/budget review.

#### Interdepartmental and Interagency Collaboration

Change From Past CIP

City Open Space, Boulder County and City Development Review.

### Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$158,073	\$150,000	\$150,000	\$150,000	\$90,000	\$0	\$0
					Funding to	o Completion	\$0

Future Unfunded \$0

Total Funding Plan: \$698,073

Additional Annual Operating and Maintenance

**Additional Annual** \$5,000 **Funding Source for** O&M: O&M:

#### Additional Annual O&M Description:

Maintain panels and instruments



Project Name: Watershed Improvements

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PW/WATER UTILITYSubcommunity:OUTSIDE PLANNING AREAProject Number:610WA52000BVCP Area:OUTSIDE PLANNING AREA

CEAP Required: No CEAP Status:

### **Project Description**

General Watershed improvements as recommended in the 2009 Source Water Master Plan.

### **Project Phasing**

Ongoing improvements to facilitiate continued reliable operation of the watershed source water storage and delivery system. CIP budget continues until 2016.

### Public Process

Interdepartmental and Interagency Collaboration

Change From Past CIP

Revised 2016 2017 2018 2019 2020 2021	Capital Funding Plan							
Water Utility \$146,357 \$80,000 \$0 \$0 \$100,000 \$0	Fund(s)	2015 Budget - Current	Requested		2018	2019	2020	2021
	Water Utility	\$146,357	\$80,000	\$0	\$0	\$0	\$100,000	\$0

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$326,357

Additional Annual Operating and Maintenance

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



Project Name: Wittemyer Ponds

Project at a Glance

Project Type: CIP-CAPITAL ENHANCEMENT

Department:PW/WATER UTILITYSubcommunity:OUTSIDE PLANNING AREAProject Number:610WA65000BVCP Area:OUTSIDE PLANNING AREA

CEAP Required: Yes CEAP Status: No

### **Project Description**

Wittemyer Ponds – this facility consists of multiple reservoirs planned for potential use in terms of city water exchanges. Alternatives for improving the ponds to reservoirs will be considered for final implementation.

#### **Project Phasing**

The alternatives study and CEAP are planned for 2019 with design and construction for 2020/2021.

#### **Public Process**

Interdepartmental and Interagency Collaboration

Change From Past CIP

Capital Funding Plan							
Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$0	\$0	\$0	\$0	\$100,000	\$492,685	\$4,926,849

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$5,519,534
Additional Annual Operating and Maintenance

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

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Project Name: Zone 1 Transmission Pipes

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PW/WATER UTILITYSubcommunity:SYSTEM-WIDEProject Number:610WA00200BVCP Area:SYSTEM-WIDE

CEAP Required: No CEAP Status:

#### **Project Description**

This project provides for the rehabilitation and improvement to the Zone 1 transmission piping of the city's water system. An extensive network of transmission piping exists, some of which is over 50 years old. It is projected this piping will require replacement or other rehabilitation. Funding is in the CIP to develop a program to inspect, prioritize and begin replacement of the transmission pipes, (pipes that are 14" diameter and larger).

#### **Project Phasing**

\$500,000 for preliminary inspection, rehabilitation and program development.

#### **Public Process**

WRAB, PB and CC CIP/budget review. Neighborhoods are notified a couple of weeks in advance of the construction and on the water info website.

#### Interdepartmental and Interagency Collaboration

Change From Past CIP

City & County Transportation, City & County Open Space, City Development Review, City Planning, City Flood, City Wastewater, Xcel, Century Link, BNSF, Private Developers, BVSD, RTD, small water districts and Ditch Companies.

Capital Funding Plan	Capi	tal	Fund	ing	Plan
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Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$0	\$0	\$0	\$250,000	\$0	\$0	\$250,000

Funding to Completion \$0

Future Unfunded \$0

Total Funding Plan: \$500,000

Additional Annual Operating and Maintenance

Additional Annual \$0 Funding Source for

O&M: O&M:

Future Unfunded \$0



Project Name: Zone 2 Transmission Pipes

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PW/WATER UTILITYSubcommunity:SYSTEM-WIDEProject Number:610WA00400BVCP Area:SYSTEM-WIDE

CEAP Required: No CEAP Status:

#### **Project Description**

This project provides for the rehabilitation and improvement to the Zone 2 transmission piping of the city's water system. An extensive network of transmission piping exists, some of which is over 50 years old. It is projected this piping will require replacement or other rehabilitation. Funding is in the CIP to develop a program to inspect, prioritize and begin replacement of the transmission pipes, (pipes that are 14" diameter and larger).

