



# CAPITAL IMPROVEMENTS PROGRAM

Fiscal Years 2019-2023

# BOZEMAN<sup>MT</sup>



City of Bozeman, Montana

Adopted

Capital Improvements Program

For Fiscal Years 2019-2023

Presented And Adopted during Public Meetings held

November 2017 – December 2017

City Commission

Carson Taylor, Mayor

Cynthia Andrus, Deputy Mayor

Jeff Krauss, Commissioner

Chris Mehl, Commissioner

I-Ho Pomeroy, Commissioner

Andrea Surratt, City Manager

Anna Rosenberry, Assistant City Manager

Kristin Donald, Finance Director

Robin Crough, City Clerk



## LETTER FROM THE CITY MANAGER

Dear City Commission and Residents of Bozeman:

We are proud to present to you the City of Bozeman, 2019-2023 Capital Improvement Program. This five-year Capital Improvement Plan (CIP) is a commitment to improving and maintaining the City of Bozeman's facilities, parks and roads to aid in the vision of Bozeman being the most livable place.

The CIP performed in compliance with State and municipal code, State Law requires the City to maintain a Capital Improvement Plan for our Development Impact Fee programs. Under Montana Code Annotated (MCA), this Capital Improvement Plan provides the schedules and cost projections required under MCA §7-6-1602(2)(k)(i-iv). In Article 5.06 of the adopted City Charter, the City Manager is responsible for preparing and submitting a multi-year capital program to the City Commission no later than December 15 for the ensuing fiscal year.

This five-year plan includes long-range plans for our current facilities while keeping in mind level of service standards. In a community with relatively high cost of living, the ability of citizens to afford the needed utility rate, fee, and assessment levels is of concern. At the same time, the City strives to keep existing facilities properly maintained — and not pass deferred maintenance costs and problems on to future generations. The staff have taken a lot of time and care in preparing this document.

At times of rapid growth, as we are experiencing once again, the need for expanded public facilities and services is at its peak. A carefully developed CIP plans for these expansions and communicates our intent to citizens and the development community. The plan has been developed with the strategic vision statements as a driving force.

In closing, I respectfully submit the 2019-2023 Capital Improvement Plan to the residents of the City of Bozeman. The City will continue to invest in capital infrastructure in order to keep Bozeman as a vibrant and active city.

Respectfully,

*Andrea Surratt*

Andrea Surratt

City Manager



# TABLE OF CONTENTS

Introduction and Overview .....	1
Background .....	1
CIP Process.....	2
CIP Funding .....	6
2019-2023 CIP Project Summary .....	7
2019-2023 CIP Financial Summary .....	10
Fund Summaries:	
Arterial & Collector District.....	11
Building Inspection .....	43
Community Development.....	49
Fire Equipment & Capital.....	55
Fire Impact Fee .....	67
Forestry Tree Maintenance District.....	71
General .....	79
Library Depreciation .....	163
Parking .....	169
Solid Waste .....	181
Stormwater.....	193
Street & Curb Reconstruction.....	213
Street Impact Fee.....	231
Street Maintenance .....	273
Wastewater .....	321
Wastewater Impact Fee.....	351
Water .....	367
Water Impact Fee .....	419



## INTRODUCTION AND OVERVIEW

One of the primary responsibilities of local government is to properly preserve, maintain, and improve a community's stock of buildings, streets, parks, water and sewer lines, and equipment. Planning for these capital improvements is a matter of prudent financial management, as well as sound development practice.

At times of rapid growth, as we are experiencing once again, the need for expanded public facilities and services is at its peak. A carefully developed CIP plans for these expansions and communicates our intent to citizens and the development community. In times of economic contraction, like the past-prolonged recession, capital improvements were often put off (deferred) as a way of trimming budgets. While this can be appropriate in cases, an annual analysis and focus on necessary capital improvements helps to ensure those capital deferrals, and their impact on the community, are fully vetted.

### Background

To provide service to its citizens, a city government needs funding for costs such as salaries, supplies, and other operating items. Most public services also entail costs for furniture, automobiles, other equipment and vehicles, land, and construction of buildings or other public facilities. These costs are separated into two large categories: (1) operating expenditures, and (2) capital outlays.

Operating expenditures include personnel costs, day-to-day maintenance and operation of City assets, and the acquisition of goods that are consumed or used up as a service is provided. These types of expenses cost less on a unit basis than most capital outlays, and they recur at roughly the same level from year to year.

Capital outlays occur on a periodic basis. Within the broad category of capital outlay expenditures, there are two subgroups: (a) capital equipment and (b) capital improvements. The City budgets capital equipment annually through the CIP process. The City budgets capital improvements annually through dedicated revenue. Capital improvement expenses also generate operating costs that must be recognized and accommodated.

The CIP includes any planned expenditure of \$10,000 or greater, that results in the acquisition of an asset with a useful life of 3 years or more. There is a couple of "exceptions" or "extensions" of this definition that we have found helpful and necessary in past years:

- General Planning Documents (master plans, community surveys, etc.) are NOT included in our CIP;
- Specific plans that involve pre-engineering or preliminary design of facilities are often (but not always) included in the CIP.
- Software purchases that could potentially be "software as a service". Cloud based services are beginning to replace our purchase of outright software and hardware. In the CIP, we have treated

the software projects as a capital outlay purchase; although a “service” type, solution may actually be chosen during the bidding/proposal process.

State law and City charter require the City to prepare the CIP. State Law requires the City to maintain a Capital Improvement Plan for our Development Impact Fee programs. Under Montana Code Annotated (MCA), this Capital Improvement Plan provides the schedules and cost projections required under MCA §7-6-1602(2)(k)(i-iv). In Article 5.06 of the adopted City Charter, the City Manager is responsible for preparing and submitting a multi-year capital program to the City Commission no later than December 15 for the ensuing fiscal year. The plan must be revised and extended each year with regard to projects not yet completed. This plan is required to include:

1. A clear general summary of contents;
2. Identification of the long-term goals of the community;
3. A list of all capital improvements and other capital expenditures which are proposed to be undertaken during the fiscal years next ensuing, with appropriate supporting information as to the necessity for each;
4. Cost estimates and recommended time schedules for each improvement or other capital expenditure;
5. Method of financing upon which each capital expenditure is to be reliant;
6. The estimated annual cost of operating and maintaining the facilities to be constructed or acquired;
7. A commentary on how the plan addresses the sustainability of the community or region of which it is a part; and
8. Methods to measure outcomes and performance of the capital plan related to the long-term goals of the community.

## CIP Process

Each year, we begin the process of updating our Capital Improvements Plan in September. Finance works in coordination with City departments and the City manager’s Office to recommend projects that can be undertaken within the funds available. The process is completed when the Commission adopts a final budget with capital items approved, usually in the following June, see the following calendar:



There are many considerations when developing the plan from basic operational needs to growth. The following descriptions are the areas considered when developing the CIP:

*City Vision and Strategic Goals*

The City recently adopted goals to develop a five-year Strategic Plan and revised its vision. The Plan has been the subject of numerous citizen engagement efforts and public meeting discussions. The

Strategic Plan initiatives to date have been included and planned for in this CIP. Below are the vision and vision statements adopted by the Commission May 15, 2017:

*Vision*

Bozeman remains a safe, inclusive community, fostering civic engagement and creativity, with a thriving diversified economy, a strong environmental ethic, and a high quality of life as our community grows and changes.

*Strategic Vision Statements:*

- 1) An Engaged Community.** We foster a culture of engagement and civic leadership based on innovation and best practices involving community members of all backgrounds and perspectives.
- 2) An Innovative Economy.** We grow a diversified and innovative economy leveraging our natural amenities, skilled and creative people, and educational resources to generate economic opportunities.
- 3) A Safe, Welcoming Community.** We embrace a safe, healthy, welcoming and inclusive community.
- 4) A Well-Planned City.** We maintain our community's quality of life as it grows and changes, honoring our sense of place and the 'Bozeman feel' as we plan for a livable, affordable, more connected city.
- 5) A Creative, Learning Culture.** We expand learning, education, arts, expression and creativity for all ages.
- 6) A Sustainable Environment.** We cultivate a strong environmental ethic, protecting our clean air, water, open spaces and climate, and promote environmentally sustainable businesses and lifestyles.
- 7) A High Performance Organization.** We operate as an ethical, high performance organization anticipating future needs, utilizing best practices, and striving for continuous improvement.

*Level of Service (LOS) Standards*

Most of the City's long-range plans establish level of service standards. These standards are critical to planning for the needs of future city residents. In some cases, such as water quality or wastewater discharge, these standards are often established or guided by outside regulating bodies. The CIP does not frequently reference specific LOS, but the underlying facility and staffing plans will contain detailed discussions of levels of service, and how the City should address increasing or decreasing levels of service through infrastructure and staffing recommendations.

*Policies for the Physical Development of our Community*

The City's Unified Development Code (UDC) is a combination of both Subdivision and Zoning regulations for development within the City. The Code is subject to amendment by the Commission, after public notices and hearings are held. The UDC applies to both private and city-owned projects. The City is currently underway with "The Bozeman Code Update," a public process to update the City's Unified Development Code (UDC). The UDC covers a diverse range of

topics, including, zoning, design standards, subdivisions, wetland, and permit review procedures. The key feature of the update is to translate the community's expectations for development as expressed in the Community Plan into a concise and useable set of regulations.

#### *Our Current Facilities and their Condition:*

The City has a number of long-range (20-year) facility plans:

- Water Treatment & Distribution Facilities
- Wastewater Collection & Treatment Facilities
- Stormwater Collection & Treatment Facilities
- Fire Station, Equipment & Staffing
- Police Station & Staffing
- Parks, Recreation, Trails & Open Space
- Transportation System Plan

These studies examine the condition and placement of existing facilities, area growth projections and pattern, regulatory changes, and possible funding mechanisms. The plans analyze various alternatives and make recommendations for implementation.

#### *Our Community's Ability to Pay for Planned Improvements*

In a community with relatively high cost of living, the ability of citizens to afford the needed utility rate, fee, and assessment levels is of concern. At the same time, the City strives to keep existing facilities properly maintained — and not pass deferred maintenance costs and problems on to future generations.

The City has adopted a Utility Rate Studies for Water and Wastewater services. These studies give us an indication of how and when utility rates must be increased to pay for the needed water and wastewater system improvements.

For General Fund (Administration, Parks, Recreation, Library, Police, and Fire) facilities and Street construction, the City does not have the ability to easily increase tax levels for funding. The City's voters must approve any tax levy increase, and state law establishes maximum debt levels.

In November 2007, the City of Bozeman voters approved a four mill perpetual levy to establish a Fire Equipment and Capital Replacement fund. This fund was added to the CIP plan, and the funds are for replacements of fire engines, ladder trucks, and other capital improvements to fire stations.

In the summer of 2015, the city successfully created a citywide Arterial & Collector Street Special District, under the special district laws of the state. The District is meant to fund street

maintenance and (re)construction on Arterial & Collector streets that is NOT eligible to be funded by impact fees. The CIP includes a 5-year plan for capital projects for this new district.

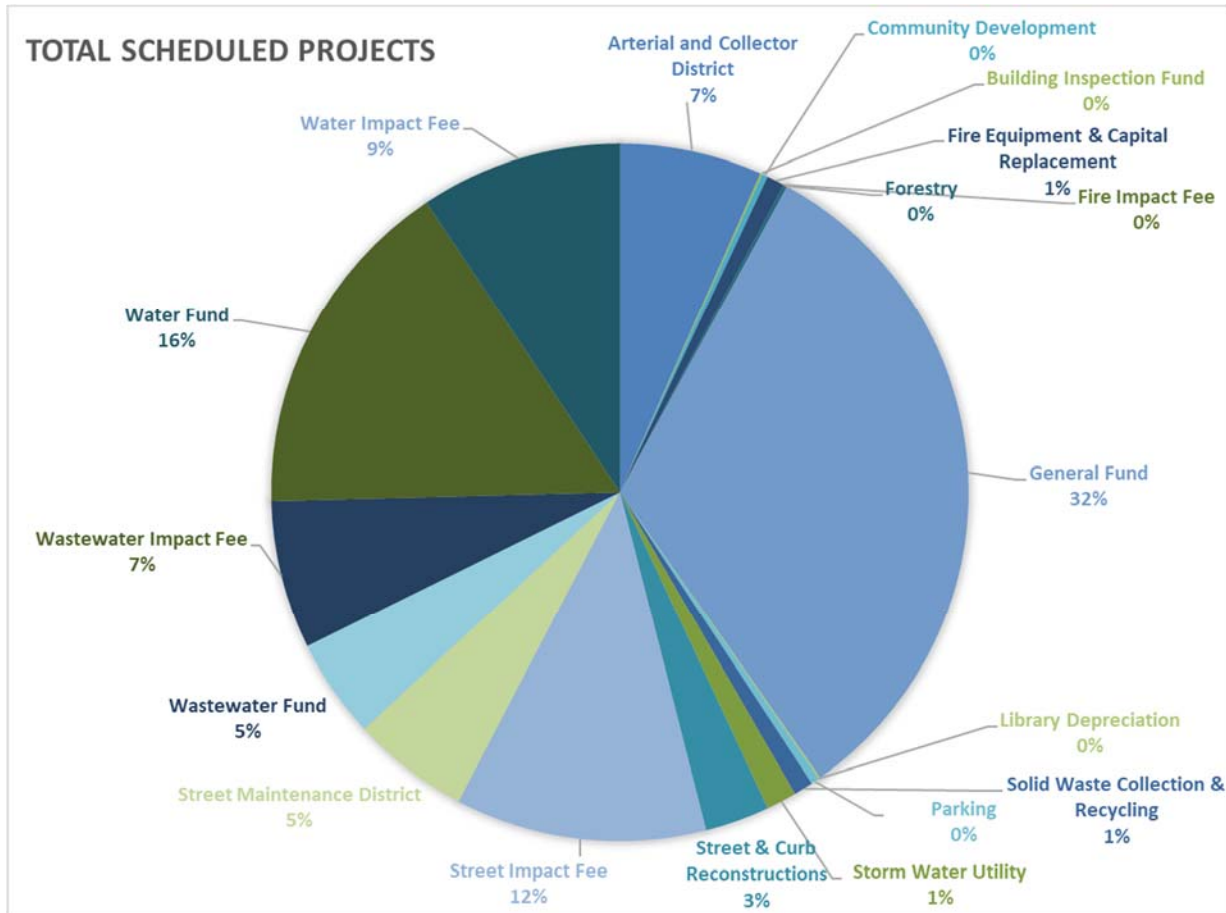
## CIP Funding

The program is designed and planned by fund. Within those funds, the method for funding the project is determined. Some funds have fees or taxes that are specific to capital improvement or maintenance. Some larger projects financing is required and bonds and other funding mechanisms need to be used. The next chart shows the funding for each area in the plan with exception any debt issuance, which can vary year to year depending on the projects and priority for the plan year. The Capital Improvement Program is then adopted but is not considered funded until the Budget is adopted in June. In addition, certain funding is not final until a passing on election ballot.

<b>Arterial and Collector District (Special Revenue Fund)</b> <ul style="list-style-type: none"> <li>• Assessment</li> <li>• Local Share for projects</li> </ul>	<b>Building Inspection Fund (Special Revenue Fund)</b> <ul style="list-style-type: none"> <li>• Charges for services</li> </ul>	<b>Community Development Fund (Special Revenue Fund)</b> <ul style="list-style-type: none"> <li>• Internal appropriation and other restricted</li> </ul>	<b>Fire Equipment and Capital Fund (Special Revenue Fund)</b> <ul style="list-style-type: none"> <li>• Dedicated tax 4 Mills</li> </ul>
<b>Fire Impact Fee (Special Revenue Fund)</b> <ul style="list-style-type: none"> <li>• Impact Fee revenue</li> </ul>	<b>Forestry- Tree Maintenance District (Special Revenue Fund)</b> <ul style="list-style-type: none"> <li>• Tree Assessment</li> </ul>	<b>General Fund</b> <ul style="list-style-type: none"> <li>• Taxes and Charges for services</li> </ul>	<b>Library Depreciation Fund</b> <ul style="list-style-type: none"> <li>• Appropriations from General Fund</li> </ul>
<b>Parking (Enterprise Fund)</b> <ul style="list-style-type: none"> <li>• Revenue for charges for services and enforcement</li> </ul>	<b>Solid Waste Fund (Enterprise Fund)</b> <ul style="list-style-type: none"> <li>• Charges for Services</li> </ul>	<b>Storm Water Fund (Enterprise Fund)</b> <ul style="list-style-type: none"> <li>• Charges for Services</li> </ul>	<b>Street and Curb Reconstruction (Special Revenue Fund)</b> <ul style="list-style-type: none"> <li>• Assessment</li> </ul>
<b>Street Impact Fee (Special Revenue Fund)</b> <ul style="list-style-type: none"> <li>• Impact Fees</li> </ul>	<b>Street Maintenance District (Special Revenue Fund)</b> <ul style="list-style-type: none"> <li>• Assessment</li> </ul>	<b>Wastewater Fund (Enterprise Fund)</b> <ul style="list-style-type: none"> <li>• Charge for Services</li> </ul>	<b>Wastewater Impact Fee (Included in Wastewater Fund)</b> <ul style="list-style-type: none"> <li>• Impact fees</li> </ul>
	<b>Water Fund (Enterprise Fund)</b> <ul style="list-style-type: none"> <li>• Charges for services</li> </ul>	<b>Water Impact Fee (Included in Water Fund)</b> <ul style="list-style-type: none"> <li>• Impact fees</li> </ul>	

## 2019-2023 CIP PROJECT SUMMARY

This five-year plan has \$231 million in scheduled projects and \$240 million unscheduled. For scheduled by fund the General fund is the largest with some major projects on the horizon and the Water fund has a tank replacement making it the second largest. Street Impact Fee is close with 12% with new projects near the School District's new High School.



### 2019

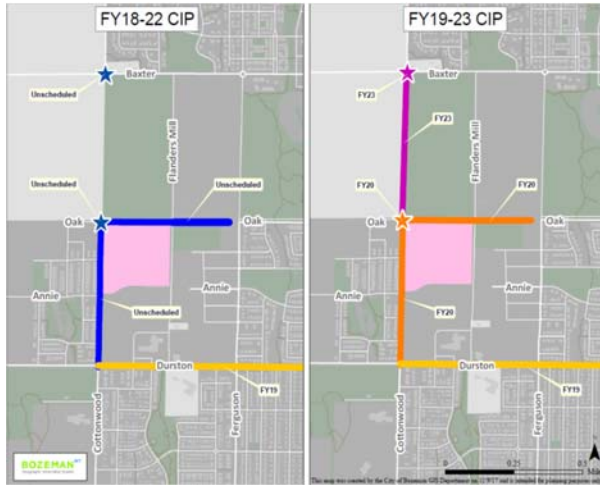
The plan includes large sewer capacity projects that aid in the School District's efforts in building a new High school. These infrastructure projects are the Davis Lift Station WWIF24 and the Front Street Interceptor WWIF11, and are scheduled in the Wastewater Impact Fee fund. Both projects will require financing in order to be completed for a total of just under \$8 million. With these two capacity efforts there are Street Impact Fee and Arterial Collector shared projects to fund the building of the roads surrounding the new high school. The Law & Justice Center has been presented as a project occur in FY19 and FY21 but with the funding, we can



change the timing and funding for a different option. Beyond major projects, there is planned road maintenance, vehicle replacements and building improvements.

## 2020

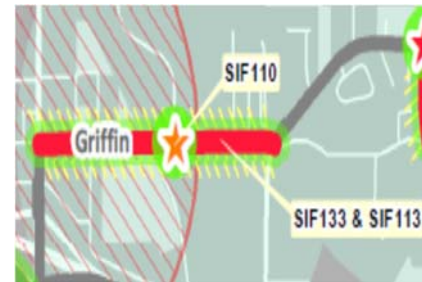
The outlook for the 2020 includes another sewer capacity-expanding project that is dependent on the



Davis Lift Station being done in 2019. The Norton East Ranch Outfall Diversion WWIF38 is \$3,320,000 and will need financing at this point in the plan. There are again major roads funded through the Street Impact Fee Fund and Arterial Collector fund a good portion is for building of the roads surrounding the new high school. Fire Station 1 is planned in this year; this will be an expansion and relocation of the current station. Along with these major projects road maintenance, vehicle replacements and building improvements are in the plan as well.

## 2021

This includes a water fund major project for the Lyman Tank and Transmission Main Construction W88, which will be funded through financing for \$10million. Griffin 7<sup>th</sup> to Rouse SIF113 funded by Street Impact Fees and Arterial collector funds is scheduled in FY21 for a project total of \$3.7 million. This is also the \$20 million portion of the Law Justice Center is scheduled.



## 2022



The Indoor/Outdoor aquatics center is planned for FY22 and will be funded through bonds going to the citizens for a vote. The Water fund has an over \$6million projects, PRV Phase 2 - Automation and Instrumentation Upgrades W71 which will provide necessary water system maintenance work. Routine vehicle replacements, pipe replacements and road maintenance is planned.

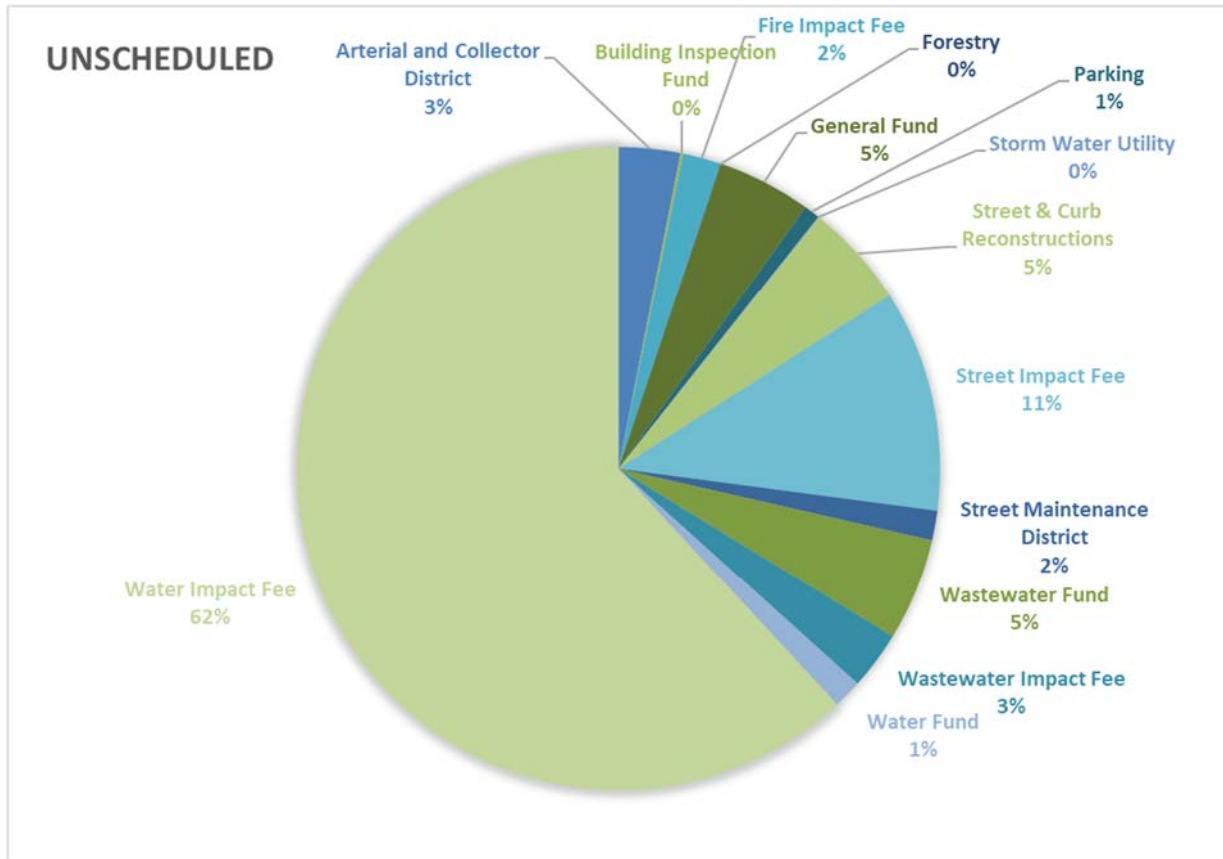
## 2023

Fowler connection (Huffine to Oak) SIF114 funded by Street Impact Fees and Arterial collector funds is scheduled in FY23 for a project total of \$7.5 million. Wastewater Impact Fees has a capacity project N

Frontage Rd Interceptor WWIF20 scheduled for just under \$5.3 million. The relocation of Fire Station 2 is scheduled to align with service needs as outlined in the adopted master plan.

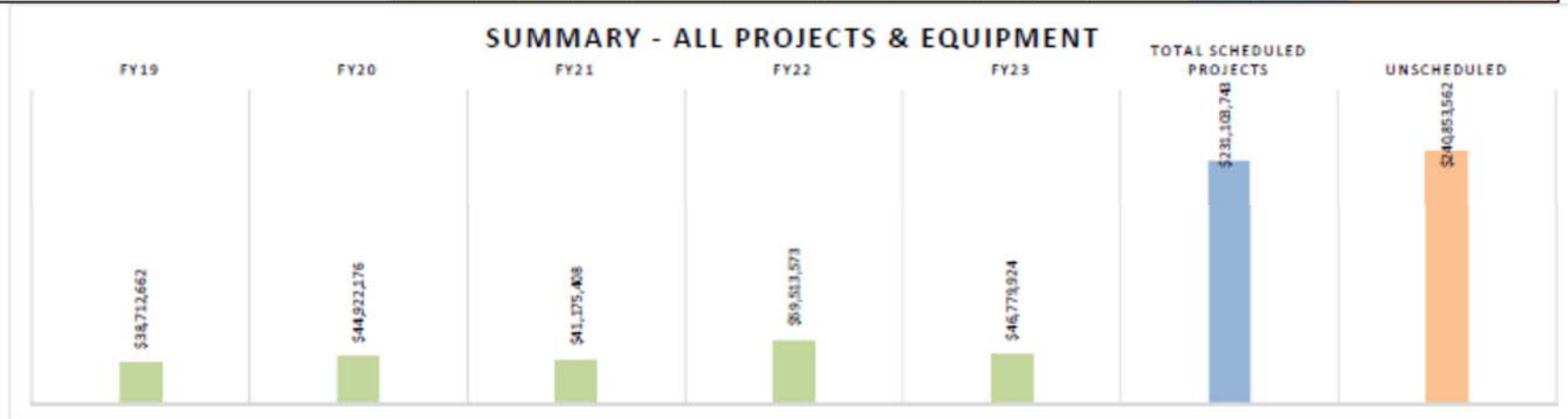
### UNSCHEDULED

The unscheduled items are in need within the five years or just after. Several large and high dollar projects remain unscheduled due to funding, timing and other unresolved issues.



## 2019-2023 CIP FINANCIAL SUMMARY

	Scheduled Projects					TOTAL SCHEDULED PROJECTS	Unscheduled
	FY19	FY20	FY21	FY22	FY23		
Arterial and Collector District	\$ 3,568,000	\$ 1,633,000	\$ 4,802,000	\$ -	\$ 5,250,000	\$ 15,253,000	\$ 7,454,000
Building Inspection Fund	\$ 216,681	\$ -	\$ -	\$ -	\$ -	\$ 216,681	\$ 325,000
Community Development	\$ 301,218	\$ 301,218	\$ -	\$ 10,800	\$ -	\$ 613,236	\$ -
Fire Equipment & Capital Replacement	\$ 530,500	\$ 606,000	\$ 423,000	\$ 170,500	\$ 176,750	\$ 1,906,750	\$ -
Fire Impact Fee	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,600,000
Forestry	\$ 140,000	\$ 118,000	\$ -	\$ 145,000	\$ -	\$ 403,000	\$ 65,000
General Fund	\$ 12,656,576	\$ 12,656,576	\$ 8,522,277	\$ 21,669,560	\$ 19,154,300	\$ 74,659,289	\$ 11,346,933
Library Depreciation	\$ 70,000	\$ 32,000	\$ 75,000	\$ -	\$ -	\$ 177,000	\$ -
Parking	\$ 112,031	\$ 112,031	\$ 330,000	\$ 310,000	\$ 30,000	\$ 894,062	\$ 1,900,000
Solid Waste Collection & Recycling	\$ 730,000	\$ 200,000	\$ 560,000	\$ 338,000	\$ 250,000	\$ 2,078,000	\$ -
Storm Water Utility	\$ 650,000	\$ 650,000	\$ 650,000	\$ 650,000	\$ 650,000	\$ 3,250,000	\$ 125,000
Street & Curb Reconstructions	\$ 284,011	\$ 744,284	\$ 642,856	\$ 884,042	\$ 4,349,886	\$ 6,905,079	\$ 12,610,559
Street Impact Fee	\$ 7,701,245	\$ 6,373,000	\$ 6,876,000	\$ 5,700,000	\$ 250,000	\$ 26,900,245	\$ 26,816,000
Street Maintenance District	\$ 2,501,500	\$ 3,233,000	\$ 2,465,500	\$ 2,375,789	\$ 1,985,000	\$ 12,560,789	\$ 3,581,210
Vehicle Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Fund	\$ 1,812,500	\$ 3,412,500	\$ 2,022,500	\$ 1,732,500	\$ 1,652,500	\$ 10,632,500	\$ 12,484,333
Wastewater Impact Fee	\$ 1,440,000	\$ 8,625,000	\$ 4,424,797	\$ 721,757	\$ 721,757	\$ 15,933,311	\$ 7,005,792
Water Fund	\$ 2,808,400	\$ 4,882,557	\$ 3,435,749	\$ 15,550,625	\$ 10,404,731	\$ 37,082,062	\$ 3,479,439
Water Impact Fee	\$ 3,190,000	\$ 1,343,010	\$ 5,945,729	\$ 9,255,000	\$ 1,905,000	\$ 21,638,739	\$ 149,060,296
<b>Total</b>	<b>\$ 38,712,662</b>	<b>\$ 44,922,176</b>	<b>\$ 41,175,408</b>	<b>\$ 59,513,573</b>	<b>\$ 46,779,924</b>	<b>\$ 231,103,743</b>	<b>\$ 240,853,562</b>



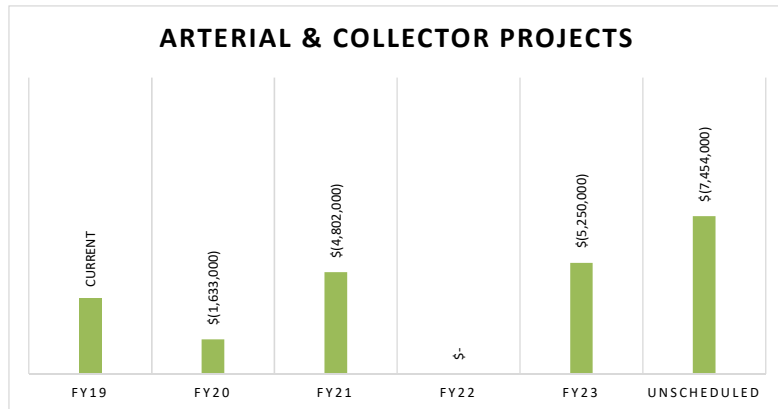
**Arterial & Collector District Fund  
Capital Improvement Plan**

Financial Summary	Current Year	Projected					Unscheduled
	FY18	FY19	FY20	FY21	FY22	FY23	
Projected Beginning Reserve Balance Dedicated to CIP	\$ 1,474,917	\$ 2,425,321	\$ 1,286,543	\$ 3,779,884	\$ 1,247,710	\$ 3,216,926	
Plus: Assessment Revenues Dedicated to CIP	\$ 1,806,513	\$ 1,128,643	\$ 1,151,216	\$ 1,208,777	\$ 1,269,216	\$ 1,345,369	\$ -
Plus: Payback Revenue	\$ 221,891	\$ 600,579	\$ 591,792	\$ 361,049			
Plus: New Gas Tax dollars	\$ 200,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 700,000	
Plus: Developer contribution SIF105 and SIF 134			\$ 1,683,333				
Less: Scheduled CIP Project Costs	\$ (1,278,000)	\$ (3,568,000)	\$ (1,633,000)	\$ (4,802,000)	\$ -	\$ (5,250,000)	\$ (7,454,000)
<b>Projected Year-End Cash Dedicated to CIP</b>	<b>\$ 2,425,321</b>	<b>\$ 1,286,543</b>	<b>\$ 3,779,884</b>	<b>\$ 1,247,710</b>	<b>\$ 3,216,926</b>	<b>\$ 12,294</b>	

Beginning Balance of Payback Improvements:	\$ (2,544,666)	\$ (2,322,775)	\$ (1,855,196)	\$ (1,263,405)	\$ (1,402,356)	\$ (1,402,356)	\$ (1,402,356)
SIF036 - Payback District							
SIF046 - Gallatin County SID							
SIF073 - Payback District							\$ (404,000)
SIF076 - Payback District				\$ (500,000)			
SIF080 - Gallatin County SID		\$ 378,688	\$ 369,901	\$ 361,049			
SIF080- Flanders Payback	\$ 221,891	\$ 221,891	\$ 221,891				
SIF109 - Gallatin County Payback/SID		\$ (133,000)					
SIF113 - Payback District			\$ (666,667)				
SIF117 - Payback District				\$ (83,333)			
SIF118 - Payback District							\$ (750,000)
SIF138- Payback District						\$ (333,333)	
<b>Ending Balance of Payback Improvements:</b>	<b>\$ (2,322,775)</b>	<b>\$ (1,855,196)</b>	<b>\$ (1,263,405)</b>	<b>\$ (1,402,356)</b>	<b>\$ (1,402,356)</b>	<b>\$ (1,402,356)</b>	<b>\$ (1,806,356)</b>

*Assumptions Made for Revenue Estimates*

	Current Year	Projected				
	FY18	FY19	FY20	FY21	FY22	FY23
Estimated Annual Assessment Revenues*	\$ 1,095,000	\$ 1,106,513	\$ 1,128,643	\$ 1,151,216	\$ 1,208,777	\$ 1,269,216
Estimated Annual Increase	65.0%	2%	2%	5%	5%	6%
Total Estimated Revenues	\$ 1,806,513	\$ 1,128,643	\$ 1,151,216	\$ 1,208,777	\$ 1,269,216	\$ 1,345,369
Current Revenues Dedicated to CIP %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Plus: Increase Dedicated to CIP	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total % Dedicated to CIP	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b>Total Estimated Revenues Dedicated to CIP</b>	<b>\$ 1,806,513</b>	<b>\$ 1,128,643</b>	<b>\$ 1,151,216</b>	<b>\$ 1,208,777</b>	<b>\$ 1,269,216</b>	<b>\$ 1,345,369</b>



\* Assessment will decrease with increased Gas Tax Funding

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
Arterial & Collector Streets									
	SIF057	Arterial & Collector	OAK (FLANDERS MILL TO RYUN SUN WAY) - CONSTRUCTION		\$500,000				
	SIF058	Arterial & Collector	OAK & N 27TH (INTERSECTION IMPROVEMENTS) - DESIGN & CONSTRUCTION	\$200,000					
	SIF062	Arterial & Collector	DURSTON (FOWLER TO FERGUSON) - CONSTRUCTION	\$760,000					
	SIF063	Arterial & Collector	FOWLER & BABCOCK (INTERSECTION IMPROVEMENTS) - CONSTRUCTION						\$400,000
	SIF073	Arterial & Collector	FOWLER & DURSTON (INTERSECTION IMPROVEMENTS) - CONSTRUCTION*						\$404,000
	SIF076	Arterial & Collector	FOWLER CONNECTION (HUFFINE TO OAK) - DESIGN (INCLUDES 3 INTERSECTIONS)*			\$500,000			
	SIF085	Arterial & Collector	BAXTER (7TH TO 19TH) - CONSTRUCTION	\$1,500,000					
	SIF086	Arterial & Collector	BAXTER & COTTONWOOD (INTERSECTION IMPROVEMENTS) - CONSTRUCTION					\$500,000	
	SIF106	Arterial & Collector	TRANSPORTATION DEMAND MANAGEMENT CONTRACT	\$50,000					
	SIF108	Arterial & Collector	S 3RD AND GRAF (INTERSECTION IMPROVEMENTS) - CONSTRUCTION	\$300,000					
	SIF109	Arterial & Collector	OAK (ROUSE THROUGH CANNERY DISTRICT) - CONSTRUCTION*	\$133,000					
	SIF110	Arterial & Collector	MANLEY & GRIFFIN (INTERSECTION IMPROVEMENTS) - CONSTRUCTION		\$400,000				
	SIF111	Arterial & Collector	HIGHLAND (MAIN TO KAGY) - CONSTRUCTION & DESIGN						\$5,000,000
	SIF113	Arterial & Collector	GRIFFIN (7TH TO ROUSE) - CONSTRUCTION*			\$2,000,000			
	SIF114	Arterial & Collector	FOWLER CONNECTION (HUFFINE TO OAK) - CONSTRUCTION					\$3,750,000	
	SIF116	Arterial & Collector	BRIDGER DR & STORY MILL RD (INTERSECTION IMPROVEMENTS) - CONSTRUCTION			\$300,000			

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
	SIF117	Arterial & Collector	STORY MILL (GRIFFIN TO BRIDGER) - CONSTRUCTION*			\$250,000			
	SIF118	Arterial & Collector	BABCOCK (11TH AVE TO 19TH AVE) - CONSTRUCTION*						\$750,000
	SIF121	Arterial & Collector	BAXTER & DAVIS (INTERSECTION IMPROVEMENTS) - ROUNDABOUT CONSTRUCTION	\$500,000					
	SIF134	Arterial & Collector	OAK (COTTONWOOD TO FLANDERS MILL) - CONSTRUCTION		\$433,000				
	SIF138	Arterial & Collector	COTTONWOOD ROAD, OAK TO BAXTER - CONSTRUCTION*					\$1,000,000	
	SIF142	Arterial & Collector	DURSTON ROAD & N. 27TH (INTERSECTION IMPROVEMENTS) - CONSTRUCTION						\$300,000
<i>Totals by DEPARTMENT</i>				\$3,443,000	\$1,333,000	\$3,050,000		\$5,250,000	\$6,854,000

Arterial & Collector Streets

A&C001	Arterial & Collector	OAK MEDIAN CONSTRUCTION (7TH TO 19TH)							\$600,000
A&C002	Arterial & Collec	MIOVISION TRAFFIC DATA SYSTEM	\$50,000						
A&C003	Arterial & Collec	TRAFFIC MODELING SOFTWARE	\$15,000						
A&C004	Arterial & Collec	OAK & 7TH RESTRIPIING	\$60,000						
A&C005	Arterial & Collector	COLLEGE (8TH TO 19TH) - DESIGN RECONSTRUCTION		\$300,000					
A&C006	Arterial & Collector	COLLEGE (8TH TO 19TH) - RECONSTRUCTION			\$1,752,000				
<i>Totals by DEPARTMENT</i>				\$125,000	\$300,000	\$1,752,000			\$600,000

Summary for Arterial & Collector Streets (28 items)

Totals by year:

	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>Unscheduled</u>
	\$3,568,000	\$1,633,000	\$4,802,000		\$5,250,000	\$7,454,000

CIP Project Fund  
Arterial & Collector Streets

DEPARTMENT  
Arterial & Collector Streets

**PROJECT NUMBER**  
**A&C001**

PROJECT NAME  
Oak Median Construction (7th to 19th)

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled \$600,000
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DESCRIPTION OF PROJECT

Replace the two way left turn lane with a landscaped median on Oak St between 7th and 19th. This project will also add street lights along the corridor.

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

This project may be used to limit access for some of the private driveways, but is primarily an aesthetic improvement.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

CIP Project Fund  
Arterial & Collector Streets

DEPARTMENT  
Arterial & Collector Streets

**PROJECT NUMBER**  
**A&C002**

**PROJECT NAME**  
Miovision Traffic data system

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$50,000					

**DESCRIPTION OF PROJECT**

Purchase of modern traffic counting devices to provide current data for the City's new Transportation Model

**ALTERNATIVES CONSIDERED**

Do nothing

**ADVANTAGES OF APPROVAL**

Allows us to populate our new transportation model with best available data resulting in best possible information

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

na

**FUNDING SOURCES**

na

CIP Project Fund  
Arterial & Collector Streets

DEPARTMENT  
Arterial & Collector Streets

**PROJECT NUMBER**  
**A&C003**

**PROJECT NAME**  
Traffic Modeling Software

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$15,000					

**DESCRIPTION OF PROJECT**

Traffic modeling guides many important decisions resulting in improved performance of the transportation network. This software purchase will leverage considerable investments already in place (e.g., WTI & MDT modeling efforts). The model will run alongside existing water and wastewater modeling packages to provide advanced understanding of current conditions, including the impacts of future development.

**ALTERNATIVES CONSIDERED**

Use professional contracted services for modeling analysis.

**ADVANTAGES OF APPROVAL**

This software leverages previous investments in transportation modeling efforts while bringing maintenance responsibilities in-house.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual software maintenance costs are estimated to be under \$2,500.

**FUNDING SOURCES**

N/A

CIP Project Fund  
Arterial & Collector Streets

DEPARTMENT  
Arterial & Collector Streets

<b>PROJECT NUMBER</b>
<b>A&amp;C004</b>

<b>PROJECT NAME</b>						
Oak & 7th Restriping						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$60,000					

<b>DESCRIPTION OF PROJECT</b>
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Restripe the intersection of Oak and 7th.

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

CIP Project Fund

Arterial & Collector Streets

DEPARTMENT

Arterial & Collector Streets

**PROJECT NUMBER**

**A&C005**

PROJECT NAME

College (8th to 19th) - Design Reconstruction

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$300,000

DESCRIPTION OF PROJECT

RDesign College, from 19th to 8th, to an urban minor arterial standard. The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use. This project will provide the design for a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice buildup. ADA compliance and MS4 permit compliance will be met at completion.

**ALTERNATIVES CONSIDERED**

Accept the current failing configuration

**ADVANTAGES OF APPROVAL**

Enhances safety and drainage, preserves pavement

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

None

**FUNDING SOURCES**

Arterial & Collector 100%

CIP Project Fund

Arterial & Collector Streets

DEPARTMENT

Arterial & Collector Streets

**PROJECT NUMBER**

**A&C006**

PROJECT NAME

College (8th to 19th) - Reconstruction

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$1,752,000

DESCRIPTION OF PROJECT

Reconstruct College, from 19th to 8th, to an urban minor arterial standard. The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use. This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice buildup. ADA compliance and MS4 permit compliance will be met at completion.

**ALTERNATIVES CONSIDERED**

Accept the current failing configuration

**ADVANTAGES OF APPROVAL**

Enhances safety and drainage, preserves pavement

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

None

**FUNDING SOURCES**

Arterial & Collector 100%

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Arterial & Collector Streets

Arterial & Collector

SIF057

PROJECT NAME

Oak (Flanders Mill to Ryun Sun Way) - Construction

- New
- Replacement
- Equipment
- Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$500,000

DESCRIPTION OF PROJECT

This project is the completion of the street segment of Oak St, from Flanders Mill to Ryun Sun Way, to a five-lane urban principal arterial standard. This project increases capacity directly by constructing new segments of arterial roadway and by adding additional lanes, dedicated bike lanes and sidewalks. Future developments in this area may not be allowed to proceed until these improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. This project will complete an important east-west link between Ferguson and Cottonwood, and conformance with the Transportation Master Plan will be attained. A payback District or SID may be created to leverage other stakeholders. Other affected projects include intersection improvements at Oak and Cottonwood, Oak and Flanders Mill, Oak and Ferguson, Oak Street - New Holland to Ferguson.

ALTERNATIVES CONSIDERED

Construct segment by segment as adjacent parcels develop.

ADVANTAGES OF APPROVAL

Increased capacity, connectivity and safety in this corridor, both for motorized vehicles as well as bicycles and pedestrians.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$1,300,000) the Arterial & Collector District (\$500,000) and local participation. The Flander's Mill development is expected to be a partner in the construction of the segments adjacent to their development.

CIP Project Fund  
Arterial & Collector Streets

DEPARTMENT  
Arterial & Collector

**PROJECT NUMBER**  
**SIF058**

**PROJECT NAME**  
Oak & N 27th (Intersection Improvements) - Design & Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$200,000					

**DESCRIPTION OF PROJECT**

Improve the intersection control at the intersection of Oak and N 27th. This intersection is currently 2-way stop controlled. Replacing it with a signal will greatly increase its capacity. The level of service at this intersection has degraded to unacceptable levels. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan will be attained at completion. Other affected projects include Oak Street corridor projects and North 27th Street improvements project.

**ALTERNATIVES CONSIDERED**

Accept the current level of service (do nothing). Secure additional financing by creating an SID or Payback District.

**ADVANTAGES OF APPROVAL**

Increased capacity at this intersection. Facilitates development currently occurring in this part of the city and network performance overall.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

This project is funded by Street Impact Fees (\$800,000) and the Arterial & Collector District (\$200,000).