#### **Project Phasing**

\$500,000 for preliminary inspection, rehabilitation and program development.

#### **Public Process**

WRAB, PB and CC CIP/budget review. Neighborhoods are notified a couple of weeks in advance of the construction and on the water info website.

#### Interdepartmental and Interagency Collaboration

Change From Past CIP

City & County Transportation, City & County Open Space, City Development Review, City Planning, City Flood, City Wastewater, Xcel, Century Link, BNSF, Private Developers, BVSD, RTD, small water districts and Ditch Companies.

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Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$0	\$0	\$250,000	\$0	\$0	\$250,000	\$0
					Fundin	a to Completio	n \$0

Total Funding Plan: \$500,000

Additional Annual Operating and Maintenance

Additional Annual \$0 Funding Source for

O&M: O&M:



Project Name: Zone 3 Transmission Pipes

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

Department:PW/WATER UTILITYSubcommunity:SYSTEM-WIDEProject Number:610WA00500BVCP Area:SYSTEM-WIDE

CEAP Required: No CEAP Status:

#### **Project Description**

This project provides for the rehabilitation and improvement to the Zone 3 transmission piping of the city's water system. An extensive network of transmission piping exists, some of which is over 50 years old. It is projected this piping will require replacement or other rehabilitation. Funding is in the CIP to develop a program to inspect, prioritize and begin replacement of the transmission pipes, (pipes that are 14" diameter and larger).

#### Project Phasing

\$250,000 for preliminary inspection, rehabilitation and program development.

\$1,200,000 for replacement of the deteriorating 18" transmission line between Boulder Canyon/Sunshine Hydro and Chautauqua Reservoir. Leftover Sunshine Transmission line funds may be used to supplement this depending on inspection results there. Design at 10% in Winter 2015/2016, Construction in Winter 2016/2017.

#### **Public Process**

WRAB, PB and CC CIP/budget review. Neighborhoods are notified a couple of weeks in advance of the construction and on the water info website.

#### Interdepartmental and Interagency Collaboration

Change From Past CIP

**Funding Source for** 

City & County Transportation, City & County Open Space, City Development Review, City Planning, City Flood, City Wastewater, Xcel, Century Link, BNSF, Private Developers, BVSD, RTD, small water districts and Ditch Companies.

#### Capital Funding Plan

Fund(s)	Revised 2015 Budget - Current Year	2016 Requested Funding	2017	2018	2019	2020	2021
Water Utility	\$0	\$1,200,000	\$0	\$0	\$250,000	\$0	\$0
					To an alian as A a	0	60

Funding to Completion \$0 Future Unfunded \$0

Total Funding Plan: \$1,450,000

Additional Annual Operating and Maintenance

Additional Annual \$0

O&M: O&M:



Project Name: Utility Billing Computer System

Project at a Glance

Project Type: CIP-CAPITAL MAINTENANCE

 Department:
 PW/UTILITIES
 Subcommunity:
 SYSTEM-WIDE

 Project Number:
 Various
 BVCP Area:
 SYSTEM-WIDE

CEAP Required: No CEAP Status:

Project Description

This project is for the upgrade of the existing Utility Billing Computer System.

**Project Phasing** 

The upgrade is anticipated in 2020.

**Public Process** 

None

Interdepartmental and Interagency Collaboration

Change From Past CIP

This project will be coordinated it IT and Finance.

Capital Funding Plan									
Fund(s) 2015	Revised	2016 Request	2017	2018	2019	2020	2021		
	Budget - Current Year	ed Funding							
Stormwater & Flood Mgt Utility	\$50,000	\$0	\$0	\$0	\$0	\$65,000	\$0		
,		Funding to Complet	to Completio	n \$0					
					F	uture Unfunde	d \$0		
Wastewater Utility	\$50,000	\$0	\$0	\$0	\$0	\$65,000	\$0		
					Funding	Funding to Completion			
					F	uture Unfunde	d \$0		
Water Utility	\$100,000	\$0	\$0	\$0	\$0	\$125,000	\$0		
					Funding	to Completio	n \$0		
					F	uture Unfunde	d \$0		

Total Funding Plan: \$305,000

Additional Annual Operating and Maintenance

Additional Annual O&M:

Funding Source for O&M:

City of Boulder

# Appendix A, UNFUNDED PROJECTS

2016-2021 Capital Improvement Program

### Capital Funding History and Future Approach to Unfunded Projects

The provision of adequate urban facilities and services to support the community's quality of life is a core tenet of the Boulder Valley Comprehensive Plan. The Capital Improvement Program is a major tool for coordinating and targeting public capital expenditures within changing budget constraints. The goal is to maintain and, in some cases, enhance service levels and standards over time, with new growth paying a fair share of the costs.

### Historical Funding Patterns in Boulder

The city has a rich history of investing in the community and its quality of life. Prior to the 2000s, the community consistently invested significant resources in capital facilities. Funding was provided through a combination of ballot measures for specific facilities and land purchases, federal funds, and discretionary revenues. Examples of investments include:

- Buying park lands and open space
- Providing and upgrading public facilities such as libraries, recreation centers and sports fields
- Building places for community business and services such as the municipal campus buildings, and operations centers, for example, the "Yards"
- Building multimodal community connections such as the Greenways system, bikeways, and intersection improvements
- Investing to create special places like the Pearl Street Mall and Chautauqua area.

Today, community members and visitors continue to benefit from these many facilities and lands on a regular basis.

The 2000s, by contrast, were often economically difficult at local, regional, national, and even global levels. The cost of delivering services and taking care of our infrastructure has increased dramatically. Global demand has resulted in energy and construction costs far outpacing the consumer price index. There is currently no sign that there will be a return to historic prices. At the same time, there have been two economic declines, increased regional competition, and



cultural change in shopping habits impacting the revenue side of the equation. The city's revenue in absolute dollars has not yet returned to where it was in 2000. Furthermore, the purchasing power of current funding is significantly less than in 2000.

Continued and ongoing CIP funding exists in certain areas through enterprise funds (e.g. Water, Wastewater, Stormwater/Flood funds), funds with dedicated tax revenues earmarked for capital investment (e.g. Permanent Parks fund) and funds with dedicated taxes or fees intended to ensure that growth pays its way (e.g. Development Excise Tax and impact fees). These sources are dependent on numerous factors, including economic conditions and approved utility rates, and cover only a portion of capital needs in the city, however, they have been steady sources for capital investment over time.

### Recent Increases in Capital Funding

In 2011 the city engaged in a capital investment strategy. At council's direction, staff engaged a stakeholder group and collected public feedback on capital investment in the city. The result of this was a voter approved capital bond (see Special Highlight: Capital Improvement Bond section of this document), which has provided over \$50 million dollars for capital investment in the city. The 20-year debt service for this is being covered from operating General Fund dollars.

A second round of the capital investment strategy was put on hold in 2012, as costs and scopes for additional potential capital projects were not yet fully known and polling did not support another ballot issue at that time. However, work continued to identify capital needs across the city with the Comprehensive Financial Strategy (CFS) project. The initial work of the CFS, capital phase involved looking at capital needs and making recommendations to council for short-term capital project funding. Additionally the CFS looked at larger infrastructure investment needs, long –term capital deficiencies, place–making capital investment and long–term operating needs.

City staff incorporated information learned from the 2013 Flood in this strategic work. Through the 2015 budget process and in response to community feedback, utility rates were adjusted to perform utility system-wide asset assessment and accelerate maintenance and replacement work, especially in the wastewater and stormwater/flood management areas. This is reflected in current utility CIP funding levels.

In November 2014, Boulder voters passed the Community, Culture and Safety tax. This



temporary, 0.3 percent sales and use tax increase over three years will provide more than \$27 million to improve community spaces, bolster cultural projects and organizations, and enhance safety in and around the downtown and University Hill. The passage of this tax addressed only a portion of the capital needs identified in the CFS and was targeted to specific capital enhancements.

### **Strategic Planning for Unfunded Projects**

Moving forward, the intention is to build on the efforts of the past decade and establish a purposeful and continuous process for capital investment to support the city's vision. Near term steps include commencing a citywide facility and asset assessment and an ongoing process for planning, funding and scheduling necessary maintenance and replacement of all capital assets. The process is expected to take a few years to complete with the goal of having a strategic approach to citywide capital planning that is integrated with the city's comprehensive plan and long term vision. This begins with establishing a baseline, developing a consistent process and ongoing system for prioritizing capital projects for asset maintenance as well as emerging needs. The strategic approach will recognize the interconnectedness of capital investment and operating planning to provide the most efficient and effective public service, meeting community needs now and in the future.