CIP Project Fund  
Arterial & Collector Streets

DEPARTMENT  
Arterial & Collector

**PROJECT NUMBER**  
**SIF062**

**PROJECT NAME**  
Durston (Fowler to Ferguson) - Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$760,000					

**DESCRIPTION OF PROJECT**

Complete Durston Rd, from Cottonwood to Fowler, to a three-lane urban minor arterial standard. This project directly increase capacity by adding additional lanes, dedicated bike lanes and sidewalks. Future developments in this area may not be allowed to proceed until these improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. Connectivity already exists at this location, it is capacity that is affected. With completion, conformance with the Transportation Master Plan will be attained. A payback District or SID may be created to leverage other stakeholders. Other affected projects include intersection improvements at Durston & Ferguson, Durston & Fowler, Durston & Flanders Mill.

**ALTERNATIVES CONSIDERED**

Construct segment by segment as adjacent parcels develop.

**ADVANTAGES OF APPROVAL**

Increased capacity and safety in this corridor, both for motorized vehicles as well as bicycles and pedestrians.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

This project is funded by Street Impact Fees (\$757,421) and the Arterial & Collector District (\$757,421). A payback district may be created to reimburse both funds for any local share (project related) costs that may be allocated to future developments.

CIP Project Fund  
Arterial & Collector Streets

DEPARTMENT  
Arterial & Collector

<b>PROJECT NUMBER</b>
<b>SIF063</b>

<b>PROJECT NAME</b>
Fowler & Babcock (Intersection Improvements) - Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$400,000

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

Install a traffic signal, roundabout, or other adequate traffic control device at the intersection of Fowler and Babcock. This intersection is currently 1-way stop controlled. Replacing it with a signal or roundabout will greatly increase its capacity. East-west connectivity already exists at this location. North-south connectivity is still lacking. Peak hour level of service for northbound traffic is degrading due to lack of north-south connectivity in the network. The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan will be attained at completion. A Payback District or SID may be created to leverage other stakeholders. Other affected projects include Fowler corridor improvements.

**ALTERNATIVES CONSIDERED**

Identified in the 2007 Transportation Plan Update. Includes installation of a traffic signal, roundabout or other adequate traffic control device when warrants are met.

**ADVANTAGES OF APPROVAL**

Increased capacity and safety at this intersection.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

This project is funded by Street Impact Fees (\$1,600,000) and the Arterial & Collector District (\$400,000).

CIP Project Fund  
Arterial & Collector Streets

DEPARTMENT  
Arterial & Collector

<b>PROJECT NUMBER</b>
<b>SIF073</b>

<b>PROJECT NAME</b>
Fowler & Durston (Intersection Improvements) - Construction*

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$404,000

<b>DESCRIPTION OF PROJECT</b>
Improve the intersection control at the intersection of Fowler and Durston. This intersection is currently I- way stop controlled. Replacing it with a signal or roundabout will greatly increase its capacity. East-west connectivity already exists at this location. North-south connectivity is still lacking. The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan will be attained at completion. Other affected projects include Fowler corridor street improvements.

**ALTERNATIVES CONSIDERED**

Accept the current level of service (do nothing). Alternative financing could be provided by creating an SID or Payback District.

**ADVANTAGES OF APPROVAL**

Improves an important connecting element in the network.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

This project is funded by Street Impact Fees (\$1,616,000) and the Arterial & Collector District (\$404,000). A development payback district may be created to reimburse Arterial & Collector District for any local share (project related) costs that may be allocated to future developments (estimated at \$404,000).

CIP Project Fund  
Arterial & Collector Streets

DEPARTMENT  
Arterial & Collector

**PROJECT NUMBER**  
**SIF076**

**PROJECT NAME**  
Fowler Connection (Huffine to Oak) - Design (Includes 3 Intersections)\*

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
		\$500,000			

**DESCRIPTION OF PROJECT**

Design Fowler from Huffine to Oak to an urban minor arterial standard, including three intersections. This project directly increase capacity by adding additional travel lanes, dedicated bike lanes and sidewalks and making improvements to the intersections. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. This project completes an important north-south connection on the west side of town. With its completion, the Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan will be attained. A Payback District or SID may be created to leverage other stakeholders. Other affected projects include intersection improvements at Fowler and Durston and Fowler and Oak.

**ALTERNATIVES CONSIDERED**

Construct segment by segment as adjacent parcels develop.

**ADVANTAGES OF APPROVAL**

This project will complete an important north-south connection, expand the capacity of our street network and improve safety for drivers and pedestrians.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

This project is funded by Street Impact Fees (\$500,000) and the Arterial & Collector District (\$500,000). A development payback district may be created to reimburse Arterial & Collector District for any local share (project related) costs that may be allocated to future developments (estimated at \$500,000).

CIP Project Fund  
Arterial & Collector Streets

DEPARTMENT  
Arterial & Collector

**PROJECT NUMBER**  
**SIF085**

PROJECT NAME  
Baxter (7th to 19th) - Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$1,500,000					

DESCRIPTION OF PROJECT

Street Reconstruction

**ALTERNATIVES CONSIDERED**

SID for full financing, Urban funds or incremental construction by developers.

**ADVANTAGES OF APPROVAL**

This project will expand the capacity of our street network and improve safety for drivers and pedestrians.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

This project is funded 100% by Street Impact Fees

CIP Project Fund  
Arterial & Collector Streets

DEPARTMENT  
Arterial & Collector

<b>PROJECT NUMBER</b>
<b>SIF086</b>

<b>PROJECT NAME</b>						
Baxter & Cottonwood (Intersection Improvements) - Construction						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
				\$500,000	

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

Improve the intersection at Baxter and Cottonwood. This intersection is currently 1-way stop controlled. Replacing it with a signal or roundabout will greatly increase its capacity. East-west connectivity already exists at this location. North-south connectivity is still lacking. The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan will be attained at completion. Other affected projects include Cottonwood corridor improvements and Baxter corridor improvements.

**ALTERNATIVES CONSIDERED**

Identified in the 2007 Transportation Plan Update. Includes installation of a traffic signal, roundabout or other adequate traffic control device when warrants are met.

**ADVANTAGES OF APPROVAL**

Increased capacity and safety at this intersection.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

This project is funded by Street Impact Fees (\$2,000,000) and the Arterial & Collector District (\$500,000).

CIP Project Fund  
Arterial & Collector Streets

DEPARTMENT  
Arterial & Collector

**PROJECT NUMBER**  
**SIF106**

**PROJECT NAME**  
Transportation Demand Management Contract

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$50,000					

**DESCRIPTION OF PROJECT**

Explore the potential for reducing vehicle demand on the network at peak hours by flexible start times, work from home incentives etc. This project is important because the funding available to increase capacity by building physical improvements to the network is unlikely to ever be sufficient. This project supplements that effort by reducing overall demand on the network.

**ALTERNATIVES CONSIDERED**

Do nothing

**ADVANTAGES OF APPROVAL**

May improve peak hour LOS in many locations by directly reducing demand

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

None

**FUNDING SOURCES**

Three-year commitment with Western Transportation Institute and MSU. FY17 was the first year of funding. FY18 & FY19 are the remaining years. 33% Impact Fee, 33% Montana State University, 33% Western Transportation Institute

CIP Project Fund  
Arterial & Collector Streets

DEPARTMENT  
Arterial & Collector

**PROJECT NUMBER**  
**SIF108**

**PROJECT NAME**  
S 3rd and Graf (Intersection Improvements) - Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$300,000					

**DESCRIPTION OF PROJECT**

Improve the intersection control at S 3rd and Graf. This is currently a stop controlled intersection. Installation of a roundabout will directly increase capacity. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. The Level of Service (LOS) Standard (BMC) will be attained at completion.

**ALTERNATIVES CONSIDERED**

Accept the existing level of service, create an SID for financing.

**ADVANTAGES OF APPROVAL**

Increased capacity and safety at this intersection.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

This project is funded by Street Impact Fees (\$1,200,000) and the Arterial & Collector District (\$300,000).

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Arterial & Collector Streets

Arterial & Collector

SIF109

PROJECT NAME

Oak (Rouse through Cannery District) - Construction\*

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$133,000

DESCRIPTION OF PROJECT

This project consists of improving Oak from Rouse through the Cannery District to include curb, gutter, sidewalks, and a turning lane to provide a complete arterial street standard. The Cannery District will be responsible for the cost of curb, gutter, and sidewalk along their property frontage as well as the turn lane to access two drive accesses that allow a left turn movement from Oak Street into the Cannery District. Future developments in this area may not be allowed to proceed until these improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. Left turn traffic safety will be improved upon installation of left turn lanes. Pedestrian safety will be improved. Conformance with the Transportation Master Plan will be attained with its completion. A payback District or SID may be created to leverage other stakeholders. Cash-in-lieu of infrastructure is anticipated to be contributed from the Cannery District developer to cover the cost of the left turn lanes needed for their drive accesses as well as the cost of curb, gutter, and sidewalk adjacent to their property. Other affected projects include Oak Street Corridor improvements.

#### ALTERNATIVES CONSIDERED

#### ADVANTAGES OF APPROVAL

Increased capacity and safety in this corridor, both for motorized vehicles as well as bicycles and pedestrians. There will be substantial pedestrian traffic between the Fairgrounds and the Cannery District. Additionally, the traffic impact study for the Cannery District indicated the need for left turn lanes for their drive accesses. As the City's transportation master plan identifies the need to upgrade the Oak Street Corridor to an arterial standard, this is an opportunity to partner with the Cannery District developer to complete a portion of the Oak Street improvements.

#### ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

#### FUNDING SOURCES

This project is funded by Street Impact Fees (\$133,000), the Arterial & Collector District (\$133,000), and Developer share (\$133,000). A development payback district or SID may be created to reimburse the Arterial & Collector District for the County's (project related) costs.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Arterial & Collector Streets

Arterial & Collector

SIFI 10

PROJECT NAME

Manley & Griffin (Intersection Improvements) - Construction

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$400,000

DESCRIPTION OF PROJECT

Improve the intersection control at Manley & Griffin. This intersection is currently 1-way stop controlled. Replacing it with a signal will greatly increase its capacity. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan will be attained at completion. A Payback District or SID may be created to leverage other stakeholders. Other affected projects include Griffin corridor improvements.

ALTERNATIVES CONSIDERED

Accept the current LOS

ADVANTAGES OF APPROVAL

Increased capacity and safety at this intersection.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

Street Impact Fees (\$1,600,000) and Arterial & Collector District (\$400,000).

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Arterial & Collector Streets

Arterial & Collector

SIF III

PROJECT NAME

Highland (Main to Kagy) - Construction & Design

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$5,000,000

DESCRIPTION OF PROJECT

Upgrade Highland, from Main to Kagy. Future developments in this area may not be allowed to proceed until these improvements are in place. This project directly increase capacity by adding additional lanes, dedicated bike lanes and sidewalks. Connectivity already exists at this location, it is capacity that is affected. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. Conformance with the Transportation Master Plan will be attained at the completion of the project. A payback District or SID may be created to leverage other stakeholders. Other affected projects include Intersection improvements at Highland and Kagy, Highland and Ellis and Highland and Main Street.

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

Increased capacity and safety in this corridor, both for motorized vehicles as well as bicycles and pedestrians.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs

FUNDING SOURCES

This project is funded by Street Impact Fees (\$5,000,000) and the Arterial & Collector District (\$5,000,000). A payback district may be created to reimburse both funds for any local share (project related) costs that may be allocated to future developments.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Arterial & Collector Streets

Arterial & Collector

SIFI 13

PROJECT NAME

Griffin (7th to Rouse) - Construction\*

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$2,000,000

DESCRIPTION OF PROJECT

Construct W Griffin corridor improvements from N. 7th to Rouse to an urban minor arterial standard. Designed improvements will improve LOS at the key intersections and will increase capacity in the corridor as a whole. Connectivity already exists at this location, it is capacity which is being expanded. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan will be attained at the completion of this project. A Payback District or SID may be created to leverage other stakeholders. Other affected projects include intersection improvements at Griffin and 7th and Griffin and Rouse.

#### ALTERNATIVES CONSIDERED

Accept the current level of service (do nothing). Alternative financing could be provided by creating an SID or Payback District.

#### ADVANTAGES OF APPROVAL

This project will expand the capacity of our street network and improve safety for drivers and pedestrians. Facilitates development currently occurring in this part of the city and network performance overall.

#### ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

#### FUNDING SOURCES

This project is funded by Street Impact Fees (\$3,500,000) and the Arterial & Collector District (\$2,000,000). A development payback district or SID may be created to reimburse Arterial & Collector District for any local share (project related) costs that may be allocated to future developments (estimated at \$2,000,000).

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Arterial & Collector Streets

Arterial & Collector

SIFI 14

PROJECT NAME

Fowler Connection (Huffine to Oak) - Construction

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$3,750,000

DESCRIPTION OF PROJECT

Complete the section of Fowler from Huffine to Oak. This project allows for extension of Fowler Avenue, which will directly increase capacity, and it extends an important north-south corridor on the west side of the city. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. Conformance with the Transportation Master Plan will be attained at the completion of this project. Other affected projects include intersection improvements on Fowler at Huffine, Babcock, Durston and Oak.

ALTERNATIVES CONSIDERED

Wait for adjacent development to occur and construct the road incrementally.

ADVANTAGES OF APPROVAL

Completes an important north-south link in the transportation network which reduces demand on other adjacent corridors.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$3,750,000) and the Arterial & Collector District (\$3,750,000). A Payback District or SID may be created to reimburse the Arterial & Collector District for any local improvements.

CIP Project Fund  
Arterial & Collector Streets

DEPARTMENT  
Arterial & Collector

**PROJECT NUMBER**  
**SIFI 16**

**PROJECT NAME**  
Bridger Dr & Story Mill Rd (Intersection Improvements) - Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
		\$300,000			

**DESCRIPTION OF PROJECT**

Improve the intersection control at Bridger and Story Mill. Adding additional phases and improving geometry will increase capacity for deficient movements at this intersection. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. Conformance with the Transportation Master Plan will be attained at completion. Other affected projects include Story Mill, Griffin to Bridger Drive.

**ALTERNATIVES CONSIDERED**

Accept the current LOS

**ADVANTAGES OF APPROVAL**

Increased capacity and safety at this intersection.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

This project is funded by Street Impact Fees (\$1,200,000) and the Arterial & Collector District (\$300,000). An SID or payback district may be created to recover the local share.

CIP Project Fund

Arterial & Collector Streets

DEPARTMENT

Arterial & Collector

PROJECT NUMBER

SIFI 17

PROJECT NAME

Story Mill (Griffin to Bridger) - Construction\*

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$250,000

DESCRIPTION OF PROJECT

Improve Story Mill from Griffin to Bridger. This project directly increases capacity by adding additional travel lanes, dedicated bike lanes and sidewalks. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. Conformance with the Transportation Master Plan will be attained at the completion of this project. A Payback District or SID may be created to leverage other stakeholders. Other affected projects include intersection improvements to Story Mill and Bridger Drive.

ALTERNATIVES CONSIDERED

Wait for adjacent development to occur and construct the road incrementally.

ADVANTAGES OF APPROVAL

Improves an important north-south link in the transportation network which reduces demand on other adjacent corridors.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$250,000) and the Arterial & Collector District (\$250,000). An SID or payback district may be created to recover the local share.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Arterial & Collector Streets

Arterial & Collector

SIFI 18

PROJECT NAME

Babcock (11th Ave to 19th Ave) - Construction\*

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$750,000

DESCRIPTION OF PROJECT

Construct the Babcock (11th to 19th) street upgrade. This project increases capacity directly by adding additional lanes, dedicated bike lanes and sidewalks. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. Conformance with the Transportation Master Plan will be attained at the completion of this project. A Payback District or SID may be created to leverage other stakeholders.

ALTERNATIVES CONSIDERED

Wait for adjacent development to install the improvements section by section.

ADVANTAGES OF APPROVAL

Allows for improvements to be made to the corridor at a time more favorable to the City

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$750,000) and the Arterial & Collector District (\$750,000). An SID or payback district may be created to pay for some local share improvements.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Arterial & Collector Streets

Arterial & Collector

SIF121

PROJECT NAME

Baxter & Davis (Intersection Improvements) - Roundabout Construction

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$500,000

DESCRIPTION OF PROJECT

Install a roundabout at Baxter & Davis. This intersection is currently 4-way stop controlled. Replacing it with a roundabout will greatly increase its capacity. Future developments in this area may not be allowed to proceed until these improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. Conformance with the Transportation Master Plan and Level of Service Standard will be attained at completion. Other affected projects include Baxter Lane Corridor Improvements.

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

This project will expand the capacity of our street network, improve safety for drivers and pedestrians and increase capacity at this intersection. Facilitates development currently occurring in this part of the city and network performance overall.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$2,000,000) and the Arterial & Collector District (\$500,000).

CIP Project Fund  
Arterial & Collector Streets

DEPARTMENT  
Arterial & Collector

**PROJECT NUMBER**  
**SIF134**

**PROJECT NAME**  
Oak (Cottonwood to Flanders Mill) - Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$433,000				

**DESCRIPTION OF PROJECT**

This project is the completion of the street segment of Oak St, from Cottonwood to Flanders Mill, to a five-lane urban principal arterial standard. This project increases capacity directly by constructing new segments of arterial roadway and by adding additional lanes, dedicated bike lanes and sidewalks, and it completes an important east-west link between Ferguson and Cottonwood. Future developments in this area may not be allowed to proceed until these improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. Conformance with the Transportation Master Plan will be attained at completion. A payback District or SID may be created to leverage other stakeholders. Other affected projects include intersection improvements at Oak and Cottonwood, Oak and Flanders Mill, Oak and Ferguson, Oak Street New Holland to Ferguson.

**ALTERNATIVES CONSIDERED**

Construct segment by segment as adjacent parcels develop.

**ADVANTAGES OF APPROVAL**

Increased capacity, connectivity and safety in this corridor, both for motorized vehicles as well as bicycles and pedestrians.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

This project is funded by Street Impact Fees (\$434,000) and \$430,000 for the local share adjacent to the City park, and an additional \$430,000 from School District #7.

CIP Project Fund  
Arterial & Collector Streets

DEPARTMENT  
Arterial & Collector

<b>PROJECT NUMBER</b>
<b>SIF138</b>

<b>PROJECT NAME</b>						
Cottonwood Road, Oak to Baxter - Construction*						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
				\$1,000,000	

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

Construction of a 5 lane Principal Arterial Street

**ALTERNATIVES CONSIDERED**

SID, Payback District, TOPS, incremental construction by adjacent developers.

**ADVANTAGES OF APPROVAL**

The project will expand the capacity and improve the connectivity of the city street network. It will improve safety for drivers and pedestrians and improve access to the Sports Park. It will facilitate development currently occurring in this part of the City.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

The total project cost is \$2.5M. \$750k will come from Impact Fees, the remainder is the local share which will come from either TOPS money, BSD 7 an SID or Payback of some sort or some combination of these.

CIP Project Fund  
Arterial & Collector Streets

DEPARTMENT  
Arterial & Collector

**PROJECT NUMBER**  
**SIFI42**

**PROJECT NAME**  
Durston Road & N. 27th (Intersection Improvements) - Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled \$300,000
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**DESCRIPTION OF PROJECT**

Installation of a roundabout or signal at the intersection of Durston Road and North 27th Avenue

**ALTERNATIVES CONSIDERED**

Accept the current level of service

**ADVANTAGES OF APPROVAL**

Increased capacity at this intersection

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Incremental increase in sweeping, plowing, painting and general maintenance

**FUNDING SOURCES**

Street Impact Fees

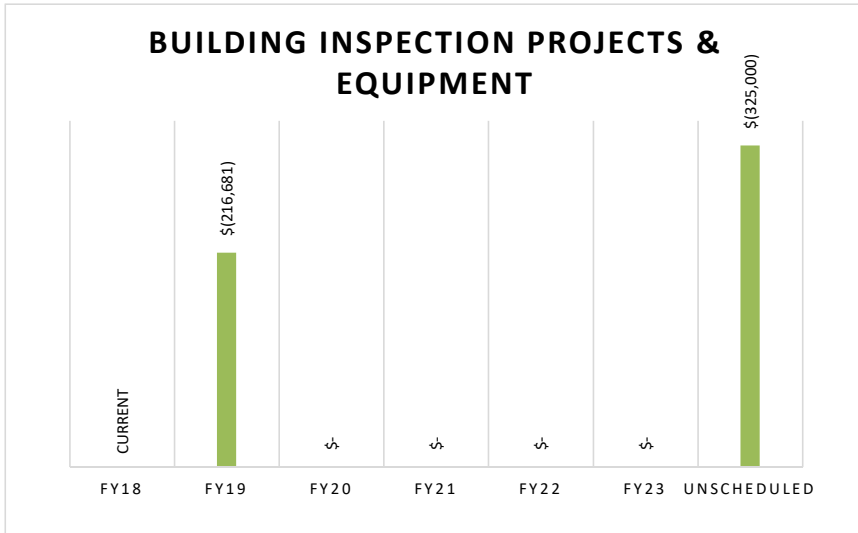


**Building Inspection Fund  
Capital Improvement Plan**

Financial Summary	Current Year	Projected					Unscheduled
	FY18	FY19	FY20	FY21	FY22	FY23	
Projected Beginning Reserve Balance Dedicated to CIP	\$ 192,100	\$ 224,600	\$ 19,065	\$ 30,768	\$ 43,056	\$ 55,958	
Plus: Building Inspection Revenues Dedicated to CIP	\$ 32,500	\$ 11,146	\$ 11,703	\$ 12,288	\$ 12,902	\$ 13,548	\$ -
Less: Scheduled CIP Project Costs	\$ -	\$ (216,681)	\$ -	\$ -	\$ -	\$ -	\$ (325,000)
<b>Projected Year-End Cash Dedicated to CIP</b>	<b>\$ 224,600</b>	<b>\$ 19,065</b>	<b>\$ 30,768</b>	<b>\$ 43,056</b>	<b>\$ 55,958</b>	<b>\$ 69,506</b>	

*Assumptions Made for Revenue Estimates:*

	Current Year	Projected				
	FY18	FY19	FY20	FY21	FY22	FY23
Estimated Annual Building Inspection Revenues	\$ 1,769,150	\$ 1,769,150	\$ 1,857,608	\$ 1,950,488	\$ 2,048,012	\$ 2,150,413
Estimated Growth in Revenues	0%	5%	5%	5%	5%	5%
Total Estimated Revenues	\$ 1,769,150	\$ 1,857,608	\$ 1,950,488	\$ 2,048,012	\$ 2,150,413	\$ 2,257,934
Current Revenues Dedicated to CIP %	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
Plus: Increase Dedicated to Capital Improvements %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total % Dedicated to CIP	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
<b>Total Estimated Revenues Dedicated to CIP</b>	<b>\$ 32,500</b>	<b>\$ 11,146</b>	<b>\$ 11,703</b>	<b>\$ 12,288</b>	<b>\$ 12,902</b>	<b>\$ 13,548</b>



CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
Building Inspection									
	BI01	BUILDING INSPE	STAFF VEHICLE - REPLACEMENTS						\$325,000
	GF199	BUILDING INSPECTION	PROFESSIONAL BUILDING RECONFIGURATION - PHASE 2	\$216,681					
<i>Totals by DEPARTMENT</i>				\$216,681					\$325,000

<i>Summary for Building Inspection (2 items)</i>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>Unscheduled</u>
<i>Totals by year:</i>	\$216,681					\$325,000

CIP Project Fund  
Building Inspection

DEPARTMENT  
BUILDING INSPECTION

**PROJECT NUMBER**  
**BI01**

PROJECT NAME  
STAFF VEHICLE - REPLACEMENTS

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$325,000

**DESCRIPTION OF PROJECT**

This item is for the scheduled replacement of Building Inspection vehicles based on age and use of the vehicle. Vehicles will be replaced according to the City's Vehicle Replacement policy; generally, 150,000 miles/20 years before replacement of non-emergency vehicles. This program will address the long term vehicle needs of the Building Division by allowing careful replacement of vehicles as vehicle conditions and department needs warrant. Right now, all vehicles are in use by Department staff, averaging approximately 5,000 miles per year. Vehicle Mileage updated October 2015. There are no maintenance issues or significant problems to report. We do regular maintenance and service all of our vehicles and always fix small stuff before it becomes a big problem.

**ALTERNATIVES CONSIDERED**

Utilize vehicles beyond the recommendations of the vehicle use policy; consider replacements of different model of vehicle.

**ADVANTAGES OF APPROVAL**

Based on the age and use of the vehicle a new vehicle will be purchased as replacement. In the past, vehicles were replaced after 5 years. We are stretching the useful life within the division to match the newly-revised vehicle purchase/replacement policy.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Generally, annual operating and maintenance costs are expected to decrease when older vehicles are replaced with newer ones. More fuel efficiency and lower repair costs are financial benefits.

**FUNDING SOURCES**

100% Building Inspection Fund

CIP Project Fund  
Building Inspection

DEPARTMENT  
BUILDING INSPECTION

**PROJECT NUMBER**  
**GF199**

PROJECT NAME  
PROFESSIONAL BUILDING RECONFIGURATION - Phase 2

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$216,681					

**DESCRIPTION OF PROJECT**

The City is responding to growth by adding staff to meet the increased demand for services in our community. We have also reorganized divisions (Community Development) and created other divisions (Stormwater) to improve efficiency and better serve our community. In order to accommodate this grow, we need to remodel the Stiff Building. In FY16 the City Commission approved a Phase I of the remodel that will provide a better use of existing space by relocating certain functions to the basement and reclaiming unused square footage. Approval of Phase II would allow the consolidation of Community Development (Planning and Building) together on one floor and the consolidation of Public Works Services (Engineering, GIS and Stormwater) together on another floor. This will allow better coordination of staff and better service to our public. Phase I is anticipated to be completed late spring of 2016.

**ALTERNATIVES CONSIDERED**

Continue to operate as we are today

**ADVANTAGES OF APPROVAL**

Community Development would be able to consolidate its operations and services to allow for an integrated customer-focused service delivery model. It will also provide Public Works with the ability to collocate its services in the Stiff Building. Finally it will help the City to take a planned and efficient approach to building utilization and service optimization.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

No additional operating costs anticipated for building reconfiguration.

**FUNDING SOURCES**

Building Inspection, Community Development, General Fund, and Parking.

# Building Inspection Vehicles - Details

Project Number	Asset #	Make	Model Yr	Current Mileage	FY19	FY20	FY21	FY22	FY23	Unscheduled	Notes
BI01	3144	Jeep Liberty	2003	70,487						\$32,500	Beyond FY20
	3218	Grand Cherokee	2004	55,257						\$32,500	Beyond FY20
	3353	Jeep Liberty	2006	49,287						\$32,500	Beyond FY20
	3328	Dodge Durango	2006	72,608						\$32,500	Beyond FY20
	3354	Jeep Liberty	2006	62,990						\$32,500	Beyond FY20
	3404	Dodge Durango	2008	44,945						\$32,500	Beyond FY20
	3329	Dodge Durango	2008	67,382						\$32,500	Beyond FY20
	3723	Jeep Patriot	2014	11,321						\$32,500	New in 2013
	3674	Jeep Patriot	2014	14,405						\$32,500	New in 2013
	3968	Prius	2017	385						\$32,500	New in 2017
	3967	Prius	2017	3,961						\$32,500	New in 2017
Total By Year for Vehicle Replacements										\$357,500	

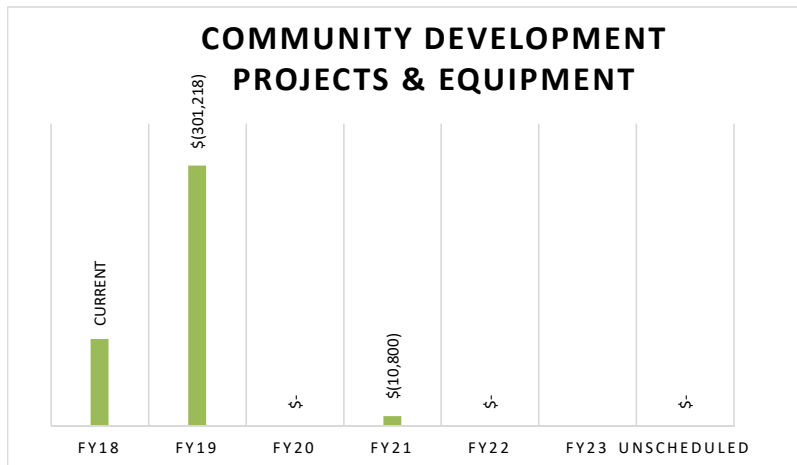


**Community Development Fund  
Capital Improvement Plan**

Financial Summary	Current Year	Projected					Unscheduled
	FY18	FY19	FY20	FY21	FY22	FY23	
Projected Beginning Reserve Balance Dedicated to CIP	\$ 141,884	\$ 382,705	\$ 172,636	\$ 265,609	\$ 349,640	\$ 446,369	
Plus: Long Range Planning Restricted Cash	\$ 90,078						
Plus: Conservation Overlay Restricted Cash	\$ 82,768						
Plus: Entryway Corridor Restricted Cash	\$ 26,691						
Plus: Technology Restricted Cash	\$ 31,284						
Plus: Planning Revenues Dedicated to CIP	\$ 110,000	\$ 91,149	\$ 92,972	\$ 94,832	\$ 96,728	\$ 98,663	
Plus: General Fund/Other Contribution							
Less: Scheduled CIP Project Costs	\$ (100,000)	\$ (301,218)	\$ -	\$ (10,800)	\$ -	\$ -	\$ -
<b>Projected Year-End Cash Dedicated to CIP</b>	<b>\$ 382,705</b>	<b>\$ 172,636</b>	<b>\$ 265,609</b>	<b>\$ 349,640</b>	<b>\$ 446,369</b>	<b>\$ 545,032</b>	

*Assumptions Made for Revenue Estimates:*

	Current Year	Projected				
	FY18	FY19	FY20	FY21	FY22	FY23
Estimated Annual Community Development Revenues (Excludes interfund transfers)	\$ 1,224,139	\$ 1,224,139	\$ 1,248,622	\$ 1,273,594	\$ 1,299,066	\$ 1,325,047
Estimated Growth in Revenues	-	2%	2%	2%	2%	2%
<b>Total Estimated Revenues</b>	<b>\$ 1,224,139</b>	<b>\$ 1,248,622</b>	<b>\$ 1,273,594</b>	<b>\$ 1,299,066</b>	<b>\$ 1,325,047</b>	<b>\$ 1,351,548</b>
Current Revenues Dedicated to CIP %	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%
Plus: Increase Dedicated to Capital Improvements %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Total % Dedicated to CIP</b>	<b>7.3%</b>	<b>7.3%</b>	<b>7.3%</b>	<b>7.3%</b>	<b>7.3%</b>	<b>7.3%</b>
<b>Total Estimated Revenues Dedicated to CIP</b>	<b>\$ 110,000</b>	<b>\$ 91,149</b>	<b>\$ 92,972</b>	<b>\$ 94,832</b>	<b>\$ 96,728</b>	<b>\$ 98,663</b>



CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
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Community Development

CD03	COMMUNITY D	COMPUTER HARDWARE			\$10,800				
CD05	COMMUNITY D	COPIER REPLACEMENT	\$35,000						
GF199	COMMUNITY DEVELOPMENT	PROFESSIONAL BUILDING RECONFIGURATION - PHASE 2	\$266,218						
<i>Totals by DEPARTMENT</i>			\$301,218		\$10,800				

*Summary for Community Development (3 items)*

*Totals by year:*

<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>Unscheduled</u>
\$301,218		\$10,800			

CIP Project Fund  
Community Development

DEPARTMENT  
COMMUNITY DEVELOPMENT

<b>PROJECT NUMBER</b>
<b>CD03</b>

<b>PROJECT NAME</b>						
COMPUTER HARDWARE						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
		\$10,800			

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

Replace computer hardware; replacements planned for years FY18 and FY20 did not meet the CIP capital threshold and will be included in budget requests for those years.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

Keeping computer hardware current diminishes the need for service calls and also facilitates the production of planning review by ensuring computers are able to run effective updated software.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

IT support, software updates

**FUNDING SOURCES**

Community Development Fund

CIP Project Fund  
Community Development

DEPARTMENT  
COMMUNITY DEVELOPMENT

PROJECT NUMBER  
CD05

PROJECT NAME  
Copier Replacement

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$35,000					

DESCRIPTION OF PROJECT

Replace combination copier/scanner. This is an essential primary work tool for Community Development for production of staff reports, intake of applications, and many other daily duties. The copier is shared with Public Works. The anticipated service life for this type of equipment under the use conditions and loads is five years or less. Mechanical failure are becoming more common with the existing machine.

ALTERNATIVES CONSIDERED

A lease may be an alternative. Experience with leasing has not been particularly positive. Efforts to continue with increasing maintenance may extend service life some but there are associated costs financially and with lost productivity during breakdowns. Given the level of time sensitive deadlines for the department substantial and frequent down times are not acceptable.

ADVANTAGES OF APPROVAL

Enable departments to continue to produce and process applications and materials.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No additional expenses are anticipated. Standard operating expenses are included in the annual budgets and are not anticipated to change substantially.

FUNDING SOURCES

General fund, planning fund

CIP Project Fund  
Community Development

DEPARTMENT  
COMMUNITY DEVELOPMENT

**PROJECT NUMBER**  
**GF199**

PROJECT NAME  
PROFESSIONAL BUILDING RECONFIGURATION - Phase 2

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$266,218					

**DESCRIPTION OF PROJECT**

The City is responding to growth by adding staff to meet the increased demand for services in our community. We have also reorganized divisions (Community Development) and created other divisions (Stormwater) to improve efficiency and better serve our community. In order to accommodate this grow, we need to remodel the Stiff Building. In FY16 the City Commission approved a Phase I of the remodel that will provide a better use of existing space by relocating certain functions to the basement and reclaiming unused square footage. Approval of Phase II would allow the consolidation of Community Development (Planning and Building) together on one floor and the consolidation of Public Works Services (Engineering, GIS and Stormwater) together on another floor. This will allow better coordination of staff and better service to our public. Phase I is anticipated to be completed late spring of 2016.

**ALTERNATIVES CONSIDERED**

Continue to operate as we are today

**ADVANTAGES OF APPROVAL**

Community Development would be able to consolidate its operations and services to allow for an integrated customer-focused service delivery model. It will also provide Public Works with the ability to collocate its services in the Stiff Building. Finally it will help the City to take a planned and efficient approach to building utilization and service optimization.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

No additional operating costs anticipated for building reconfiguration.

**FUNDING SOURCES**

Building Inspection, Community Development, General Fund, and Parking.

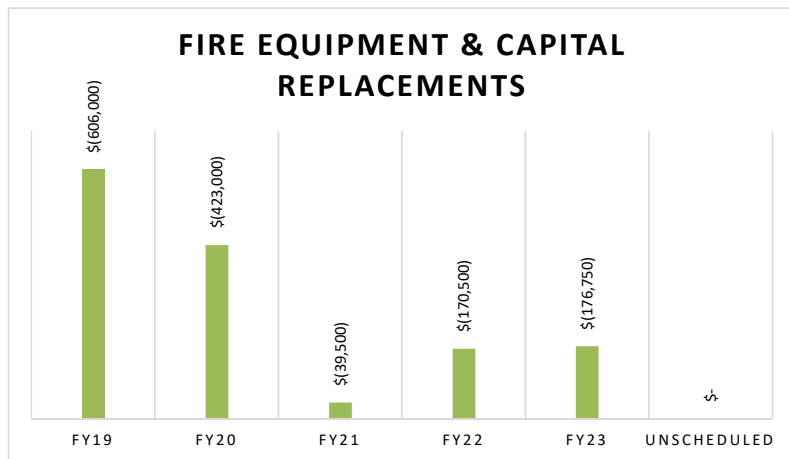


## Fire Equipment & Capital Replacement Capital Improvement Plan

Financial Summary	Current Year	Projected					Unscheduled
	FY18	FY19	FY20	FY21	FY22	FY23	
Projected Beginning Reserve Balance Dedicated to CIP	\$ 675,700	\$ 549,980	\$ 360,903	\$ 367,335	\$ 770,149	\$ 1,055,232	
Plus: Dedicated Tax Revenues 4 Mills	\$ 404,780	\$ 416,923	\$ 429,431	\$ 442,314	\$ 455,583	\$ 469,251	\$ -
Plus: Anticipated Grant Revenue							
Less: Scheduled CIP Project Costs	\$ (530,500)	\$ (606,000)	\$ (423,000)	\$ (39,500)	\$ (170,500)	\$ (176,750)	\$ -
<b>Projected Year-End Cash Dedicated to CIP</b>	<b>\$ 549,980</b>	<b>\$ 360,903</b>	<b>\$ 367,335</b>	<b>\$ 770,149</b>	<b>\$ 1,055,232</b>	<b>\$ 1,347,733</b>	

### Assumptions Made for Revenue Estimates:

	Current Year	Projected				
	FY18	FY19	FY20	FY21	FY22	FY23
Estimated Annual Tax Revenues	\$ 404,780	\$ 404,780	\$ 416,923	\$ 429,431	\$ 442,314	\$ 455,583
Estimated Annual Increase	0%	3%	3%	3%	3%	3%
Total Estimated Revenues	\$ 404,780	\$ 416,923	\$ 429,431	\$ 442,314	\$ 455,583	\$ 469,251
Current Revenues Dedicated to CIP %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Plus: Increase Dedicated to CIP	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total % Dedicated to CIP	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Estimated Revenues Dedicated to CIP	\$ 404,780	\$ 416,923	\$ 429,431	\$ 442,314	\$ 455,583	\$ 469,251



CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
Fire Equip & Capital Replacement									
	FE06	FIRE	RADIO REPLACEMENT PROGRAM	\$250,000	\$250,000				
	FE12	FIRE	PERSONAL PROTECTIVE EQUIPMENT	\$36,000	\$38,000	\$39,500	\$40,500	\$41,750	
	FE13	FIRE	STATION ALERTING SYSTEM	\$250,000					
	FE14	FIRE	STRUCTURAL COLLAPSE EQUIPMENT	\$70,000					
	FE15	FIRE	CARDIAC MONITOR REPLACEMENT		\$135,000				
	FE16	FIRE	EXTRICATION TOOLS				\$130,000		
	FE17	FIRE	WILDLAND APPARATUS					\$135,000	
<i>Totals by DEPARTMENT</i>				\$606,000	\$423,000	\$39,500	\$170,500	\$176,750	

<i>Summary for Fire Equip &amp; Capital Replacement (7 items)</i>				<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>Unscheduled</u>
<i>Totals by year:</i>				\$606,000	\$423,000	\$39,500	\$170,500	\$176,750	

CIP Project Fund	DEPARTMENT						<b>PROJECT NUMBER</b>
Fire Equip & Capital Replacement	FIRE						<b>FE06</b>
<b>PROJECT NAME</b>							<input type="checkbox"/> New
Radio Replacement Program							<input checked="" type="checkbox"/> Replacement
FY19	FY20	FY21	FY22	FY23	Unscheduled		<input checked="" type="checkbox"/> Equipment
\$250,000	\$250,000						<input type="checkbox"/> Project

**DESCRIPTION OF PROJECT**

This plan allows for aging fire portable radios to be replaced, including all of the software, programming and peripheral accessories. This is a planned replacement of radios at the end of their predicted usable life, estimated between eight and ten years. This will provide for seamless communication and response capabilities as the radios become less reliable and repair is no longer a financially prudent option. Radios are an essential item in the operation of the Bozeman Fire Department. Fire radios must be available for fire use 24 hours a day, 365 days a year. These radios are assigned to the three stations, all apparatus, and management staff and are used daily. The decision was made during FY-17 CIP discussions to postpone scheduled replacements of Fire Department radios due to uncertain plans of the Gallatin County 911 Center. Since this decision one year ago, a test was conducted with Bozeman Fire and Bozeman Police Department. The test utilized an 800 MHz radio system to evaluate its use as a potential upgrade from the current radio system. The results of the test were extremely positive, with noted improvements related to in-building coverage and city wide coverage. Since the test, the 911 advisory board has voted to move forward with a 4 phase plan to upgrade the radio system in Gallatin County. Phase I would call for the City of Bozeman to move to an 800 MHz digital trunked radio system.

**ALTERNATIVES CONSIDERED**

We still have the option of backing out of the 800 MHz system, however in doing so we would need to re-visit with 911 and the 911 Advisory Board about other potential solutions for Bozeman Fire. If Bozeman Fire were to back out and Bozeman Police still move forward, we would lose the ability to communicate effectively with each other, something that creates a major safety concern for both parties. In order to maintain consistency in public safety operations, both departments should remain on the same radio system.

**ADVANTAGES OF APPROVAL**

Clear and dependable communication allows for quick and efficient emergency deployment and the required level of firefighter safety. The portable radio project addresses a planned replacement program that existed in the CIP prior to the decision to move to 800 MHz radios. The purchase improves our ability to communicate within the city, particularly inside of larger buildings such as the high school, hospital, and big box retailers. We potentially may see some trade in value or resale value for some of the replaced units depending on their condition.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

As these are replacement radios we anticipate very little increases operating costs.

**FUNDING SOURCES**

100% Fire Equipment & Capital Replacement Fund - with possible reimbursement by Gallatin County 911 System.

CIP Project Fund	DEPARTMENT					<b>PROJECT NUMBER</b>
Fire Equip & Capital Replacement	Fire					<b>FE12</b>
<b>PROJECT NAME</b>						<input checked="" type="checkbox"/> New
Personal Protective Equipment						<input checked="" type="checkbox"/> Replacement
FY19	FY20	FY21	FY22	FY23	Unscheduled	<input checked="" type="checkbox"/> Equipment
\$36,000	\$38,000	\$39,500	\$40,500	\$41,750		<input type="checkbox"/> Project

**DESCRIPTION OF PROJECT**

Today each member of the Bozeman Fire Department is issued two sets of personal protective equipment (PPE), a primary and a backup set. By having two sets available members are ensured that if their primary set becomes contaminated or damaged on a call that they have a backup set of gear to move over into to complete their shift while their primary set is cleaned or repaired. The NFPA and manufacturer guidelines recommend that PPE used by firefighters, often referred to as turnout gear, be replaced every 10 years due to the breakdown of the protective fibers that are used to make the gear. Presently the fire department purchases gear on a rotating cycle so that a firefighter's primary gear is 0-5 years old and their back-up gear is 6-10 years old. This rotation is consistent with national best practice and is something the fire department plans to continue. To this point these purchases have been made annually out of the general fund even though its meets the criteria for the Capital Equipment and Replacement Fund. Starting in FY-19 the fire department will move this purchase form the general fund to the capital fund. This will become an annual expense in the capital plan.

**ALTERNATIVES CONSIDERED**

Continue to purchase out of the general fund budget

**ADVANTAGES OF APPROVAL**

Moves purchase from general fund budget to capital budget

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Will be replaced in 10 years

**FUNDING SOURCES**

CIP Project Fund	DEPARTMENT						<b>PROJECT NUMBER</b>
Fire Equip & Capital Replacement	Fire						<b>FE13</b>
<b>PROJECT NAME</b>							<input checked="" type="checkbox"/> New
Station Alerting System							<input type="checkbox"/> Replacement
FY19	FY20	FY21	FY22	FY23	Unscheduled		<input checked="" type="checkbox"/> Equipment
\$250,000							<input type="checkbox"/> Project

**DESCRIPTION OF PROJECT**

Presently the fire department receives primary notification of emergency calls via an alpha numeric pager. The use of alpha numeric paging is an outdated method of notifying emergency responders of response request and is difficult to find technological support for. The new 800 MHz radio system coupled with the installation of a new Computer Aided Dispatch (CAD) system now gives the Fire Department the ability to utilize a station alerting system. The implementation of a station alerting system allows for faster notification of responders as it eliminates the need for alpha numeric pagers which are slower, as they require the use of multiple interfaces. Station alerting allows for both audible and visual notification of responders while not increasing the workload on dispatchers. The moment that dispatchers have the basic information of an emergency call, a station alerting system automatically notifies the appropriate response unit while the dispatcher continues to gather information. This improves the first phase of a response which is commonly referred to as the call processing time, which by national standard is to be completed within 60 – 80 seconds. Today the average call processing time is approximately 90 seconds. By improving call processing times the overall response time to an emergency response is also reduced. This project also has a direct effect on the second phase of a response which is referred to as turnout time. Turnout time is the time from when responders are notified until they begin their actual driving response. Today with the alpha paging system the fire department routinely sees a 30-40 second delay in pager activation which causes extended turnout times. The national standard for turnout times is 60-80 seconds depending on the type of call, however today BFD times are closer to 90-105 seconds, primarily related to the alpha pager delay. Station alerting has the potential to reduce overall response times by nearly a minute and solves the problem of using alpha numeric paging. This project would require the installation of specific equipment in all of the fire stations, thus if a plan is implemented to address the current station 1 and station 2 as suggested in the Fire Master Plan, this project may need to be postponed until that occurs.