Finally, in conjunction with ongoing operating analysis and the review of the long-term financial structural gap, and understanding capital funding gaps identified through the asset assessment and capital strategy work, the city will be exploring other options, such as creating a capital fund with annual contributions from ongoing revenues, to address capital needs.

### **Unfunded Projects**

In each department's section of this document, departments have identified key unfunded projects and emerging needs. The following bullets provide a summary of the unfunded capital. These items have been identified over time from the capital investment strategy work, department strategic and master plans, CFS analysis, information learned from the September 2013 Flood, and public input. The lists are not exhaustive (and dollar amounts are very rough estimates where they are available at all), but rather they illustrate the challenges and opportunities that lie ahead. (Note: the list below does not include OSMP or Utilities projects, as existing and future funding is anticipated to be able to address the emerging and long-term capital needs in these areas.) It is anticipated that the upcoming work on an asset assessment inventory, in conjunction with



ongoing capital investment strategic work and the updated Boulder Valley Comprehensive Plan, will lay out a more comprehensive list of infunded capital, as well as options to address the needs.

### Citywide

An emerging city-wide issue is our aging radio infrastructure. FAM has submitted a 2016 budget request for a radio infrastructure analysis and strategic plan. This strategic plan will impact all users of the city's radio system including public safety, public works, Parks and Recreation and Open Space and Mountain Parks. Additional costs for replacement will be determined using the results of the study.

#### **DUHMD**

- University Hill Commercial District Pedestrian Lighting
- Alley Master Plan implementation

#### **FAM**

- Parking Lot Repairs at the Municipal Service Center and Public Safety Building parking lots
- Energy Efficiencies and Renewables
- Electric Vehicle Infrastructure
- Facility Space / Office Space (existing and future city employees)

### Fire

- Relocate Fire Station 3 out of the 100-year floodplain, co-locate with Fire Administration
   Offices, and construct a separate storage facility for fire vehicles and equipment
  - One-time Buildings \$11,412,500, Land up to \$8,600,000, On-going \$459,000
- Replacement or Remodel of Fire Station 4 north of the current location of 4100 Darley Avenue
  - One-time Building \$2,442,750, Land up to \$2,000,000, On-going \$165,000
- Remodel Fire Station 6 currently located at 5145 N 63<sup>rd</sup> Street
  - One-time \$1,154,625, On-going \$165,000
- Remodel Fire Station 2 at the current location of 2225 Baseline Road.
  - One-time Building \$3,842,000, Land up to \$3,500,000, On-going \$229,500
- Remodel Fire Station 5 at the current location of 4365 19<sup>th</sup> Street.
  - One-time Building \$1,084,500, On-going \$229,500
- Remodel Fire Station 1 at the current location of 2441 13<sup>th</sup> Street.

## **Appendix A, Unfunded Projects**



- One-time Building \$3,397,125, On-going \$128,800
- Remodel Fire Station 7 at the current location of 1380 55<sup>th</sup> Street.
  - One-time Building \$1,096,875, On-going \$42,000.
- Fire Training Center Phase 2 Driving area and storage building
  - One-time Concrete \$2,500,000, Building \$2,250,000, On-going \$60,000.
- Fire Training Center Phase 3 Additional classroom and office space.
  - One-time \$1,500,000, On-going \$56,000.

### Information Technology

- New, emerging software-based automation opportunities that will continually arise.
- Future replacement and/or expansion of critical enterprise software (e.g. finance and payroll) and departmental systems (e.g. police records management, parks and recreation registration, court case management and many others).
- IT infrastructure replacement (e.g. PCs, networks, servers, telephones, etc) for central and mobile computing infrastructure (e.g. mobile devices, wireless networks, virtualized servers, associated security systems), data storage, and use of cloud-based applications and data storage.

#### Parks & Recreation

- Work collaboratively with Boulder Fire Department to coordinate Fire Station #3 with potential
  move to Mapleton including identification of funding for relocation of athletic fields to Stazio
  or Valmont and upgrade of Mapleton Park to a community park serving the surrounding area
- Full replacement of Scott Carpenter Outdoor Pool
- System-wide compliance with federal standards for the Americans with Disabilities Act
- Increased capacity and additional facilities for youth and adult sports
- Expansion and enhancement of recreation centers and aquatics facilities that accommodate increased demand for lap swimming, fitness equipment and classroom space
- Boulder Reservoir infrastructure upgrades to increase operational efficiencies and improve public amenities
- Park infrastructure upgrades for the Civic Area and Pearl Street Mall
- Major parking lot renovations at key facilities
- Infrastructure associated with Valmont City Park Phase 2 development.
- Address maintenance backlog estimated at over \$27 million on approximately \$200 million assets.



### Transportation

- The unfunded projects list in the Transportation Fund is informed by the area/corridor planning processes including next phase Civic Area planning, Envision East Arapahoe and 30<sup>th</sup> Street/Colorado Avenue planning.
- Boulder Junction implementation may potentially have additional transportation connections needs that are not currently funded beyond the first phase of high priority Key Public Improvements in the Phase 1 area.
- Quiet zone implementation to allow for quieter railroad crossings continues to come up as a
  community desire and is not currently funded. The current evaluation identifies approximately
  \$5M in capital improvements needed for the city's railroad crossings to be Quiet Zone
  compliant.

City of Boulder

# Appendix B, CEAP PROJECTS

2016-2021 Capital Improvement Program

The City of Boulder assesses potential impacts of conceptual project alternatives in order to inform the selection and refinement of a preferred alternative. The evaluation of these alternatives is known as a Community and Environmental Assessment Process or CEAP.

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

All CEAPs include an analysis of the project and alternatives, including how the project will further implement the BVCP, master plan goals, or subcommunity or area plans. The alternatives are then analyzed through a checklist of impacts to: natural areas or features; riparian areas and floodplains; wetlands; geology and soils; water quality; air quality; resource conservation; cultural and historic resources; visual quality; safety; physiological well-being; urban services; special populations; and the economy.

The Appendix to Title 2 of the Boulder Revised Code instructs that major capital improvement projects should be handled in accordance with the City Plans and Projects Handbook, dated November 2007.

The 2007 Handbook provides that a project should be evaluated through a CEAP if it meets any of the following criteria:

- A project or a potential alternative could have a significant impact on an environmental, social, or cultural resource and the project would benefit from a CEAP.
- The project is anticipated to generate enough neighborhood or community input to require a public hearing or board review.
- There is more than one possible conceptual alternative that will require staff or community input in the selection.



 The project requires alternatives analysis as part of internal or external permitting and review processes at the local, county (1041), state, or federal level (NEPA). (An internal city CEAP should be performed prior to submitting for a local permit or to the external agency.)

Annually, the list of Capital Projects is reviewed by the internal city CEAP review group, and the group discusses projects that may need a CEAP. Projects that require Concept and Site Plan Review do not go through the CEAP and are not reviewed by the CEAP Review Group.

CEAP findings are submitted by departments to their respective advisory board for review as part

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

The following capital improvement projects proposed for funding in the 2016–2021 CIP are recommended to complete a Community and Environmental Assessment Process (CEAP).

### Open Space and Mountain Parks Department

- Historical Structures and Trails Stabilization and Restoration\*
- Visitor Infrastructure System-wide\*

### Parks and Recreation Department

- Boulder Reservoir South Improvements\*
- Violet Park (in conjunction with Greenways Fourmile Canyon Creek improvements)

#### Transportation Division

- 28<sup>th</sup> Street Baseline to Iris (CEAP Completed 2001)
- Baseline Underpass Broadway to 28<sup>th</sup> (CEAP Completed 2013)
- Broadway Reconstruction (Violet to US36)\*
- 30<sup>th</sup> and Colorado Ave. Ped/Bike Underpass\*
- 19th Street Complete Streets (Norwood to Iris)\*

### **Utilities Division / Tributary Greenways**

- Barker Dam Hydroelectric and Dam outlet
- Carter Lake Pipeline NCWCD Conveyance & Carter Lake Hydroelectric
- Fourmile Canyon Creek Flood Mitigation Upstream of Upland

## **Appendix B: CEAP Projects**



- Lakewood Pipeline
- South Boulder Creek Flood Mitigation Phase I\*
- Wittemyer Ponds\*

The following are flood mitigation plans in their early stages. As specific projects and their scope are identified the need for CEAP will be evaluated in annual process.

- Bear Canyon Creek Flood Mitigation
- Bluebell and King's Gulch Flood Mitigation
- Boulder Creek Flood Mitigation
- Gregory Creek Flood Mitigation
- Skunk Creek Flood Mitigation
- Twomile Canyon Creek Flood Mitigation
- Upper Goose Creek Drainage

<sup>\*</sup>As the scope of work is defined the necessity of a CEAP or other public review will be determined.

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