**ALTERNATIVES CONSIDERED**

Continue to use existing alpha pagers / delay this project until decisions on existing fire stations are made.

**ADVANTAGES OF APPROVAL**

Improved response times / answers question about long term solution to emergency responder notification

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

**FUNDING SOURCES**

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Fire Equip & Capital Replacement

Fire

FE14

PROJECT NAME

Structural Collapse Equipment

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$70,000

DESCRIPTION OF PROJECT

A structural collapse can be defined as a car driving into a building causing part of the building to fall, up to a total building collapsing due to a seismic event that occurs. Today the Fire Department has no structural collapse equipment in its cadre of tools. In the event of structural collapse, the nearest capable response team would be dispatched from Idaho Falls, ID. The department has spent the past two budget years improving our confined space and trench rescue response capabilities and is now prepared to add structural collapse to our capabilities. The requested equipment includes tools that are capable of accessing patients through concrete and steel, some of the more common obstacles encountered in a structural collapse. Also included in the requested is a search camera which allows rescuers to evaluate areas of collapse both visually and audibly for potential victims without having to access the area thus speeding up the search for potential victims.

ALTERNATIVES CONSIDERED

Do not purchase equipment / accept current level of risk / rely on out of state support for response if needed

ADVANTAGES OF APPROVAL

Provides city with equipment necessary to handle a structural collapse, most likely to occur with a seismic event. Minimizes need for out of state response.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

CIP Project Fund	DEPARTMENT					<b>PROJECT NUMBER</b>
Fire Equip & Capital Replacement	Fire					<b>FE15</b>
<b>PROJECT NAME</b>						<input checked="" type="checkbox"/> New
Cardiac Monitor Replacement						<input checked="" type="checkbox"/> Replacement
FY19	FY20	FY21	FY22	FY23	Unscheduled	<input checked="" type="checkbox"/> Equipment
	\$135,000					<input type="checkbox"/> Project

**DESCRIPTION OF PROJECT**

The Fire Department maintains 4 cardiac monitors that are on in-service apparatus. It is best practice to keep all of our cardiac monitors the same across the board so that staff do not have to attempt to remain familiar with multiple models of monitors. The next scheduled update to the cardiac monitoring is set for 2020. The department has the ability to receive trade in credit on its existing monitors during this transition as well. By staying with the most current version of cardiac monitors the department maintains interoperability with both AMR and Bozeman Health. These units would be expected to last until 2030 which is the next scheduled update. The department also maintains an annual service contract on the monitors during their life span.

**ALTERNATIVES CONSIDERED**

Continue to use current model cardiac monitors and make replacements out of general fund as needed

**ADVANTAGES OF APPROVAL**

Helps maintain interoperability with Bozeman Health and AMR. Keeps monitors consistent across the board for all BFD paramedics

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Will be replaced in 10 years

**FUNDING SOURCES**

CIP Project Fund  
Fire Equip & Capital Replacement

DEPARTMENT  
Fire

**PROJECT NUMBER**  
**FE16**

PROJECT NAME  
Extrication Tools

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
			\$130,000		

**DESCRIPTION OF PROJECT**

These are the tools that are used to access and remove patients from automobile accidents when they have become pinned or trapped in a vehicle. Having up to date extrication equipment is important as auto manufacturers continue to come out with new metals and materials that older equipment cannot cut. By replacing all three of the units at the same time we standardized our fleet of tools, making use, training, and maintenance consistent across the board. The anticipated life span of this equipment is 10 years.

**ALTERNATIVES CONSIDERED**

Continue to use existing equipment and plan replacement out of general fund budget

**ADVANTAGES OF APPROVAL**

Moves purchase from general fund to capital fund. Ensures that extrication equipment is consistent across the department and up to current standards related to automobile construction.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

**FUNDING SOURCES**

CIP Project Fund  
Fire Equip & Capital Replacement

DEPARTMENT  
Fire

**PROJECT NUMBER**  
**FE17**

PROJECT NAME  
Wildland Apparatus

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
				\$135,000	

**DESCRIPTION OF PROJECT**

The City of Bozeman continues to have several areas of undeveloped land within its corporate boundaries. Areas such as Story Mill, the Gallatin Regional Park, MSU agricultural fields, Pete’s Hill, and others still pose a risk of wildland fire problems. Having a wildland apparatus allows for the BFD to respond to these types of events in a vehicle that is equipped and designed for these types of responses, which often require that we travel off road to address the fire problem. The City’s current wildland apparatus will be approaching 30 years old during this fiscal year. While the vehicle may not have significant mileage other assessments such as structural integrity of the vehicle will need to be done based on the use of the vehicle as well as an assessment of the fire pump on the unit.

**ALTERNATIVES CONSIDERED**

Continue to use existing apparatus

**ADVANTAGES OF APPROVAL**

Provides department with reliable, up to date, wildland apparatus to address identified risk in the community.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

**FUNDING SOURCES**

# Fire Department Light Vehicle Replacements

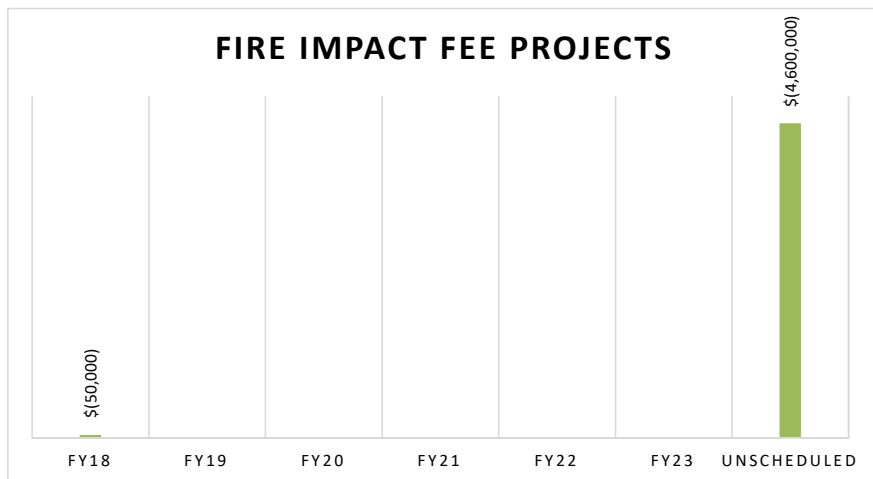
Asset #	Unit #	Model Yr	Current Make/Features	Currently Assigned to	Current Mileage	Replacement	FY18	FY19	FY20	FY21	FY22	Unscheduled
3076	F3	2002	Chevy Suburban	Deputy Chief Fire Marshall	149,347	Approved for replacement in FY-18 with Ford Interceptor SUV	\$40,000					
3247	F4	2004	Chevy Tahoe	Emergency Management Staff Captain	147,932	Ford Interceptor SUV – in FY-25						
2764	F2	2000	Chevy Tahoe	Operations Chief	134,519	Approved for replacement in FY-18 with Ford Interceptor SUV	\$40,000					
3153	BC1	2003	Chey Suburban	Batallion Chief	118,195	Approved for replacement in FY-18 with ½ ton 4x4 pickup	\$50,000					
3332	F6	2007	Chevy Tahoe	Fire Inspector	77,365	Ford Interceptor SUV						
3363	F7	2007	Dodge Durango	Fire Inspector	48,055	Ford Interceptor SUV						
3275	U4	2005	Ford F150	Plowing/Fire Investigations/Prevention Truck	46,159							
3158	F5	2003	Chevy Silverado - Crew Cab	Training Officer	35,760	3/4 or 1 ton pickup capable of pulling fire department trailers						
1535	B1	1993	Ford Truck	Wildland	18,197							
3816	F1	2016	Ford Interceptor SUV	Fire Chief	5,700							
3260	HMT	2004	Trailer	Hazmat								
<b>Totals</b>							<b>\$130,000</b>					

## Fire Impact Fee Capital Improvement Plan

Financial Summary	Current Year	Projected					Unscheduled
	FY18	FY19	FY20	FY21	FY22	FY23	
Projected Beginning Reserve Balance Dedicated to CIP	\$ 1,546,501	\$ 1,858,751	\$ 2,239,114	\$ 2,638,494	\$ 3,057,844	\$ 3,498,161	\$ -
Plus: Impact Fee Revenues Dedicated to CIP	\$ 362,250	\$ 380,363	\$ 399,381	\$ 419,350	\$ 440,317	\$ 462,333	\$ -
Plus: FIF07 Engine #4 - Voter Approved Bond							
Plus: FIF06 Station #4 - Voter Approved Bond							
Less: Scheduled CIP Project Costs	\$ (50,000)						\$ (4,600,000)
<b>Projected Year-End Cash Dedicated to CIP</b>	<b>\$ 1,858,751</b>	<b>\$ 2,239,114</b>	<b>\$ 2,638,494</b>	<b>\$ 3,057,844</b>	<b>\$ 3,498,161</b>	<b>\$ 3,960,494</b>	

### Assumptions Made for Revenue Estimates:

	Current Year	Projected				
	FY18	FY19	FY20	FY21	FY22	FY23
Estimated Annual Fire Impact Fee Revenues	\$ 362,250	\$ 362,250	\$ 380,363	\$ 399,381	\$ 419,350	\$ 440,317
Estimated Annual Increase	0.0%	5%	5%	5%	5%	5%
<b>Total Estimated Revenues</b>	<b>\$ 362,250</b>	<b>\$ 380,363</b>	<b>\$ 399,381</b>	<b>\$ 419,350</b>	<b>\$ 440,317</b>	<b>\$ 462,333</b>
Current Revenues Dedicated to CIP %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Plus: Increase Dedicated to Fire Capacity Expansion CIP	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Total % Dedicated to CIP</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
<b>Total Estimated Revenues Dedicated to CIP</b>	<b>\$ 362,250</b>	<b>\$ 380,363</b>	<b>\$ 399,381</b>	<b>\$ 419,350</b>	<b>\$ 440,317</b>	<b>\$ 462,333</b>



CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
<b>Impact Fees Fire</b>									
	FIF06	FIRE IF	FIRE STATION CONSTRUCTION / EXPANSION / RELOCATION						\$3,900,000
	FIF07	FIRE IF	FIRE DEPARTMENT RESPONSE APPARATUS						\$700,000
<i>Totals by DEPARTMENT</i>									\$4,600,000

<i>Summary for Impact Fees Fire (2 items)</i>				<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>Unscheduled</u>
<i>Totals by year:</i>									\$4,600,000

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Impact Fees Fire

FIRE IF

FIF06

PROJECT NAME

Fire Station Construction / Expansion / Relocation

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$3,900,000

DESCRIPTION OF PROJECT

The Fire Master Plan is completed and schedule for final adoption on November 6, 2017. The new Master Plan includes a comprehensive review of current station locations and the capacity to meet the current needs of the city along with recommendations for new fire stations. City staff will be evaluating the Master Plan recommendations during the next 12 months and formulating a plan to rehab / relocate / construction new fire stations to address the growth in the City.

ALTERNATIVES CONSIDERED

As provided by Commission

ADVANTAGES OF APPROVAL

The completion of this project would enhance our ability to respond to growing parts of the community within a time frame that has been historically acceptable to the citizens of Bozeman. The additional station /expansion / relocation also has the potential to have a positive impact on our ISO rating and encourage additional growth in areas of the city.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating & Maintenance Costs: Impact Fees can not be spent on operations and maintenance costs. The City's General Fund will bear the annual operating and maintenance expenses associated with this facility and staffing.

FUNDING SOURCES

Fire Impact Fees and possible voter approved bond

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Impact Fees Fire

FIRE IF

FIF07

PROJECT NAME

Fire Department Response Apparatus

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$700,000

DESCRIPTION OF PROJECT

The Fire Master Plan is complete and scheduled for final adoption on November 6, 2017. The new Master Plan includes a review of resource deployment, unit responses, and unit availability. The Fire Department will be evaluating these results to determine future needs of the department from a response and deployment model. This could include potential outcomes of purchasing additional apparatus, ranging from SUVs to Fire Engines to Ladder Trucks to handle the city's emergency response load.

ALTERNATIVES CONSIDERED

As provided by the Commission

ADVANTAGES OF APPROVAL

Helps us maintain current response time standards.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating & Maintenance Costs: Impact Fees can not be used for annual operating and maintenance costs. The City's General Fund will pay for the increased fuel, maintenance and insurance costs associated with this engine. In addition, this would add a possible FTE.

FUNDING SOURCES

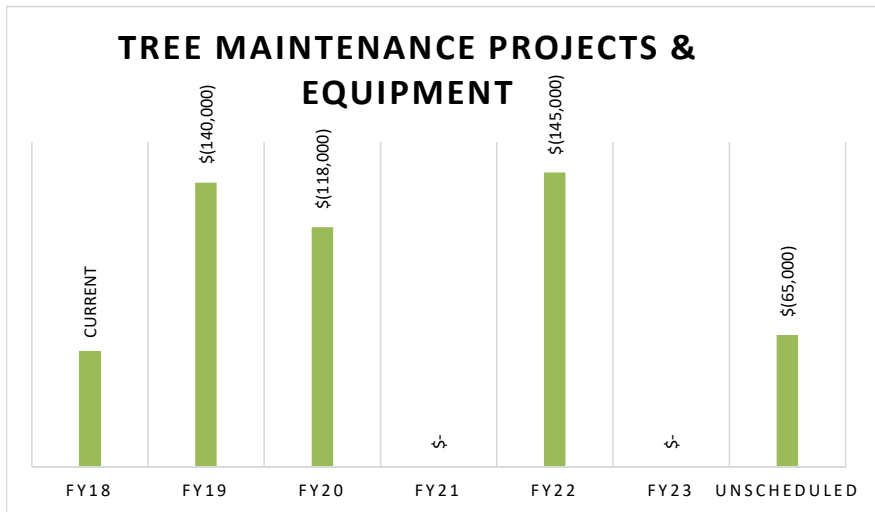
Impact Fees

**Tree Maintenance Fund  
Capital Improvement Plan**

Financial Summary	Current Year	Projected						UNSCHEDULED
	FY18	FY19	FY20	FY21	FY22	FY23		
Projected Beginning Reserve Balance Dedicated to CIP	\$ 140,026	\$ 118,932	\$ 20,872	\$ (44,180)	\$ 19,994	\$ (49,387)	\$ -	
Plus: Tree Mtc Revenues Dedicated to CIP	\$ 35,906	\$ 41,940	\$ 52,949	\$ 64,174	\$ 75,618	\$ 87,285	\$ -	
Less: Scheduled CIP Project Costs	\$ (57,000)	\$ (140,000)	\$ (118,000)	\$ -	\$ (145,000)	\$ -	\$ (65,000)	
<b>Projected Year-End Cash Dedicated to CIP</b>	<b>\$ 118,932</b>	<b>\$ 20,872</b>	<b>\$ (44,180)</b>	<b>\$ 19,994</b>	<b>\$ (49,387)</b>	<b>\$ 37,898</b>		

*Assumptions Made for Revenue Estimates*

	Current Year	Projected					
	FY18	FY19	FY20	FY21	FY22	FY23	
Estimated Annual Tree Mtc Revenues	\$ 692,073	\$ 692,073	\$ 698,994	\$ 705,984	\$ 713,044	\$ 720,174	
Estimated Annual Increase - Attributed to Annexations	0%	1%	1%	1%	1%	1%	
Total Estimated Revenues	\$ 692,073	\$ 698,994	\$ 705,984	\$ 713,044	\$ 720,174	\$ 727,376	
Current Revenues Dedicated to CIP %	3.2%	4.5%	6.0%	7.5%	9.0%	10.5%	
Plus: Increase Dedicated to CIP	1.3%	1.5%	1.5%	1.5%	1.5%	1.5%	
Total % Dedicated to CIP	4.5%	6.0%	7.5%	9.0%	10.5%	12.0%	
Total Estimated Revenues Dedicated to CIP	\$ 31,143	\$ 41,940	\$ 52,949	\$ 64,174	\$ 75,618	\$ 87,285	



CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
Tree Maintenance District									
	FOR07	FORESTRY	FORESTRY VEHICLE REPLACEMENTS		\$28,000				
	FOR10	FORESTRY	STUMP GRINDER						
	FOR11	FORESTRY	LOG LOADER & TRUCK	\$140,000					
	FOR13	FORESTRY	AERIAL LIFT / BUCKET TRUCK				\$145,000		
	FOR14	FORESTRY	FORESTRY CHIP TRUCK		\$90,000				
	FOR15	FORESTRY	TOOLCAT UTILITY MACHINE						\$65,000
<i>Totals by DEPARTMENT</i>				\$140,000	\$118,000		\$145,000		\$65,000

<i>Summary for Tree Maintenance District (6 items)</i>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>Unscheduled</u>
<i>Totals by year:</i>	\$140,000	\$118,000		\$145,000		\$65,000

CIP Project Fund  
Tree Maintenance District

DEPARTMENT  
FORESTRY

<b>PROJECT NUMBER</b>
<b>FOR07</b>

<b>PROJECT NAME</b>						
Forestry Vehicle Replacements						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$28,000				

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

This is a request to replace a 1999 Ford 1/2 ton pickup truck. #2728 has 95,000 miles and the clutch needs replacement.

**ALTERNATIVES CONSIDERED**

Continue to use and repair existing vehicle. As directed by Commission.

**ADVANTAGES OF APPROVAL**

Replacing this pickup will provide the Forestry division with more reliable truck, improve safety, lower exhaust emissions, tow trailers with its tow package, and work as needed.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Operating costs (maintenance and fuel/oil) of a newer vehicle are expected to be lower.

**FUNDING SOURCES**

100% Tree Maintenance District Fund

CIP Project Fund  
Tree Maintenance District

DEPARTMENT  
FORESTRY

**PROJECT NUMBER**  
**FOR10**

PROJECT NAME  
STUMP GRINDER

- New
- Replacement
- Equipment
- Project

FY19                  FY20                  FY21                  FY22                  FY23                  Unscheduled

**DESCRIPTION OF PROJECT**

This is a request to replace a 1996 Vermeer stump grinder. This would be a scheduled replacement of an department forestry equipment that is nearing 20 years of age. Forestry needs a larger, and more modern stump grinder. Additional info: #2671 – 1996 Vermeer 630B Stump Grinder  
350 Hours Replace All Wiring Replace Cutter Belts

**ALTERNATIVES CONSIDERED**

Continue to use existing equipment. As directed by Commission.

**ADVANTAGES OF APPROVAL**

Replacing this equipment will provide the Forestry division with an larger and more reliable piece of equipment. Also it will improve productivity and will be safer for the operator. Trade in on new purchase or put in public auction.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Normal maintenance and upkeep.

**FUNDING SOURCES**

100% Tree Maintenance District Fund

CIP Project Fund  
Tree Maintenance District

DEPARTMENT  
FORESTRY

PROJECT NUMBER  
FOR I I

PROJECT NAME  
LOG LOADER & TRUCK

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$140,000					

DESCRIPTION OF PROJECT

This a request to replace a 2001 Ford F650. Forestry is moving up an unscheduled request to FY19. This piece of Forestry equipment is both unsafe and impractical. Additional info: #3125 – 2001 Ford F650, National Crane N50, Palift Hydraulic Dump, 10,000 miles/1100 hours. Hydroboost Brake System Repairs, Leaky Rear Seals, transmission slip, GVWR 26000 Max – 24500 lbs. empty. Not True Forestry style Equipment.

ALTERNATIVES CONSIDERED

Continue to use existing vehicle. As directed by Commission.

ADVANTAGES OF APPROVAL

Replacing this Forestry equipment will provide better production and improved safety to the operator. This truck and crane was pieced together and is over its safe gvw nearly empty. Replace for a true urban Forestry log and brush loader. Trade in or public auction the whole thing. No other City department can use it or any part of it.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

100% Tree Maintenance District Fund

CIP Project Fund  
Tree Maintenance District

DEPARTMENT  
FORESTRY

**PROJECT NUMBER**  
**FOR13**

PROJECT NAME  
Aerial Lift / Bucket Truck

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
			\$145,000		

DESCRIPTION OF PROJECT

Replace 2001 #3069 C7500 HI-Ranger bucket truck. This Forestry equipment is nearing its 20 year anniversary. 11,000 miles/4,000 hours. This truck has been the main workhorse for the division and is showing its wear. Replacement would give us a modern truck with a higher working height and new safety items.

ALTERNATIVES CONSIDERED

Continue to use existing vehicle. As directed by the commission.

ADVANTAGES OF APPROVAL

Replacement of this equipment provides the division with a more reliable bucket truck. Improves operator safety, lowers exhaust emissions, and gives us the overall working height we need for the City's largest trees. Sell by public auction the existing bucket truck.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

100% Tree Maintenance District Fund

CIP Project Fund  
Tree Maintenance District

DEPARTMENT  
Forestry

<b>PROJECT NUMBER</b>
<b>FOR14</b>

PROJECT NAME
FORESTRY CHIP TRUCK

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$90,000				

DESCRIPTION OF PROJECT
------------------------

This is a request to replace a 1991 International Forestry chip truck. This Forestry equipment is nearly 30 years old and has reliability issues with the engine. Replacement with a modern truck would bring cleaner emission through Tier 4 Diesel standards. A larger dump body of 20 cubic yards (25% increase) reduces trips to the landfill, saving both vehicle wear and time.

**ALTERNATIVES CONSIDERED**

Replace 1991 International Forestry with a new 15 cubic yard chip truck (Reduced cost).

**ADVANTAGES OF APPROVAL**

Improved efficiency and reduced man-hours spent dumping waste

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Routine maintenance and Diesel Exhaust Fluid

**FUNDING SOURCES**

100% Tree Maintenance District Fund

CIP Project Fund  
Tree Maintenance District

DEPARTMENT  
FORESTRY

**PROJECT NUMBER**  
**FOR15**

PROJECT NAME  
TOOLCAT UTILITY MACHINE

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$65,000

DESCRIPTION OF PROJECT

This is a request for a multi-function, cabbed vehicle. This equipment would improve efficiency and capability related to snow removal. Compared to hand-shoveling and ATV use, staff could maintain more plowing routes in less time.

ALTERNATIVES CONSIDERED

Rely on current hand-shoveling and ATV use.

ADVANTAGES OF APPROVAL

Increased staff efficiency related to snow removal

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Routine maintenance

FUNDING SOURCES

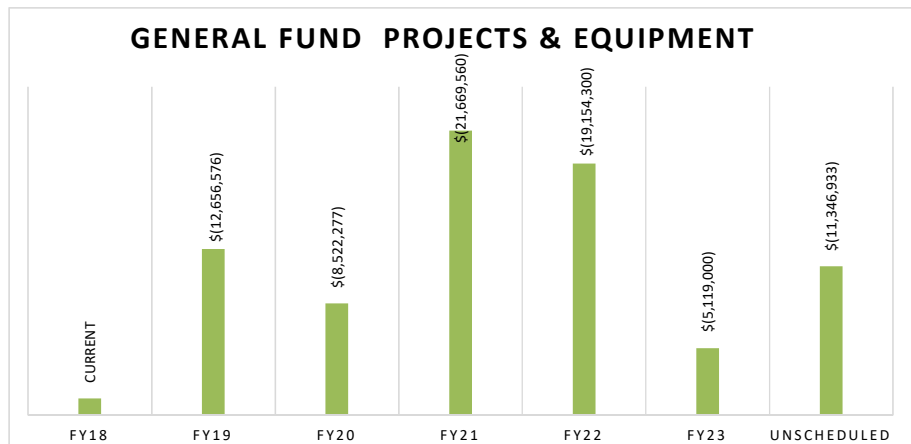
100% Tree Maintenance Fund

**General Fund  
Capital Improvement Plan**

Financial Summary	Current Year		Projected				Unscheduled
	FY18	FY19	FY20	FY21	FY22	FY23	
Projected Beginning Balance Dedicated to CIP	\$ -	\$ 236,000	\$ (356,664)	\$ (755,568)	\$ (552,920)	\$ (11,771)	
Plus: General Fund Revenues Dedicated to CIP	\$ 1,284,996	\$ 919,412	\$ 1,083,374	\$ 1,094,207	\$ 1,105,149	\$ 1,116,201	\$ -
Plus: GF231 - Cem. Irrigation Project - Reserve Used for Grant Match	\$ 200,000	\$ 200,000					
Plus: GF231 - Cem. Irrigation Project - Grant/Funding DNRC and BOR		\$ 425,000					
Plus: GF286 - Veterans Cemetery Project - Reserve Used		\$ 88,000	\$ 40,000	\$ 45,000			
Plus: GF280 - Story Mansion Sewer Repair, from Story Mansion Fund	\$ 18,000						
Plus: GF052 - Police Non-Patrol Vehicle, from Donation	\$ 18,000						
Plus: Intercap Loan - GF260, GF261 Sports Complex Imps.		\$ 431,500					
Plus: Bond Issue: GF263 L&J		\$ 10,000,000		\$ 20,000,000			
Plus: Bond Issue: GF305 Fire Station 1			\$ 6,500,000				
Plus: Bond Issue: GF306 Fire Station 2						4,500,000	
Plus: Bond Issue: GF056 Indoor/Outdoor Aquatics Facility					\$ 16,500,000		
Plus: GF137 Swim Center/ GF238 Bogert Bond Issue (with Aquatics Facility question)					\$ 1,432,300		
Less: Scheduled CIP Project Costs	\$ (1,284,996)	\$ (12,656,576)	\$ (8,522,277)	\$ (21,669,560)	\$ (19,154,300)	\$ (5,119,000)	\$ (11,346,933)
<b>Creation of Citywide Park Maint Dist. CIP projects moved to own fund</b>		<b>Creation</b>	<b>\$ 500,000</b>	<b>\$ 733,000</b>	<b>\$ 658,000</b>	<b>\$ 203,000</b>	<b>\$ 3,395,000</b>
Projected Year-End Cash Dedicated to CIP	\$ 236,000	\$ (356,664)	\$ (755,568)	\$ (552,920)	\$ (11,771)	\$ 688,430	

*Assumptions Made for Revenue Estimates:*

	Current Year		Projected			
	FY18	FY19	FY20	FY21	FY22	FY23
Estimated Annual General Fund Revenues	\$ 30,343,623	\$ 30,343,623	\$ 30,647,059	\$ 30,953,530	\$ 31,263,065	\$ 31,575,696
Estimated Growth in General Fund Revenues	0%	1%	1%	1%	1%	1%
Total Estimated General Fund Revenues	\$ 30,343,623	\$ 30,647,059	\$ 30,953,530	\$ 31,263,065	\$ 31,575,696	\$ 31,891,453
<b>Current Revenues Dedicated to CIP %</b>	<b>2.6%</b>	<b>2.6%</b>	<b>3.0%</b>	<b>3.5%</b>	<b>3.5%</b>	<b>3.5%</b>
Plus: Increase Dedicated to Capital Improvements %	0.4%	0.4%	0.5%	0.0%	0.0%	0.0%
<b>Total % Dedicated to CIP</b>	<b>3.0%</b>	<b>3.0%</b>	<b>3.5%</b>	<b>3.5%</b>	<b>3.5%</b>	<b>3.5%</b>
Total Estimated Revenues Dedicated to CIP	\$ 910,309	\$ 919,412	\$ 1,083,374	\$ 1,094,207	\$ 1,105,149	\$ 1,116,201



CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
General Fund									
	GF010	CEMETERY	CEMETERY MOWER REPLACEMENTS	\$16,000	\$16,000	\$18,000	\$18,000	\$18,000	
	GF083	CEMETERY	BACKHOE		\$110,000				
	GF116	CEMETERY	CEMETERY VEHICLE REPLACEMENTS	\$50,000					
	GF231	CEMETERY	CEMETERY IRRIGATION PROJECT	\$682,859					
	GF252	CEMETERY	CEMETERY COLUMBARIUM			\$55,000			
	GF268	CEMETERY	SOUTHWEST MONTANA VETERAN'S CEMETERY	\$88,000	\$40,000	\$45,000			\$360,000
<i>Totals by DEPARTMENT</i>				\$836,859	\$166,000	\$118,000	\$18,000	\$18,000	\$360,000
General Fund									
	GF282	City Admin/ Sustainability	CITY HALL PLUG-IN HYBRID ELECTRIC VEHICLE	\$33,000					
<i>Totals by DEPARTMENT</i>				\$33,000					
General Fund									
	GF283	City Clerk's Office /	COMMISSION ROOM TECHNOLOGY UPGRADE	\$80,000					
	GF284	City Clerk's Offi	LASERFICHE SOFTWARE UPGRADE		\$57,000	\$28,000	\$28,000	\$28,000	\$28,000
<i>Totals by DEPARTMENT</i>				\$80,000	\$57,000	\$28,000	\$28,000	\$28,000	\$28,000
General Fund									
	GF275	ECONOMIC DEV	FIBER OPTIC CONDUIT AND VAULTS	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
<i>Totals by DEPARTMENT</i>				\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
General Fund									
	GF285	Facilities/Librar y	LIBRARY EXTERIOR DOOR OPERATORS/CLOSURES REPLACEMENT	\$12,000					
<i>Totals by DEPARTMENT</i>				\$12,000					
General Fund									
	GF103	FACILITY - CH	AMERICAN'S WITH DISABILITIES ACT (ADA) COMPLIANCE IMPROVEMENTS	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
	GF219	FACILITY - CH	ADDITION TO CITY HALL, CONSOLIDATION OF SERVICES						\$5,500,000
	GF241	FACILITY - CH	REPLACEMENT OF CITY HALL AC CONDENSING UNIT – ROOF TOP	\$50,000					
	GF245	FACILITY - CH	ENERGY PROJECTS – CITY HALL			\$75,000			
	GF271	FACILITY - CH	CITY HALL NEW PARKING LOT						\$250,000
	GF272	FACILITY - CH	SITE SECURITY UPGRADE - BUILDING LOCKS	\$15,000	\$15,000	\$15,000			
	GF303	FACILITY - CH	CITY HALL EXPANSION REMODEL OF STORAGE AREAS INTO OFFICES			\$25,000			
	GF304	FACILITY - CH	CITY HALL COMMISSION ROOM EXPANSION/REMODEL	\$300,000					
<i>Totals by DEPARTMENT</i>				\$375,000	\$25,000	\$125,000	\$10,000	\$10,000	\$5,750,000
General Fund									
	GF001	FACILITY - PROF	PROFESSIONAL BUILDING ELEVATOR REPLACEMENT						\$66,600
	GF199	FACILITY - PROF	PROFESSIONAL BUILDING RECONFIGURATION - PHASE 2	\$37,031					
<i>Totals by DEPARTMENT</i>				\$37,031					\$66,600
General Fund									
	GF157	FACILITY - SC	SENIOR CENTER ELEVATOR				\$68,000		
<i>Totals by DEPARTMENT</i>							\$68,000		
General Fund									
	GF224	FINANCE	SUNGARD ANALYTICS NOW COGNOS BI (BUSINESS INTELLIGENCE) WEB-BASED REPORTING SUITE	\$35,000					
	GF227	FINANCE	ERP REPLACEMENT / UPGRADE "SUNGARD REPLACEMENT / UPGRADE"						\$333,333
<i>Totals by DEPARTMENT</i>				\$35,000					\$333,333
General Fund									
	GF305	Fire	FIRE STATION 2					\$4,500,000	
	GF306	Fire	FIRE STATION 1	79	\$6,500,000				

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
<i>Totals by DEPARTMENT</i>					\$6,500,000			\$4,500,000	
General Fund									
	GF287	Human Resourc	LEARNING MANAGEMENT SYSTEM	\$25,000					
	GF288	Human Resourc	APPLICANT TRACKING SYSTEM			\$30,000			
<i>Totals by DEPARTMENT</i>				\$25,000		\$30,000			
General Fund									
	GF062	I.T.	PERSONAL COMPUTER (PC) REPLACEMENT	\$50,000	\$55,000	\$65,000	\$65,000	\$60,000	
	GF080	I.T.	REMOTE CLOSET SWITCHES, ROUTER AND WIRELESS AP REPLACEMENT	\$45,000	\$45,000	\$45,000	\$50,000	\$50,000	
	GF199	I.T.	PROFESSIONAL BUILDING RECONFIGURATION - PHASE 2	\$136,186					
	GF229	I.T.	ISCSI STORAGE REPLACEMENT	\$45,000					
	GF233	I.T.	VEHICLE REPLACEMENT					\$23,000	\$83,000
	GF263	I.T.	POLICE VIDEO EVIDENCE STORAGE AND BACKUP				\$40,000		
	GF265	I.T.	GENERAL FUND SERVER REPLACEMENT			\$68,000			
	GF289	I.T.	SERVER FARM SOFTWARE UPGRADES		\$10,000	\$10,000	\$25,000	\$25,000	
<i>Totals by DEPARTMENT</i>				\$276,186	\$110,000	\$188,000	\$180,000	\$158,000	\$83,000
General Fund									
	GF031	PARKS	PARK IMPROVEMENT GRANTS		\$150,000		\$150,000		
	GF034	PARKS	LARGE DECK MOWER	\$90,000		\$58,000		\$60,000	\$110,000
	GF084	PARKS	PARKS RESTROOM UPGRADES			\$80,000			\$470,000
	GF092	PARKS	PLAYGROUND EQUIPMENT		\$95,000	\$95,000	\$120,000		\$120,000
	GF108	PARKS	PARK SIDEWALK REPLACEMENTS				\$120,000	\$88,000	
	GF115	PARKS	PARK VEHICLE REPLACEMENTS	\$50,000	\$30,000	\$30,000	\$28,000	\$55,000	\$180,000
	GF148	PARKS	BMX PARKING LOT						\$85,000
	GF190	PARKS	4-WHEELER ATV REPLACEMENT			\$16,000			\$14,000
	GF191	PARKS	UPGRADE SOFTBALL COMPLEX LIGHTING						\$1,000,000

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
	GF195	PARKS	TURF SWEEPER	\$32,000					\$36,000
	GF205	PARKS	PROST PLAN UPDATE	\$109,000					
	GF250	PARKS	SPLASH PADS		\$225,000		\$240,000		\$190,000
	GF260	PARKS	SPORTS COMPLEX - CONSTRUCTION OF 'PROJECT RELATED' COTTONWOOD ROAD AREA WATER & WASTEWATER IMPROVEMENTS			\$364,000			
	GF270	PARKS	SNOW PLOWING VEHICLE	\$65,000					\$75,000
	GF278	PARKS	GRIFFIN AT STORY MILL PARK ROAD IMPROVEMENT - .26 MILE						\$260,000
	GF279	PARKS	STORY MILL ROAD IMPROVEMENT - .17 MILE						\$170,000
	GF281	PARKS	BOZEMAN POND PARK & AASHEIM BALLFIELDS ROAD EXPANSION - .17 MILE & .09 MILE						\$260,000
	GF290	PARKS	IRRIGATION SYSTEM REPLACEMENTS						\$425,000
	GF291	PARKS	PICKLEBALL COURTS			\$90,000			
<i>Totals by DEPARTMENT</i>				\$346,000	\$500,000	\$733,000	\$658,000	\$203,000	\$3,395,000
<b>General Fund</b>									
	PW05/06	Parks and Facility Portion	PUBLIC WORKS SHOPS FACILITY PLAN AND CONSTRUCTION	\$10,000	\$50,000				
<i>Totals by DEPARTMENT</i>				\$10,000	\$50,000				
<b>General Fund</b>									
	GF052	POLICE	POLICE NON-PATROL VEHICLE REPLACEMENTS	\$15,000		\$15,000	\$15,000	\$30,000	\$377,000
	GF053	POLICE	PATROL VEHICLE REPLACEMENT	\$124,000	\$189,000	\$128,000	\$195,000	\$132,000	\$680,000
	GF165	POLICE	PATROL MOTORCYCLE REPLACEMENTS						\$60,000
	GF166	POLICE	PORTABLE AND MOBILE RADIO REPLACEMENTS	\$295,000	\$295,000				
	GF262	POLICE	POLICE K9			\$17,000			\$19,000
	GF263	POLICE	LAW & JUSTICE CENTER	\$10,000,000		\$20,000,000			
	GF292	POLICE	PATROL CAR AUXILIARY EQUIPMENT	81 \$15,000	\$10,000	\$10,000	\$10,000	\$15,000	\$10,000

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
	GF293	POLICE	NON-PATROL CAR NEW VEHICLES		\$15,000		\$15,000		
	GF294	POLICE	PATROL CAR - ADDITIONAL			\$64,000			
<i>Totals by DEPARTMENT</i>				\$10,449,000	\$509,000	\$20,234,000	\$235,000	\$177,000	\$1,146,000

General Fund

	GF056	RECREATION	DESIGN & CONSTRUCT INDOOR/OUTDOOR FAMILY AQUATICS CENTER			\$100,000	\$16,500,000		
	GF137	RECREATION	SWIM CENTER - FACILITY REPAIRS AND REPLACEMENTS				\$949,300		
	GF140	RECREATION	LINDLEY CENTER PARKING LOT RENOVATION			\$53,560			
	GF209	RECREATION	LINDLEY CENTER FULL UPGRADE: RESTROOMS, WINDOWS, SIDING, KITCHEN, ROOF, FLOORING		\$224,277				
	GF238	RECREATION	BOGERT POOL RENOVATION				\$483,000		
	GF295	RECREATION	SWIM CENTER UV SYSTEM REPLACEMENT	\$68,500					
	GF296	RECREATION	SWIM CENTER – FRONT FURNACE REPLACEMENT		\$36,000				
	GF297	RECREATION	SWIM CENTER ROOF REPLACEMENT	\$26,000					
	GF298	RECREATION	SWIM CENTER – BARRIER WALL IN PUMP ROOM	\$22,000					
	GF299	RECREATION	VEHICLE REPLACEMENT		\$30,000				
	GF300	RECREATION	STORY MILL COMMUNITY CENTER GYMNASIUM FLOOR REPLACEMENT						\$110,000
	GF301	RECREATION	STORY MANSION EXTERIOR PAINT						\$50,000
	GF302	RECREATION	PASSENGER VAN			\$35,000			
<i>Totals by DEPARTMENT</i>				\$116,500	\$290,277	\$188,560	\$17,932,300		\$160,000

Summary for General Fund (78 items)

	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>Unscheduled</u>
<i>Totals by year:</i>	\$12,656,576	\$8,232,277	\$21,669,560	\$19,154,300	\$5,119,000	\$11,346,933

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

FACILITY - PROF

GF001

PROJECT NAME

PROFESSIONAL BUILDING ELEVATOR REPLACEMENT

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$66,600

DESCRIPTION OF PROJECT

The elevator in the Professional Building is a three stop Otis elevator. The elevator was installed when the second floor was added in 1972. Since the City purchased the building we have remodeled several areas on both the main floor and second floor – the elevator remains original and is approaching 44 years of continued use. The elevator is to the point where many technological improvements have been made in elevator technology and a change out would yield both improved service and some reductions in energy costs. The elevator is inspected annually and is still safe although there are some inherent problems with the operation of the elevator. Of the four elevators owned by the City, this system experiences the most downtime. One big problem is the leveling systems and the way the rails and tracks are mounted in the building. The elevator will malfunction and require resetting if it loaded heavy to one side. A new car and track system would solve the nuisance trips associated with this aging elevator.

ALTERNATIVES CONSIDERED

Continue to maintain and adjust the elevator operating systems throughout the year.

ADVANTAGES OF APPROVAL

Increase reliability and reduced maintenance costs. Some electrical savings associated with improved electric motors.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs

FUNDING SOURCES

General Fund and Building Inspection Fund

CIP Project Fund  
General Fund

DEPARTMENT  
CEMETERY

**PROJECT NUMBER**  
**GF010**

PROJECT NAME  
CEMETERY MOWER REPLACEMENTS

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$16,000	\$16,000	\$18,000	\$18,000	\$18,000	

DESCRIPTION OF PROJECT

Ongoing cemetery mower replacement program. Scheduled on a five year replacement program, with the oldest cemetery mower now being 5 years old. Proposing to go back to the three replacement cycle, due to numerous breakdowns after the three year mark. These mowers are used to complete the mowing 53+ acres of turf inside and outside the cemetery which include mowing of the open space, trails, and the weekly mowing through the headstones.

**ALTERNATIVES CONSIDERED**

Keep older mowers for extended periods of time, which has been done as we moved to a 5 year replacement program instead of a 3 year program.

**ADVANTAGES OF APPROVAL**

Less down time; Decreased repair /maintenance costs; High trade –in value; Increased productivity; Less emissions.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Routine maintenance, oil changes, fuel.

**FUNDING SOURCES**

100% General Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

PARKS

GF031

PROJECT NAME

PARK IMPROVEMENT GRANTS

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$150,000

\$150,000

DESCRIPTION OF PROJECT

The General Fund contributes funds every other year towards improving park infrastructure through implementation of park master plans. This grant program is a matching funds program in which the City receives a minimum 1 to 1 match from the recipient. The Commission has established a formal grant policy by resolution. By switching to every other year, and also increasing the allocation, bigger projects can be accomplished, though these projects will take more time to complete.

#### ALTERNATIVES CONSIDERED

Handle park equipment and improvement requests on an adhoc basis, as various donors or service groups bring them forward. Allocate more or fewer dollars to the program.

#### ADVANTAGES OF APPROVAL

This matching funds program provides critical infrastructure to the park system by utilizing the talents of our community members through matching funds, donations, labor in lieu of and numerous specialized services. All of the above can be used as a match in this program

#### ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: New infrastructure and facilities bring on increased maintenance and labor costs. The nature of each project funded will determine the continued costs. Some projects have very low ongoing costs, others have relatively higher costs.

#### FUNDING SOURCES

100% General Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

PARKS

GF034

PROJECT NAME

LARGE DECK MOWER

New

Replacement

Equipment

Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$90,000		\$58,000		\$60,000	\$110,000

DESCRIPTION OF PROJECT

The mower request in FY19 would be an addition of a large-deck sports turf mower, anticipated to be needed for additional parkland used for athletics, such as: Enterprise Park (formerly Lerner Park), Oak Springs Park, Adam Bronken Sports Complex, and the eventual 80 acre Bozeman Sports Complex. The City currently mows over 150 acres of irrigated turfgrass weekly.

#### ALTERNATIVES CONSIDERED

Continue to repair as break downs occur, Replace mowers as they breakdown, explore a lease program.

#### ADVANTAGES OF APPROVAL

Proper mowing of sports fields and formal parks are imperative to safety. Regular replacement will reduce maintenance costs and decrease the number of breakdowns we have been experiencing. Well mowed parks are an important reflection on our City and how it is perceived by visitors and citizens. New mowers will be more reliable, safer, productive, and will reduce the workload on the vehicle maintenance shop personnel. Well maintained sports fields have proven to be a vital component to the economic growth of our community, by attracting regional and state tournaments to Bozeman.

#### ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Improve scheduling of mowing and increase crew efficiency because of reliable equipment.

#### FUNDING SOURCES

100% General Fund.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

POLICE

GF052

PROJECT NAME

POLICE NON-PATROL VEHICLE REPLACEMENTS

New

Replacement

Equipment

Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$15,000		\$15,000	\$15,000	\$30,000	\$377,000

DESCRIPTION OF PROJECT

The police department has unmarked vehicles used by command staff, detectives and some support positions. Some of these vehicles are used for support operations, such as animal control, community resource officer, code compliance, etc.... Command and detective vehicles are assigned and used to respond to emergency calls for command/control or investigations. Generally vehicle replacement of these vehicles involves buying used, lower mileage vehicles with some trade-in done by higher mileage vehicles nearing the end of time to operate safely. Decisions on when to rotate these vehicles is usually higher mileage than a normal police car and dependent largely on track history for maintenance concerns. In FY19 and FY21 we have 2 detective vehicles in need of replacement. Cost estimates involve buying a lower mileage or lease return vehicle, not a new vehicle. In FY20 and FY22 we anticipate adding two School Resource Officer Positions to cover the new Bozeman High School and increased demand for police services at all schools. In FY22 and FY23 we have identified 3 admin vehicles that will need replacement. These are used by command officers for daily and on-call response throughout the city.

ALTERNATIVES CONSIDERED

Each year we assess each purchase decision. At times we may be able to convert a marked police car to a detective use, when the vehicle is no longer trustworthy to the levels of immediate emergency response, but could be used for a year or two as an unmarked support vehicle.

ADVANTAGES OF APPROVAL

2 of these vehicles are new and essential. The replacements are also essential and continue to provide safe and reliable transportation. These unmarked cars tend to last for at least 15 years.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

General Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

POLICE

GF053

PROJECT NAME

PATROL VEHICLE REPLACEMENT

New

Replacement

Equipment

Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$124,000	\$189,000	\$128,000	\$195,000	\$132,000	\$680,000

DESCRIPTION OF PROJECT

This plan allows for a number of patrol cars to be replaced each year, including all of the necessary vehicle equipment (top lights, sirens, radio, mobile data terminals, video cameras, electronic reporting / ticketing systems, etc.) Costs are based on actual costs in FY18 of \$61,000 per vehicle and anticipated increases in FY19 and beyond. Patrol vehicles are an essential item in the operation of the Bozeman Police Department, being the primary tool used for over 50,000 Response to Calls each year. Police vehicles must be available for police patrol and emergency call response 24 hours a day, 365 days a year. These vehicles are used to respond to both emergency and non-emergency calls for service, investigate vehicle crashes, conduct traffic enforcement and for general patrol duties. These patrol vehicles average approximately 20,000 miles annually. Vehicles earmarked for replacement will have a minimum estimated 110,000 miles per vehicle, which with police emergency response tends to be the rough time when police vehicles are no longer safe for emergency response. An additional 10 patrol vehicles will need replacement after FY23. A review of mileage and estimated staffing increases in patrol by 2-3 officers over the next few years has also led to the identified need for an additional patrol vehicle in FY21. This won't replace a vehicle and brings the total patrol response vehicles to 23 (1 unmarked / 2 K9 vehicles / 20 fully marked)

#### ALTERNATIVES CONSIDERED

None.

#### ADVANTAGES OF APPROVAL

This helps us plan for safe and reliable emergency response vehicles for patrol use, as well as projected lower annual maintenance costs. This program would allow for the replacement of older, higher mileage patrol cars that become less reliable and more costly to repair. Equipment components mounted inside the car can sometimes be transferred from the old car to the new car, depending on the condition. These replacements continue to bring the department closer to 100% matching Ford SUV patrol vehicles.

#### ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

These are replacement vehicles. Recurring costs frequently decline as newer cars replace older ones. Maintenance costs have stabilized due to regularly scheduled service, even though calls for service have increased and additional officers have been hired.

#### FUNDING SOURCES

100% General Fund

CIP Project Fund  
General Fund

DEPARTMENT  
RECREATION

<b>PROJECT NUMBER</b>
<b>GF056</b>

<b>PROJECT NAME</b>						
DESIGN & CONSTRUCT INDOOR/OUTDOOR FAMILY AQUATICS CENTER						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
		\$100,000	\$16,500,000		

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

Indoor/Outdoor Aquatics Center. This item was identified as a "Top Ten Capital Facility Recommendation" in the PROST plan, adopted October 2007. The design phase in FY18 includes the preliminary design of the Family Aquatics Center. This project will need to be approved by the voters. It is estimated that an election would be offered in the fall of 2021.

**ALTERNATIVES CONSIDERED**

Do not build a community aquatics center.

**ADVANTAGES OF APPROVAL**

Community Benefits of an Aquatics Center: safe and healthy place for families to play, connected families, strong vital involved community, and increased community programs.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual operating and maintenance costs to include additional aquatic staff: Cost undetermined at this time.

**FUNDING SOURCES**

Bond and General Fund.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

I.T.

GF062

PROJECT NAME

PERSONAL COMPUTER (PC) REPLACEMENT

New

Replacement

Equipment

Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$50,000	\$55,000	\$65,000	\$65,000	\$60,000	

DESCRIPTION OF PROJECT

This is a general item for replacement of personal computers for General Fund related jobs and services. (Enterprise and Special Revenue fund services pay for their own pc's.) As of FY17, Personal Computers moved to a 5 year rotation before replacement. PC Replacements are one of the primary drivers of Help Desk Calls (PM01 & WL01) - aging computers can have more software and technical conflicts, and replaced PC's often require user support for newer versions of software, etc.

ALTERNATIVES CONSIDERED

Not replace computer/server hardware as frequently.

ADVANTAGES OF APPROVAL

City technology needs will be better met and the IT department will be able to more efficiently support employees and citizens.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

100% General Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

I.T.

GF080

PROJECT NAME

REMOTE CLOSET SWITCHES, ROUTER AND WIRELESS AP REPLACEMENT

New

Replacement

Equipment

Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$45,000	\$45,000	\$45,000	\$50,000	\$50,000	

DESCRIPTION OF PROJECT

Wan Site end of life replacements for switches and router throughout City to include City Hall, Professional Building, City Shops, Landfill, L&J, Library, WWTP, WTP, Swim Center, Beall Park, Cemetery. Smaller sites will be consolidated in one year. FY 15 - Prof-Building, Vehicle Maint. This equipment is critical to the City's technology network, supporting all of the department's performance measures related to system "uptime" (PM02-PM06) and workload measures related to number of hours the network and various software is "in service" (WL02-W06).

ALTERNATIVES CONSIDERED

Maintain current switches without critical support or maintenance.

ADVANTAGES OF APPROVAL

Maintain uptime for all WAN locations throughout the City to include phone services as well as data.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

General Fund – with costs shared with Enterprise, as location warrants.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

CEMETERY

GF083

PROJECT NAME

BACKHOE

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$110,000

DESCRIPTION OF PROJECT

This piece of equipment would replace the current cemetery backhoe (2001- 3119 hours) that is used for burials an average of 2 times per week. This is the main piece of equipment utilized for cemetery burials.

ALTERNATIVES CONSIDERED

Continue to utilize the older backhoe and repair and maintain as necessary. Potentially, borrow from another department.

ADVANTAGES OF APPROVAL

Increased reliability and safety for staff and the families relying on cemetery services. The old cemetery backhoe could potentially be transitioned to the Parks Division.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Operating and repair costs are expected to be lower than the existing vehicle.

FUNDING SOURCES

100% General Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

PARKS

GF084

PROJECT NAME

PARKS RESTROOM UPGRADES

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$80,000

\$470,000

DESCRIPTION OF PROJECT

This project is the general replacement and upgrading of the City Park's public restroom facilities. Other restrooms that need to be replaced- and/or built are: Rose Park \$80,000 (FY 21), Beall Park \$40,000 and the Softball Complex \$300,000 -( Large Facility plus Concession Stand), BMX- Westlake Park \$130,000 are unscheduled.

ALTERNATIVES CONSIDERED

Continue to try to maintain existing facilities. The Rose and BMX Park projects will provide restroom facilities in areas where currently none exist. The BMX project potentially could be part of the Midtown Urban Renewal District.

ADVANTAGES OF APPROVAL

Ease and efficiency of maintaining new restrooms; increased cleanliness of public facilities.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Operating and repair costs are expected to be lower than the existing facilities.

FUNDING SOURCES

100% General Fund, BMX Park funding possible from TIF

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

PARKS

GF092

PROJECT NAME

PLAYGROUND EQUIPMENT

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$95,000

\$95,000

\$120,000

\$120,000

DESCRIPTION OF PROJECT

The following playground equipment will eventually need to be replaced due to its age and condition: Replacement will bring equipment up to today's standards and reduce safety and liability concerns. Jarrett Park (FY19) and Christie Park (FY20) are identified as the playgrounds that need replacement, in that priority. New replacements include: Lindley Park (FY22) and Kirk Park playgrounds. The majority of the city-maintained playgrounds were installed in the early 1990's. In general, safety recommendations for playgrounds address: playground site elements, sight lines, equipment features and materials, surfacing materials, hardware, paints and finishes, and any other hazards that might be present. Playground repairs require same-day response given their critical safety implication. Currently, the Parks Division inspects and maintains 21 playgrounds city-wide and assists with another 19 HOA- maintained playgrounds with monthly inspections and recommendations.

ALTERNATIVES CONSIDERED

Keep existing equipment in place, maintain as we go

ADVANTAGES OF APPROVAL

Increased safety for community members.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Minimal.

FUNDING SOURCES

100% General Fund.

CIP Project Fund  
General Fund

DEPARTMENT  
FACILITY - CH

<b>PROJECT NUMBER</b>
<b>GF103</b>

<b>PROJECT NAME</b>
AMERICAN'S WITH DISABILITIES ACT (ADA) COMPLIANCE IMPROVEMENTS

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	

<b>DESCRIPTION OF PROJECT</b>
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Replace or install ADA upgrades in various city-owned buildings. Work examples include: door hardware, handrails, parking signage and stalls, building access, etc. The Facilities Superintendent has been working with the ADA advisory committee to provide recommendations to the City on priority order for any upgrades or improvements that may be identified to make our facilities and programs more accessible. This money has been used, and will continue to be used to improve accessibility as demonstrates a commitment from the City to address ADA issues. Based on the initial review of the work to be done the dollar amount should be increased in order to complete the improvements within the needed timeframe.

#### ALTERNATIVES CONSIDERED

When remodels are initiated on buildings they are brought up to current ADA requirements as per regulations. There are changes to the ADA that took effect in March 2011. We will continue to make upgrades as changes are made to buildings but this budget item would accelerate the compliance for city buildings.

#### ADVANTAGES OF APPROVAL

It has been the policy of the city to meet the full spirit of the law as outlined in the ADA regulations. By taking the initiative to bring all our buildings up to current standards we can provide a positive example to the community in meeting the needs of people with restricted or limited mobility.

#### ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No significant costs are anticipated with these improvements.

#### FUNDING SOURCES

100% General Fund.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

PARKS

GF108

PROJECT NAME

PARK SIDEWALK REPLACEMENTS

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$120,000

\$88,000

DESCRIPTION OF PROJECT

Sidewalks Identified for replacement due to deteriorating cement, missing sections and heaving from weather and tree roots. New sidewalks must meet or exceed city code. Replacing the old sidewalk will result in a safer sidewalk year round and enable the sidewalk plows to better meet the snow removal municipal code. Costs of approximately \$11.75 square foot for rip and replace. Project 1: \$120,000 - Southside Park - replace 730' of sidewalk along South 5th Avenue and along West Alderson Street with new 6' (six foot) wide concrete sidewalk, and the related retaining wall. Project 2: \$88,000 - Cooper Park - replace the sidewalk around the entire block approximately 1875' total. This sidewalk serves as a main route to and from the University.

ALTERNATIVES CONSIDERED

Maintain existing sidewalks and patch and repair as needed.

ADVANTAGES OF APPROVAL

Increased safety for community members and efficiency of operation (plowing)

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: no estimate at this time

FUNDING SOURCES

General Fund.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

PARKS

GF115

PROJECT NAME

PARK VEHICLE REPLACEMENTS

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$50,000	\$30,000	\$30,000	\$28,000	\$55,000	\$180,000

DESCRIPTION OF PROJECT

The Parks Division utilizes vehicles for mowing, fertilization, irrigation, inspections, snow plowing and repairs of the city parks. City parkland now has grown to over 500 acres that the Parks Division is responsible for. All vehicles are utilized until service related down-time for equipment and staff become problematic or safety is compromised. FY19 represents a one ton pick-up replacement. Dodge has ceased making parts for 2001 1-ton that is currently in the Parks fleet. The two current 1-tons in the Park fleet are used for plowing parking lots, ice rinks, hauling garbage, stone, and trail fines among other duties. The addition in FY20 of \$30,000 is for a ½ ton fleet vehicle to replace the 1991 Dodge with 5 year repair costs of \$32124.00. That vehicle is currently on the auction block. An incremental approach to replacing aging fleet vehicles which includes an additional hybrid car (FY22)- and ½ ton pickups for the increase in FTE's within the division. (FY20 and FY21) An additional 1-ton pickup was moved into FY23. A more detailed list of the replacement plan, along with updated vehicle mileage, has been sent to Finance- Mileage updated October 2, 2017.

ALTERNATIVES CONSIDERED

None.

ADVANTAGES OF APPROVAL

This insures safe and reliable vehicles for park use.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: These are replacements; recurring costs frequently decline as newer cars replace older ones. 5 year average on repairs to the Parks fleet - \$3,550.00 per vehicle.

FUNDING SOURCES

100% General Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

CEMETERY

GF116

PROJECT NAME

CEMETERY VEHICLE REPLACEMENTS

New

Replacement

Equipment

Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$50,000					

DESCRIPTION OF PROJECT

Cemetery Vehicle Replacement Plan - the Cemetery Department utilizes 1-Ton trucks for operations and maintenance of the Sunset Hills Cemetery. Asset# 1213 - 1989 1Ton 4x4, \*41,360 miles - is critical to providing prompt burial services roughly twice a week and sanding/plowing cemetery roads. While it has relatively low miles, it has extremely low fuel economy (460 engine) which drives our recommendation to replace this 28 year old vehicle. \*Mileage as of 11/2017.

ALTERNATIVES CONSIDERED

Keep maintaining #1213 until a new replacement is funded or replacement parts are no longer available.

ADVANTAGES OF APPROVAL

This insures safe and reliable vehicles for cemetery use.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: These are replacements; recurring costs frequently decline as newer cars replace older ones

FUNDING SOURCES

100% General Fund

CIP Project Fund  
General Fund

DEPARTMENT  
RECREATION

<b>PROJECT NUMBER</b>
<b>GF137</b>

<b>PROJECT NAME</b>						
SWIM CENTER - FACILITY REPAIRS AND REPLACEMENTS						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
			\$949,300		

<b>DESCRIPTION OF PROJECT</b>
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The Swim Center requires numerous repair and equipment replacements which would be added to the Bond initiative for the Indoor/Outdoor Aquatics Center. These items include: gutter replacement \$159,000; deck tile replacement \$150,000; removal of ceiling tiles and basic cosmetic improvements \$127,000; HVAC unit replacement \$365,000; pool re-plaster \$148,000

**ALTERNATIVES CONSIDERED**

**ADVANTAGES OF APPROVAL**

These projects will help to ensure that we are able to maintain a safe and functional facility. The pool is extremely well utilized and repairs and replacements are necessary over time in order to continue to serve the community.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

No additional annual operating and maintenance costs

**FUNDING SOURCES**

Bond

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

RECREATION

GF140

PROJECT NAME

LINDLEY CENTER PARKING LOT RENOVATION

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$53,560

DESCRIPTION OF PROJECT

Curb and overlay the parking lot at the Lindley Center and include ADA parking stalls. Install parking lot lights and bases, a dumpster pad and dumpster enclosure fence. This project aligns with section 10.10.1 of the PROST plan (adopted October 2007) that recommends that City parks, recreation facilities and trails are accessible to the greatest extent possible. Includes permit fees.

ALTERNATIVES CONSIDERED

Sealing and striping lot and not installing lights

ADVANTAGES OF APPROVAL

Comply with city codes, allow for more cars to be parked in the lot at a time, more organized parking which will make the lot safer and reduced liability, lights will help with public safety and parking lot/facility security, ADA spots will be designated which will make the lot accessible, the dumpster would be enclosed.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual operating and maintenance costs to include striping and periodic overlays.

FUNDING SOURCES

General Fund

CIP Project Fund

DEPARTMENT

**PROJECT NUMBER**

General Fund

PARKS

**GFI 48**

PROJECT NAME

BMX PARKING LOT

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$85,000

DESCRIPTION OF PROJECT

Installation of parking lot at Westlake BMX park, left as unscheduled due to this potentially could be part of the Mid-Town Urban Renewal project- as Westlake/BMX reside in this area.

**ALTERNATIVES CONSIDERED**

Do not install a parking lot

**ADVANTAGES OF APPROVAL**

Increased access to the Children’s Memorial Park and Christmas tree drop off area.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Minimal. Clean-up, possible snow plowing, painting lines every few years

**FUNDING SOURCES**

100% General Fund, possible funding from TIF

CIP Project Fund  
General Fund

DEPARTMENT  
FACILITY - SC

**PROJECT NUMBER**  
**GF157**

PROJECT NAME  
SENIOR CENTER ELEVATOR

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
			\$68,000		

**DESCRIPTION OF PROJECT**

The elevator at the Bozeman Senior Social Center is a three stop Otis elevator. The elevator was installed in early 1980 and is at the point where many technological improvements have been made in elevator technology. A change out would yield both improved service and some reductions in energy costs. While the elevator is inspected annually and is safe, it is used heavily by the members of the Senior Center. Planning ahead for the replacement of the elevator will be more cost effective and avoid unnecessary down time during the replacement process. The elevator maintenance contractor has recommended this be the first elevator replaced by the City.

**ALTERNATIVES CONSIDERED**

Continue to maintain and adjust the elevator operating systems as needed. Wait to replace the elevator until it physically breaks down or continue to monitor the operation and hold off on the replacement until the routine repair and maintenance costs exceed acceptable limits

**ADVANTAGES OF APPROVAL**

Improved operations and reduced maintenance for the elevator most needed by a special population. Small reduction in annual energy costs.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs.

**FUNDING SOURCES**

General Fund -

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

POLICE

GFI65

PROJECT NAME

PATROL MOTORCYCLE REPLACEMENTS

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$60,000

DESCRIPTION OF PROJECT

Currently the Police Department has two police motorcycles and one used solely for training. Patrol motorcycles are an essential item in the traffic enforcement division, used for a portion of the over 13,000 traffic stops, crashes, and citations each year. These motorcycles are used from March to October each year and are responsible for a portion of the response to both emergency and non-emergency calls for service, investigate accidents, conduct traffic enforcement and general patrol duties. In FY18 we did not deploy the motorcycles because of staffing shortages and have plans to deploy in FY19. The current motorcycles will not need replacement during the next 5 years.

ALTERNATIVES CONSIDERED

None.

ADVANTAGES OF APPROVAL

This ensures safe and reliable emergency response vehicles for patrol use, as well as lower annual maintenance costs. For the traffic division to be effective, this equipment must be kept in top operating condition. Police motorcycles are available for police patrol use during the day and when the city streets are clear enough to ride.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Maintenance costs are stable due to regularly scheduled service. Officers assigned to the motorcycle division are also assigned to their own motorcycle.

FUNDING SOURCES

100% General Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

POLICE

GFI66

PROJECT NAME

PORTABLE AND MOBILE RADIO REPLACEMENTS

New

Replacement

Equipment

Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$295,000	\$295,000				

DESCRIPTION OF PROJECT

In FY18 the department and City has been in conversations and planning with Gallatin County 9-1-1 to improve radio communication that has become an operational and safety concern. Regardless of the final improvements to infrastructure, one of the identified needs for replacement is subscriber units (portable radios used by officers and mobile radios used in emergency response vehicles).The replacement of these subscriber units (radios) are a major step to improving communications and responses capabilities. These radios are an essential item in the operation of the Bozeman Police Department, being a critical communication tool used for over to 50,000 Response to Calls each year. Police radios must be available for police use 24 hours a day, 365 days a year. These radios are individually assigned, allowing for greater longevity, and department-wide communication in the event of a need for major response. The City Commission approved purchasing these units, which are currently purchased with payments in FY19 and FY21. These radios will have at least a 10 year use for emergency response. This purchase included 70 Portable (handheld) radios and 27 mobile (vehicle) radios. This amount represents just the police department share of purchases.

ALTERNATIVES CONSIDERED

No other alternatives at this time.

ADVANTAGES OF APPROVAL

This ensures safe and reliable emergency communication and response. Program allows for a planned and predictable need for equipment replacement. Clear and dependable communication allows for quick and efficient deployment and the required level of officer safety.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

100% General Fund

CIP Project Fund

DEPARTMENT

**PROJECT NUMBER**

General Fund

PARKS

**GF190**

PROJECT NAME

4-WHEELER ATV REPLACEMENT

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$16,000

\$14,000

DESCRIPTION OF PROJECT

Replace the ATV (2000 Yamaha Grizzly) used for sidewalk snow removal and is the main piece of equipment that is used to spray approx 300 acres with herbicides and biostimulants for the Parks Division.

**ALTERNATIVES CONSIDERED**

Continue to use the 2000 Yamaha Grizzly and repair as needed.

**ADVANTAGES OF APPROVAL**

Maximize efficiency, minimize down time, proactive replacement of aging equipment.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Routine maintenance

**FUNDING SOURCES**

100% General Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

PARKS

GF191

PROJECT NAME

UPGRADE SOFTBALL COMPLEX LIGHTING

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$1,000,000

DESCRIPTION OF PROJECT

Replace the current lights at the Softball Complex with appropriate stadium lights. Estimate provided by MUSCO, would be bid at the time of construction. Existing lights have light spillage/pollution and cannot be "retro-fitted".

ALTERNATIVES CONSIDERED

Keep existing lights

ADVANTAGES OF APPROVAL

The new lights can offer 50% less light spillage and glare and reduce energy costs by up to 50%. Additionally, upgraded lights could help to reduce or eliminate complaints regarding light pollution.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Reduction in electrical use.

FUNDING SOURCES

100% General Fund, or fundraising by user groups - Cost estimates range from \$750,000 to \$825,000 in August 2012.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

PARKS

GF195

PROJECT NAME

TURF SWEEPER

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$32,000

\$36,000

DESCRIPTION OF PROJECT

This would be used to maintain the 150+ acres of turf in the park inventory. This piece of equipment would be used extensively at the new Sports Complex and other venues on the west side of town. ( Ex. Adam Bronken Sports Complex and Oak Springs Park.) An efficient coring aerator is productive and coincides with water conservation efforts and safe playing athletic fields.

ALTERNATIVES CONSIDERED

Continue to operate with two aerators.

ADVANTAGES OF APPROVAL

Proactively and aggressively aerate parks and sports fields within the City to create safer and healthier turf that uses less water and attract tournaments to Bozeman.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

100% General Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

FACILITY - PROF

GF199

PROJECT NAME

PROFESSIONAL BUILDING RECONFIGURATION - Phase 2

New

Replacement

Equipment

Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$37,031					

DESCRIPTION OF PROJECT

The City is responding to growth by adding staff to meet the increased demand for services in our community. We have also reorganized divisions (Community Development) and created other divisions (Stormwater) to improve efficiency and better serve our community. In order to accommodate this growth, we need to remodel the Stiff Building. In FY16 the City Commission approved Phase I of the remodel which will provide better use of existing space by relocating certain functions to the basement and repurposing unused square footage. Approval of Phase II would allow the consolidation of Community Development (Planning and Building) together on one floor and the consolidation of Public Works Services (Engineering, GIS and Stormwater) together on another floor. This will allow better coordination of staff and better service to our public.

ALTERNATIVES CONSIDERED

Continue to operate as we are today

ADVANTAGES OF APPROVAL

Community Development would be able to consolidate its operations and services to allow for an integrated customer-focused service delivery model. It will also provide Public Works with the ability to collocate its services in the Stiff Building. Finally it will help the City to take a planned and efficient approach to building utilization and service optimization.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No additional operating costs anticipated for building reconfiguration.

FUNDING SOURCES

Building Inspection, Community Development, General Fund, and Parking

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

I.T.

GF199

PROJECT NAME

PROFESSIONAL BUILDING RECONFIGURATION - Phase 2

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$136,186

DESCRIPTION OF PROJECT

The City is responding to growth by adding staff to meet the increased demand for services in our community. We have also reorganized divisions (Community Development) and created other divisions (Stormwater) to improve efficiency and better serve our community. In order to accommodate this grow, we need to remodel the Stiff Building. In FY16 the City Commission approved a Phase I of the remodel that will provide a better use of existing space by relocating certain functions to the basement and reclaiming unused square footage. Approval of Phase II would allow the consolidation of Community Development (Planning and Building) together on one floor and the consolidation of Public Works Services (Engineering, GIS and Stormwater) together on another floor. This will allow better coordination of staff and better service to our public. Phase I is anticipated to be completed late spring of 2016.

ALTERNATIVES CONSIDERED

Continue to operate as we are today

ADVANTAGES OF APPROVAL

Community Development would be able to consolidate its operations and services to allow for an integrated customer-focused service delivery model. It will also provide Public Works with the ability to collocate its services in the Stiff Building. Finally it will help the City to take a planned and efficient approach to building utilization and service optimization.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No additional operating costs anticipated for building reconfiguration.

FUNDING SOURCES

Building Inspection, Community Development, General Fund, and Parking

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

PARKS

GF205

PROJECT NAME

New

PROST PLAN UPDATE

Replacement

FY19

FY20

FY21

FY22

FY23

Unscheduled

Equipment

\$109,000

Project

DESCRIPTION OF PROJECT

Update the 2007 Parks Recreation Open Space Trail (PROST) Plan. The current plan is now 10 years old. Since adoption, the city has grown in size, new park properties have come into the system, and local demographics have changed. This project anticipates hiring an outside party to update the Plan that will take into consideration the updated Community Plan.

ALTERNATIVES CONSIDERED

Do not update the plan.

ADVANTAGES OF APPROVAL

The update would record and reference new and accurate information that has been developing over the last 10 years.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

General Fund

CIP Project Fund  
General Fund

DEPARTMENT  
RECREATION

PROJECT NUMBER  
GF209

PROJECT NAME  
LINDLEY CENTER FULL UPGRADE: RESTROOMS, WINDOWS, SIDING, KITCHEN, ROOF, FLOOR

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$224,277				

DESCRIPTION OF PROJECT

This project is the combination of requests for upgrade of the Restrooms (\$56,650), Window Replacement (\$24,926), Siding Replacement (\$27,192), Kitchen Upgrade (\$56,650), East Roof Insulation (\$27,192), Floor support (\$14,389), Roof support (\$17,278) . This is a heavily used community center that could benefit from substantial improvements.

ALTERNATIVES CONSIDERED

As suggested by the Commission

ADVANTAGES OF APPROVAL

1. Brings restroom up to current ADA requirements; 2. Brings restroom up to current City of Bozeman building codes; 3. Improves sanitation in the restrooms and kitchen facilities; 4. Rehabs and secures the building envelope for years to come; 5. Reduced energy consumption from improved windows and insulation. 6. Addresses deficiencies that were identified in the 2014 structural analysis and 2012 facility condition inventory.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Minimal.

FUNDING SOURCES

General Fund

CIP Project Fund  
General Fund

DEPARTMENT  
FACILITY - CH

<b>PROJECT NUMBER</b>
<b>GF219</b>

<b>PROJECT NAME</b>						
ADDITION TO CITY HALL, CONSOLIDATION OF SERVICES						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$5,500,000

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

This project would relocate the functions currently housed in the Stiff Building (Community Development/Engineering/IT/Building Inspection) into an expansion of City Hall on Lamme Street.

**ALTERNATIVES CONSIDERED**

Keep operations at the Stiff Building.

**ADVANTAGES OF APPROVAL**

Centralizing more services in one location at City Hall will improve efficiency of staff and make it easier for citizens to conduct business with the City.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

The new facility should have lower operating costs than the Stiff Building.

**FUNDING SOURCES**

Potential Funding Sources include: General Fund, Enterprise Fund (for public works), Building Inspection Fund (Building Inspection Division), sale of the Stiff Building. This is a very rough estimate, based on building square footage and current construction costs.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

FINANCE

GF224

PROJECT NAME

SUNGARD ANALYTICS NOW COGNOS BI (BUSINESS INTELLIGENCE) WEB-BASED REPORTING

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$35,000					

- New
- Replacement
- Equipment
- Project

DESCRIPTION OF PROJECT

Web-based report authoring tool used to build sophisticated, multi-page, multi-query reports using data from SunGard. Seamlessly integrates Microsoft Excel, enabling users to explore and analyze data in a familiar environment using skills they already have. Includes enhanced e-mailing and report publishing capabilities, in addition to access by mobile devices including iPads & iPhones.

ALTERNATIVES CONSIDERED

Continue to use SunGard QREP product, which requires a higher level of training and expertise for end-users. QREP is no longer being developed/enhanced and IBM software support is scheduled to end on April 30, 2018

ADVANTAGES OF APPROVAL

An increased ability to push more big data out to a bigger audience and to empower novice users to collect and analyze the tremendous amount of data in SunGard.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Ongoing annual maintenance cost = \$3,280

FUNDING SOURCES

General Fund, although enterprise funds would continue to be big users, especially GIS

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

FINANCE

GF227

PROJECT NAME

ERP REPLACEMENT / UPGRADE "SUNGARD REPLACEMENT / UPGRADE"

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$333,333

DESCRIPTION OF PROJECT

Replacing/upgrading the current system installed in 1999. This is the system that runs all the financial, community development, land records, utility and business license applications. Although it is unscheduled we are currently looking into this with a possibility of FY20.

#### ALTERNATIVES CONSIDERED

Continue running current SunGard package. Use SunGard.net (NaviLine EDGE) as an improvement to the current system, but not a full replacement.

#### ADVANTAGES OF APPROVAL

Simplified package. Easier to integrate the various applications/programs. Easier to pull out information for end users. Easier compilation of Commission reports and packets for Community Development.

#### ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Unknown. Dependent on the option chosen.

#### FUNDING SOURCES

General Fund 33%; Water Fund 33%; Wastewater Fund 33%

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

I.T.

GF229

PROJECT NAME

ISCSI STORAGE REPLACEMENT

New

Replacement

Equipment

Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$45,000					

DESCRIPTION OF PROJECT

All of the virtual servers that reside at these two buildings use these devices as their storage device. These are critical pieces of infrastructure.

ALTERNATIVES CONSIDERED

Don't replace for one more year.

ADVANTAGES OF APPROVAL

Allows us to keep our critical pieces of infrastructure running well and under warranty.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

General Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

CEMETERY

GF231

PROJECT NAME

CEMETERY IRRIGATION PROJECT

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$682,859

DESCRIPTION OF PROJECT

Phased Project to move irrigation of cemetery and park lands off treated municipal supply onto raw surface supply previously decreed to irrigate cemetery lands from the Story Mill Ditch .The planned improvements dramatically reduces the amount of man hours required to monitor watering during season. Improved irrigation system reduces/eliminates water loss and water is applied in the most efficient manner maximizing the use of the resource. FY 17: Phase II Design for Irrigation of Cemetery Lands • Inlet structure and piping • Pump house • Main and laterals • Electrical • Irrigation System Components. FY 18:\* Phase III Installation of Diversion Works Project to Cemetery Lands. FY 19:\* Phase IV Extension to Haggerty Fields •Design •Installation.

#### ALTERNATIVES CONSIDERED

Continue to use treated water for cemetery land irrigation.

#### ADVANTAGES OF APPROVAL

The Parks & Rec Department would no longer pay for large quantities of treated water for irrigation. It protects and preserves the City's most valuable decreed surface water right and makes available for sale treated water that would otherwise have irrigated the cemetery. The treated water that is no longer applied to the cemetery and parks irrigation would be available for sale to new water customers enabling future growth and/or improving the reliability of the City's water supplies for use in times of drought. Makes available approximately 258 AF of treated water, valued at \$1,548,000.00 available for retail sale for approximately 1,121 SF homes or 2,080 MF homes. increases the reliability of domestic water supplies in times of drought.

#### ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Pump replacement. It is yet to be determined what additional operations and maintenance costs would be associated with the project during FY 19-21 at this time. This is due to the fact that the feasibility study that will be completed in FY 17 and will identify various alternatives and costs of each alternative will inform future operations and maintenance costs during FY 19-21. Upon completion of the feasibility study, an alternative will be selected and projected operations and maintenance costs can be included into the CIP for FY 19-21.

#### FUNDING SOURCES

General Fund. This project started in Fy18 with 200K. \*If awarded, grant funding through the Bureau of Reclamation's WaterSMART Program would offset total project costs.

CIP Project Fund

DEPARTMENT

**PROJECT NUMBER**

General Fund

I.T.

**GF233**

PROJECT NAME

VEHICLE REPLACEMENT

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$23,000

\$83,000

DESCRIPTION OF PROJECT

Replacement of IT Vehicles. If our current vehicle is still running well and maintenance costs are not high, we would keep them beyond what is shown here. 2005 Chevy Colorado with 38K 1999 Dodge Truck with 107K 1999 Jeep Cherokee with 74K 1995 Dodge Truck with 67K

**ALTERNATIVES CONSIDERED**

Buy new or Do nothing.

**ADVANTAGES OF APPROVAL**

Provide functional transportation with reduced maintenance costs.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Minimal

**FUNDING SOURCES**

General Fund

CIP Project Fund  
General Fund

DEPARTMENT  
RECREATION

PROJECT NUMBER  
GF238

PROJECT NAME  
BOGERT POOL RENOVATION

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
			\$483,000		

DESCRIPTION OF PROJECT

Bogert Pool is beginning to show its wear faster every year. This project would replace the coping around the pool that is cracked in several areas and the pool gutters that are cracking, crumbling, and/or lifting from the pool edge. All of the leaks that could be patched without digging up the bottom of the pool have been patched. There is minimal leaking in the return pipes to the pool but we recommend repairing the leaks in the returning piping that were identified in May of 2015, before the pool is blasted with sand or high pressure water, prepped, and resurfaced. The retaining wall is going to be replaced with a wrought iron fence to allow more visibility to the facility at night and provide more structure, as the current wall is weakening. The sections of the decking in front of the locker rooms have sunken over the years and will also be replaced. The Bogert Pool renovation or replacement with an alternate water feature would be added to the Bond Initiative for the Indoor/Outdoor Aquatic Center.

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

A new gutter system would mitigate entrapment issues caused by the current gutter system. The current gutters are disintegrating between the gutter and the ledge of the pool where there gutter sits. Several gutter tiles need to be re-adhered to the pool ledge every spring and often during the pool season. If a tile is still attached but loose, it can easily be pulled from the wall. Several of the gutter tiles have been replaced through the years. In many places, a space was not left between the tiles. This doesn't allow the water to flow into the gutter system for optimal water circulation. The surface of the pool is currently being patched with hydraulic cement in areas where the plaster is coming up. A new surface would work to protect the structure of the pool. Making these repairs to Bogert would extend the life of the pool for many years.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No additional costs would be associated with these repairs.

FUNDING SOURCES

Bond

CIP Project Fund  
General Fund

DEPARTMENT  
FACILITY - CH

**PROJECT NUMBER**  
**GF241**

**PROJECT NAME**  
Replacement of City Hall AC Condensing Unit – Roof Top

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$50,000					

**DESCRIPTION OF PROJECT**

The roof-top air conditioning condensing unit at City Hall is original to the building (1980) and is reaching the end of its useful service life. This unit is critical to the temperature control for all office and public areas at City Hall.

**ALTERNATIVES CONSIDERED**

Continue to maintain the current unit until parts and refrigerant are no longer available.

**ADVANTAGES OF APPROVAL**

Reduced maintenance, increased efficiency and improved operation.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

None.

**FUNDING SOURCES**

General Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

FACILITY - CH

GF245

PROJECT NAME

Energy Projects – City Hall

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$75,000

DESCRIPTION OF PROJECT

City Hall is a LEED-Silver certified building and is currently underperforming. A recent Energy Star Portfolio Manager review found that City Hall scored a 30 on a scale of 1 to 100, indicating that the energy performance of the building has declined as equipment has aged or been replaced, and spaces modified. Retro-commissioning improves efficiency of a building's equipment and systems; often resolving problems that occurred during design or construction, or those that develop over time. It is a system-wide evaluation of opportunities to improve energy performance and occupant comfort. City Hall was first commissioned in 2008 following the remodel. Many issues were addressed at that time, but certain problems related to the heating hot water system balance were not due to budget constraints. The commissioning report recommended replacement of 24 fin tube balancing valves and control valves on unit heaters. These components are negatively impacting the operation and efficiency of heating and cooling systems. Building Commissioning was again identified as a need in the 2014 McKinstry Investment Grade Audit. This project addresses the mechanical upgrades first identified in the commissioning report from 2008 allowing for a retro-commission for the building following the mechanical upgrades and AC Condensing Unit replacement.

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

Improved HVAC system operations and reduced utility costs, based on the known conditions, McKinstry estimates that commissioning would save at least \$2,400 per year. The occupants of the building should experience more even temperatures and improved building airflow and ventilation. Additional savings may be possible, but not fully understood until all the recommended improvements are identified.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

General Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

PARKS

GF250

PROJECT NAME

Splash Pads

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$225,000

\$240,000

\$190,000

DESCRIPTION OF PROJECT

There are two proposed Splash Pad Projects: 1, The installation Interactive Water Feature at the Story Mill Community Park 2. The installation of a splash pad at the new sports complex. This plan will give the community two larger Splash Pads / Water Features located in large Community Parks at different ends of the City. Story Mill Community Park in the East and Sports Park in the West.

ALTERNATIVES CONSIDERED

Do not install splash pads.

ADVANTAGES OF APPROVAL

Can help reduce children's fear of water. Adds community water features that have no admittance fee allowing people of all socio economic status to enjoy a public aquatics amenity. Geographically separates two installations to best serve the entire community.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Some additional water costs and maintenance will be required. Additional maintenance is estimated at 0.2 FTE

FUNDING SOURCES

Numerous funding options include TOP Bond money, General Fund cash reserves, Park Improvement Grant money, or combining into an Aquatics Bond vote.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

CEMETERY

GF252

PROJECT NAME

CEMETERY COLUMBARIUM

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$55,000

DESCRIPTION OF PROJECT

Adding an additional eighty niche each columbarium to the Sunset Hills Cemetery with the first one scheduled FY18. These two additional columbariums would be installed within the same area as the existing columbariums. Currently, the second columbarium is approximately 96% sold.

ALTERNATIVES CONSIDERED

Do not add any columbariums to the cemetery and cease or put on hold the program once the second columbarium is full.

ADVANTAGES OF APPROVAL

Continuation on a long standing cemetery service, along with ease and minimal maintenance.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Minimal if any.

FUNDING SOURCES

General Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

PARKS

GF260

PROJECT NAME

SPORTS COMPLEX - CONSTRUCTION OF 'PROJECT RELATED' COTTONWOOD ROAD AREA

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$364,000

DESCRIPTION OF PROJECT

As owner of the Sports Park property, the City is required to construct a number of street, water, and sewer improvements. In approval of the Sports Park purchase, \$1,778,000 was approved in TOP Bond funding for these infrastructure improvements: Baxter Lane, Cottonwood Road, Durston/Cottonwood Intersection, Flanders Mill Road (including ditch), and Oak Street. We estimate that the Bond Funding will not be sufficient to cover the Cottonwood Road (or Oak Street) improvements. We anticipate needing to build the project-related portions of the Cottonwood Road street-related improvements with Arterial & Collector District dollars. The related water and sewer-line improvements will need to come from the General Fund. Our original cost estimates from the Spring of 2014 have been increased by 15% to estimate construction inflation costs.

ALTERNATIVES CONSIDERED

Delay the improvements.

ADVANTAGES OF APPROVAL

Proper construction of the adjacent street, water, and sewer improvements, in concert with our development regulations. Better access and amenities for the Sports Park.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

The City's Street Maintenance Funds will maintain the street surface, once constructed. The utilities will maintain the pipes once installed.

FUNDING SOURCES

GENERAL FUND.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

POLICE

GF262

PROJECT NAME

POLICE K9

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$17,000

\$19,000

DESCRIPTION OF PROJECT

Police K9 (Canine dogs) are an integral tool for police operations. The department has two trained K9teams (handler and dog) for operations that provide assistance with drug interdiction, search ability for suspects committing crimes in buildings or helping locate and identify suspects that have left or fled a crime-scene. A trained K9 generally has a maximum of 7-8years where the dog is healthy and capable of serving. One of two dogs deployed is likely have reached its operational timeline by FY21, while the remaining K9 has another 7 years+ of operational capability. This cost includes full purchase, training of the new K9 handler(officer) and shipping/transport of the K9 to Bozeman.

ALTERNATIVES CONSIDERED

Not purchasing or training a K9 dog/team is an option, but not recommended.

ADVANTAGES OF APPROVAL

Continued ability to have K9 on-duty or available to investigate and secure prosecution of criminal activity in Bozeman.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

The operational costs of a K9 each year are part of existing budget considerations.

FUNDING SOURCES

Other funding sources may be available as FY23 gets closer.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

POLICE

GF263

PROJECT NAME

LAW & JUSTICE CENTER

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$10,000,000

\$20,000,000

DESCRIPTION OF PROJECT

GF050 for City only Justice Center did not pass and the original GF263 joint City and County Justice Center did not pass. This project is still needed and the project is being placed in the plan as options are explored.

ALTERNATIVES CONSIDERED

Non-joint project with county but other City Department joint projects could be planned

ADVANTAGES OF APPROVAL

This has been a priority since 2008 and the issues noted in the past are still present and have increased.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Maintenance of an additional building

FUNDING SOURCES

Voter approved general obligation bond and other fundig will be explored

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

I.T.

GF263

PROJECT NAME

Police Video Evidence Storage and Backup

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$40,000

DESCRIPTION OF PROJECT

We are currently generating around 1 Terabyte of data per month with the in car video systems and will be out of space for storage in the next 12-18 months. It is critical information that grows rapidly. We are trying to get ahead of the growth by purchasing a 5 year solution out of the gate that can be expanded as needed into the future for growth and the possibility of body cameras. The FY 22 amount relates to the increased storage needed related to body camera files.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Will allow us to continue to safely store, access and backup crucial evidentiary data without concern of running out of storage space.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

General Fund or Grant Money

CIP Project Fund

DEPARTMENT

**PROJECT NUMBER**

General Fund

I.T.

**GF265**

PROJECT NAME

GENERAL FUND SERVER REPLACEMENT

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$68,000

DESCRIPTION OF PROJECT

Replacement of physical servers.

**ALTERNATIVES CONSIDERED**

Virtualize if possible instead of buying physical servers

**ADVANTAGES OF APPROVAL**

Keep our server infrastructure under warranty and in good working condition for required performance.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

**FUNDING SOURCES**

General Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

CEMETERY

GF268

PROJECT NAME

Southwest Montana Veteran's Cemetery

New

Replacement

Equipment

Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$88,000	\$40,000	\$45,000			\$360,000

DESCRIPTION OF PROJECT

First phase of the Southwest Montana Veteran's Cemetery which includes design, earth work, sidewalks and retaining walls to form the 'backbone' for the Veteran group to start fundraising. Phase two potentially could be the 5500 square foot stamped concrete plaza and phase three could be the installation of the first columbarium. Phases 2 and 3 potentially be funded with a 50% match from the veteran's groups for the concrete and the first columbarium.

ALTERNATIVES CONSIDERED

Reduce the City's capital input and rely on the various Veteran groups for the funding.

ADVANTAGES OF APPROVAL

A true veteran's cemetery will help the veteran's realize their benefits upon their death. Currently, there are over 70,000 veterans in southwest Montana, who upon their death, would have to be interred in Helena or Laurel to realize the benefit.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Future phasing might be required, depending on the fundraising capabilities of the various veteran group in southwest Montana.

FUNDING SOURCES

50% General Fund and funds from various veteran's groups.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

PARKS

GF270

PROJECT NAME

Snow Plowing Vehicle

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$65,000

\$75,000

DESCRIPTION OF PROJECT

The eventual replacement of the 1992 MT articulating tractor, which does the bulk of the sidewalk snow removal for the Parks Division, encompassing over 20 miles of sidewalks and four routes to plow. The newest cost saving measure is to share the cost of a vehicle with Streets. The advantage of the co-op is that Parks needs the vehicle in the winter for plowing and Streets in the summer for right of way mowing. The Parks and Cemetery divisions are responsible for snow removal on the majority of sidewalks, paths, accesses and trails that the City is responsible for. The addition of Oak Spring Park, Adam Bronken sidewalk and the Bozeman Pond expansion has necessitated moving up the request for an additional snow removal vehicle into FY19 instead of FY20.

ALTERNATIVES CONSIDERED

Repair and maintain the 1992 MT as needed.

ADVANTAGES OF APPROVAL

Less down time and maintenance/repair costs. A new MT tractor will be able to support more implements, less emissions and better fuel economy, faster more efficient use of time which will be a factor with the expanding sidewalk and trail snow removal routes as more parks come on board such as Bozeman Pond expansion, sports Complex and Story Mill Community Park.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual operating and maintenance costs: better fuel economy and less emissions = less maintenance and operating costs.

FUNDING SOURCES

100% General Fund for Parks but cost share with Street Maintenance District

CIP Project Fund  
General Fund

DEPARTMENT  
FACILITY - CH

**PROJECT NUMBER**  
**GF271**

PROJECT NAME  
City Hall New Parking Lot

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$250,000

DESCRIPTION OF PROJECT

Convert existing lot west of City Hall into a new parking lot.

ALTERNATIVES CONSIDERED

Continue to use the underutilized lot West of City Hall as a community garden.

ADVANTAGES OF APPROVAL

Parking at City Hall is very limited due to space constraints, this has an impact on City staff, the general public, and visiting guests. Additional parking spaces in the West lot should take pressure off of street parking around City Hall as well as allow staff to parking in the same lot. This will free up the East side parking lot for general public during normal business hours. A new lot will also provide a safer parking environment to the public during large meetings that take place at City Hall after hours.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

General annual cost for items such as: lamp replacement, line stripping, asphalt reseal, snow removal, and landscaping.

FUNDING SOURCES

General Fund or Downtown TIF District Funding

CIP Project Fund  
General Fund

DEPARTMENT  
FACILITY - CH

**PROJECT NUMBER**  
**GF272**

**PROJECT NAME**  
Site Security upgrade - Building Locks

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$15,000	\$15,000	\$15,000			

**DESCRIPTION OF PROJECT**

Currently the City has approximately 64 Trilogy keyless access locks. Of the 64 units, 18 are wireless units. The remaining 46 hardwired units require physical access with a cable & laptop to make updates for staffing access changes. This project will upgrade the hardwire units to wireless over a period of time.

**ALTERNATIVES CONSIDERED**

Continue as we currently operate.

**ADVANTAGES OF APPROVAL**

Moving to a wireless system means all updates can be performed using the City wide network. The advantages to this system is the better utilization of staff hours by reducing the required man hours per access update. Depending on the access level required for a staff member, it could mean accessing 50 individual locks for a single access change.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

General maintenance cost, battery change-outs.

**FUNDING SOURCES**

General Fund

CIP Project Fund

DEPARTMENT

**PROJECT NUMBER**

General Fund

ECONOMIC DEVELOPMENT

**GF275**

**PROJECT NAME**

Fiber Optic Conduit and Vaults

New

Replacement

Equipment

Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000

**DESCRIPTION OF PROJECT**

Future City conduit policy will drive the future investment in city owned conduit.

**ALTERNATIVES CONSIDERED**

Do nothing, reduce or increase CIP investment.

**ADVANTAGES OF APPROVAL**

Provides funding for the purchase of fiber conduit and vaults in furtherance of a future conduit policy

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Cost of design and installation

**FUNDING SOURCES**

General Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

PARKS

GF278

PROJECT NAME

Griffin at Story Mill Park road improvement - .26 mile

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$260,000

DESCRIPTION OF PROJECT

This represents funding the City's 1/2 portion of the East Griffin Road construction as it abuts to Story Mill Community Park.

ALTERNATIVES CONSIDERED

Construction of a woonerf type road section (or alternative park type road). More accomodating to pedestrian traffic depending on future development by the property owners adjacent south side E Griffin.

ADVANTAGES OF APPROVAL

Safe vehiculuar an dpedestrian access to municipal facilities.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

General Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

PARKS

GF279

PROJECT NAME

Story Mill Road Improvement - .17 mile

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$170,000

DESCRIPTION OF PROJECT

This represents funding the City's 1/2 portion of the Story Mill Road construction as it abuts to Story Mill Community Park.

ALTERNATIVES CONSIDERED

No alternatives considered.

ADVANTAGES OF APPROVAL

Safe vehicular and pedestrian access to municipal facilities.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

General Fund

CIP Project Fund  
General Fund

DEPARTMENT  
PARKS

**PROJECT NUMBER**  
**GF281**

**PROJECT NAME**  
Bozeman Pond Park & Aasheim ballfields road expansion - .17 mile & .09 mile

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$260,000

**DESCRIPTION OF PROJECT**

This represents funding the City's required portion of 1/2 necessary to build Fowler Road adjacent to Bozeman Pond Park Expansion and Aasheim ballfields.

**ALTERNATIVES CONSIDERED**

Waiting to acquire the ROW at the intersection of Fowler and Babcock before constructing these road sections.

**ADVANTAGES OF APPROVAL**

Safe vehicular and pedestrian access to municipal parks.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

**FUNDING SOURCES**

General Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

City Admin/ Sustainability

GF282

PROJECT NAME

City Hall Plug-in Hybrid Electric Vehicle

New

Replacement

Equipment

Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$33,000					

DESCRIPTION OF PROJECT

Bozeman City Hall is in need of an efficient vehicle for staff to conduct daily errands and to attend local and regional meetings. As part of City Hall's LEED certification, the building is equipped with a 120v outlet adjacent to the west parking lot for the purpose of charging an electric vehicle. To demonstrate our commitment to efficiency and to lead by example, we would like to incorporate Plug-in Hybrid Electric Vehicle (PHEV) technology into our fleet. PHEVs combine a gasoline with an electric motor and a rechargeable battery. Unlike conventional hybrids, PHEVs can be plugged-in and recharged from an outlet, allowing them to drive extended distances using just electricity before transitioning to gasoline. PHEVs offer an exceptional range and offer enhanced reliability by operating on either electricity or gasoline. Currently, City Hall has a Chevy Tahoe with 124,658 and gets 15 MPG compared to an estimated 133 MPGe for a PHEV and a 640 mile driving range. City Hall staff generally borrow a hybrid vehicle from Public Works for long distance travel, however, this has become increasingly challenging as our staff grows and the hybrids are often unavailable. The budget includes \$2,000 to designate a parking space at City Hall for EV charging.

#### ALTERNATIVES CONSIDERED

Leasing for \$300 to \$380 per month for three years instead of purchasing.

#### ADVANTAGES OF APPROVAL

Improved operational efficiency. Most days the vehicle would operate on electricity only, but offers the flexibility to travel long distances.

#### ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Periodic tire replacements and maintenance.

#### FUNDING SOURCES

General Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

City Clerk's Office / Informational Technology

GF283

PROJECT NAME

Commission Room Technology Upgrade

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$80,000

DESCRIPTION OF PROJECT

This request is to replace the majority of outdated/broken/breaking technology and structurally-related elements including but not limited to built-in microphones, live-streaming equipment, computer display equipment, audio/amps, equipment housing, City-responsibility audio/visual room technology/equipment, etc.

#### ALTERNATIVES CONSIDERED

This will require substantial in-room activity and a number of elements depend on room/dais layout, if a larger remodel of the room is planned, this should happen concurrently.

#### ADVANTAGES OF APPROVAL

The Commission Room is already outdated and many elements already do not work. This will increase technological options for both meetings and general use, as well as prevent more significant issues are larger elements inherently break over time.

#### ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No substantial operating costs, only small changes/fixes when necessary.

#### FUNDING SOURCES

General Fund capital?

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

City Clerk's Office / Informational Technology

GF284

PROJECT NAME

Laserfiche Software Upgrade

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$57,000

\$28,000

\$28,000

\$28,000

\$28,000

DESCRIPTION OF PROJECT

The FY19 request is to replace the majority of outdated/broken/breaking technology and structural-related elements including but not limited to built-in microphones, live-streaming equipment, computer display equipment, audio/amps, equipment housing, City-responsibility audio/visual room technology/equipment, etc. | The FY20 request is an upgrade to Laserfiche Avante, which is needed to bring our digital records software to a more recent version, as well as incorporate in functionality including workflow and forms, which can increase efficiencies across departments. The following years request is the estimated annual fee for the software.

#### ALTERNATIVES CONSIDERED

The FY19 Commission Room technology upgrade will require substantial in-room activity and a number of elements depend on room/dais layout, if a larger remodel of the room is planned, this should happen concurrently. | The FY20 Laserfiche upgrade could potentially happen a year prior or later, depending on workload and City priorities and staff resources. A number of departments are anxious for the increased use of the product.

#### ADVANTAGES OF APPROVAL

Regarding the FY19 tech upgrade, the Commission Room is already outdated and many elements already do not work. This will increase technological options for both meetings and general use, as well as prevent more significant issues are larger elements inherently break over time. | The FY20+ Laserfiche upgrade is a needed improvement, and while it will be a process to bring departments on board, it will both increase staff efficiencies in record management (across all departments) but also citizen ease of access for public information.

#### ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No substantial operating costs for the FY19 Commission Room upgrade, only small changes/fixes when necessary. | The FY20+ Laserfiche upgrade will require an annual software fee, estimated at \$28,000 (incorporated in the above schedule).

#### FUNDING SOURCES

General Fund capital

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

Facilities/Library

GF285

PROJECT NAME

Library Exterior Door Operators/Closures Replacement

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$12,000

DESCRIPTION OF PROJECT

The automatic door operators at the library have been in operation for over ten years, due to the heavy traffic load on these door they are showing wear. Issues with the operators can impact ADA performance and also not close fully when seals are in place. Normal door closure will also be replaced at the same time.

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

Increases the reliability of the building system

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

\$1200 per year, preventative maintenance cost General Fund

FUNDING SOURCES

Library has stated they have funds in Library depreciation fund that can be used for this project

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

Human Resources

GF287

PROJECT NAME

Learning Management System

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$25,000

DESCRIPTION OF PROJECT

Enterprise solution for housing and administering employee training

ALTERNATIVES CONSIDERED

none

ADVANTAGES OF APPROVAL

Efficient and manageable training for employees in a variety of formats, improved training records

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

\$5,000 annual maintenance estimate

FUNDING SOURCES

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

Human Resources

GF288

PROJECT NAME

Applicant Tracking System

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$30,000

DESCRIPTION OF PROJECT

System to electronically manage the recruitment process – from application to hire.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Increased efficiency, accuracy, and applicant experience

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

\$5,000 estimate

FUNDING SOURCES

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

I.T.

GF289

PROJECT NAME

Server Farm Software Upgrades

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$10,000

\$10,000

\$25,000

\$25,000

DESCRIPTION OF PROJECT

Upgrading our VM farm and SQL Cluster to the newest versions for current and future compatibility

ALTERNATIVES CONSIDERED

Stay on our current versions until forced to upgrade

ADVANTAGES OF APPROVAL

Will keep the City current with supported versions of the operating systems and will allow us to support software that requires the newer versions.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

General Fund-Perhaps some enterprise funds to cover their use.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

Parks

GF290

PROJECT NAME

Irrigation System Replacements

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$425,000

DESCRIPTION OF PROJECT

Replacement of irrigation systems that are past their life cycle estimates. 40 years is the average life cycle of an irrigation system.

ALTERNATIVES CONSIDERED

Not replace the systems and fix on an "as needed" basis.

ADVANTAGES OF APPROVAL

Efficient water use, lower repair costs, compatibility with the new Centralized systems. Potentially coincide with transitioning the Softball Complex and Lindley Park off of treated water (Complex) and on to surface water.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

General Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

Parks

GF291

PROJECT NAME

Pickleball Courts

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$90,000

DESCRIPTION OF PROJECT

Install Pickleball courts in one of our city parks. One potential site would be Bogert Park Tennis Courts.

ALTERNATIVES CONSIDERED

Do not install Pickleball courts and continue to utilize Southside tennis courts.

ADVANTAGES OF APPROVAL

Separate the increasing number of Pickleball players from the tennis players. Dedicated space for a fast growing sport

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Resurfacing or re-painting in future years.

FUNDING SOURCES

100% General Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

POLICE

GF292

PROJECT NAME

PATROL CAR AUXILIARY EQUIPMENT

New

Replacement

Equipment

Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$15,000	\$10,000	\$10,000	\$10,000	\$15,000	\$10,000

DESCRIPTION OF PROJECT

Within a patrol car is a significant amount of technology related auxiliary equipment. This includes a radar unit, Arbitrator Video Recorder, Electronic ticketing printer, Mobile Data Computer amongst other items. Most of these items are part of a normal replacement schedule as new patrol vehicles are purchased and old patrol vehicles retired. However, we are finding the need to address several areas in this category separate from this rotation schedule. First, in FY19, we need to replace all electronic ticketing printers, which were installed over 5 years ago, with full sized printers. This will allow for integration with our new Records management system and will allow for the printing of tickets in the field that are easier to read, printing of forms or "Marsy rights" notifications, etc... Secondly, we are finding that a Mobile Data Computer needs replacement about every 5 years, and many of our vehicles are rotated at 6 or 7 years, meaning some additional MDC will be needed beyond what is part of a vehicle rotation. And 3rd, we will be moving to a more portable MDC and docking stations over a 5 year period that makes the ability for an officer to use the MDC outside of the vehicle, on calls and bringing it into buildings or our station to complete reports. This direction will also lead to less desktop computers being purchased and increase officer efficiency.

#### ALTERNATIVES CONSIDERED

Alternatives are to continue to use existing MDC

#### ADVANTAGES OF APPROVAL

Less costs for desktop computers, less duplication of maintenance, more efficiency for officers, meaning officers more available for emergency call response.

#### ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

#### FUNDING SOURCES

CIP Project Fund  
General Fund

DEPARTMENT  
POLICE

**PROJECT NUMBER**  
**GF293**

PROJECT NAME  
NON-PATROL CAR NEW VEHICLES

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$15,000		\$15,000		

DESCRIPTION OF PROJECT

In FY20 and FY22 we anticipate adding two School Resource Officer Positions to cover the new Bozeman High School and increased demand for police services at all schools.

#### ALTERNATIVES CONSIDERED

Alternatives may include use of older patrol cars that can't be used for patrol response, or the use of existing marked units which will add mileage to those vehicles and effect that rotation schedule.

#### ADVANTAGES OF APPROVAL

These vehicles tend to be used for more than 10 years and provide SRO ability to respond to the schools, other emergency and on-call response after hours.

#### ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

#### FUNDING SOURCES

100% General Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

POLICE

GF294

PROJECT NAME

PATROL CAR - ADDITIONAL

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$64,000

DESCRIPTION OF PROJECT

A review of mileage and estimated staffing increases in patrol by 2-3 officers over the next few years has also led to the identified need for an additional patrol vehicle in FY21. This won't replace a vehicle and brings the total patrol response vehicles to 23 (1 unmarked / 2 K9 vehicles / 20 fully marked)

ALTERNATIVES CONSIDERED

Continue patrol response with existing patrol cars, resulting in higher mileage/annum for each vehicle and difficulty at times to have sufficient vehicles available for # of officers hired and deployed by FY21+)

ADVANTAGES OF APPROVAL

This is an essential vehicle for safe and reliable emergency response vehicles for patrol use, as well as projected lower annual maintenance costs. This additional vehicle provides sufficient marked patrol cars for 24/7 response.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

100% General Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

Recreation

GF295

PROJECT NAME

SWIM CENTER UV SYSTEM REPLACEMENT

New

Replacement

Equipment

Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$68,500					

DESCRIPTION OF PROJECT

A functioning UV system is critical when dealing with the high bather load that the swim center accommodates. The UV system was installed in 2010. We are in line for a replacement considering the environment the electrical components are exposed to. If we were able to construct a wall between the humid, corrosive environment and our electronics it is estimated that a UV unit would last twice that long. Annually we are spending approximately four times the amount in repairs and maintenance compared to units that are stored separately from an open water source and units that are more advanced since this unit was put in. The Swim Center currently has such a high bather load that when the UV goes out in the winter months it is difficult and sometimes impossible to keep our combined chlorine levels within the range outlined by the MT Health Code. It is a safety issue for the swimmers. Parts for this unit are not readily available. Control panels have a 6 week lead time to be replaced and the electrical components have to be shipped from Germany.

ALTERNATIVES CONSIDERED

Do not replace the current system.

ADVANTAGES OF APPROVAL

In addition to maintaining air quality, UV systems act as a secondary disinfectant to the chlorine, making the water cleaner and safer for swimmers. A modern UV unit would be more energy efficient, and it would be easier to obtain parts for since UV systems are now standard practice for pool sanitization.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

General Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

Recreation

GF296

PROJECT NAME

SWIM CENTER – FRONT FURNACE REPLACEMENT

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$36,000

DESCRIPTION OF PROJECT

The front furnace supplies air to the lobby, locker rooms, and lifeguard room. The unit is deteriorating due to the humid environment. Getting parts for the furnace is becoming increasingly difficult due to its age. The unit would be replaced with a unit which are designed for aquatic environments or be placed outside. The current unit was installed in 2008.

ALTERNATIVES CONSIDERED

Continue to repair the unit.

ADVANTAGES OF APPROVAL

Replacing the current unit would cut down on costs to repair and service the unit.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

General Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

RECREATION

GF297

PROJECT NAME

SWIM CENTER ROOF REPLACEMENT

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$26,000

DESCRIPTION OF PROJECT

The roof over the locker rooms/lobby area needs to be reroofed. The recommendation is to remove the existing Hypalon roof membrane and Gypsum cover board. Replace any damaged insulation. Attach 1/2 inch layer of HD Polyiso cover board on top of the existing poly roof insulation on the entire surface that is being reroofed. Install a fully adhered Firestone 60 mil EPDM roof system. Flash all walls, pipes, and penetrations with Firestone flashing material. Install new prefinished metal drip edge on the outer perimeter and seal with a 5" flashing membrane.

ALTERNATIVES CONSIDERED

Do not replace the roof.

ADVANTAGES OF APPROVAL

Fix the roof before it becomes problematic.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

General Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

Recreation

GF298

PROJECT NAME

SWIM CENTER – BARRIER WALL IN PUMP ROOM

New

Replacement

Equipment

Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$22,000					

DESCRIPTION OF PROJECT

The pump room at the swim center contains an open filtration pit. The pump room also houses all of the equipment necessary to operate the pool. The constant exposure to the chlorine and humidity from the open pit leads to accelerated deterioration of the electrical and mechanical components on the boilers, UV system and programmable logic controller.

ALTERNATIVES CONSIDERED

Do not build the wall.

ADVANTAGES OF APPROVAL

Thousands of dollars are spent each year replacing parts due to rust and corrosion. It has been recommended to us by those who service our equipment to build a barrier between the open water source and our equipment in order to help extend the life of the equipment and cut down on money spent on parts and service.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

General Fund.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

RECREATION

GF299

PROJECT NAME

Vehicle Replacement

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$30,000

DESCRIPTION OF PROJECT

Replacement of a 1989 truck with a more dependable vehicle for Recreation Division staff.

ALTERNATIVES CONSIDERED

Not replacing the 1989 truck

ADVANTAGES OF APPROVAL

Having a reliable and safer vehicle for Recreation Division staff to utilize.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Routine maintenance

FUNDING SOURCES

General Fund

CIP Project Fund  
General Fund

DEPARTMENT  
RECREATION

PROJECT NUMBER  
GF300

PROJECT NAME  
Story Mill Community Center gymnasium floor replacement

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$110,000

DESCRIPTION OF PROJECT

Replacing the existing gymnasium floor with a wood floor that is more durable and conducive to multiple uses.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

The current floor is made of brightly colored plastic tiles that include a large Boys and Girls Club logo in the middle. The former Boys and Girls Club was used primarily for youth programs. The Story Mill Community Center will be home to Parks and Recreation Department programs for people of all ages, large special events, and will also be utilized by community groups for sports leagues and events. There will be a significant increase in use of the space and existing floor is not conducive to many of those uses, including pickleball, one of our most popular adult programs. A wood gymnasium floor is the most durable and long lasting option.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Refinishing when needed

FUNDING SOURCES

General Fund

CIP Project Fund  
General Fund

DEPARTMENT  
RECREATION

**PROJECT NUMBER**  
**GF301**

PROJECT NAME  
Story Mansion Exterior Paint

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$50,000

DESCRIPTION OF PROJECT

Repainting the exterior of the Story Mansion

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

The exterior paint at the Story Mansion has started to fade and peel. As this continues, we risk compromising the siding which could need replacement due to damage and would be a significantly more expensive project.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Repainting as needed

FUNDING SOURCES

General Fund

CIP Project Fund  
General Fund

DEPARTMENT  
RECREATION

**PROJECT NUMBER**  
**GF302**

PROJECT NAME  
Passenger Van

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
		\$35,000			

DESCRIPTION OF PROJECT

The purchase of a 12-15 passenger van for Parks and Recreation Department programs as well as other city departments use as needed.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Our current passenger van can accommodate 13 children and 2 staff when used for programs. The majority of our programs have a max capacity of 20 or more, which means multiple trips and additional staff support is required when transporting participants, or a lower max number put on the program. Another van would better meet current needs.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Routine Maintenance

FUNDING SOURCES

General Fund

CIP Project Fund  
General Fund

DEPARTMENT  
FACILITY - CH

<b>PROJECT NUMBER</b>
<b>GF303</b>

<b>PROJECT NAME</b>						
City Hall Expansion Remodel of Storage areas into Offices						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
		\$25,000			

<b>DESCRIPTION OF PROJECT</b>
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With the additional planned FTE as the City grows City Hall's current storage areas can be remodeled into office spaces. The space could potentially provide 2-3 offices spaces downstairs.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

Any additional FTE in any of the Department in City Hall do not currently have space. This would provide space that is permanent.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Routine Maintenance and cleaning.

**FUNDING SOURCES**

General Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

FACILITY - CH

GF304

PROJECT NAME

City Hall Commission Room Expansion/Remodel

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$300,000

DESCRIPTION OF PROJECT

This will address security issues and provide an additional meeting room.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Increases safety and provides the needed additional meeting room.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Routine Maintenance and cleaning.

FUNDING SOURCES

General Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

Fire

GF305

PROJECT NAME

Fire Station 2

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$4,500,000

DESCRIPTION OF PROJECT

Fire Station 2, located at 410 S. 19th Ave, is a 1-story building that was constructed in 1974 to serve as the West end fire station for the City of Bozeman. Due to growth of the city, this station now primarily serves what is the South side and Central parts of the city. The station serves as the primary response station for all areas west of N. 7th Ave to the City limits that are South of Durston Ave. This station is the primary response station for all of MSU campus and Bozeman High School and is the secondary response to areas in the downtown core. General maintenance and repairs have been the majority of work completed on this station since it's opening. The department has continued to deal with a sewage problem on a reoccurring basis where the sewage backs up into the living area of the station. Multiple plans have been implemented to address this but to date the problem still occurs. Size and location are two factors that impede the service delivery of this station. Based on it's location in relation to campus and the downtown core this is the station where the fire department ladder truck should be housed, however the station is too small to accommodate the ladder truck. In terms of location when station 2 was built N. 19th was a two lane road whereas today it is a 4 lane major thoroughfare for the city. Leaving from and returning to the fire station can be an extremely difficult task for fire crews during peak traffic hours. In September 2017 the Fire Master Plan update was presented with the recommendation to relocate Fire Station 2 somewhere on MSU campus to improve response capabilities. This would require a partnership with MSU but could have multiple benefits from an emergency planning standpoint. If a plan were to be developed that relocated Fire Station 2 to MSU campus additional funds and planning should be evaluated for relocating the fire department training facility to the same site, an additional recommendation from the recent Fire Master Plan.

ALTERNATIVES CONSIDERED

As recommended by Commission

ADVANTAGES OF APPROVAL

Addresses health and safety, space, and long term needs of fire station 2 for the next 25-30 years.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

General operating cost which are currently budgeted in the fire department general fund budget.

FUNDING SOURCES

TBD

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

Fire

GF306

PROJECT NAME

Fire Station I

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$6,500,000

DESCRIPTION OF PROJECT

Fire Station I, located at 34 N. Rouse Ave, is a 2-story building with an ancillary fire tower attached to the building that was constructed in 1965 to serve as the downtown fire station for the City of Bozeman as well as the administrative offices for the Fire Department. The station serves as the primary response station for all areas east of N. 7th Ave to the City limits and is the secondary response to areas primarily east of 19th Ave included all of MSU campus. Since its opening the station has been a shared facility between police and fire with the police presences fluctuating over that period of time. Today the station houses the support services functions of BPD which is comprised of a staff of 5 personnel and 1 Administrative Assistant. The station also serves as an East annex for patrol officers who need to access a computer, paperwork, or restroom. A remodel was done in 1996 on the main level portions of the building currently used by the Police Department which added some exterior windows and moved some of the interior walls. An addition to North Side of Fire Station I was completed in 2003, adding an additional office, locker space for firefighter's personal protective equipment, and a clean room where members could decontaminate themselves and their equipment after returning from an emergency call. In 2011 a Heating Plan Replacement Assessment was conducted by CTA Architects & Engineers to assess three different heating plant replacement options. The following is from the executive summary of the report, the entire report can be found in Appendix A of this report. "The existing heating plant contains the original steam boiler that currently serves the existing fire station. The boiler's chemical treatment history has been erratic at best. Consequently the boiler and steam piping has corroded severely over time and its overall condition can be considered as poor. The boiler was originally sized to serve the fire station and the adjacent old City Hall building which included an intended future addition. In 2010 the connection of the steam system to the old city hall was severed as a result of the building being sold. With the extreme reduction of the steam load the existing steam boiler has experienced severe cycling. The continued short cycling will inevitably lead to boiler failure". To date now action has been taken on this study. In 2012 the Bozeman Facilities Department partnered with Bechtel Architects to conduct a facilities condition inventory. Appendix B. In this report the

ALTERNATIVES CONSIDERED

As recommended by Commission

ADVANTAGES OF APPROVAL

Addresses structural, mechanically, health and safety, and space needs of fire station I for the next 25-30 years.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

General operating cost which are currently budgeting in the fire department general fund budget.

FUNDING SOURCES

TBD

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

Parks and Facility Portion

PW05/06

PROJECT NAME

Public Works Shops Facility Plan and Construction

New

Replacement

Equipment

Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$10,000	\$50,000				

DESCRIPTION OF PROJECT

Develop a long term master plan for Public Works shop facilities, equipment, and personnel. This includes conducting a needs assessment of space for existing and future employees, equipment, machinery, and rolling stock. There is a severe shortage of enclosed storage for equipment, vehicles, and machinery, resulting in extra wear and tear, additional maintenance costs, and time preparing the equipment on cold mornings.

ALTERNATIVES CONSIDERED

Continue using existing infrastructure.

ADVANTAGES OF APPROVAL

Provide an accurate analysis of the City of Bozeman Public Works space needs for both equipment as well as people.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Depending on the results of the plan, the likely result will be the construction of additional storage and office space.

FUNDING SOURCES

his project will be split 3 ways between Water Fund (\$20,000), Wastewater Fund (\$20,000), and Street Maintenance Fund (\$20,000). With a portion from the General Fund for Parks and Facility vehicle uses.

# Police Vehicle Details

Project Number	Asset #	Make	Current Mileage	FY19	FY20	FY21	FY22	FY23	Unscheduled	Notes
GF052	3138	Detective Vehicle -	126,000	\$15,000					\$20,000	Mileage Oct16
	3274	General Use Vehic	116,000						\$0	Mileage Oct16
	3480	General Use Vehic	41,000						\$0	Mileage Oct16
	3230	General Use Vehic	136,000						\$0	Mileage Oct16
	3680	Detective Vehicle	41,000						\$15,000	Mileage Oct16
	3680	Captain Vehicle –	68,000						\$15,000	Mileage Oct16
	3445	Deputy Chief Vehi	62,000						\$15,000	Mileage Oct16
	3368	Detective Vehicle	70,000						\$15,000	Mileage Oct16
	3384	Detective Vehicle	63,000						\$15,000	Mileage Oct16
	3383	Detective Vehicle	59,000						\$15,000	Mileage Oct16
	3678	Detective Vehicle	51,000						\$15,000	Mileage Oct16
	3381	Detective Vehicle	45,000						\$15,000	Mileage Oct16
	3971	Detective Vehicle	45,000						\$15,000	Mileage Oct16
	3680	Detective Vehicle	41,000						\$15,000	Mileage Oct16
	3679	Detective Vehicle	40,000						\$15,000	Mileage Oct16
	3739	Detective Vehicle	40,000						\$15,000	Mileage Oct16
	3677	Detective Vehicle -	45,000						\$15,000	Mileage Oct16
	3681	Community Resou	47,000						\$20,000	Mileage Oct16
	3374	Code Compliance	88,000						\$20,000	Mileage Oct16
	3976	Evidence Vehicle -	100,000						\$20,000	Mileage Oct16
	3438	Chief Vehicle – 08	69,000				\$15,000		\$20,000	Mileage Oct16
	3443	Captain Vehicle –	69,000				\$15,000		\$20,000	Mileage Oct16
	3790	Animal Control Of	28,000						\$45,000	Mileage Oct16
	4042	Crash Investigatio	4,000						\$62,000	Mileage Oct16
	3140	Captain Vehicle -	79,000				\$15,000		\$20,000	Mileage Oct16
	3382	Detective Vehicle -	94,000			\$15,000			\$20,000	Mileage Oct16

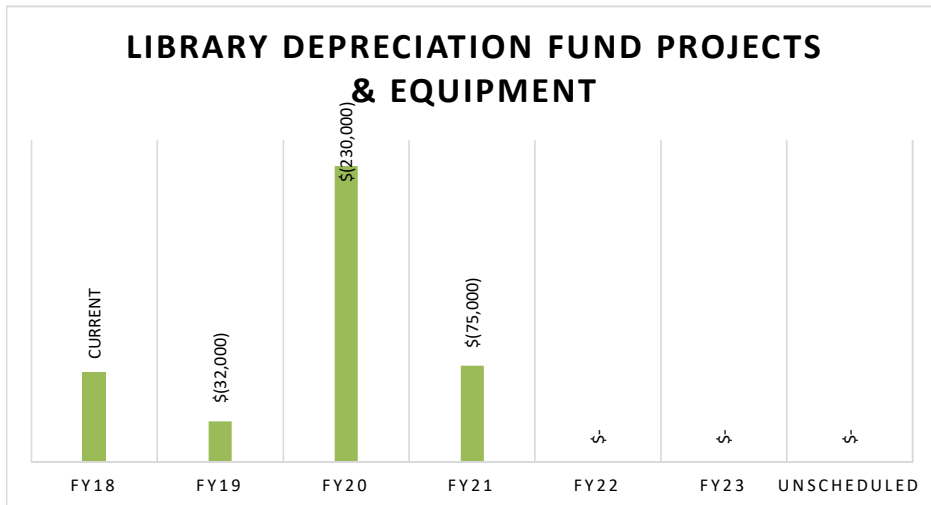
Project Number	Asset #	Make	Current Mileage	FY19	FY20	FY21	FY22	FY23	Unscheduled	Notes
GF053	3627	Marked Patrol Ve	85,000	\$62,000						Mileage Oct 16
	3499	Marked Patrol Ve	78,000		\$63,000					Mileage Oct 16
	3630	Marked Patrol Ve	74,000	\$62,000	\$63,000					Mileage Oct 16
	3595	Marked Patrol Ve	73,000	\$62,000	\$63,000					Mileage Oct 16
	3590	Marked Patrol Ve	100,000	\$62,000						Mileage Oct 16
	3699	Marked Patrol Ve	57,000		\$63,000		\$65,000			Mileage Oct 16
	3698	Marked Patrol Ve	63,000		\$63,000	\$64,000				Mileage Oct 16
	3628	Marked Patrol Ve	70,000		\$63,000	\$64,000				Mileage Oct 16
	4037	Marked Patrol Ve	24,000						\$67,000	Mileage Oct 16
	3740	Marked Patrol Ve	36,000						\$67,000	Mileage Oct 16
	4038	Marked Patrol Ve	23,000						\$67,000	Mileage Oct 16
	4039	Marked Patrol Ve	18,000						\$67,000	Mileage Oct 16
	4040	Marked Patrol Ve	3,000						\$67,000	Mileage Oct16
	4041	Marked Patrol Ve	1,000						\$67,000	Mileage Oct16
	3741	Marked Patrol Ve	34,000						\$67,000	Mileage Oct 16
	3631	Marked Patrol Ve	52,000						\$72,000	Mileage Oct 16
	3661	Marked Patrol Ve	49,000				\$65,000			Mileage Oct 16
	3697	Marked Patrol Ve	47,000				\$65,000.00	\$66,000		Mileage Oct 16
	3660	Marked Patrol Ve	42,000				\$65,000.00		\$72,000	Mileage Oct 16
	3695	Marked Patrol Ve	56,000			\$64,000		\$66,000		Mileage Oct 16
	3742	Marked Patrol Ve	43,000			\$64,000			\$67,000	Mileage Oct 16
	3659	Marked Patrol Ve	55,000			\$64,000	\$65,000			Mileage Oct 16
GF165	3112	02 Harley Davidso	22,000						\$30,000	Mileage Oct16
	3744	15 Harley Davidso	5,000						\$30,000	Mileage Oct16
	3111	02 Harley Davidso	18,000				\$20,000.00			Mileage Oct16 – Trai
Totals				\$263,000	\$378,000	\$335,000	\$360,000	\$162,000	\$1,202,000	

## Library Depreciation Reserve Fund Capital Improvement Plan

Financial Summary	Current Year	Projected					Unscheduled
	FY18	FY19	FY20	FY21	FY22	FY23	
Projected Beginning Reserve Balance Dedicated to CIP	\$ 352,503	\$ 270,860	\$ 278,368	\$ 88,666	\$ 54,770	\$ 96,696	
Plus: Estimated Annual Unspent Appropriations	\$ 38,357	\$ 39,508	\$ 40,298	\$ 41,104	\$ 41,926	\$ 42,765	\$ -
Less: Carryover FY17 Capital Projects	\$ (50,000)						
Less: Scheduled CIP Project Costs	\$ (70,000)	\$ (32,000)	\$ (230,000)	\$ (75,000)	\$ -	\$ -	\$ -
<b>Projected Year-End Cash Dedicated to CIP</b>	<b>\$ 270,860</b>	<b>\$ 278,368</b>	<b>\$ 88,666</b>	<b>\$ 54,770</b>	<b>\$ 96,696</b>	<b>\$ 139,461</b>	

### Assumptions Made for Revenue Estimates:

	Current Year	Projected				
	FY18	FY19	FY20	FY21	FY22	FY23
Estimated Annual Library Budget	\$ 2,018,800	\$ 2,079,364	\$ 2,120,951	\$ 2,163,370	\$ 2,206,638	\$ 2,250,770
Estimated Amount of Budget left Unused	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%
Estimated Annual Unspent Appropriations	\$ 38,357	\$ 39,508	\$ 40,298	\$ 41,104	\$ 41,926	\$ 42,765
Current Budget Amount Dedicated to CIP %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Plus: Increase Dedicated to Capital Improvements %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Total % Dedicated to CIP</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
<b>Total Estimated Revenues Dedicated to CIP</b>	<b>\$ 38,357</b>	<b>\$ 39,508</b>	<b>\$ 40,298</b>	<b>\$ 41,104</b>	<b>\$ 41,926</b>	<b>\$ 42,765</b>



CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
Library Depreciation Reserve									
	LIB22	LIBRARY	NEW CARPET FOR THE PUBLIC AREA OF THE LIBRARY.		\$230,000				
	LIB23	LIBRARY	1 COLOR COPIER	\$10,000					
	LIB25	LIBRARY	AUTOMATED BLINDS, 1ST FLOOR WINDOWS	\$22,000					
	LIB26	LIBRARY	MATERIALS CONVEYOR SYSTEM FOR CIRCULATION DEPARTMENT			\$75,000			
<i>Totals by DEPARTMENT</i>				\$32,000	\$230,000	\$75,000			

*Summary for Library Depreciation Reserve (4 items)*

*Totals by year:*

<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>Unscheduled</u>
\$32,000	\$230,000	\$75,000			

CIP Project Fund  
Library Depreciation Reserve

DEPARTMENT  
LIBRARY

**PROJECT NUMBER**  
**LIB22**

PROJECT NAME  
New carpet for the public area of the Library.

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$230,000				

DESCRIPTION OF PROJECT

Replace worn carpeting in Library on both floors, in public areas.

**ALTERNATIVES CONSIDERED**

Library patrons and staff will continue to walk on worn carpet.

**ADVANTAGES OF APPROVAL**

The 10-yr. old carpet is beginning to show a great deal of wear from the 1000-1500 people a day who come through the library. It will have to be replaced at some point for both aesthetic reasons and as a safety precaution.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

**FUNDING SOURCES**

Library Depreciation Fund

CIP Project Fund  
Library Depreciation Reserve

DEPARTMENT  
LIBRARY

**PROJECT NUMBER**  
**LIB23**

PROJECT NAME  
I Color copier

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$10,000					

DESCRIPTION OF PROJECT

Obtain a new small color copier

**ALTERNATIVES CONSIDERED**

Place a small color copier in the Children's Department and replace the aging black & white printer in the staff workroom until it quits. Continue to provide only black & white copies to public in Children's; use the existing black & white printer in the staff workroom until it quits. According to the service rep, we will not be able to get parts for the machine after the next year.

**ADVANTAGES OF APPROVAL**

Patrons of the Children's department have asked for color printing for some time and will be pleased to have this service.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

**FUNDING SOURCES**

Library Depreciation Fund

CIP Project Fund  
Library Depreciation Reserve

DEPARTMENT  
LIBRARY

**PROJECT NUMBER**  
**LIB25**

PROJECT NAME  
Automated Blinds, 1st floor windows

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$22,000					

DESCRIPTION OF PROJECT

Replace the automated window blinds on the 1st floor windows in the Library. They are ten years old and are malfunctioning on a regular basis.

**ALTERNATIVES CONSIDERED**

Leave the existing ones in place.

**ADVANTAGES OF APPROVAL**

We will not have broken, non-functional blinds in the windows facing our beautiful Library grounds and Lindley Park.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

**FUNDING SOURCES**

Library Depreciation Reserve Fund

CIP Project Fund

DEPARTMENT

**PROJECT NUMBER**

Library Depreciation Reserve

LIBRARY

**LIB26**

**PROJECT NAME**

Materials conveyor system for Circulation Department

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$75,000

**DESCRIPTION OF PROJECT**

Automated conveyor system for returned books and materials will pre-sort materials for staff and save on staff time

**ALTERNATIVES CONSIDERED**

Continue to handle returned materials manually

**ADVANTAGES OF APPROVAL**

Greater efficiency in circulation department, save staff time

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

**FUNDING SOURCES**

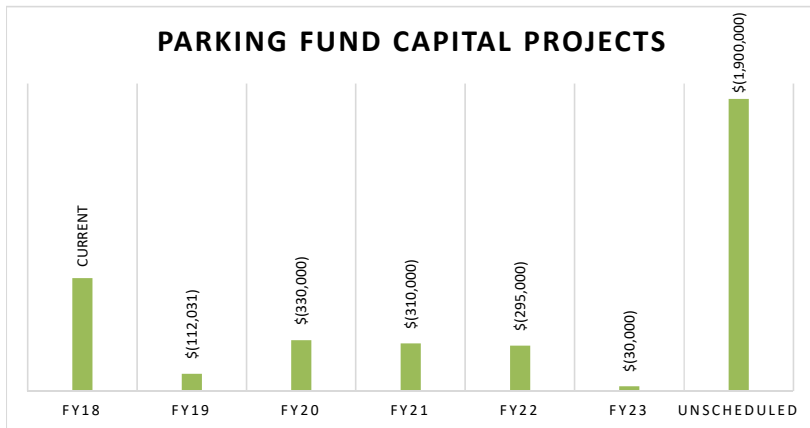
Library Depreciation Reserve Fund

**Parking Fund  
Capital Improvement Plan**

Financial Summary	Current Year	Projected					Unscheduled
	FY18	FY19	FY20	FY21	FY22	FY23	
Projected Beginning Balance Dedicated to CIP	\$ 710,702	\$ 323,373	\$ 642,697	\$ 701,771	\$ 675,798	\$ 497,684	
Plus: Parking Revenues Dedicated to CIP	\$ 43,835	\$ 46,027	\$ 48,329	\$ 50,745	\$ 53,282	\$ 55,946	
Cash In Lieu of Parking							
Plus: Parking Revenues Dedicated to Capital	\$ 43,835	\$ 48,329	\$ 50,745	\$ 53,282	\$ 53,604	\$ 53,604	\$ -
Plus: Downtown TIF Interest Contribution	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	
Plus: TIF Contribution for parking lot redesign and improv.	\$ 250,000	\$ 300,000	\$ 280,000	\$ 170,000	\$ -	\$ -	
Plus: Grant funding for P024		\$ 27,000					
Less: Scheduled CIP Costs (adjusted)	\$ (735,000)	\$ (112,031)	\$ (330,000)	\$ (310,000)	\$ (295,000)	\$ (30,000)	\$ (1,900,000)
<b>Projected Year-End Cash Dedicated to CIP</b>	<b>\$ 323,373</b>	<b>\$ 642,697</b>	<b>\$ 701,771</b>	<b>\$ 675,798</b>	<b>\$ 497,684</b>	<b>\$ 587,235</b>	

*Assumptions Made for Revenue Estimates:*

	Current Year	Projected				
	FY18	FY19	FY20	FY21	FY22	FY23
Estimated Annual Parking Fund Revenues	\$ 730,590	\$ 730,590	\$ 767,120	\$ 805,475	\$ 845,749	\$ 888,037
Estimated Growth in Revenues	0%	5%	5%	5%	5%	5%
Total Estimated Revenues	\$ 730,590	\$ 767,120	\$ 805,475	\$ 845,749	\$ 888,037	\$ 932,439
Current Revenues Dedicated to CIP %	0.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Plus: Increase Dedicated to Capital Improvements %	6.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total % Dedicated to CIP	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Total Estimated Revenues Dedicated to Capital	\$ 43,835	\$ 46,027	\$ 48,329	\$ 50,745	\$ 53,282	\$ 55,946



CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
Parking Fund									
	GF199	PARKING	PROFESSIONAL BUILDING RECONFIGURATION - PHASE 2	\$37,031					
	P001	PARKING	WILLSON LOT REDESIGN		\$300,000				
	P004	PARKING	SURFACE PARKING LOT HARDWARE & SOFTWARE SYSTEMS	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	
	P012	PARKING	ARMORY LOT REDESIGN AND IMPROVEMENTS				\$250,000		
	P014	PARKING	PARKING GARAGE CRACK MAINTENANCE AND REPAIR	\$20,000	\$5,000	\$5,000	\$20,000	\$5,000	
	P015	PARKING	PARKING GARAGE ROOF PROJECT						\$400,000
	P016	PARKING	PURCHASE OF PROPERTY FOR FUTURE PARKING FACILITIES IN THE DOWNTOWN PARKING DISTRICT.						\$1,500,000
	P017	PARKING	ROUSE PARKING LOT RE-DESIGN AND IMPROVEMENTS			\$280,000			
	P020	PARKING	PARKING VEHICLE LEASES	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	
	P024	PARKING	ELECTRIC VEHICLE CHARGING STATION	\$30,000					
<i>Totals by DEPARTMENT</i>				\$112,031	\$330,000	\$310,000	\$295,000	\$30,000	\$1,900,000

<i>Summary for Parking Fund (10 items)</i>				<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>Unscheduled</u>
<i>Totals by year:</i>				\$112,031	\$330,000	\$310,000	\$295,000	\$30,000	\$1,900,000

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Parking Fund

PARKING

GF199

PROJECT NAME

PROFESSIONAL BUILDING RECONFIGURATION - Phase 2

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$37,031

DESCRIPTION OF PROJECT

The City is responding to growth by adding staff to meet the increased demand for services in our community. We have also reorganized divisions (Community Development) and created other divisions (Stormwater) to improve efficiency and better serve our community. In order to accommodate this growth, we need to remodel the Stiff Building. In FY16 the City Commission approved a Phase I of the remodel that will provide a better use of existing space by relocating certain functions to the basement and reclaiming unused square footage. Approval of Phase II would allow the consolidation of Community Development (Planning and Building) together on one floor and the consolidation of Public Works Services (Engineering, GIS and Stormwater) together on another floor. This will allow better coordination of staff and better service to our public. Phase I is anticipated to be completed late spring of 2016.

ALTERNATIVES CONSIDERED

Continue to operate as we are today

ADVANTAGES OF APPROVAL

Community Development would be able to consolidate its operations and services to allow for an integrated customer-focused service delivery model. It will also provide Public Works with the ability to collocate its services in the Stiff Building. Finally it will help the City to take a planned and efficient approach to building utilization and service optimization.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No additional operating costs anticipated for building reconfiguration.

FUNDING SOURCES

Building Inspection, Community Development, General Fund, and Parking

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Parking Fund

PARKING

P001

PROJECT NAME

Willson Lot Redesign

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$300,000

DESCRIPTION OF PROJECT

Improve the parking lot layout, set-backs, landscaping, signage, lighting, required storm water treatment infrastructure requirements and parking kiosk.

ALTERNATIVES CONSIDERED

Keep lot as is

ADVANTAGES OF APPROVAL

Improved functioning of parking lot

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Minimal

FUNDING SOURCES

Parking Fund and TIF Contribution

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Parking Fund

PARKING

P004

PROJECT NAME

Surface Parking Lot Hardware & Software Systems

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$15,000

\$15,000

\$15,000

\$15,000

DESCRIPTION OF PROJECT

It is highly likely the Downtown Parking Lots will be transitioned to a fee lots. This will require the purchase and installation of pay-and-display kiosks for each parking lot estimated to cost \$60,000. The pads and vehicle protection will be installed as a part of each surface lot's redesign.

#### ALTERNATIVES CONSIDERED

Do not convert lots to pay lots; continue the current practice of permit holders and free 2-hour parking.

#### ADVANTAGES OF APPROVAL

Citizens using the surface lots will pay for the actual time they use the facilities. Revenue from parking charges can be used to support the parking operations and fund additional parking assets. This equipment will improve the efficiency of parking officers monitoring parking rules in the downtown.

#### ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Minor operational costs.

#### FUNDING SOURCES

Parking Fund and TIF Contributions

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Parking Fund

PARKING

P012

PROJECT NAME

Armory Lot Redesign and Improvements

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$250,000

DESCRIPTION OF PROJECT

This project is scheduled after the completion of the Etha Hotel construction project. Layout, set-backs, landscaping, signage, lighting, sidewalks, and storm water treatment facilities are being planned.

#### ALTERNATIVES CONSIDERED

Keep the lot as is.

#### ADVANTAGES OF APPROVAL

Better functioning and safer parking lot layout. Will reduce a significant amount of untreated stormwater runoff. Increased revenue and parking asset coordination through the implementation of pay kiosks.

#### ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

New asphalt will require less maintenance, but plantings and landscaping will require additional maintenance.

#### FUNDING SOURCES

Parking Fund and TIF Contributions - the Etha Hotel may also help fund these improvements.

CIP Project Fund

DEPARTMENT

**PROJECT NUMBER**

Parking Fund

PARKING

**P014**

PROJECT NAME

Parking Garage Crack Maintenance and Repair

New

Replacement

Equipment

Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$20,000	\$5,000	\$5,000	\$20,000		

DESCRIPTION OF PROJECT

Includes laser measuring of deck gaps and routine repairs and patching of concrete deck surfaces. Structural gap repair is anticipated every 3 years with routine caulking in between.

**ALTERNATIVES CONSIDERED**

Moving to an every other year gap maintenance or reducing the frequency of structural gap filling (not advised).

**ADVANTAGES OF APPROVAL**

Will extend the life of the parking garage deck surfaces.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

None

**FUNDING SOURCES**

Parking Fund

CIP Project Fund

DEPARTMENT

**PROJECT NUMBER**

Parking Fund

PARKING

**P015**

PROJECT NAME

Parking Garage Roof Project

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$400,000

DESCRIPTION OF PROJECT

Construction in the downtown core has increased demand for parking space in the Garage. The demand for additional space is anticipated with construction projects both planned and underway. The top floor of the garage has limited use during the winter months as snow removal is difficult due to limited clearances. Installing a roof on the top floor would allow for maximum utilization of the garage year around.

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

Increased utilization of the Parking Garage in all weather conditions.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

Parking Fund and TIF Contributions

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Parking Fund

PARKING

P016

PROJECT NAME

Purchase of property for future parking facilities in the Downtown Parking District.

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$1,500,000

DESCRIPTION OF PROJECT

The Downtown Strategic Parking Management Plan was adopted by the Parking omission and City Commission in July 2016. The plan outlines 26 strategies to address current and future parking issue in the Downtown. Over the next year, the Parking Commission will be working with city staff, downtown stakeholders and the community at large on next steps based on the adopted plan. The acquisition and construction of future parking assets (surface and structured) is a fundamental component. Costs and locations of those needed assets are not know, but our current Black (Carnegie) Parking lot was appraised at \$1.5 M in 2011.

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

Adequate parking resources are critical for the economic health and vibrancy of the Downtown Bozeman.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Additional lot maintenance each year/season.

FUNDING SOURCES

Parking Fund, Bonds, TIF, Loans, SID

CIP Project Fund

DEPARTMENT

**PROJECT NUMBER**

Parking Fund

PARKING

**P017**

PROJECT NAME

Rouse Parking Lot Re-design and Improvements

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$280,000

DESCRIPTION OF PROJECT

Rouse Lot Improvements – Layout, set-backs, landscaping, signage, lighting, sidewalks, and stormwater treatment facilities. These improvements are separate from any creek restoration project and will only involve the surface lot.

**ALTERNATIVES CONSIDERED**

Maintain current configuration.

**ADVANTAGES OF APPROVAL**

Better functioning and safer parking lot layout. Increased revenue and parking asset coordination through the implementation of pay kiosks.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

New asphalt will require less maintenance, but plantings and landscaping will require additional maintenance.

**FUNDING SOURCES**

Parking Fund, TIF contribution for lot improvements.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Parking Fund

PARKING

P020

PROJECT NAME

Parking Vehicle Leases

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$10,000	\$10,000	\$10,000	\$10,000		

DESCRIPTION OF PROJECT

In the fall of 2016, the Parking Division transitioned from utilizing old Police vehicles to leased Prius hybrids. Initial indications are that these vehicles will work exceptionally well for parking enforcement duties and will reduce the fuel consumption and maintenance costs when compared to the retired patrol vehicles.

#### ALTERNATIVES CONSIDERED

Continue to use retired patrol vehicles, lease hybrid vehicles at \$280/pm. 12,000 mile annual usage. Purchase new cars.

#### ADVANTAGES OF APPROVAL

Low cost vehicles that are suitable for the Parking Enforcement function; re-use of police vehicles once they are no longer suitable for first-responder use.

#### ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Anticipating maintenance requirements for used police vehicles is difficult at best as their age and condition were the primary reasons they were replaced in the PD. Maintenance and operations for leased vehicles would be limited to oil changes and fuel costs and would be significantly lower than the current fleet.

#### FUNDING SOURCES

Parking Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Parking Fund

Parking

P024

PROJECT NAME

Electric Vehicle Charging Station

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$30,000

DESCRIPTION OF PROJECT

The Sustainability Coordinator is preparing a grant application to the Montana Department of Environmental Quality for federal pass-thru grant funding, derived from the Volkswagen settlement, for the purchase and installation of one electric vehicle charging station (EVCS) at the Bridger Park Downtown Garage. The EVCS will be positioned directly outside the parking office, inside the parking garage, and will have the capability to charge two EV's at once. The amount budgeted (\$3,000) is a required 10% match on the project.

ALTERNATIVES CONSIDERED

N/A

ADVANTAGES OF APPROVAL

Installation and operation of the EVCS will enhance the City of Bozeman's ability to service multi-modal forms of transportation, and provide additional support to local sustainability efforts.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Increased electric power costs for the parking garage, level of which is unknown at this time.

FUNDING SOURCES

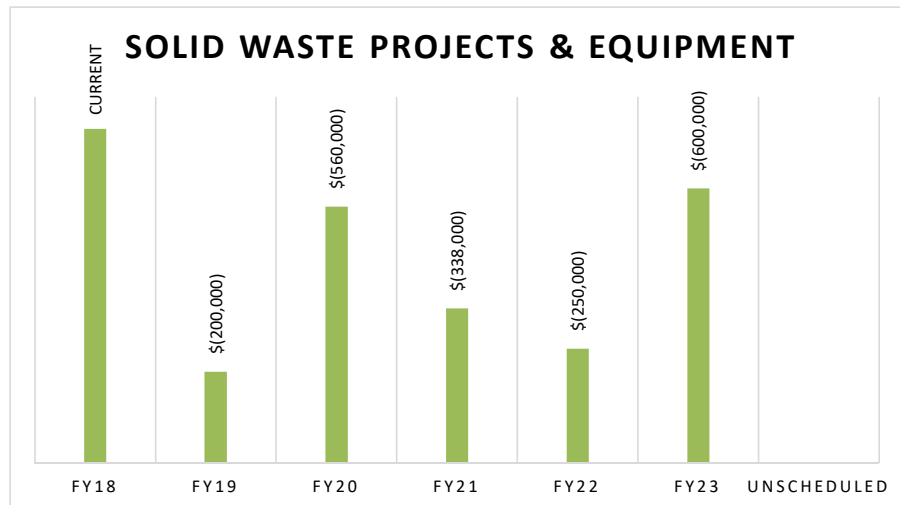
Parking Services Fund (Operating). It is the intention of Majority of the funding is grant related with a 10% match. Thee parking fund will only be required to contribute \$3,000 of the \$30,000 total cost.

## Solid Waste Collection & Recycling Capital Improvement Plan

Financial Summary	Current Year		Projected					Unscheduled
	FY18	FY19	FY20	FY21	FY22	FY23		
Projected Beginning Reserve Balance Dedicated to CIP	\$ 468,495	\$ 135,862	\$ 452,848	\$ 435,683	\$ 667,660	\$ 1,016,135	\$ -	
Plus: Revenues Dedicated to CIP	\$ 492,367	\$ 516,986	\$ 542,835	\$ 569,977	\$ 598,476	\$ 628,399	\$ -	
Less: FY17 Carryover Capital	\$ (95,000)							
Less: Scheduled CIP Project Costs	\$ (730,000)	\$ (200,000)	\$ (560,000)	\$ (338,000)	\$ (250,000)	\$ (600,000)		
Projected Year-End Cash Dedicated to CIP	\$ 135,862	\$ 452,848	\$ 435,683	\$ 667,660	\$ 1,016,135	\$ 1,044,535	\$ -	

Assumptions are made for Revenue Estimates

	Current Year		Projected				
	FY18	FY19	FY20	FY21	FY22	FY23	
Estimated Annual Revenues	\$ 3,787,441	\$ 3,787,441	\$ 3,976,813	\$ 4,175,654	\$ 4,384,436	\$ 4,603,658	
Estimated Annual Increase in Revenues	0.0%	5.0%	5.0%	5.0%	5.0%	5.0%	
Total Estimated Revenues	\$ 3,787,441	\$ 3,976,813	\$ 4,175,654	\$ 4,384,436	\$ 4,603,658	\$ 4,833,841	
Current Revenues Dedicated to CIP %	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%	
Plus: Increase Dedicated to CIP	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Total % Dedicated to CIP	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%	
Total Estimated Revenues Dedicated to CIP	\$ 492,367	\$ 516,986	\$ 542,835	\$ 569,977	\$ 598,476	\$ 628,399	



CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
Solid Waste Fund									
	SW32	Collection	FRONT LOAD TRUCK REPLACEMENT		\$270,000				
	SW36	Collection	SIDE LOAD TRUCK - NEW (ADDITIONAL ROUTE)		\$290,000				
	SW45	Collection	TOTE DELIVERY TRUCK			\$38,000			
	SW46	Collection	GRAPPLE TRUCK	\$200,000					
<i>Totals by DEPARTMENT</i>				\$200,000	\$560,000	\$38,000			

Solid Waste Fund									
	SW47	Solid Waste	SOLID WASTE RATE STUDY				\$50,000		
	SW48	Solid Waste	TROMMEL SCREEN				\$200,000		
	SW50	Solid Waste	SIDE LOAD TRUCK					\$300,000	
	SW51	Solid Waste	SIDE LOAD TRUCK - RECYCLING					\$300,000	
	SW52	Solid Waste	SIDE LOAD TRUCK REPLACEMENT			\$300,000			
<i>Totals by DEPARTMENT</i>						\$300,000	\$250,000	\$600,000	

<i>Summary for Solid Waste Fund (9 items)</i>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>Unscheduled</u>
<i>Totals by year:</i>	\$200,000	\$560,000	\$338,000	\$250,000	\$600,000	

CIP Project Fund  
Solid Waste Fund

DEPARTMENT  
Collection

**PROJECT NUMBER**  
**SW32**

PROJECT NAME  
Front Load Truck Replacement

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$270,000				

DESCRIPTION OF PROJECT

This truck is a replacement for an existing front-load truck currently collecting residential and commercial refuse. This equipment is critical to the operation of the Solid Waste Division. Customer depend on refuse removal on their collection day. Efficiency is improved with this equipment on the chassis side with increased fuel efficiency and emission reductions.

ALTERNATIVES CONSIDERED

Leasing a front-load truck.

ADVANTAGES OF APPROVAL

Reliable equipment to ensure routes completed in an efficient manner. Maintenance costs of new equipment will be lower.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Average maintenance costs: \$10,000/year

FUNDING SOURCES

100% Solid Waste Fund

CIP Project Fund  
Solid Waste Fund

DEPARTMENT  
Collection

**PROJECT NUMBER**  
**SW36**

PROJECT NAME  
Side Load Truck - New (Additional Route)

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$290,000				

DESCRIPTION OF PROJECT

This is a new side load truck to be used for additional routes. This equipment is critical to the operation of the Solid Waste Division. Customers depend on refuse removal on their collection day. Efficiency is improved with this equipment on the chassis side with increased fuel efficiency and emission reductions. The packer mounted on the chassis also see improvements thru better operator agronomics with joystick controls and better packer function options.

ALTERNATIVES CONSIDERED

Leasing a side-load truck

ADVANTAGES OF APPROVAL

Reliable equipment to ensure routes completed in an efficient manner. Maintenance costs of new equipment will be lower.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual operating and maintenance costs = \$30,000

FUNDING SOURCES

100% Solid Waste Fund

CIP Project Fund  
Solid Waste Fund

DEPARTMENT  
Collection

<b>PROJECT NUMBER</b>
<b>SW45</b>

<b>PROJECT NAME</b>						
Tote Delivery Truck						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
		\$38,000			

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

This truck is a replacement for an existing tote delivery truck. This truck is critical in the execution of container management. Totes need to be delivered to new customers, exchange of totes for customers and removal of totes.

**ALTERNATIVES CONSIDERED**

Leasing a truck

**ADVANTAGES OF APPROVAL**

The Solid Waste Divison can continue to deliver,exchange and remove customer tote requests.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Maintenance costs \$1,000/year

**FUNDING SOURCES**

100% Solid Waste Fund

CIP Project Fund  
Solid Waste Fund

DEPARTMENT  
Collection

**PROJECT NUMBER**  
**SW46**

PROJECT NAME  
Grapple Truck

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$200,000					

**DESCRIPTION OF PROJECT**

Truck with articulating arm with clam shells that will pick up large, bulky items (including brush removal) and place into dump box. While work can still be done by hand, manual work increases risk of back injury. Efficiency is accomplished thru our work comp rates.

**ALTERNATIVES CONSIDERED**

Leasing a grapple truck

**ADVANTAGES OF APPROVAL**

Equipment would be used to pick up large bulky items and brush. Currently we manually load these items by hand.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Maintenance cost: \$6,000 per year

**FUNDING SOURCES**

100% Solid Waste Fund

CIP Project Fund  
Solid Waste Fund

DEPARTMENT  
Solid Waste

**PROJECT NUMBER**  
**SW47**

PROJECT NAME  
Solid Waste Rate Study

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
			\$50,000		

DESCRIPTION OF PROJECT

Solid Waste Rate Study - including an analysis of revenue requirements, funding depreciation, and cost recovery by customer class. The most recent rate study was completed in 2013 and should be updated.

ALTERNATIVES CONSIDERED

Continue with current rates.

ADVANTAGES OF APPROVAL

Full cost accounting, rates based on cost of services.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

NA

FUNDING SOURCES

100% Solid Waste Fund

CIP Project Fund  
Solid Waste Fund

DEPARTMENT  
Solid Waste

**PROJECT NUMBER**  
**SW48**

PROJECT NAME  
Trommel Screen

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
			\$200,000		

**DESCRIPTION OF PROJECT**

A screen that can separate out garbage from finished compost and separate the size of compost. This is the final stage of the composting process that we are currently unable to accomplish using existing equipment.

**ALTERNATIVES CONSIDERED**

Rental of this equipment is not available

**ADVANTAGES OF APPROVAL**

The Solid Waste Division can market the finished compost product

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**  
NA

**FUNDING SOURCES**

100% Solid Waste Fund

CIP Project Fund  
Solid Waste Fund

DEPARTMENT  
Solid Waste

<b>PROJECT NUMBER</b>
<b>SW50</b>

<b>PROJECT NAME</b>						
Side Load Truck						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
				\$300,000	

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

This side load truck is critical to complete residential garbage collection service. As per the approved 6 year replacement schedule, garbage truck, asset # 3839, will be placed as backup truck for the division.

**ALTERNATIVES CONSIDERED**

Leasing a side load truck

**ADVANTAGES OF APPROVAL**

Reliable equipment to ensure routes completed in an efficient manner. Maintenance costs of new equipment will be lower.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual operating and maintenance costs \$30,000

**FUNDING SOURCES**

100% Solid Waste Enterprise Fund

CIP Project Fund  
Solid Waste Fund

DEPARTMENT  
Solid Waste

**PROJECT NUMBER**  
**SW51**

PROJECT NAME  
Side Load Truck - Recycling

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
				\$300,000	

**DESCRIPTION OF PROJECT**

This side load truck is critical to complete residential and commercial recycling collection service. As per the approved 6 year replacement schedule, recycling truck, asset #3838, will be placed as a backup truck for the division.

**ALTERNATIVES CONSIDERED**

Leasing a side load truck

**ADVANTAGES OF APPROVAL**

Reliable equipment to ensure routes completed in an efficient manner. Maintenance costs of new equipment will be lower.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual operating and maintenance costs \$30,000

**FUNDING SOURCES**

100% Solid Waste Enterprise Fund

CIP Project Fund  
Solid Waste Fund

DEPARTMENT  
Solid Waste

**PROJECT NUMBER**  
**SW52**

PROJECT NAME  
Side Load Truck Replacement

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
		\$300,000			

**DESCRIPTION OF PROJECT**

This side load truck is critical to complete residential garbage collection service. As per the approved 6 year replacement schedule, garbage truck, asset #3746, will be placed as a backup truck for the division.

**ALTERNATIVES CONSIDERED**

Leasing a side load truck

**ADVANTAGES OF APPROVAL**

Reliable equipment to ensure routes completed in an efficient manner. Maintenance costs of newer equipment will be lower.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual operating and maintenance costs \$30,000

**FUNDING SOURCES**

100% Solid Waste Enterprise Fund

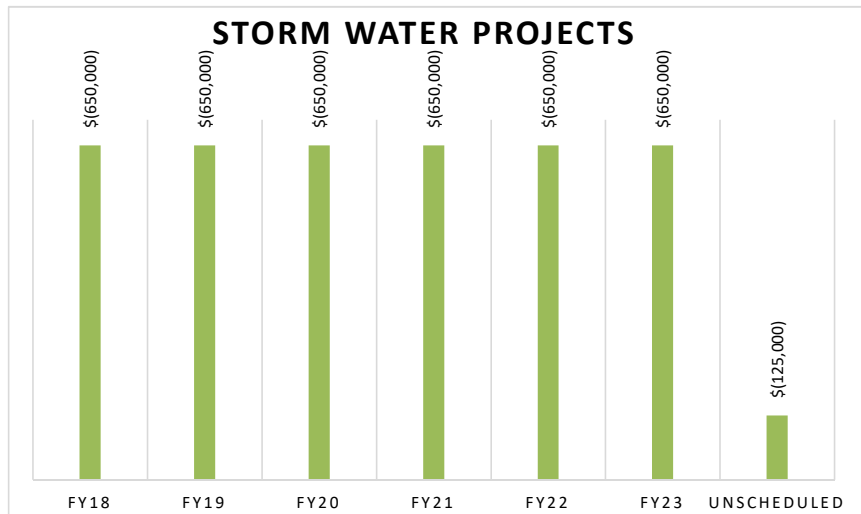


## Storm Water Utility Capital Improvement Plan

Financial Summary	Current Year	Projected					Unscheduled
	FY18	FY19	FY20	FY21	FY22	FY23	
Projected Beginning Reserve Balance Dedicated to CIP	\$ 797,389	\$ 446,437	\$ 420,777	\$ 413,848	\$ 426,211	\$ 458,445	
Plus: Storm Water Utility Fees Dedicated to Capital	\$ 606,156	\$ 624,341	\$ 643,071	\$ 662,363	\$ 682,234	\$ 702,701	
Less: FY17 Carryover Capital	\$ (307,108)						
Less: Scheduled CIP Project Costs	\$ (650,000)	\$ (650,000)	\$ (650,000)	\$ (650,000)	\$ (650,000)	\$ (650,000)	\$ (125,000)
<b>Projected Year-End Cash Dedicated to CIP</b>	<b>\$ 446,437</b>	<b>\$ 420,777</b>	<b>\$ 413,848</b>	<b>\$ 426,211</b>	<b>\$ 458,445</b>	<b>\$ 511,146</b>	

### Assumptions Made for Revenue Estimates

	Current Year	Projected				
	FY18	FY19	FY20	FY21	FY22	FY23
Estimated Annual Storm Water Utility Revenue	\$ 1,347,013	\$ 1,347,013	\$ 1,387,423	\$ 1,429,046	\$ 1,471,917	\$ 1,516,075
Estimated Annual Increase - Attributed to Growth	0%	3%	3%	3%	3%	3%
Estimated Annual Increase - Rate Increase	0%	0%	0%	0%	0%	0%
<b>Total Estimated Revenues</b>	<b>\$ 1,347,013</b>	<b>\$ 1,387,423</b>	<b>\$ 1,429,046</b>	<b>\$ 1,471,917</b>	<b>\$ 1,516,075</b>	<b>\$ 1,561,557</b>
Current Revenues Dedicated to CIP %	45.0%	45.0%	45.0%	45.0%	45.0%	45.0%
Plus: Increase Dedicated to Capital	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Total % Dedicated to CIP</b>	<b>45.0%</b>	<b>45.0%</b>	<b>45.0%</b>	<b>45.0%</b>	<b>45.0%</b>	<b>45.0%</b>
<b>Total Estimated Revenues Dedicated to CIP</b>	<b>\$ 606,156</b>	<b>\$ 624,341</b>	<b>\$ 643,071</b>	<b>\$ 662,363</b>	<b>\$ 682,234</b>	<b>\$ 702,701</b>



CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
Stormwater Fund									
	STRM48	Engineering	ANNUAL INLET REPLACEMENT PROGRAM	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	
	STRM57	Engineering	DOWNTOWN BOZEMAN CREEK CULVERT ASSESSMENT	\$15,000					
<i>Totals by DEPARTMENT</i>				\$115,000	\$100,000	\$100,000	\$100,000	\$100,000	
Stormwater Fund									
	STRM13	Stormwater	ANNUAL PIPE REHABILITATION AND DRAINAGE PROJECTS	\$50,000	\$50,000	\$200,000	\$200,000	\$200,000	
	STRM26	Stormwater	STORMWATER TV VAN REFURBISHMENT						\$125,000
	STRM31	Stormwater	MECHANICAL SEPARATION UNITS - DOWNTOWN STORMWATER TREATMENT PHASE 4			\$300,000			
	STRM34	Stormwater	MECHANICAL SEPARATION UNITS - DOWNTOWN STORMWATER TREATMENT PHASE 3		\$300,000				
	STRM36	Stormwater	BOULEVARD INFILTRATION STRUCTURES - DOWNTOWN STORMWATER TREATMENT PHASE 2	\$50,000					
	STRM38	Stormwater	MECHANICAL SEPARATION UNITS - DOWNTOWN STORMWATER TREATMENT PHASE 5				\$300,000		
	STRM39	Stormwater	MECHANICAL SEPARATION UNITS - DOWNTOWN STORMWATER TREATMENT PHASE 2	\$350,000					
	STRM49	Stormwater	BOULEVARD INFILTRATION STRUCTURES - DOWNTOWN STORMWATER TREATMENT PHASE 3		\$50,000				
	STRM50	Stormwater	STORMWATER FACILITY PLAN UPDATE		\$150,000				
	STRM51	Stormwater	PIPE REPLACEMENT – N. 4TH (W. COTTONWOOD TO W. PEACH)	\$50,000					
	STRM52	Stormwater	MECHANICAL SEPARATION UNITS - DOWNTOWN STORMWATER TREATMENT PHASE 6					\$300,000	

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
	STRM53	Stormwater	BOULEVARD INFILTRATION STRUCTURES - DOWNTOWN STORMWATER TREATMENT PHASE 6					\$50,000	
	STRM54	Stormwater	ADMINISTRATION STAFF VEHICLE	\$35,000					
	STRM55	Stormwater	BOULEVARD INFILTRATION STRUCTURES - DOWNTOWN STORMWATER TREATMENT PHASE 5				\$50,000		
	STRM56	Stormwater	BOULEVARD INFILTRATION STRUCTURES - DOWNTOWN STORMWATER TREATMENT PHASE 4			\$50,000			
<i>Totals by DEPARTMENT</i>				\$535,000	\$550,000	\$550,000	\$550,000	\$550,000	\$125,000

<i>Summary for Stormwater Fund (17 items)</i>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>Unscheduled</u>
<i>Totals by year:</i>	\$650,000	\$650,000	\$650,000	\$650,000	\$650,000	\$125,000

CIP Project Fund  
Stormwater Fund

DEPARTMENT  
Stormwater

PROJECT NUMBER  
**STRM13**

PROJECT NAME  
Annual Pipe Rehabilitation and Drainage Projects

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$50,000	\$50,000	\$200,000	\$200,000	\$200,000	

DESCRIPTION OF PROJECT

An annual program that provides funding for the design and construction of various pipe rehabilitation, drainage, and treatment projects that improve the structural integrity and conveyance capacity of the City's stormwater infrastructure network. Unplanned funds allow Staff to respond to infrastructure needs that arise from reoccurring system inspection and partner with other Public Works' projects, such as local SID street reconstructions when approved.

#### ALTERNATIVES CONSIDERED

Staff assessed the potential of Stormwater Operations Personnel completing all pipe rehabilitation and drainage projects; however, this approach would significantly reduce resources applied towards critical reoccurring infrastructure maintenance.

#### ADVANTAGES OF APPROVAL

The allocation of unplanned funds allows Staff to be proactive in the repair and replacement of stormwater infrastructure that has or is likely to fail, increasing system efficiency and reducing City liability.

#### ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Stormwater Operations Personnel will complete maintenance of projects as required.

#### FUNDING SOURCES

None

CIP Project Fund  
Stormwater Fund

DEPARTMENT  
Stormwater

**PROJECT NUMBER**  
**STRM26**

PROJECT NAME  
Stormwater TV Van Refurbishment

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$125,000

**DESCRIPTION OF PROJECT**

Refurbishment of existing Stormwater TV van routinely completed every 5 years to replace worn parts and remain consistent with new technology. This equipment is critical in assessing structural failures in the City's underground stormwater system, and allows the City to identify troubled areas and allocate resources to fix. This process significantly improves operation efficiency, budget allocation, and project planning. Deferring this purchase would result in existing equipment to exceed their effective lifespans, resulting in unexpected breakdowns and inefficiencies.

**ALTERNATIVES CONSIDERED**

Purchase a new TV Van at an estimated cost of \$250,000.

**ADVANTAGES OF APPROVAL**

Provides for the timely replacement of critical maintenance equipment.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Decrease in maintenance costs

**FUNDING SOURCES**

Stormwater Fund

CIP Project Fund  
Stormwater Fund

DEPARTMENT  
Stormwater

**PROJECT NUMBER**  
**STRM3 I**

**PROJECT NAME**  
Mechanical Separation Units - Downtown Stormwater Treatment Phase 4

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
		\$300,000			

**DESCRIPTION OF PROJECT**

This project includes the installation of three (3) stormwater mechanical separation units near the following intersections: N. Rouse and E. Tamarack, S. Black and E. Cleveland, and S. Bozeman and E. Cleveland. Staff proposes to target these locations because the roads, parking lots, yards, driveways, and drainage systems contained within their urban watersheds have a direct connection to Bozeman and Matthew Bird Creeks, meaning no removal of stormwater pollutants currently occurs.

**ALTERNATIVES CONSIDERED**

Staff has not identified any alternative stormwater treatment approaches with comparable maintenance requirements, construction footprints, and/or pollutant removal efficiencies, especially considering the large size of the drainage basins targeted.

**ADVANTAGES OF APPROVAL**

The three (3) units will treat stormwater flowing from 278 urban acres and collect over 17 tons of sediment, litter, oil, and metals annually. Pollutant removal will improve public safety, help restore Bozeman and Matthew Bird Creeks' aquatic habitat, decrease infrastructure degradation, and provide the City a measurable step towards municipal stormwater discharge permit compliance.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Stormwater Operations Personnel will complete maintenance quarterly, including the removal of collected debris using existing vacuuming equipment. Once collected, Staff will temporarily store and dry debris at the City's Stormwater Waste Management Facility before hauling to the landfill for final disposal.

**FUNDING SOURCES**

None

CIP Project Fund  
Stormwater Fund

DEPARTMENT  
Stormwater

**PROJECT NUMBER**  
**STRM34**

**PROJECT NAME**  
Mechanical Separation Units - Downtown Stormwater Treatment Phase 3

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$300,000				

**DESCRIPTION OF PROJECT**

This project includes the installation of three (3) stormwater mechanical separation units near the following intersections: N. Rouse and E. Peach, N. Tracy and W. Main, and Langhor and Westridge. Staff proposes to target these locations because the roads, parking lots, yards, driveways, and drainage systems contained within their urban watersheds have a direct connection to Bozeman and Matthew Bird Creeks, meaning no removal of stormwater pollutants currently occurs.

**ALTERNATIVES CONSIDERED**

Staff has not identified any alternative stormwater treatment approaches with comparable maintenance requirements, construction footprints, and/or pollutant removal efficiencies, especially considering the large size of the drainage basins targeted.

**ADVANTAGES OF APPROVAL**

The three (3) units will treat stormwater flowing from 258 urban acres, and collect over 16 tons of sediment, litter, oil, and metals annually. Pollutant removal will improve public safety, help restore Bozeman and Matthew Bird Creeks' aquatic habitat, decrease infrastructure degradation, and provide the City a measurable step towards municipal stormwater discharge permit compliance.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Stormwater Operations Personnel will complete maintenance quarterly, including the removal of collected debris using existing vacuuming equipment. Once collected, Staff will temporarily store and dry debris at the City's Stormwater Waste Management Facility before hauling to the landfill for final disposal.

**FUNDING SOURCES**

None

CIP Project Fund  
Stormwater Fund

DEPARTMENT  
Stormwater

**PROJECT NUMBER**  
**STRM36**

**PROJECT NAME**  
Boulevard Infiltration Structures - Downtown Stormwater Treatment Phase 2

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$50,000					

**DESCRIPTION OF PROJECT**

This project includes the installation of two (2) stormwater boulevard infiltration structures near the intersection of N. 11th and W. Dickerson. Staff proposes to target this location because the roads, parking lots, yards, driveways, and drainage systems contained within its urban watershed have a direct connection to Mandeville Creek, meaning no removal of stormwater pollutants currently occurs.

**ALTERNATIVES CONSIDERED**

Staff has not identified any alternative stormwater treatment approaches with comparable maintenance requirements, construction footprints, and/or pollutant removal efficiencies, especially considering the small size of the drainage basin targeted.

**ADVANTAGES OF APPROVAL**

The two (2) structures will divert, capture, and infiltrate stormwater flowing from seven (7) urban acres, collecting over two (2) tons of sediment, litter, oil, and metals annually. Pollutant removal will improve public safety, help restore Mandeville Creek's aquatic habitat, decrease infrastructure degradation, and provide the City a measurable step towards municipal stormwater discharge permit compliance.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Stormwater Operations Personnel will complete maintenance quarterly, including the removal of collected debris using existing vacuuming equipment. Once collected, Staff will temporarily store and dry debris at the City's Stormwater Waste Management Facility before hauling to the landfill for final disposal.

**FUNDING SOURCES**

None

CIP Project Fund  
Stormwater Fund

DEPARTMENT  
Stormwater

**PROJECT NUMBER**  
**STRM38**

**PROJECT NAME**  
Mechanical Separation Units - Downtown Stormwater Treatment Phase 5

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
			\$300,000		

**DESCRIPTION OF PROJECT**

This project includes the installation of three (3) stormwater mechanical separation units near the following intersections: N. 4th and W. Peach, N. 11th and W. Koch, and N. 9th and W. Villard. Staff proposes to target these locations because the roads, parking lots, yards, driveways, and drainage systems contained within their urban watersheds have a direct connection to Mandeville Creek, meaning no removal of stormwater pollutants currently occurs.

**ALTERNATIVES CONSIDERED**

Staff has not identified any alternative stormwater treatment approaches with comparable maintenance requirements, construction footprints, and/or pollutant removal efficiencies, especially considering the large size of the drainage basins targeted.

**ADVANTAGES OF APPROVAL**

The three (3) units will treat stormwater flowing from 255 urban acres and collect over 15 tons of sediment, litter, oil, and metals annually. Pollutant removal will improve public safety, help restore aquatic habitat, decrease infrastructure degradation, and provide the City a measurable step towards municipal stormwater discharge permit compliance.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Stormwater Operations Personnel will complete maintenance quarterly, including the removal of collected debris using existing vacuuming equipment. Once collected, Staff will temporarily store and dry debris at the City's Stormwater Waste Management Facility before hauling to the landfill for final disposal.

**FUNDING SOURCES**

None

CIP Project Fund  
Stormwater Fund

DEPARTMENT  
Stormwater

**PROJECT NUMBER**  
**STRM39**

**PROJECT NAME**  
Mechanical Separation Units - Downtown Stormwater Treatment Phase 2

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$350,000					

**DESCRIPTION OF PROJECT**

This project includes the installation of four (4) stormwater mechanical separation units near the following intersections: N. Black and E. Main, N. Bozeman and E. Main, N. Rouse and E. Main, and Westridge and Overbrook. Staff proposes to target these locations because the roads, parking lots, yards, driveways, and drainage systems contained within their urban watersheds have a direct connection to Bozeman and Matthew Bird Creeks, meaning no removal of stormwater pollutants currently occurs.

**ALTERNATIVES CONSIDERED**

Staff has not identified any alternative stormwater treatment approaches with comparable maintenance requirements, construction footprints, and/or pollutant removal efficiencies, especially considering the large size of the drainage basins targeted.

**ADVANTAGES OF APPROVAL**

The four (4) units will treat stormwater flowing from 162 urban acres, collecting over 12 tons of sediment, litter, oil, and metals annually. Pollutant removal will improve public safety, help restore Bozeman and Matthew Bird Creeks' aquatic habitat, decrease infrastructure degradation, and provide the City a measurable step towards municipal stormwater discharge permit compliance.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Stormwater Operations Personnel will complete maintenance quarterly, including the removal of collected debris using existing vacuuming equipment. Once collected, Staff will temporarily store and dry debris at the City's Stormwater Waste Management Facility before hauling to the landfill for final disposal.

**FUNDING SOURCES**

None

CIP Project Fund  
Stormwater Fund

DEPARTMENT  
Engineering

**PROJECT NUMBER**  
**STRM48**

**PROJECT NAME**  
Annual Inlet Replacement Program

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	

**DESCRIPTION OF PROJECT**

An annual program that provides funding for the replacement of under sized and degraded stormwater inlets throughout the downtown core in coordination with the Street and Engineering Divisions' Annual Pedestrian Ramp Replacement Program.

**ALTERNATIVES CONSIDERED**

Staff assessed the potential of Stormwater Operations Personnel completing inlet replacements; however, this approach would significantly reduce resources applied towards critical reoccurring system maintenance.

**ADVANTAGES OF APPROVAL**

Upgrading the inlets to the City's current standard will reduce localized flooding and improve stormwater treatment through increased sump depth.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Stormwater Operations Personnel will complete maintenance annually, including the removal of collected debris using existing inlet vacuuming equipment. Once collected, Staff will temporarily store and dry debris at the City's Stormwater Waste Management Facility before hauling to the landfill for final disposal.

**FUNDING SOURCES**

None

CIP Project Fund  
Stormwater Fund

DEPARTMENT  
Stormwater

**PROJECT NUMBER**  
**STRM49**

**PROJECT NAME**  
Boulevard Infiltration Structures - Downtown Stormwater Treatment Phase 3

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$50,000				

**DESCRIPTION OF PROJECT**

This project includes the installation of two (2) stormwater boulevard infiltration structures near the intersection of N. 11th and W. Alderson. Staff proposes to target this location because the roads, parking lots, yards, driveways, and drainage systems contained within its urban watershed have a direct connection to Mandeville Creek, meaning no removal of stormwater pollutants currently occurs.

**ALTERNATIVES CONSIDERED**

Staff has not identified any alternative stormwater treatment approaches with comparable maintenance requirements, construction footprints, and/or pollutant removal efficiencies, especially considering the small size of the drainage basin targeted.

**ADVANTAGES OF APPROVAL**

The two (2) structures will divert, capture, and infiltrate stormwater flowing from eight (8) urban acres and collect over two (2) tons of sediment, litter, oil, and metals annually. Pollutant removal will improve public safety, help restore Mandeville Creek's aquatic habitat, decrease infrastructure degradation, and provide the City a measurable step towards municipal stormwater discharge permit compliance.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Stormwater Operations Personnel will complete maintenance quarterly, including the removal of collected debris using existing vacuuming equipment. Once collected, Staff will temporarily store and dry debris at the City's Stormwater Waste Management Facility before hauling to the landfill for final disposal.

**FUNDING SOURCES**

None

CIP Project Fund  
Stormwater Fund

DEPARTMENT  
Stormwater

PROJECT NUMBER  
**STRM50**

PROJECT NAME  
Stormwater Facility Plan Update

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$150,000				

DESCRIPTION OF PROJECT

This project includes the hiring of a contractor to update the City of Bozeman’s Stormwater Facility Plan, which was last revised in 2007. The City has made significant programmatic, operational, and administrative changes over the past ten years in response to evolving environmental regulations, growth, and aging infrastructure. An updated Stormwater Facility Plan will assist Staff in identifying high-priority infrastructure deficiencies, future needs, and determine the City’s regulatory standing with MS4 Permit regulations.

ALTERNATIVES CONSIDERED

Staff will continue implementing recommendations provided in the 2007 Stormwater Facility Plan.

ADVANTAGES OF APPROVAL

A Stormwater Facility Plan will provide Staff a framework, action plan, and third party professional oversight that will assist the City in achieving its programmatic goals, which include complying with environmental regulations, improving waterway health, protecting public safety, and managing infrastructure.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

None

CIP Project Fund  
Stormwater Fund

DEPARTMENT  
Stormwater

PROJECT NUMBER  
STRM5I

PROJECT NAME  
Pipe Replacement – N. 4th (W. Cottonwood to W. Peach)

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$50,000					

DESCRIPTION OF PROJECT

This project includes the construction of 150' of 30" reinforced concrete pipe near the intersection of N. 4th and W. Peach, replacing a conveyance ditch and linking two existing pipe sections. Staff proposes to target this location because the ditch is clogged and reverse graded due to significant degradation. Staff secured an easement from the property owner in FY17 to facilitate the construction of this project and improve land records.

ALTERNATIVES CONSIDERED

Staff assessed the potential of rehabbing the conveyance ditch currently in place; however, decided to proceed with a pipe project after reviewing long-term maintenance cost and private property concerns.

ADVANTAGES OF APPROVAL

The pipe will convey stormwater originating from a 58-acre urban watershed, reducing flood risk for adjacent properties and improving water quality by mitigating past issues stemming from erosion and illegal dumping.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Stormwater Operations Personnel will complete maintenance annually, including the removal of collected debris using existing pipe flushing equipment. Once collected, Staff will temporarily store and dry debris at the City's Stormwater Waste Management Facility before hauling to the landfill for final disposal.

FUNDING SOURCES

None

CIP Project Fund  
Stormwater Fund

DEPARTMENT  
Stormwater

PROJECT NUMBER  
**STRM52**

PROJECT NAME  
Mechanical Separation Units - Downtown Stormwater Treatment Phase 6

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
				\$300,000	

DESCRIPTION OF PROJECT

This project includes the installation of three (3) stormwater mechanical separation units near the following intersections: S. 17th and W. Babcock, Blackmore and Terrace, and S. Tracy and E. Kagy. Staff proposes to target these locations because the roads, parking lots, yards, driveways, and drainage systems contained within their urban watersheds have a direct connection to Mandeville and Matthew Bird Creeks, meaning no removal of stormwater pollutants currently occurs.

ALTERNATIVES CONSIDERED

Staff has not identified any alternative stormwater treatment approaches with comparable maintenance requirements, construction footprints, and/or pollutant removal efficiencies, especially considering the large size of the drainage basins targeted.

ADVANTAGES OF APPROVAL

The three (3) units will treat stormwater flowing from 100 urban acres and collect over 6 tons of sediment, litter, oil, and metals annually. Pollutant removal will improve public safety, help restore aquatic habitat, decrease infrastructure degradation, and provide the City a measurable step towards municipal stormwater discharge permit compliance.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Stormwater Operations Personnel will complete maintenance quarterly, including the removal of collected debris using existing vacuuming equipment. Once collected, Staff will temporarily store and dry debris at the City's Stormwater Waste Management Facility before hauling to the landfill for final disposal.

FUNDING SOURCES

None

CIP Project Fund  
Stormwater Fund

DEPARTMENT  
Stormwater

PROJECT NUMBER  
**STRM53**

PROJECT NAME  
Boulevard Infiltration Structures - Downtown Stormwater Treatment Phase 6

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
				\$50,000	

DESCRIPTION OF PROJECT

This project includes the installation of two stormwater boulevard infiltration structures near the intersection of N. Broadway and E. Mendenhall. Staff proposes to target this location because the roads, parking lots, yards, driveways, and drainage systems contained within its urban watershed have a direct connection to the East Gallatin River, meaning no removal of stormwater pollutants currently occurs.

ALTERNATIVES CONSIDERED

Staff has not identified any alternative stormwater treatment approaches with comparable maintenance requirements, construction footprints, and/or pollutant removal efficiencies, especially considering the small size of the drainage basin targeted.

ADVANTAGES OF APPROVAL

The two (2) structures will divert, capture, and infiltrate stormwater flowing from four (4) urban acres and collect over one (1) ton of sediment, litter, oil, and metals annually. Pollutant removal will improve public safety, help restore aquatic habitat, decrease infrastructure degradation, and provide the City a measurable step towards municipal stormwater discharge permit compliance.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Stormwater Operations Personnel will complete maintenance quarterly, including the removal of collected debris using existing vacuuming equipment. Once collected, Staff will temporarily store and dry debris at the City's Stormwater Waste Management Facility before hauling to the landfill for final disposal.

FUNDING SOURCES

None

CIP Project Fund  
Stormwater Fund

DEPARTMENT  
Stormwater

PROJECT NUMBER  
**STRM54**

PROJECT NAME  
Administration Staff Vehicle

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$35,000					

DESCRIPTION OF PROJECT

This project includes the purchase of a new field work and inspection vehicle for Stormwater Division Administrative Staff, accommodating transportation needs for a new Specialist Position hired in FY18. The Stormwater Division has three administrative personnel who currently have one truck, and access to two cars shared between multiple Public Works' Divisions. An additional truck is necessary for Staff to complete pollution event mitigation activities, sampling equipment transport, work within the public-right-of way, and field inspections.

ALTERNATIVES CONSIDERED

Staff assessed the potential of sharing existing vehicles; however, determined that scheduling conflicts would present themselves frequently, affecting the Division's ability to achieve level of service goals.

ADVANTAGES OF APPROVAL

The purchase of an additional vehicle will allow Stormwater Division Staff to complete daily work activities timely, effectively, and safely.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Staff will budget for annual preventative maintenance completed by a mix of internal and external services, ensuring the vehicle stays in good working order.

FUNDING SOURCES

None

CIP Project Fund  
Stormwater Fund

DEPARTMENT  
Stormwater

**PROJECT NUMBER**  
**STRM55**

**PROJECT NAME**  
Boulevard Infiltration Structures - Downtown Stormwater Treatment Phase 5

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
			\$50,000		

**DESCRIPTION OF PROJECT**

This project includes the installation of two stormwater boulevard infiltration structures near the intersection of N. Montana and E. Beall. Staff proposes to target this location because the roads, parking lots, yards, driveways, and drainage systems contained within its urban watershed have a direct connection to Bozeman Creek, meaning no removal of stormwater pollutants currently occurs.

**ALTERNATIVES CONSIDERED**

Staff has not identified any alternative stormwater treatment approaches with comparable maintenance requirements, construction footprints, and/or pollutant removal efficiencies, especially considering the small size of the drainage basin targeted.

**ADVANTAGES OF APPROVAL**

The two (2) structures will divert, capture, and infiltrate stormwater flowing from eight (8) urban acres and collect over two (2) tons of sediment, litter, oil, and metals annually. Pollutant removal will improve public safety, help restore aquatic habitat, decrease infrastructure degradation, and provide the City a measurable step towards municipal stormwater discharge permit compliance.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Stormwater Operations Personnel will complete maintenance quarterly, including the removal of collected debris using existing vacuuming equipment. Once collected, Staff will temporarily store and dry debris at the City's Stormwater Waste Management Facility before hauling to the landfill for final disposal.

**FUNDING SOURCES**

None

CIP Project Fund  
Stormwater Fund

DEPARTMENT  
Stormwater

PROJECT NUMBER  
**STRM56**

PROJECT NAME  
Boulevard Infiltration Structures - Downtown Stormwater Treatment Phase 4

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
		\$50,000			

DESCRIPTION OF PROJECT

This project includes the installation of two stormwater boulevard infiltration structures near the intersection of S. Black and E. Garfield. Staff proposes to target this location because the roads, parking lots, yards, driveways, and drainage systems contained within its urban watershed have a direct connection to Mandeville Creek, meaning no removal of stormwater pollutants currently occurs.

ALTERNATIVES CONSIDERED

Staff has not identified any alternative stormwater treatment approaches with comparable maintenance requirements, construction footprints, and/or pollutant removal efficiencies, especially considering the small size of the drainage basin targeted.

ADVANTAGES OF APPROVAL

The two (2) structures will divert, capture, and infiltrate stormwater flowing from 14 urban acres and collect over two (2) tons of sediment, litter, oil, and metals annually. Pollutant removal will improve public safety, help restore Mandeville Creek's aquatic habitat, decrease infrastructure degradation, and provide the City a measurable step towards municipal stormwater discharge permit compliance.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Stormwater Operations Personnel will complete maintenance quarterly, including the removal of collected debris using existing vacuuming equipment. Once collected, Staff will temporarily store and dry debris at the City's Stormwater Waste Management Facility before hauling to the landfill for final disposal.

FUNDING SOURCES

None

CIP Project Fund  
Stormwater Fund

DEPARTMENT  
Engineering

PROJECT NUMBER  
**STRM57**

PROJECT NAME

Downtown Bozeman Creek Culvert Assessment

FY19  
\$15,000

FY20

FY21

FY22

FY23

Unscheduled

- New
- Replacement
- Equipment
- Project

DESCRIPTION OF PROJECT

Assess the condition of the downtown Bozeman Creek culverts crossing Lamme St, Mendenhall St, Main St, Babcock St, Olive St, and Rouse Ave. These are high risk assets that in the event of a failure, could result in extensive road and business closures throughout the downtown corridor. This project is split between Stormwater (\$15,000) and Street Maintenance (\$15,000).

ALTERNATIVES CONSIDERED

Do nothing

ADVANTAGES OF APPROVAL

Identifies susceptibility of downtown culverts to critical failure.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

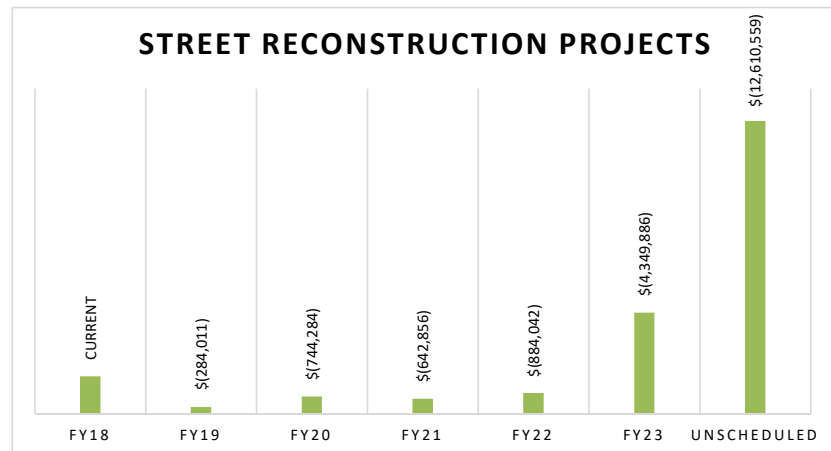
\$15,000 Stormwater, \$15,000 Street Maintenance

## Street and Curb Reconstructions Capital Improvement Plan

Financial Summary	Current Year	Projected					Unscheduled
	FY18	FY19	FY20	FY21	FY22	FY23	
Projected Beginning Reserve Balance Dedicated to CIP	\$ 469,863	\$ (206,137)	\$ 375,541	\$ 856,103	\$ 1,230,542	\$ 1,704,915	
Plus: Street Maintenance Assessments Dedicated	\$ 684,000	\$ 697,680	\$ 711,634	\$ 725,866	\$ 740,384	\$ 755,191	
Plus: SID for West Lincoln - SCR20 - 75%		\$ 168,008					
Plus: SID for South Tracy - SCR09 - 50%	\$ 240,000						
Plus: SID for South Black - SCR08 - 75%			\$ 513,213				
Plus: SID for North Tracy - SCR10 - 50%				\$ 291,428			
Plus: SID for North 17th - SCR16 - 75%					\$ 618,032		
Plus: SID for W Kochh - SCR12 - 50%						\$ 867,070	
Plus: SID for S 5th - SCR14 - 50%						\$ 1,277,873	
Less: Scheduled CIP Project Costs	\$ (1,600,000)	\$ (284,011)	\$ (744,284)	\$ (642,856)	\$ (884,042)	\$ (4,349,886)	\$ (12,610,559)
<b>Projected Year-End Cash Dedicated to CIP</b>	<b>\$ (206,137)</b>	<b>\$ 375,541</b>	<b>\$ 856,103</b>	<b>\$ 1,230,542</b>	<b>\$ 1,704,915</b>	<b>\$ 255,164</b>	

### Assumptions Made for Revenue Estimates

	Current Year	Projected				
	FY18	FY19	FY20	FY21	FY22	FY23
Total Estimated Annual Street Assessment Revenue	\$ 684,000	\$ 684,000	\$ 697,680	\$ 711,634	\$ 725,866	\$ 740,384
Estimated Annual Increase - Attributed to Annexations	0.0%	2%	2%	2%	2%	2%
Total Estimated Revenues	\$ 684,000	\$ 697,680	\$ 711,634	\$ 725,866	\$ 740,384	\$ 755,191
Current Revenues Dedicated to Street & Curb CIP %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Plus: Increase Dedicated to Reconstruction & Curbs	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total % Dedicated to CIP	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Estimated Revenues Dedicated to CIP	\$ 684,000	\$ 697,680	\$ 711,634	\$ 725,866	\$ 740,384	\$ 755,191



CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
Street & Curb Reconstruction Fund									
	SCR01	Engineering	ANNUAL CURB REPLACEMENT & CONCRETE REPAIR PROGRAM	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	
	SCR03	Engineering	W OLIVE (8TH TO TRACY) - DESIGN AND CONSTRUCTION						\$1,736,555
	SCR04	Engineering	S GRAND (OLIVE TO HAYES) – DESIGN AND CONSTRUCTION						\$2,118,375
	SCR05	Engineering	N GRAND (MENDENHAL TO PEACH) - DESIGN AND CONSTRUCTION						\$1,191,119
	SCR07	Engineering	S 3RD (OLIVE TO CLEVELAND) - DESIGN AND CONSTRUCTION						\$1,866,113
	SCR08	Engineering	S BLACK (COLLEGE TO S CUL-DE-SAC) - DESIGN AND CONSTRUCTION		\$684,284				
	SCR10	Engineering	N TRACY (VILLARD TO PEACH) - DESIGN AND CONSTRUCTION			\$582,856			
	SCR11	Engineering	S 4TH AVE (COLLEGE TO BABCOCK) - DESIGN AND CONSTRUCTION						\$1,637,967
	SCR12	Engineering	W KOCH (8TH TO TRACY) - DESIGN AND CONSTRUCTION					\$1,734,140	
	SCR13	Engineering	S 6TH (BABCOCK TO CLEVELAND) - DESIGN AND CONSTRUCTION						\$2,117,189
	SCR14	Engineering	S 5TH (OLIVE TO HAYES) - DESIGN AND CONSTRUCTION					\$2,555,746	
	SCR15	Engineering	W HARRISON (TRACY TO 6TH) - DESIGN AND CONSTRUCTION						\$1,305,886
	SCR16	Engineering	N 17TH (DURSTON TO END) - DESIGN AND CONSTRUCTION				\$824,042		
	SCR19	Engineering	DAVIS (CHURCH TO PLUM) - DESIGN AND CONSTRUCTION						\$637,355
	SCR20	Engineering	W LINCOLN (GRAND TO WILSON) - DESIGN AND CONSTRUCTION	\$224,011					
<i>Totals by DEPARTMENT</i>				\$284,011	\$744,284	\$642,856	\$884,042	\$4,349,886	\$12,610,559

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
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<i>Summary for Street &amp; Curb Reconstruction Fund (15 items)</i>				<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>Unscheduled</u>
<i>Totals by year:</i>				\$284,011	\$744,284	\$642,856	\$884,042	\$4,349,886	\$12,610,559

CIP Project Fund  
Street & Curb Reconstruction Fund

DEPARTMENT  
Engineering

**PROJECT NUMBER**  
**SCR01**

**PROJECT NAME**  
Annual Curb Replacement & Concrete Repair Program

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	

**DESCRIPTION OF PROJECT**

When a pedestrian ramp is installed, many times the adjacent curbs need to be replaced in order to get drainage to not stop at the new ramp. Smaller curb repairs can be necessary rather than replacing a whole block. These repairs result in improved stormwater control, and facilitates better street sweeping. Additionally, broken curbs can be hazardous to vehicle tires. These improvements can be combined with ADA ramp replacement work and inlet replacement work.

**ALTERNATIVES CONSIDERED**

Continue current operations

**ADVANTAGES OF APPROVAL**

This will allow completion of smaller projects instead of waiting for an entire block to be repaired

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Cost of Materials

**FUNDING SOURCES**

Street & Curb Replacement Fund

CIP Project Fund  
Street & Curb Reconstruction Fund

DEPARTMENT  
Engineering

**PROJECT NUMBER**  
**SCR03**

**PROJECT NAME**  
W Olive (8th to Tracy) - Design and Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$1,736,555

**DESCRIPTION OF PROJECT**

Reconstruction of West Olive St from 8th to Tracy, including repairs to failed curbs and gutters. The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use. This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice buildup. ADA compliance and MS4 permit compliance will be met at completion. This project will trigger water, sewer, and storm drain improvement projects within the reconstruction area. For planning purposes, project estimates West Olive to function as a Major Collector, which would require a 15% contribution from property owners via a Special Improvement District Assessment.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

Enhances safety and drainage, preserves pavement

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

None

**FUNDING SOURCES**

Street and Curb Replacement Fund - 85%. Local SID - 15%.

CIP Project Fund  
Street & Curb Reconstruction Fund

DEPARTMENT  
Engineering

**PROJECT NUMBER**  
**SCR04**

**PROJECT NAME**  
S Grand (Olive to Hayes) – Design and Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$2,118,375

**DESCRIPTION OF PROJECT**

Reconstruction of S Grand, from Olive to Hayes, including repairs to failed curbs and gutters. The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use. This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice buildup. ADA compliance and MS4 permit compliance will be met at completion. This project will trigger water, sewer, and storm drain improvement projects within the reconstruction area. For planning purposes, project estimates Lincoln to function as a Local Street, which would require a 75% contribution from property owners via a Special Improvement District Assessment.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

Enhances safety and drainage, preserves pavement

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

None

**FUNDING SOURCES**

Street and Curb Replacement Fund - 25%. Local SID - 75%.

CIP Project Fund  
Street & Curb Reconstruction Fund

DEPARTMENT  
Engineering

PROJECT NUMBER  
SCR05

PROJECT NAME  
N Grand (Mendenhal to Peach) - Design and Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$1,191,119

DESCRIPTION OF PROJECT

Reconstruction of North Grand from Mendenhal to Peach, including repairs to failed curbs and gutters. The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use. This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice buildup. ADA compliance and MS4 permit compliance will be met at completion. This project will trigger water, sewer, and storm drain improvement projects within the reconstruction area. For planning purposes, project estimates North Grand will function as a Local Street, which would require a 75% contribution from property owners via a Special Improvement District Assessment.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Enhances safety and drainage, preserves pavement

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

Street and Curb Replacement Fund - 25%. Local SID - 75%.

CIP Project Fund  
Street & Curb Reconstruction Fund

DEPARTMENT  
Engineering

**PROJECT NUMBER**  
**SCR07**

**PROJECT NAME**  
S 3rd (Olive to Cleveland) - Design and Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$1,866,113

**DESCRIPTION OF PROJECT**

Reconstruction of South 3rd Ave from Olive to Cleveland, including repairs to failed curbs and gutters. The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use. This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice buildup. ADA compliance and MS4 permit compliance will be met at completion. This project will trigger water, sewer, and storm drain improvement projects within the reconstruction area. For planning purposes, project estimates S 3rd to function as a Minor Collector, which would require a 50% contribution from property owners via a Special District Assessment.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

Enhances safety and drainage, preserves pavement

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

None

**FUNDING SOURCES**

Street and Curb Replacement Fund - 50%. Local SID - 50%.

CIP Project Fund  
Street & Curb Reconstruction Fund

DEPARTMENT  
Engineering

**PROJECT NUMBER**  
**SCR08**

**PROJECT NAME**  
S Black (College to S Cul-De-Sac) - Design and Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$684,284				

**DESCRIPTION OF PROJECT**

Reconstruction of South Black from College to the Cul-de-Sac, including repairs to failed curb and gutters. The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use. This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice buildup. ADA compliance and MS4 permit compliance will be met at completion. This project will trigger water, sewer, and storm drain improvement projects within the reconstruction area. For planning purposes, project estimates South Black to function as a Local Street, which would require a 75% contribution from property owners via a Special Improvement District Assessment.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

Enhances safety and drainage, preserves pavement

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

None

**FUNDING SOURCES**

Street and Curb Replacement Fund - 25%. Local SID - 75%.

CIP Project Fund  
Street & Curb Reconstruction Fund

DEPARTMENT  
Engineering

PROJECT NUMBER  
SCR10

PROJECT NAME  
N Tracy (Villard to Peach) - Design and Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
		\$582,856			

DESCRIPTION OF PROJECT

Reconstruction of North Tracy Street from Villard to Peach, including repairs to failed curbs and gutters. The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use. This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice buildup. ADA compliance and MS4 permit compliance will be met at completion. This project will trigger water, sewer, and storm drain improvement projects within the reconstruction area. For planning purposes, project estimates North Tracy to function as a Minor Collector, which would require a 50% contribution from property owners via a Special Improvement District Assessment.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Enhances safety and drainage, preserves pavement

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

Street and Curb Replacement Fund - 50%. Local SID - 50%.

CIP Project Fund  
Street & Curb Reconstruction Fund

DEPARTMENT  
Engineering

PROJECT NUMBER  
SCR11

PROJECT NAME  
S 4th Ave (College to Babcock) - Design and Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$1,637,967

DESCRIPTION OF PROJECT

Reconstruction of South 4th Ave from College to Babcock, including re pairs to failed curbs and gutters. The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use. This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice buildup. ADA compliance and MS4 permit compliance will be met at completion. This project will trigger water, sewer, and storm drain improvement projects within the reconstruction area. For planning purposes, project estimates South 4th to function as a Local Street, which would re quire a 75% contribution from property owners via a Special Improvement District Assessment.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Enhances safety and drainage, preserves pavement

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

Street and Curb Replacement Fund - 25%. Local SID - 75%.

CIP Project Fund  
Street & Curb Reconstruction Fund

DEPARTMENT  
Engineering

PROJECT NUMBER  
SCR12

PROJECT NAME  
W Koch (8th to Tracy) - Design and Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
				\$1,734,140	

DESCRIPTION OF PROJECT

Reconstruction of West Koch Street from 8th to Tracy, including repairs to failed curbs and gutters. The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use. This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice buildup. ADA compliance and MS4 permit compliance will be met at completion. This project will trigger water, sewer, and storm drain improvement projects within the reconstruction area. For planning purposes, project estimates West Koch to function as a Minor Collector, which would require a 50% contribution from property owners via a Special Improvement District Assessment.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Enhances safety and drainage, preserves pavement

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

Street and Curb Replacement Fund - 50%. Local SID - 50%.

CIP Project Fund  
Street & Curb Reconstruction Fund

DEPARTMENT  
Engineering

PROJECT NUMBER  
SCR13

PROJECT NAME  
S 6th (Babcock to Cleveland) - Design and Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$2,117,189

DESCRIPTION OF PROJECT

Reconstruction of South 6th Ave from Babcock to Cleveland, including repairs to failed curbs and gutters. The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use. This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice buildup. ADA compliance and MS4 permit compliance will be met at completion. This project will trigger water, sewer, and storm drain improvement projects within the reconstruction area. For planning purposes, project estimates South 6th to function as a Local Street, which would require a 75% contribution from property owners via a Special Improvement District Assessment.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Enhances safety and drainage, preserves pavement

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

Street and Curb Replacement Fund - 25%. Local SID - 75%.

CIP Project Fund  
Street & Curb Reconstruction Fund

DEPARTMENT  
Engineering

**PROJECT NUMBER**  
**SCRI4**

**PROJECT NAME**  
S 5th (Olive to Hayes) - Design and Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
				\$2,555,746	

**DESCRIPTION OF PROJECT**

Reconstruction of South 5th Ave from Olive to Hayes, including repairs to failed curbs and gutters. The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use. This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice buildup. ADA compliance and MS4 permit compliance will be met at completion. This project will trigger water, sewer, and storm drain improvement projects within the reconstruction area. For planning purposes, project estimates South 5th to function as a Minor Collector, which would require a 50% contribution from property owners via a Special District Assessment.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

Enhances safety and drainage, preserves pavement

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

None

**FUNDING SOURCES**

Street and Curb Replacement Fund - 50%. Local SID - 50%.

CIP Project Fund  
Street & Curb Reconstruction Fund

DEPARTMENT  
Engineering

PROJECT NUMBER  
SCR15

PROJECT NAME  
W Harrison (Tracy to 6th) - Design and Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$1,305,886

DESCRIPTION OF PROJECT

Reconstruction of West Harrison from Tracy to 6th, including repairs to failed curbs and gutters. The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use. This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice buildup. ADA compliance and MS4 permit compliance will be met at completion. This project will trigger water, sewer, and storm drain improvement projects within the reconstruction area. For planning purposes, project estimates West Harrison to function as a Local Street, which would require a 75% contribution from property owners via a Special Improvement District Assessment.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Enhances safety and drainage, preserves pavement

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

Street and Curb Replacement Fund - 25%. Local SID - 75%.

CIP Project Fund  
Street & Curb Reconstruction Fund

DEPARTMENT  
Engineering

PROJECT NUMBER  
SCR16

PROJECT NAME  
N 17th (Durston to End) - Design and Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
			\$824,042		

DESCRIPTION OF PROJECT

Reconstruction of North 17th Ave from Durston to Waggon Wheel Trailer Park, including repairs to failed curbs and gutters. The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use. This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice buildup. ADA compliance and MS4 permit compliance will be met at completion. This project will trigger water, sewer, and storm drain improvement projects within the reconstruction area. For planning purposes, project estimates North 17th to function as a Local Street, which would require a 75% contribution from property owners via a Special Improvement District Assessment.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Enhances safety and drainage, preserves pavement

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

Street and Curb Replacement Fund - 25%. Local SID - 75%.

CIP Project Fund  
Street & Curb Reconstruction Fund

DEPARTMENT  
Engineering

**PROJECT NUMBER**  
**SCRI9**

**PROJECT NAME**  
Davis (Church to Plum) - Design and Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$637,355

**DESCRIPTION OF PROJECT**

Reconstruction of Davis from Church to Plum, including repairs to failed curbs and gutters. The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use. This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice buildup. ADA compliance and MS4 permit compliance will be met at completion. This project will trigger water, sewer, and storm drain improvement projects within the reconstruction area. For planning purposes, project estimates Davis to function as a Local Street, which would require a 75% contribution from property owners via a Special Improvement District Assessment.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

Enhances safety and drainage, preserves pavement

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

None

**FUNDING SOURCES**

Street and Curb Replacement Fund - 25%. Local SID - 75%.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Street & Curb Reconstruction Fund

Engineering

SCR20

PROJECT NAME

W Lincoln (Grand to Wilson) - Design and Construction

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$224,011

DESCRIPTION OF PROJECT

Reconstruction of West Lincoln, from Grand to Wilson, including repairs to failed curbs and gutters. The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use. This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice buildup. ADA compliance and MS4 permit compliance will be met at completion. This project will trigger water, sewer, and storm drain improvement projects within the reconstruction area. For planning purposes, project estimates Lincoln to function as a Local Street, which would require a 75% contribution from property owners via a Special Improvement District Assessment.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Enhances safety and drainage, preserves pavement

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

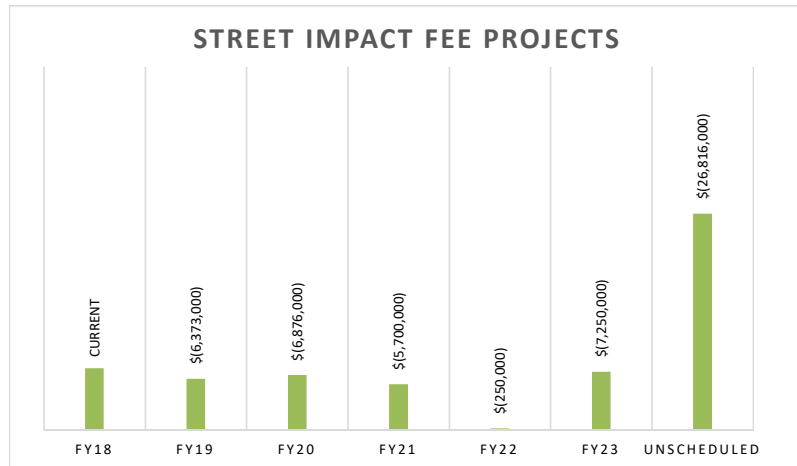
Street and Curb Replacement Fund - 25%. Local SID - 75%.

**Street Impact Fee  
Capital Improvement Plan**

Financial Summary	Current Year	Projected					Unscheduled
	FY18	FY19	FY20	FY21	FY22	FY23	
Projected Beginning Reserve Balance Dedicated to CIP	\$ 11,636,058	\$ 3,133,569	\$ 986,819	\$ (1,451,619)	\$ (2,492,178)	\$ 2,150,235	
Plus: Impact Fee Revenues Dedicated to CIP	\$ 4,025,000	\$ 4,226,250	\$ 4,437,563	\$ 4,659,441	\$ 4,892,413	\$ 5,137,033	\$ -
Plus: Urban Funds:							
Less: Carryover FY17 Capital Projects	\$ (4,826,244)						
Less: Scheduled CIP Project Costs*	\$ (7,701,245)	\$ (6,373,000)	\$ (6,876,000)	\$ (5,700,000)	\$ (250,000)	\$ (7,250,000)	\$ (26,816,000)
<b>Projected Year-End Cash Dedicated to CIP</b>	<b>\$ 3,133,569</b>	<b>\$ 986,819</b>	<b>\$ (1,451,619)</b>	<b>\$ (2,492,178)</b>	<b>\$ 2,150,235</b>	<b>\$ 37,268</b>	

*Assumptions Made for Revenue Estimates*

	Current Year	Projected				
	FY18	FY19	FY20	FY21	FY22	FY23
Estimated Annual Street Impact Fee Revenues**	\$ 4,025,000	\$ 4,025,000	\$ 4,226,250	\$ 4,437,563	\$ 4,659,441	\$ 4,892,413
Estimated Annual Increase	0.0%	5%	5%	5%	5%	5%
Total Estimated Revenues	\$ 4,025,000	\$ 4,226,250	\$ 4,437,563	\$ 4,659,441	\$ 4,892,413	\$ 5,137,033
Current Revenues Dedicated to CIP %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Plus: Increase Dedicated to Street Capacity Expansion CIP	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total % Dedicated to CIP	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b>Total Estimated Revenues Dedicated to CIP</b>	<b>\$ 4,025,000</b>	<b>\$ 4,226,250</b>	<b>\$ 4,437,563</b>	<b>\$ 4,659,441</b>	<b>\$ 4,892,413</b>	<b>\$ 5,137,033</b>



\*Note: This schedule no longer contains the portions of project costs that will be paid by other sources, with the exception of Federal Urban Funds. See the "Funding Sources" discussion at the bottom of each project item sheet.

\*\*Using three year average for estimates

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
Impact Fees Streets									
	SIF001	Street Impact F	ANNUAL RIGHT OF WAY ACQUISITION	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	
	SIF009	Street Impact Fees	KAGY (WILLSON TO 19TH) - CONSTRUCTION						\$8,000,000
	SIF057	Street Impact Fees	OAK (FLANDERS MILL TO RYUN SUN WAY) - CONSTRUCTION		\$1,000,000				
	SIF058	Street Impact Fees	OAK & N 27TH (INTERSECTION IMPROVEMENTS) - DESIGN & CONSTRUCTION	\$800,000					
	SIF062	Street Impact Fees	DURSTON (FOWLER TO FERGUSON) - CONSTRUCTION	\$760,000					
	SIF063	Street Impact Fees	FOWLER & BABCOCK (INTERSECTION IMPROVEMENTS) - CONSTRUCTION						\$1,600,000
	SIF073	Street Impact Fees	FOWLER & DURSTON (INTERSECTION IMPROVEMENTS) - CONSTRUCTION						\$1,616,000
	SIF076	Street Impact Fees	FOWLER CONNECTION (HUFFINE TO OAK) - DESIGN (INCLUDES 3 INTERSECTIONS)			\$500,000			
	SIF086	Street Impact Fees	BAXTER & COTTONWOOD (INTERSECTION IMPROVEMENTS) - CONSTRUCTION					\$2,000,000	
	SIF098	Street Impact Fees	OAK & COTTONWOOD (INTERSECTION IMPROVEMENTS) - ROUNDABOUT CONSTRUCTION		\$2,192,000				
	SIF105	Street Impact Fees	COTTONWOOD (DURSTON TO OAK) - CONSTRUCTION		\$1,250,000				
	SIF108	Street Impact Fees	S 3RD AND GRAF (INTERSECTION IMPROVEMENTS) - CONSTRUCTION	\$1,200,000					
	SIF109	Street Impact Fees	OAK (ROUSE THROUGH CANNERY DISTRICT) - CONSTRUCTION	\$133,000					
	SIF110	Street Impact Fees	MANLEY & GRIFFIN (INTERSECTION IMPROVEMENTS) - CONSTRUCTION		\$1,600,000				
	SIF111	Street Impact Fees	HIGHLAND (MAIN TO KAGY) - CONSTRUCTION & DESIGN						\$5,000,000
	SIF113	Street Impact F	GRIFFIN (7TH TO ROUSE) - CONSTRUCTION			\$3,500,000			
	SIF114	Street Impact Fees	FOWLER CONNECTION (HUFFINE TO OAK) - CONSTRUCTION					\$3,750,000	

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
	SIF116	Street Impact Fees	BRIDGER DR & STORY MILL RD (INTERSECTION IMPROVEMENTS) - CONSTRUCTION			\$1,200,000			
	SIF117	Street Impact Fees	STORY MILL (GRIFFIN TO BRIDGER) - CONSTRUCTION			\$250,000			
	SIF118	Street Impact Fees	BABCOCK (11TH AVE TO 19TH AVE) - CONSTRUCTION						\$750,000
	SIF118	Street Impact Fees	BABCOCK (11TH AVE TO 19TH AVE) - DESIGN						\$250,000
	SIF121	Street Impact Fees	BAXTER & DAVIS (INTERSECTION IMPROVEMENTS) - ROUNDABOUT CONSTRUCTION	\$2,000,000					
	SIF123	Street Impact Fees	BRIDGER DR & STORY MILL RD (INTERSECTION IMPROVEMENTS) - DESIGN		\$100,000				
	SIF127	Street Impact F	FOWLER RIGHT OF WAY PURCHASE						\$1,000,000
	SIF128	Street Impact F	KAGY (WILLSON TO HIGHLAND) - DESIGN						\$500,000
	SIF129	Street Impact Fees	KAGY (WILLSON TO HIGHLAND) - CONSTRUCTION						\$6,000,000
	SIF132	Street Impact Fees	STORY MILL (GRIFFIN TO BRIDGER) - DESIGN		\$50,000				
	SIF133	Street Impact F	GRIFFIN (7TH TO ROUSE) - DESIGN	\$400,000					
	SIF134	Street Impact Fees	OAK (COTTONWOOD TO FLANDERS MILL) - CONSTRUCTION		\$434,000				
	SIF136	Street Impact Fees	BABCOCK WIDENING FERGUSON TO COTTONWOOD						\$900,000
	SIF137	Street Impact Fees	COTTONWOOD (DURSTON TO OAK) - DESIGN	\$250,000					
	SIF138	Street Impact Fees	COTTONWOOD ROAD, OAK TO BAXTER - CONSTRUCTION					\$500,000	
	SIF139	Street Impact Fees	OAK (FLANDERS MILL TO RYUN SUN WAY) - DESIGN	\$150,000					
	SIF140	Street Impact Fees	OAK (COTTONWOOD TO FLANDERS MILL) - DESIGN	\$180,000					
	SIF141	Street Impact Fees	COTTONWOOD ROAD, OAK TO BAXTER - DESIGN	\$250,000					

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
	SIF142	Street Impact Fees	DURSTON ROAD & N. 27TH (INTERSECTION IMPROVEMENTS) - CONSTRUCTION						\$1,200,000
	SIF143	Street Impact Fees	BAXTER & COTTONWOOD INTERSECTION - RIGHT OF WAY					\$750,000	
<i>Totals by DEPARTMENT</i>				\$6,373,000	\$6,876,000	\$5,700,000	\$250,000	\$7,250,000	\$26,816,000

<i>Summary for Impact Fees Streets (37 items)</i>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>Unscheduled</u>
<i>Totals by year:</i>	\$6,373,000	\$6,876,000	\$5,700,000	\$250,000	\$7,250,000	\$26,816,000

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

**PROJECT NUMBER**  
**SIF001**

**PROJECT NAME**  
Annual Right Of Way Acquisition

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	

**DESCRIPTION OF PROJECT**

Annual allocation available for right-of-way purchases as they become available. In all cases, the only reason additional R/W is required is that the existing roadway is being expanded and capacity will be increased. Purchasing additional right-of-way may be critical to connecting elements of the transportation network, and in doing so, conformance with the City Transportation Master Plan can be obtained. Purchase of R/W is often a prerequisite for construction of the critical elements of the transportation network. Other affected projects include all of the other street impact fee projects could potentially be affected by R/W acquisition.

**ALTERNATIVES CONSIDERED**

Condemn property for right-of-way; pay court costs as well as appraised value of property. Time consuming for city staff and a relatively expensive process. Wait for adjacent property owners to dedicate R/W as part of the annexation/development process.

**ADVANTAGES OF APPROVAL**

Provides dollars for the purchase of necessary right-of-way as it becomes available on the market. Avoids the expensive, antagonistic condemnation process where possible or having to wait for voluntary dedications.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating & Maintenance Costs: Street Impact Fees can not be spent on operating and maintaining facilities. There is expected to be a very minimal, incremental cost to the Street Maintenance District from this expenditure.

**FUNDING SOURCES**

None

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

<b>PROJECT NUMBER</b>
<b>SIF009</b>

<b>PROJECT NAME</b>						
Kagy (Willson to 19th) - Construction						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$8,000,000

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

This project consists of reconstructing Kagy Boulevard from the intersection of S 19th Ave to Willson Ave to a 4 lane urban arterial standard. This project directly increase capacity by adding additional travel lanes, dedicated bike lanes and sidewalks and making improvements to the intersections. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. Kagy serves as an important element of Bozeman's perimeter street system connecting Highland Blvd., Willson Ave, and S. 19th. It also serves as the primary access to Montana State University and the University's major athletic facilities. The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan will be attained with this project. Other affected projects include intersection Improvements at Kagy & 19th, Kagy & 7th, Kagy & 11th, Kagy & Willson.

#### ALTERNATIVES CONSIDERED

SID, Urban funds, incremental construction by adjacent development.

#### ADVANTAGES OF APPROVAL

Kagy is a State Urban Route and is eligible for expenditure of State urban funds designated annually for the City of Bozeman; however, the availability of urban funds cannot match the pace of the City's transportation improvement needs. The need for this project comes from increased traffic due to growth in the Bozeman area and the project is eligible for Impact Fee Funds. Use of Street Impact Funds enables the community to leverage the available State Urban transportation funds to complete projects and address more of its pressing transportation needs.

#### ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

#### FUNDING SOURCES

This project is funded by Street Impact Fees (\$8,000,000) and Urban Funds (\$8,000,000). A Payback District or SID may be able to created to leverage other stakeholders.

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

<b>PROJECT NUMBER</b>
<b>SIF057</b>

<b>PROJECT NAME</b>
Oak (Flanders Mill to Ryun Sun Way) - Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$1,000,000				

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

This project is the completion of the street segment of Oak St, from Flanders Mill to Ryun Sun Way, to a five-lane urban principal arterial standard. This project increases capacity directly by constructing new segments of arterial roadway and by adding additional lanes, dedicated bike lanes and sidewalks. Future developments in this area may not be allowed to proceed until these improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. This project will complete an important east-west link between Ferguson and Cottonwood, and conformance with the Transportation Master Plan will be attained. A payback District or SID may be created to leverage other stakeholders. Other affected projects include intersection improvements at Oak and Cottonwood, Oak and Flanders Mill, Oak and Ferguson, Oak Street - New Holland to Ferguson.

**ALTERNATIVES CONSIDERED**

Construct segment by segment as adjacent parcels develop.

**ADVANTAGES OF APPROVAL**

Increased capacity, connectivity and safety in this corridor, both for motorized vehicles as well as bicycles and pedestrians.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

This project is funded by Street Impact Fees (\$1,300,000) the Arterial & Collector District (\$500,000) and local participation. The Flander's Mill development is expected to be a partner in the construction of the segments adjacent to their development.

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

<b>PROJECT NUMBER</b>
<b>SIF058</b>

<b>PROJECT NAME</b>
Oak & N 27th (Intersection Improvements) - Design & Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$800,000					

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

Improve the intersection control at the intersection of Oak and N 27th. This intersection is currently 2-way stop controlled. Replacing it with a signal will greatly increase its capacity. The level of service at this intersection has degraded to unacceptable levels. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan will be attained at completion. Other affected projects include Oak Street corridor projects and North 27th Street improvements project.

**ALTERNATIVES CONSIDERED**

Accept the current level of service (do nothing). Secure additional financing by creating an SID or Payback District.

**ADVANTAGES OF APPROVAL**

Increased capacity at this intersection. Facilitates development currently occurring in this part of the city and network performance overall.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

This project is funded by Street Impact Fees (\$800,000) and the Arterial & Collector District (\$200,000).

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

**PROJECT NUMBER**  
**SIF062**

**PROJECT NAME**  
Durston (Fowler to Ferguson) - Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$760,000					

**DESCRIPTION OF PROJECT**

Complete Durston Rd, from Cottonwood to Fowler, to a three-lane urban minor arterial standard. This project directly increase capacity by adding additional lanes, dedicated bike lanes and sidewalks. Future developments in this area may not be allowed to proceed until these improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. Connectivity already exists at this location, it is capacity that is affected. With completion, conformance with the Transportation Master Plan will be attained. A payback District or SID may be created to leverage other stakeholders. Other affected projects include intersection improvements at Durston & Ferguson, Durston & Fowler, Durston & Flanders Mill.

**ALTERNATIVES CONSIDERED**

Construct segment by segment as adjacent parcels develop.

**ADVANTAGES OF APPROVAL**

Increased capacity and safety in this corridor, both for motorized vehicles as well as bicycles and pedestrians.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

This project is funded by Street Impact Fees (\$757,421) and the Arterial & Collector District (\$757,421). A payback district may be created to reimburse both funds for any local share (project related) costs that may be allocated to future developments.

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

<b>PROJECT NUMBER</b>
<b>SIF063</b>

<b>PROJECT NAME</b>						
Fowler & Babcock (Intersection Improvements) - Construction						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$1,600,000

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

Install a traffic signal, roundabout, or other adequate traffic control device at the intersection of Fowler and Babcock. This intersection is currently 1-way stop controlled. Replacing it with a signal or roundabout will greatly increase its capacity. East-west connectivity already exists at this location. North-south connectivity is still lacking. Peak hour level of service for northbound traffic is degrading due to lack of north-south connectivity in the network. The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan will be attained at completion. A Payback District or SID may be created to leverage other stakeholders. Other affected projects include Fowler corridor improvements.

**ALTERNATIVES CONSIDERED**

Identified in the 2007 Transportation Plan Update. Includes installation of a traffic signal, roundabout or other adequate traffic control device when warrants are met.

**ADVANTAGES OF APPROVAL**

Increased capacity and safety at this intersection.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

This project is funded by Street Impact Fees (\$1,600,000) and the Arterial & Collector District (\$400,000).

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

<b>PROJECT NUMBER</b>
<b>SIF073</b>

<b>PROJECT NAME</b>						
Fowler & Durston (Intersection Improvements) - Construction						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$1,616,000

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

Improve the intersection control at the intersection of Fowler and Durston. This intersection is currently I- way stop controlled. Replacing it with a signal or roundabout will greatly increase its capacity. East-west connectivity already exists at this location. North-south connectivity is still lacking. The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan will be attained at completion. Other affected projects include Fowler corridor street improvements.

**ALTERNATIVES CONSIDERED**

Accept the current level of service (do nothing). Alternative financing could be provided by creating an SID or Payback District.

**ADVANTAGES OF APPROVAL**

Improves an imporant connecting element in the network.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

This project is funded by Street Impact Fees (\$1,616,000) and the Arterial & Collector District (\$404,000). A development payback district may be created to reimburse Arterial & Collector District for any local share (project related) costs that may be allocated to future developments (estimated at \$404,000).

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

<b>PROJECT NUMBER</b>
<b>SIF076</b>

<b>PROJECT NAME</b>
Fowler Connection (Huffine to Oak) - Design (Includes 3 Intersections)

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
		\$500,000			

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

Design Fowler from Huffine to Oak to an urban minor arterial standard, including three intersections. This project directly increase capacity by adding additional travel lanes, dedicated bike lanes and sidewalks and making improvements to the intersections. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. This project completes an important north-south connection on the west side of town. With its completion, the Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan will be attained. A Payback District or SID may be created to leverage other stakeholders. Other affected projects include intersection improvements at Fowler and Durston and Fowler and Oak.

**ALTERNATIVES CONSIDERED**

Construct segment by segment as adjacent parcels develop.

**ADVANTAGES OF APPROVAL**

This project will complete an important north-south connection, expand the capacity of our street network and improve safety for drivers and pedestrians.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

This project is funded by Street Impact Fees (\$500,000) and the Arterial & Collector District (\$500,000). A development payback district may be created to reimburse Arterial & Collector District for any local share (project related) costs that may be allocated to future developments (estimated at \$500,000).

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

<b>PROJECT NUMBER</b>
<b>SIF086</b>

<b>PROJECT NAME</b>
Baxter & Cottonwood (Intersection Improvements) - Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
				\$2,000,000	

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

Improve the intersection at Baxter and Cottonwood. This intersection is currently 1-way stop controlled. Replacing it with a signal or roundabout will greatly increase its capacity. East-west connectivity already exists at this location. North-south connectivity is still lacking. The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan will be attained at completion. Other affected projects include Cottonwood corridor improvements and Baxter corridor improvements.

**ALTERNATIVES CONSIDERED**

Identified in the 2007 Transportation Plan Update. Includes installation of a traffic signal, roundabout or other adequate traffic control device when warrants are met.

**ADVANTAGES OF APPROVAL**

Increased capacity and safety at this intersection.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

This project is funded by Street Impact Fees (\$2,000,000) and the Arterial & Collector District (\$500,000).

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

<b>PROJECT NUMBER</b>
<b>SIF098</b>

<b>PROJECT NAME</b>
Oak & Cottonwood (Intersection Improvements) - Roundabout Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$2,192,000				

<b>DESCRIPTION OF PROJECT</b>
Installation of a roundabout at the intersection of Oak and Cottonwood. Capacity will be greatly increased on the network as a whole as this intersection is currently 3-legged, rural and stop controlled on Cottonwood (Harper Puckett). This improvement will complete an important north-south connection on Cottonwood. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan will be attained at completion. Other affected projects include Cottonwood Road Improvements and Oak Street Improvements.

**ALTERNATIVES CONSIDERED**

Not installing the intersection improvement at the same time as the construction of the intersecting streets. Secure additional financing by creating an SID or Payback District.

**ADVANTAGES OF APPROVAL**

Increased capacity and safety at this intersection.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

This project is funded by Street Impact Fees (\$2,192,000) and a local share (\$548,000).

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

**PROJECT NUMBER**  
**SIF105**

**PROJECT NAME**  
Cottonwood (Durston to Oak) - Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$1,250,000				

**DESCRIPTION OF PROJECT**

Complete the construction of Cottonwood Road from Durston Road to Oak Street to a five-lane urban arterial standard. This project increases capacity directly by adding additional lanes, dedicated bike lanes and sidewalks. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. Cottonwood Rd serves as an important element in Bozeman's west side street system and serves as a primary north-south corridor on the west side of the city, and conformance with the Transportation Master Plan will be attained with its completion. A Payback District or SID may be created to leverage other stakeholders. Other affected projects include Cottonwood corridor street improvements, intersection improvements at Cottonwood and Durston and Cottonwood and Oak.

**ALTERNATIVES CONSIDERED**

Construct segment by segment as adjacent parcels develop.

**ADVANTAGES OF APPROVAL**

This project will expand the capacity of our street network and improve safety for drivers and pedestrians. Facilitates development currently occurring in this part of the city and network performance overall.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

The total project cost is \$2.5M. \$1.5M will come from Impact Fees, the remainder is the local share which will come from either BSD 7, an SID or Payback of some sort or some combination of these.

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

**PROJECT NUMBER**  
**SIF108**

PROJECT NAME  
S 3rd and Graf (Intersection Improvements) - Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$1,200,000					

DESCRIPTION OF PROJECT

Improve the intersection control at S 3rd and Graf. This is currently a stop controlled intersection. Installation of a roundabout will directly increase capacity. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. The Level of Service (LOS) Standard (BMC) will be attained at completion.

**ALTERNATIVES CONSIDERED**

Accept the existing level of service, create an SID for financing.

**ADVANTAGES OF APPROVAL**

Increased capacity and safety at this intersection.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

This project is funded by Street Impact Fees (\$1,200,000) and the Arterial & Collector District (\$300,000).

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

PROJECT NUMBER  
SIF109

PROJECT NAME  
Oak (Rouse through Cannery District) - Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$133,000					

DESCRIPTION OF PROJECT

This project consists of improving Oak from Rouse through the Cannery District to include curb, gutter, sidewalks, and a turning lane to provide a complete arterial street standard. The Cannery District will be responsible for the cost of curb, gutter, and sidewalk along their property frontage as well as the turn lane to access two drive accesses that allow a left turn movement from Oak Street into the Cannery District. Future developments in this area may not be allowed to proceed until these improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. Left turn traffic safety will be improved upon installation of left turn lanes. Pedestrian safety will be improved. Conformance with the Transportation Master Plan will be attained with its completion. A payback District or SID may be created to leverage other stakeholders. Cash-in-lieu of infrastructure is anticipated to be contributed from the Cannery District developer to cover the cost of the left turn lanes needed for their drive accesses as well as the cost of curb, gutter, and sidewalk adjacent to their property. Other affected projects include Oak Street Corridor improvements.

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

Increased capacity and safety in this corridor, both for motorized vehicles as well as bicycles and pedestrians. There will be substantial pedestrian traffic between the Fairgrounds and the Cannery District. Additionally, the traffic impact study for the Cannery District indicated the need for left turn lanes for their drive accesses. As the City's transportation master plan identifies the need to upgrade the Oak Street Corridor to an arterial standard, this is an opportunity to partner with the Cannery District developer to complete a portion of the Oak Street improvements.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$133,000), the Arterial & Collector District (\$133,000), and Developer share (\$133,000). A development payback district or SID may be created to reimburse the Arterial & Collector District for the County's (project related) costs.

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

PROJECT NUMBER  
SIFI 10

PROJECT NAME  
Manley & Griffin (Intersection Improvements) - Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$1,600,000				

DESCRIPTION OF PROJECT

Improve the intersection control at Manley & Griffin. This intersection is currently 1-way stop controlled. Replacing it with a signal will greatly increase its capacity. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan will be attained at completion. A Payback District or SID may be created to leverage other stakeholders. Other affected projects include Griffin corridor improvements.

#### ALTERNATIVES CONSIDERED

Accept the current LOS

#### ADVANTAGES OF APPROVAL

Increased capacity and safety at this intersection.

#### ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

#### FUNDING SOURCES

Street Impact Fees (\$1,600,000) and Arterial & Collector District (\$400,000).

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

PROJECT NUMBER  
SIF111

PROJECT NAME  
Highland (Main to Kagy) - Construction & Design

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$5,000,000

DESCRIPTION OF PROJECT

Upgrade Highland, from Main to Kagy. Future developments in this area may not be allowed to proceed until these improvements are in place. This project directly increase capacity by adding additional lanes, dedicated bike lanes and sidewalks. Connectivity already exists at this location, it is capacity that is affected. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. Conformance with the Transportation Master Plan will be attained at the completion of the project. A payback District or SID may be created to leverage other stakeholders. Other affected projects include Intersection improvements at Highland and Kagy, Highland and Ellis and Highland and Main Street.

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

Increased capacity and safety in this corridor, both for motorized vehicles as well as bicycles and pedestrians.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs

FUNDING SOURCES

This project is funded by Street Impact Fees (\$5,000,000) and the Arterial & Collector District (\$5,000,000). A payback district may be created to reimburse both funds for any local share (project related) costs that may be allocated to future developments.

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

PROJECT NUMBER  
SIFI 13

PROJECT NAME  
Griffin (7th to Rouse) - Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
		\$3,500,000			

DESCRIPTION OF PROJECT

Construct W Griffin corridor improvements from N. 7th to Rouse to an urban minor arterial standard. Designed improvements will improve LOS at the key intersections and will increase capacity in the corridor as a whole. Connectivity already exists at this location, it is capacity which is being expanded. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan will be attained at the completion of this project. A Payback District or SID may be created to leverage other stakeholders. Other affected projects include intersection improvements at Griffin and 7th and Griffin and Rouse.

ALTERNATIVES CONSIDERED

Accept the current level of service (do nothing). Alternative financing could be provided by creating an SID or Payback District.

ADVANTAGES OF APPROVAL

This project will expand the capacity of our street network and improve safety for drivers and pedestrians. Facilitates development currently occurring in this part of the city and network performance overall.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$3,500,000) and the Arterial & Collector District (\$2,000,000). A development payback district or SID may be created to reimburse Arterial & Collector District for any local share (project related) costs that may be allocated to future developments (estimated at \$2,000,000).

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

**PROJECT NUMBER**  
**SIFI 14**

**PROJECT NAME**  
Fowler Connection (Huffine to Oak) - Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
				\$3,750,000	

**DESCRIPTION OF PROJECT**

Complete the section of Fowler from Huffine to Oak. This project allows for extension of Fowler Avenue, which will directly increase capacity, and it extends an important north-south corridor on the west side of the city. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. Conformance with the Transportation Master Plan will be attained at the completion of this project. Other affected projects include intersection improvements on Fowler at Huffine, Babcock, Durston and Oak.

**ALTERNATIVES CONSIDERED**

Wait for adjacent development to occur and construct the road incrementally.

**ADVANTAGES OF APPROVAL**

Completes an important north-south link in the transportation network which reduces demand on other adjacent corridors.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

This project is funded by Street Impact Fees (\$3,750,000) and the Arterial & Collector District (\$3,750,000). A Payback District or SID may be created to reimburse the Arterial & Collector District for any local improvements.

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

**PROJECT NUMBER**  
**SIFI 16**

**PROJECT NAME**  
Bridger Dr & Story Mill Rd (Intersection Improvements) - Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
		\$1,200,000			

**DESCRIPTION OF PROJECT**

Improve the intersection control at Bridger and Story Mill. Adding additional phases and improving geometry will increase capacity for deficient movements at this intersection. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. Conformance with the Transportation Master Plan will be attained at completion. Other affected projects include Story Mill, Griffin to Bridger Drive.

**ALTERNATIVES CONSIDERED**

Accept the current LOS

**ADVANTAGES OF APPROVAL**

Increased capacity and safety at this intersection.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

This project is funded by Street Impact Fees (\$1,200,000) and the Arterial & Collector District (\$300,000). An SID or payback district may be created to recover the local share.

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

**PROJECT NUMBER**  
**SIFI 17**

**PROJECT NAME**  
Story Mill (Griffin to Bridger) - Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
		\$250,000			

**DESCRIPTION OF PROJECT**

Improve Story Mill from Griffin to Bridger. This project directly increases capacity by adding additional travel lanes, dedicated bike lanes and sidewalks. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. Conformance with the Transportation Master Plan will be attained at the completion of this project. A Payback District or SID may be created to leverage other stakeholders. Other affected projects include intersection improvements to Story Mill and Bridger Drive.

**ALTERNATIVES CONSIDERED**

Wait for adjacent development to occur and construct the road incrementally.

**ADVANTAGES OF APPROVAL**

Improves an important north-south link in the transportation network which reduces demand on other adjacent corridors.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

This project is funded by Street Impact Fees (\$250,000) and the Arterial & Collector District (\$250,000). An SID or payback district may be created to recover the local share.

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

**PROJECT NUMBER**  
**SIFI 18**

**PROJECT NAME**  
Babcock (11th Ave to 19th Ave) - Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$750,000

**DESCRIPTION OF PROJECT**

Construct the Babcock (11th to 19th) street upgrade. This project increases capacity directly by adding additional lanes, dedicated bike lanes and sidewalks. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. Conformance with the Transportation Master Plan will be attained at the completion of this project. A Payback District or SID may be created to leverage other stakeholders.

**ALTERNATIVES CONSIDERED**

Wait for adjacent development to install the improvements section by section.

**ADVANTAGES OF APPROVAL**

Allows for improvements to be made to the corridor at a time more favorable to the City

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

This project is funded by Street Impact Fees (\$750,000) and the Arterial & Collector District (\$750,000). An SID or payback district may be created to pay for some local share improvements.

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

<b>PROJECT NUMBER</b>
<b>SIFI 18</b>

<b>PROJECT NAME</b>						
Babcock (11th Ave to 19th Ave) - Design						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$250,000

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

Design the Babcock (11th to 19th) street upgrade. This project increases capacity directly by adding additional lanes, dedicated bike lanes and sidewalks. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. Conformance with the Transportation Master Plan will be attained at the completion of this project. A Payback District or SID may be created to leverage other stakeholders.

**ALTERNATIVES CONSIDERED**

Wait for adjacent development to install the improvements section by section.

**ADVANTAGES OF APPROVAL**

Allows for improvements to be made to the corridor at a time more favorable to the City

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

100% Street Impact Fees. A payback district may be able to reimburse for design costs.

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

**PROJECT NUMBER**  
**SIF121**

**PROJECT NAME**  
Baxter & Davis (Intersection Improvements) - Roundabout Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$2,000,000					

**DESCRIPTION OF PROJECT**

Install a roundabout at Baxter & Davis. This intersection is currently 4-way stop controlled. Replacing it with a roundabout will greatly increase its capacity. Future developments in this area may not be allowed to proceed until these improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. Conformance with the Transportation Master Plan and Level of Service Standard will be attained at completion. Other affected projects include Baxter Lane Corridor Improvements.

**ALTERNATIVES CONSIDERED**

**ADVANTAGES OF APPROVAL**

This project will expand the capacity of our street network, improve safety for drivers and pedestrians and increase capacity at this intersection. Facilitates development currently occurring in this part of the city and network performance overall.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

This project is funded by Street Impact Fees (\$2,000,000) and the Arterial & Collector District (\$500,000).

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

**PROJECT NUMBER**  
**SIF123**

PROJECT NAME  
Bridger Dr & Story Mill Rd (Intersection Improvements) - Design

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$100,000				

DESCRIPTION OF PROJECT

Design of Intersection improvements at the intersection of Story Mill and Bridger Drive.

ALTERNATIVES CONSIDERED

Accept the current LOS

ADVANTAGES OF APPROVAL

Increased capacity at this intersection. Facilitate development already occurring in this area

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

NA

FUNDING SOURCES

NA

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

**PROJECT NUMBER**  
**SIF127**

PROJECT NAME  
Fowler Right of Way Purchase

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$1,000,000

DESCRIPTION OF PROJECT

Purchase the right of way on Fowler (Durstun to Annie). This purchase allows for extension of Fowler Avenue, which will directly increase capacity, and it extends an important north-south corridor on the west side of the City. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. Other affected projects include Fowler corridor improvements.

ALTERNATIVES CONSIDERED

Do nothing, wait for adjacent development to dedicate the R/W

ADVANTAGES OF APPROVAL

Allows for improvements to be made to the corridor at a time more favorable to the City.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED  
NA

FUNDING SOURCES

100% Street Impact Fees

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

**PROJECT NUMBER**  
**SIF128**

**PROJECT NAME**  
Kagy (Willson to Highland) - Design

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$500,000

**DESCRIPTION OF PROJECT**

Design Kagy, from Willson to Highland, including the intersections at Sourdough & Kagy and Highland & Kagy. This project increases capacity directly by adding additional lanes, dedicated bike lanes and sidewalks and by improving intersection LOS. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. A Payback District or SID may be created to leverage other stakeholders. Other affected projects include intersections at Sourdough/Church and Highland.

**ALTERNATIVES CONSIDERED**

Wait for adjacent development to install the improvements section by section.

**ADVANTAGES OF APPROVAL**

This project will expand the capacity of our street network and improve safety for drivers and pedestrians. Facilitates development currently occurring in this part of the city and network performance overall.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

None

**FUNDING SOURCES**

Design is 100% impact fee eligible.

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

**PROJECT NUMBER**  
**SIF129**

**PROJECT NAME**  
Kagy (Willson to Highland) - Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$6,000,000

**DESCRIPTION OF PROJECT**

Complete Kagy, from Willson to Highland, including the intersections at Sourdough & Kagy and Highland & Kagy. This project increases capacity directly by adding additional lanes, dedicated bike lanes and sidewalks and by improving intersection LOS. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan will be attained at completion. A Payback District or SID may be created to leverage other stakeholders. Other affected projects include intersections at Sourdough/Church and Highland.

**ALTERNATIVES CONSIDERED**

Wait for adjacent development to install the improvements section by section.

**ADVANTAGES OF APPROVAL**

This project will expand the capacity of our street network and improve safety for drivers and pedestrians. Facilitates development currently occurring in this part of the city and network performance overall.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

This project is eligible for Urban funds. A payback district or SID could be created to recover a portion of the local share.

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

**PROJECT NUMBER**  
**SIF132**

PROJECT NAME  
Story Mill (Griffin to Bridger) - Design

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$50,000				

DESCRIPTION OF PROJECT

Story Mill design from Griffin to Bridger. This project directly increases capacity by adding additional travel lanes, dedicated bike lanes and sidewalks. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. Conformance with the Transportation Master Plan will be attained at completion. A Payback District or SID may be created to leverage other stakeholders. Other affected projects include intersection improvements to Story Mill and Bridger Drive.

ALTERNATIVES CONSIDERED

Wait for adjacent development to occur and construct the road incrementally.

ADVANTAGES OF APPROVAL

Improves an important north-south link in the transportation network which reduces demand on other adjacent corridors.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED  
NA

FUNDING SOURCES

Design is 100% impact fee eligible.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Impact Fees Streets

Street Impact Fees

SIF133

PROJECT NAME

Griffin (7th to Rouse) - Design

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$400,000

DESCRIPTION OF PROJECT

Design W Griffin corridor improvements from N. 7th to Rouse to an urban minor arterial standard. Designed improvements will improve LOS at the key intersections and will increase capacity in the corridor as a whole. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan will be attained at completion. A Payback District or SID may be created to leverage other stakeholders. Other affected projects include intersection improvements at Griffin and 7th and Griffin and Rouse.

#### ALTERNATIVES CONSIDERED

Accept the current level of service (do nothing). Alternative financing could be provided by creating an SID or Payback District.

#### ADVANTAGES OF APPROVAL

This project will expand the capacity of our street network and improve safety for drivers and pedestrians. Facilitates development currently occurring in this part of the city and network performance overall.

#### ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

#### FUNDING SOURCES

Design is 100% impact fee eligible.

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

**PROJECT NUMBER**  
**SIF134**

**PROJECT NAME**  
Oak (Cottonwood to Flanders Mill) - Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$434,000				

**DESCRIPTION OF PROJECT**

This project is the completion of the street segment of Oak St, from Cottonwood to Flanders Mill, to a five-lane urban principal arterial standard. This project increases capacity directly by constructing new segments of arterial roadway and by adding additional lanes, dedicated bike lanes and sidewalks, and it completes an important east-west link between Ferguson and Cottonwood. Future developments in this area may not be allowed to proceed until these improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. Conformance with the Transportation Master Plan will be attained at completion. A payback District or SID may be created to leverage other stakeholders. Other affected projects include intersection improvements at Oak and Cottonwood, Oak and Flanders Mill, Oak and Ferguson, Oak Street New Holland to Ferguson.

**ALTERNATIVES CONSIDERED**

Construct segment by segment as adjacent parcels develop.

**ADVANTAGES OF APPROVAL**

Increased capacity, connectivity and safety in this corridor, both for motorized vehicles as well as bicycles and pedestrians.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

This project is funded by Street Impact Fees (\$434,000) and \$430,000 for the local share adjacent to the City park, and an additional \$430,000 from School District #7.

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

<b>PROJECT NUMBER</b>
<b>SIF136</b>

<b>PROJECT NAME</b>						
Babcock Widening Ferguson to Cottonwood						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$900,000

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

Widen Babcock to a 3-lane collector standard per the section defined in the 2017 Transportation Master Plan.

**ALTERNATIVES CONSIDERED**

Developer funded street expansion per the former streets policy where the developers on the south side of Babcock will upgrade the street as development proceeds.

**ADVANTAGES OF APPROVAL**

Coordinate upgrade of the entire street segment with development along the south side of Babcock and use a payback district to recover costs from development.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

The street already exists, and the street will be widened to add a center turn lane. Therefore additional striping and pavement maintenance will be required for approximately 2,600 feet.

**FUNDING SOURCES**

Development funded improvement of the southern half of the street per the former streets policy under which the northern half of the street improvement was constructed.

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

**PROJECT NUMBER**  
**SIF137**

PROJECT NAME  
Cottonwood (Durstun to Oak) - Design

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$250,000					

DESCRIPTION OF PROJECT

Design of 5 lane arterial in FY 19 to allow construction in FY20

**ALTERNATIVES CONSIDERED**

Construct segment by segment as adjacent parcels develop

**ADVANTAGES OF APPROVAL**

This project will expand the capacity of our street network and improve safety for drivers and pedestrians. Facilitates development currently occurring in this part of the city as well as network performance overall.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

NA

**FUNDING SOURCES**

NA

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

<b>PROJECT NUMBER</b>
<b>SIF138</b>

<b>PROJECT NAME</b>						
Cottonwood Road, Oak to Baxter - Construction						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
				\$500,000	

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

Construction of a 5 lane Principal Arterial Street

**ALTERNATIVES CONSIDERED**

SID, Payback District, TOPS, incremental construction by adjacent developers.

**ADVANTAGES OF APPROVAL**

The project will expand the capacity and improve the connectivity of the city street network. It will improve safety for drivers and pedestrians and improve access to the Sports Park. It will facilitate development currently occurring in this part of the City.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating and Maintenance costs: Incremental increases in sweeping, plowing and general maintenance costs.

**FUNDING SOURCES**

The total project cost is \$2.5M. \$750K will come from Impact Fees, the remainder is the local share which will come from either TOPS money, BSD 7 an SID or Payback of some sort or some combination of these.

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

<b>PROJECT NUMBER</b>
<b>SIF139</b>

<b>PROJECT NAME</b>						
Oak (Flanders Mill to Ryun Sun Way) - Design						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$150,000					

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

Design of 5 lane arterial in FY 19 to allow construction in FY20.

**ALTERNATIVES CONSIDERED**

Construct segment by segment as adjacent parcels develop.

**ADVANTAGES OF APPROVAL**

This project will expand the capacity of our street network and improve safety for drivers and pedestrians. Facilitates development currently occurring in this part of the city as well as network performance overall.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

NA

**FUNDING SOURCES**

NA

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

**PROJECT NUMBER**  
**SIFI 40**

**PROJECT NAME**  
Oak (Cottonwood to Flanders Mill) - Design

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$180,000					

**DESCRIPTION OF PROJECT**

This project is to design the street segment of Oak St, from Cottonwood to Flanders Mill, to a five-lane urban principal arterial standard. This project increases capacity directly by constructing new segments of arterial roadway and by adding additional lanes, dedicated bike lanes and sidewalks. Future developments in this area may not be allowed to proceed until these improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. This project completes an important east-west link between Ferguson and Cottonwood, and conformance with the Transportation Master Plan will be attained. A payback District or SID may be created to leverage other stakeholders. Other affected projects include intersection improvements at Oak and Cottonwood, Oak and Flanders Mill, Oak and Ferguson, Oak Street New Holland to Ferguson.

**ALTERNATIVES CONSIDERED**

Construct segment by segment as adjacent parcels develop.

**ADVANTAGES OF APPROVAL**

Increased capacity, connectivity and safety in this corridor, both for motorized vehicles as well as bicycles and pedestrians.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**  
NA

**FUNDING SOURCES**  
NA

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

**PROJECT NUMBER**  
**SIF141**

PROJECT NAME  
Cottonwood Road, Oak to Baxter - Design

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$250,000					

DESCRIPTION OF PROJECT  
Design a 5 lane Principal Arterial Street

**ALTERNATIVES CONSIDERED**

SID, Payback District, TOPS, incremental construction by adjacent developers.

**ADVANTAGES OF APPROVAL**

The project will expand the capacity and improve the connectivity of the city street network. It will improve safety for drivers and pedestrians and improve access to the Sports Park. It will facilitate development currently occurring in this part of the City.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

NA

**FUNDING SOURCES**

NA

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

<b>PROJECT NUMBER</b>
<b>SIF142</b>

<b>PROJECT NAME</b>						
Durston Road & N. 27th (Intersection Improvements) - Construction						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$1,200,000

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

Installation of a roundabout or signal at the intersection of Durston Road and N. 27th

**ALTERNATIVES CONSIDERED**

Accept the current level of service

**ADVANTAGES OF APPROVAL**

Increased capacity at this intersection.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Incremental increases in sweeping, plowing, painting and general maintenance costs

**FUNDING SOURCES**

Arterial and Collector funds

CIP Project Fund  
Impact Fees Streets

DEPARTMENT  
Street Impact Fees

<b>PROJECT NUMBER</b>
<b>SIFI43</b>

<b>PROJECT NAME</b>						
Baxter & Cottonwood Intersection - Right of Way						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
				\$750,000	

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

Purchase of the right of way necessary for the construction of the Baxter & Cottonwood intersection improvements

**ALTERNATIVES CONSIDERED**

Do not construct intersection until ROW obtained

**ADVANTAGES OF APPROVAL**

This project will allow an intersection to built

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

N/A

**FUNDING SOURCES**

100% Street Impact Fees

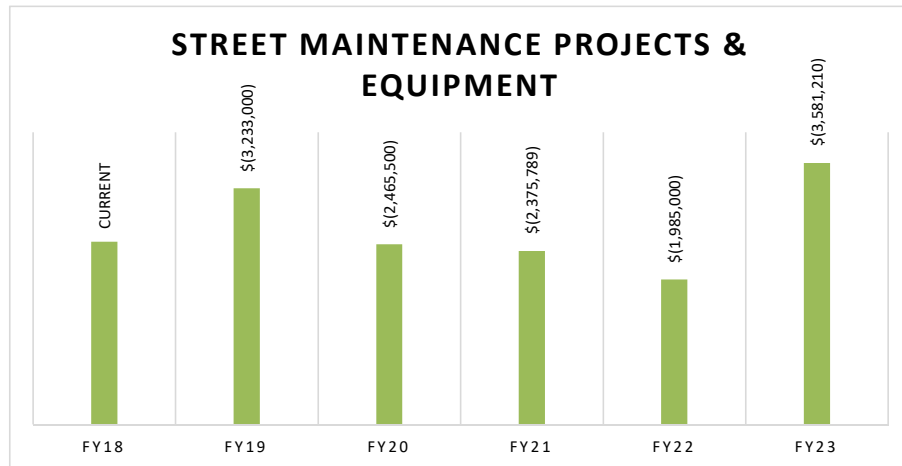


**Street Maintenance District  
Capital Improvement Plan**

Financial Summary	Current Year	Projected					Unscheduled
	FY18	FY19	FY20	FY21	FY22	FY23	
Projected Beginning Reserve Balance Dedicated to CIP	\$ 170,039	\$ 522,802	\$ 377,163	\$ (466,738)	\$ (509,234)	\$ (427,437)	
Plus: Street Mtc Revenues Dedicated to CIP	\$ 1,773,500	\$ 1,661,961	\$ 1,695,200	\$ 1,729,104	\$ 1,763,686	\$ 1,798,960	\$ -
Plus: Gas Tax	\$ 693,936	\$ 693,900	\$ 693,900	\$ 693,900	\$ 693,900	\$ 693,900	
Less: Carryover FY17 Capital Projects	\$ (452,673)						
Less: Scheduled CIP Project Costs	\$ (1,662,000)	\$ (2,501,500)	\$ (3,233,000)	\$ (2,465,500)	\$ (2,375,789)	\$ (1,985,000)	\$ (3,581,210)
Projected Year-End Cash Dedicated to CIP	\$ 522,802	\$ 377,163	\$ (466,738)	\$ (509,234)	\$ (427,437)	\$ 80,423	

Assumptions are made for Revenue Estimates

	Current Year	Projected				
	FY18	FY19	FY20	FY21	FY22	FY23
Estimated Undesignated Annual Street Mtc Revenues	\$ 4,547,436	\$ 4,177,880	\$ 4,261,437	\$ 4,346,666	\$ 4,433,599	\$ 4,522,271
Estimated Annual Increase - Attributed to Annexations		2%	2%	2%	2%	2%
Annual Increase in Pavement Maintenance		0%	0%	0%	0%	0%
Total Estimated Revenues	\$ 4,547,436	\$ 4,261,437	\$ 4,346,666	\$ 4,433,599	\$ 4,522,271	\$ 4,612,717
Current Revenues Dedicated to CIP %	30.0%	39.0%	39.0%	39.0%	39.0%	39.0%
Plus: Increase Dedicated to CIP	9.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total % Dedicated to CIP	39.0%	39.0%	39.0%	39.0%	39.0%	39.0%
Total Estimated Revenues Dedicated to CIP	\$ 1,773,500	\$ 1,661,961	\$ 1,695,200	\$ 1,729,104	\$ 1,763,686	\$ 1,798,960



CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
Street Maintenance Fund									
	STR71-19	Engineering	STREET IMPROVEMENTS - MAINTENANCE & REHABILITATION (MILL & OVERLAY) - FY19	\$554,500					
	STR71-20	Engineering	STREET IMPROVEMENTS - MAINTENANCE & REHABILITATION (MILL & OVERLAY) - FY20		\$986,000				
	STR71-21	Engineering	STREET IMPROVEMENTS - MAINTENANCE & REHABILITATION (MILL & OVERLAY) - FY21			\$964,000			
	STR71-22	Engineering	STREET IMPROVEMENTS - MAINTENANCE & REHABILITATION (MILL & OVERLAY) - FY22				\$913,329		
	STR71-23	Engineering	STREET IMPROVEMENTS - MAINTENANCE & REHABILITATION (MILL & OVERLAY) - FY23					\$1,014,000	
	STR72-19	Engineering	STREET IMPROVEMENTS - MAINTENANCE & REHABILITATION (CHIP SEAL) - FY19	\$827,000					
	STR72-20	Engineering	STREET IMPROVEMENTS - MAINTENANCE & REHABILITATION (CHIP SEAL) - FY20		\$913,000				
	STR72-21	Engineering	STREET IMPROVEMENTS - MAINTENANCE & REHABILITATION (CHIP SEAL) - FY21			\$902,500			
	STR72-22	Engineering	STREET IMPROVEMENTS - MAINTENANCE & REHABILITATION (CHIP SEAL) - FY22				\$727,460		
	STR72-23	Engineering	STREET IMPROVEMENTS - MAINTENANCE & REHABILITATION (CHIP SEAL) - FY23					\$316,000	
	STR75	Engineering	ANNUAL PEDESTRIAN RAMP REPLACEMENT PROGRAM	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	
	STR76	Engineering	DOWNTOWN BOZEMAN CREEK CULVERT ASSESSMENT	\$15,000					
	STR77	Engineering	OAK AND 7TH INTERSECTION UPGRADE	\$60,000					
<i>Totals by DEPARTMENT</i>				\$1,556,500	\$1,999,000	\$1,966,500	\$1,740,789	\$1,430,000	

Street Maintenance Fund

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
	PW05	Public Works	PUBLIC WORKS SHOPS MASTER PLAN	\$20,000					
	PW06	Public Works	PUBLIC WORKS SHOPS FACILITY CONSTRUCTION		\$670,000				
	STR53	Public Works	MENDENHALL & BABCOCK STREETScape						\$2,076,210
<i>Totals by DEPARTMENT</i>				\$20,000	\$670,000				\$2,076,210
Street Maintenance Fund									
	STR68	Signs & Signals	RECTANGULAR RAPID FLASHING BEACON	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	
	STR78	Signs & Signals	REPLACE #2748 - 1999 SERVICE TRUCK WITH A MID SIZE PICK UP.					\$35,000	
	STR79	Signs & Signals	SIGN MAKING MACHINE	\$60,000					
	STR80	Signs & Signals	UTILITY TERRAIN VEHICLE	\$55,000					
<i>Totals by DEPARTMENT</i>				\$125,000	\$10,000	\$10,000	\$10,000	\$45,000	
Street Maintenance Fund									
	STR01	Street Operatio	REPLACE #1539 - 2WD 1990 FORD RANGER	\$16,000					
	STR01	Street Operations	REPLACE #2749 - 1997 FORD 1 TON MANUAL TRANSMISSION F350	\$45,000					
	STR20	Street Operatio	ANNUAL BIKE PATH IMPROVEMENTS	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	
	STR22	Street Operatio	GRADER LEASE	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	
	STR30	Street Operations	ANNUAL MEDIAN & BOULEVARD MAINTENANCE	\$55,000	\$60,000	\$65,000	\$70,000	\$75,000	
	STR34	Street Operatio	SWEEPERS	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	
	STR35	Street Operatio	REGENERATIVE AIR SWEEPER						\$250,000
	STR40	Street Operatio	DUMP TRUCK WITH PLOW & SANDER - 2			\$200,000		\$210,000	
	STR49	Street Operatio	SANDERS	\$27,000	\$27,000	\$27,000	\$27,000	\$27,000	
	STR50	Street Operatio	PLOWS	\$12,000	\$12,000	\$12,000	\$13,000	\$13,000	
	STR58	Street Operations	TANDEM AXLE DUMP TRUCK WITH PLOW & SANDER				\$250,000		

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
	STR63	Street Operatio	REPLACE SIGNAL AT BABCOCK & WILSON						\$750,000
	STR73	Street Operatio	REPLACE SKID STEER		\$90,000				
	STR74	Street Operatio	PAINT TRUCK						\$225,000
	STR81	Street Operatio	BRINE MAKING MACHINE WITH BUILDING						\$200,000
	STR82	Street Operatio	MOTOR GRADER LEASE PAYOFF	\$170,000					
	STR83	Street Operations	N. 27TH MEDIAN LANDSCAPING AND IRRIGATION FROM OAK TO BAXTER	\$40,000					
	STR84	Street Operatio	PLUG IN ELECTRIC WORK TRUCK.				\$60,000		
	STR85	Street Operatio	REPLACE 1992 WHEEL LOADER		\$180,000				
	STR86	Street Operations	S. 27TH MEDIAN LANDSCAPING AND IRRIGATION FROM KURK TO BLACKWOOD.				\$20,000		
	STR87	Street Operations	SPOT PROJECTS AS RECOMMENDED BY THE BOZEMAN AREA BICYCLE ADVISORY BOARD (BABAB).						\$50,000
	STR88	Street Operations	SPOT PROJECTS AS RECOMMENDED BY THE PEDESTRIAN TRAFFIC AND SAFETY COMMITTEE.						\$30,000
	STR89	Street Operatio	SPRAY PATCH TRUCK	\$250,000					
<i>Totals by DEPARTMENT</i>				\$800,000	\$554,000	\$489,000	\$625,000	\$510,000	\$1,505,000

<i>Summary for Street Maintenance Fund (43 items)</i>	<i>FY19</i>	<i>FY20</i>	<i>FY21</i>	<i>FY22</i>	<i>FY23</i>	<i>Unscheduled</i>
<i>Totals by year:</i>	\$2,501,500	\$3,233,000	\$2,465,500	\$2,375,789	\$1,985,000	\$3,581,210

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Public Works

PROJECT NUMBER  
PW05

PROJECT NAME  
Public Works Shops Master Plan

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$20,000					

DESCRIPTION OF PROJECT

Develop a long term master plan for Public Works shop facilities, equipment, and personnel. This includes conducting a needs assessment of space for existing and future employees, equipment, machinery, and rolling stock. There is a severe shortage of enclosed storage for equipment, vehicles, and machinery, resulting in extra wear and tear, additional maintenance costs, and time preparing the equipment on cold mornings. Additionally, there is a lack of space available for existing as well as future staff. This will be split three ways between water (\$20,000), wastewater (\$20,000), and streets (\$20,000).

ALTERNATIVES CONSIDERED

Continue using existing infrastructure.

ADVANTAGES OF APPROVAL

Provide an accurate analysis of the City of Bozeman Public Works space needs for both equipment as well as people.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Depending on the results of the plan, the likely result will be the construction of additional storage and office space.

FUNDING SOURCES

This project will be split 3 ways between Water Fund (\$20,000), Wastewater Fund (\$20,000), and Street Maintenance Fund (\$20,000)

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Public Works

**PROJECT NUMBER**  
**PW06**

**PROJECT NAME**  
Public Works Shops Facility Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$670,000				

**DESCRIPTION OF PROJECT**

Construct additional facilities recommended in the result of the Public Works Shops Master Plan. This will be split three ways between water (\$670,000), wastewater (\$670,000), and streets (\$670,000).

**ALTERNATIVES CONSIDERED**

Continue using existing infrastructure.

**ADVANTAGES OF APPROVAL**

The construction of a new Public Works facility will provide indoor storage for millions of dollars of equipment, machinery, vehicles, etc. This will both reduce wear and tear and maintenance costs, as well as reduce time spent on preparing equipment on cold mornings.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Normal building maintenance and utility costs.

**FUNDING SOURCES**

This project will be split 3 ways between Water Fund (\$670,000), Wastewater Fund (\$670,000), and Street Maintenance Fund (\$670,000)

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Street Operations

**PROJECT NUMBER**  
**STR01**

**PROJECT NAME**  
Replace #2749 - 1997 Ford 1 Ton Manual Transmission F350

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$45,000					

**DESCRIPTION OF PROJECT**

Replace #2749 - 1997 Ford 1 Ton Manual Transmission F350. Setting up and mobilizing to the job site is done with this truck and a trailer. Being able to leave the truck hooked up to the trailer during the project helps with transporting and also utilizing the smallest work area in neighborhoods. Single pieces of equipment scattered over blocks in the core not only inconveniences the residents where we are working but affects the surrounding blocks as well. Without this truck operating reliably, we have to drive equipment to the site which can take a paver or skid steer more than an hour to travel through town.

**ALTERNATIVES CONSIDERED**

Run to failure.

**ADVANTAGES OF APPROVAL**

A much more useable year round truck. Better fuel mileage and lower emissions. We are spending about \$.90 per mile on maintenance and repairs. A new vehicle spends about \$.05 per mile on M&R. Anytime M&R exceed \$.50 per mile, it is time to consider removing the truck from the fleet.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Normal routine maintenance.

**FUNDING SOURCES**

100% Street Maintenance District Revenue

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Street Operations

**PROJECT NUMBER**  
**STR01**

**PROJECT NAME**  
Replace #1539 - 2WD 1990 Ford Ranger

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$16,000					

**DESCRIPTION OF PROJECT**

Replace #1539 - 2WD 1990 Ford Ranger with Hybrid Sedan. We would buy one of the Public Works lease hybrids. Their lease ends in. Currently when we need to do inspections, inventories, GIS, training trips or take several people on route training, we use several vehicles or make several trips. A hybrid sedan to replace the truck would be much more useful. This vehicle will be able to carry up to 4 people at a time, and would be available to other departments as needed.

**ALTERNATIVES CONSIDERED**

Run to failure.

**ADVANTAGES OF APPROVAL**

A much more useable year round vehicle. Better fuel mileage and lower emissions.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Normal routine maintenance.

**FUNDING SOURCES**

100% Street Maintenance District Revenue

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Street Operations

**PROJECT NUMBER**  
**STR20**

**PROJECT NAME**  
Annual Bike Path Improvements

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	

**DESCRIPTION OF PROJECT**

This item would provide for bike-related infrastructure including (but, not limited to) racks, signs, striping, curb-cuts, and separated pathways. The Greater Bozeman Area Transportation Plan (2007 Update) Section 5.4 Recommended Bicycle Facility Improvements outlines many facilities. The Bozeman Area Bicycle Advisory Board (BABAB) gave the City their top 2 priorities: They are listed with City Engineering cost estimates: North 11th Ave - Mendenhall to Durston, \$14,500; Willson Ave - Main Street to Kagy Blvd, \$54,300. This money can be combined with street re-surfacing projects.

**ALTERNATIVES CONSIDERED**

Continue with existing infrastructure.

**ADVANTAGES OF APPROVAL**

Safety will likely be improved.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

No additional operating costs.

**FUNDING SOURCES**

100% Street Maintenance Fund

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Street Operations

**PROJECT NUMBER**  
**STR22**

PROJECT NAME  
Grader Lease

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	

**DESCRIPTION OF PROJECT**

This is a request to establish at a minimum a 20 year replacement schedule for our graders. Currently our fleet is comprised of a 1994, 1998, 2003, 2007, and 2014. Grading the residential streets is critical to safe travel of our citizens. Pulling the snow out from the curb so it can be blown into trucks and hauled away is important to parking in the downtown and other business areas. These graders will be all-wheel drive, which increases our productivity. Newer equipment has fewer breakdowns and better fuel economy which means less time in the shop and fueling during a shift. The old grader would be traded in or auctioned.

**ALTERNATIVES CONSIDERED**

Budget 250k every 5 years to purchase. Cut back on our use of graders in the residential areas. Continue to use what we have and replace when we have complete failure.

**ADVANTAGES OF APPROVAL**

Much more reliable and fuel efficient equipment.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Decrease in costs due to newer equipment.

**FUNDING SOURCES**

100% Street Maintenance Revenue

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Street Operations

<b>PROJECT NUMBER</b>
<b>STR30</b>

<b>PROJECT NAME</b>						
Annual Median & Boulevard Maintenance						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$55,000	\$60,000	\$65,000	\$70,000	\$75,000	

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

This provides funding for the annual maintenance of Bozeman’s medians. This includes sprinkler installation and maintenance, landscaping, mowing, and general maintenance of Bozeman’s medians and boulevards. Annual increases are due to expected growth.

**ALTERNATIVES CONSIDERED**

None.

**ADVANTAGES OF APPROVAL**

Making our currently unmaintained medians into weed free low maintenance show pieces. We are partnering internally with the Water Conservation Manager and externally with MSU to design and install low water easily maintained medians. Also contract out the maintenance on our established medians.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

None. Lower water use means lower utility costs.

**FUNDING SOURCES**

100% Street Maintenance District Revenue

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Street Operations

PROJECT NUMBER  
STR34

PROJECT NAME  
Sweepers

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	

DESCRIPTION OF PROJECT

This is for leasing or purchasing sweepers through the MACI (Montana Air and Congestion Initiative) equipment purchase program. These are mechanical sweepers that if necessary can be operated without using water. The next sweeper we would replace is our 2005 model with 59,000 miles and 9372 hours. It is scheduled for an elevator replacement next year and we would like to replace rather than repair at a cost of \$15,000. Industry standards show it is best to replace municipal sweepers at 5 years. We are able to get about 10 years due to our excellent maintenance program. The City's MS4 Stormwater Permitting requires sweeping up sand and dirt before it can enter waterways. Clean streets/ bike lanes are a quality of life issue. We are required to meet the goal of sweeping all local streets twice per year, monthly sweeping of all arterial and collector roadways and weekly sweeping of Main Street, most bike lanes weekly during the summer. Heavy development activity requires additional sweeping in construction areas. Sweepers are very high maintenance as they age. Leases terms for sweepers are a maximum of 5 years due to life expectancy. We are currently in the 3rd year of one lease. This additional sweeper lease would replace our oldest sweeper a 2006. We submit every year to the Montana Department of Transportation's (MDT) Montana Air and Congestion Initiative (MACI) equipment purchase program for sweepers. With this program, MACI pays for 87% and we pay 13% for a sweeper. If we are chosen, we would use our lease payment to fund our share of the cost which would be ~\$34,000.

ALTERNATIVES CONSIDERED

Budget 250k every year until all sweepers are replaced. Cut back on our sweeping There are no local contractors at this time. Continue to use what we have.

ADVANTAGES OF APPROVAL

Much improved operations. Better air quality. Improved storm water discharge.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None.

FUNDING SOURCES

100% Street Maintenance District Revenue

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Street Operations

<b>PROJECT NUMBER</b>
<b>STR35</b>

<b>PROJECT NAME</b>						
Regenerative Air Sweeper						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$250,000

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

We have had demonstrations of these sweepers and their ability to get the fine particles off of the pavement is noticeable. As air quality and Stormwater discharge regulations tighten, we may be forced to use regenerative type sweepers or at the very least have one in our fleet to do the final sweeping pass to get the <1 micron particles that can become airborne. Rather than make several passes with our mechanical sweepers, an RA sweeper could get it done in one pass. The one drawback is that RA sweepers cannot be used below freezing. They need water at all times.

**ALTERNATIVES CONSIDERED**

Only use mechanical sweepers which discharge dust when sweeping.

**ADVANTAGES OF APPROVAL**

We could improve our discharge into the storm water system. Spring sweeping of the winter sand would generate less dust therefore eliminating complaints from citizens and DEQ.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Normal sweeper maintenance costs.

**FUNDING SOURCES**

100% Street Maintenance District

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Street Operations

**PROJECT NUMBER**  
**STR40**

**PROJECT NAME**  
Dump Truck With Plow & Sander - 2

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
		\$200,000		\$210,000	

**DESCRIPTION OF PROJECT**

The 1990 Dump truck will be 28 years old with 82,000 in town miles and over 10,000 hours. Parts have been discontinued. We have had to patch the leaking gas tank because a replacement is not available. When the other rusted spots start leaking we will be forced to park the truck. The motor is so tired that we are removing the plow this winter because it doesn't have the power to plow and sand uphill. We average about \$1,200 per year in repairs and maintenance. The running and floor boards are rusted through but we are able to cover them with old mud flaps to make it drivable. Parts availability will be what stops this truck. Single axle dump trucks are used on smaller projects in the summer including alley maintenance, asphalt patching and debris pickup. In the winter these trucks are the only equipment we can safely and efficiently plow the narrow streets. We are able to haul snow in tight quarters also. Additionally, the 1990 underpowered gasoline engine dump truck that averages about 3 MPG when used for plowing operations. The FY21 request will replace a 1993 underpowered gasoline engine dump truck. The new truck could be fueled with alternative fuels such as Biodiesel. Estimates show that the 1990 spews over 30 tons of CO2 into the air per year and by removing this from our fleet will help us reach our goal of reducing municipal greenhouse emissions 15% below 2000 levels by 2020. This truck will also be available for use by other departments.

**ALTERNATIVES CONSIDERED**

Continue with 1993 model.

**ADVANTAGES OF APPROVAL**

Efficiency, less emissions, safety, fuel savings and more reliable equipment.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Less than current model.

**FUNDING SOURCES**

100% Street Maintenance District Revenue

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Street Operations

**PROJECT NUMBER**  
**STR49**

**PROJECT NAME**  
Sanders

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$27,000	\$27,000	\$27,000	\$27,000	\$27,000	

**DESCRIPTION OF PROJECT**

Sanders are used in a very corrosive and abrasive environments. We rebuild the conveyor and hydraulic system in the first 4 years. If we don't have a catastrophic failure in the next 2-3 years, the V box and structural components start to fail in the 7th year. By replacing the sander every 8 years (we now have 8 sanders), we can avoid having a season ending failure. Sanders are about 6 months out when ordering so we would never get a new one in the same season that we needed a replacement. We have two different sizes so we could run them until they fail during a major storm and then have one of each size sitting here. The problem with that is the new sanders would be aging without being used. Using this method we could have two failures in one year and be short one sander. If we can't put down sand or deicer during the winter, we fail to service our citizens. Not being able to control the quantity, means we are either putting down too much or too little product. Too much sand and we increase our spring sweeping and too little sand and the crashes increase.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

More reliable sanders. Less failures in the middle of a storm.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Decrease in maintenance costs.

**FUNDING SOURCES**

100% Street Maintenance District Revenue

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Street Operations

**PROJECT NUMBER**  
**STR50**

PROJECT NAME  
Plows

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$12,000	\$12,000	\$12,000	\$13,000	\$13,000	

**DESCRIPTION OF PROJECT**

This is to replace the worn plow blades. With as much as a 90 day delivery time to replace a plow, it is important to replace them before they fail. When the moldboard of the plow gets bent after several years of use, it is very difficult to bolt on a replacement cutting edge. If they are not tight to the cutting edge surface they face early failure and require replacement at inopportune times. We have 7 large plows so they will be on a 7 year replacement schedule.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

A much more efficient plow operation. Less time spent replacing cutting edges that prematurely break.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

None

**FUNDING SOURCES**

100% Street Maintenance District Revenue

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Public Works

<b>PROJECT NUMBER</b>
<b>STR53</b>

<b>PROJECT NAME</b>						
Mendenhall & Babcock Streetscape						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$2,076,210

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

Conduct Streetscape Improvements Along Mendenhall & Babcock (On Hold For SID Development)

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Street Operations

**PROJECT NUMBER**  
**STR58**

**PROJECT NAME**  
Tandem Axle Dump Truck With Plow & Sander

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
			\$250,000		

**DESCRIPTION OF PROJECT**

This is a request to replace a 1994 tandem axle truck with 128,000 miles and over 11,000 hours. It is very important that we get the arterials and collectors plowed and sanded before 8 AM. When a tandem axle 10 yard truck is down for any period of time, the backup is a 1990 gas engine single axle 4 yard truck which takes twice as long to finish a route if it stays in operation for the entire shift. Not acceptable to our customers. With the widening of multiple collectors and arterials, the continued need for a larger capacity truck to finish plow and sanding routines is critical to maintaining our service to the traveling public. During paving operations, being able to haul twice as much asphalt cuts down on the number of trips to the asphalt plant. This makes the paving crew more efficient and uses less fuel. The 1994 truck would be used as a backup in the winter and still be used for paving instead of a single-axle truck.

**ALTERNATIVES CONSIDERED**

Continue with no tandem back up in the winter. Run single axle 4 yard dump trucks with asphalt operations

**ADVANTAGES OF APPROVAL**

Reliability, efficiency, less emissions and safety.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Less than the current model.

**FUNDING SOURCES**

100% Street Maintenance District Revenue

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Street Operations

<b>PROJECT NUMBER</b>
<b>STR63</b>

<b>PROJECT NAME</b>						
Replace Signal At Babcock & Wilson						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$750,000

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

Upgrade Signal at Babcock & Wilson. Underground conduit is full and failing. Pedestrian functions should be upgraded to new type such as count down and vibratory tactile. Additionally, the existing signal can't have Opticom for fire trucks.

**ALTERNATIVES CONSIDERED**

Leave as is until failure.

**ADVANTAGES OF APPROVAL**

Fire department can use Opticom to pass through the light. ADA requirements would be met. Room for future expansion in the conduit.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Routine maintenance.

**FUNDING SOURCES**

Arterial and Collector Fund

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Signs & Signals

PROJECT NUMBER  
**STR68**

PROJECT NAME  
Rectangular Rapid Flashing Beacon

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	

DESCRIPTION OF PROJECT

This request is for a rectangular rapid flashing beacon. We get several requests a year for these and would like to have one ready to install. These would be similar to the unit installed on Kagy at 7th avenue. RRFB's have shown to increase visibility of pedestrians in crosswalks which in turn increases safety of the pedestrian. In the past we have had the Bozeman School District and the Bozeman Police Foundation contribute to the cost of these.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

By having one on hand, we are able to install it in the same construction season it is requested without waiting for a budget cycle.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None.

FUNDING SOURCES

100% Street Maintenance District Revenue

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Engineering

<b>PROJECT NUMBER</b>
<b>STR71-19</b>

<b>PROJECT NAME</b>						
Street Improvements - Maintenance & Rehabilitation (Mill & Overlay) - FY19						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$554,500					

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

Mill and Overlays are a critical component to our pavement preservation program. We plan to mill and overlay 2.4 miles in FY19. This includes W Babcock from Main to 11th, Koch from S 23rd to 11th, S 23rd from Main to College, and S 20th from Babcock to Koch. There is potential for bike lane striping enhancements with some projects, and they will be coordinated with any necessary utility replacement projects.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

Increases the lifespan of streets within the City of Bozeman

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

This project results in a net decrease in overall maintenance costs over the lifecycle of all pavements.

**FUNDING SOURCES**

Street Maintenance Fund

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Engineering

**PROJECT NUMBER**  
**STR71-20**

**PROJECT NAME**  
Street Improvements - Maintenance & Rehabilitation (Mill & Overlay) - FY20

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$986,000				

**DESCRIPTION OF PROJECT**

Mill and Overlays are a critical component to our pavement preservation program. We plan to mill and overlay 3.6 miles in FY20. This includes Story Mill Rd from Bridger north to City Limits, Tamarack from N 7th to Rouse, N 5th from Peach to Tamarack, W Aspen from N 7th to N 5th, N 3rd from Peach to Tamarack, Willson from Main to Cottonwood, and W Lincoln from 19th to 11th. There is potential for bike lane striping enhancements with some projects, and they will be coordinated with any necessary utility replacement projects.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

Increases the lifespan of streets within the City of Bozeman

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

This project results in a net decrease in overall maintenance costs over the lifecycle of all pavements.

**FUNDING SOURCES**

Street Maintenance Fund

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Engineering

**PROJECT NUMBER**  
**STR71-21**

**PROJECT NAME**  
Street Improvements - Maintenance & Rehabilitation (Mill & Overlay) - FY21

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
		\$964,000			

**DESCRIPTION OF PROJECT**

Mill and Overlays are a critical component to our pavement preservation program. We plan to mill and overlay 1.9 miles in FY21. This includes Simmental Way from Baxter north, and Durston from Hanson to 19th. There is potential for bike lane striping enhancements with some projects, and they will be coordinated with any necessary utility replacement projects.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

Increases the lifespan of streets within the City of Bozeman

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

This project results in a net decrease in overall maintenance costs over the lifecycle of all pavements.

**FUNDING SOURCES**

Street Maintenance Fund

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Engineering

**PROJECT NUMBER**  
**STR71-22**

**PROJECT NAME**  
Street Improvements - Maintenance & Rehabilitation (Mill & Overlay) - FY22

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
			\$913,329		

**DESCRIPTION OF PROJECT**

Mill and Overlays are a critical component to our pavement preservation program. We plan to mill and overlay 2.3 miles in FY22. This includes N Church from Lamme to Peach, S 3rd from Kagy to Graf, W Graf from S 3rd to S 3rd, and S 3rd from Graf to Goldenstein. There is potential for bike lane striping enhancements with some projects, and they will be coordinated with any necessary utility replacement projects.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

Increases the lifespan of streets within the City of Bozeman

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

This project results in a net decrease in overall maintenance costs over the lifecycle of all pavements.

**FUNDING SOURCES**

Street Maintenance Fund

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Engineering

**PROJECT NUMBER**  
**STR71-23**

**PROJECT NAME**  
Street Improvements - Maintenance & Rehabilitation (Mill & Overlay) - FY23

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
				\$1,014,000	

**DESCRIPTION OF PROJECT**

Mill and Overlays are a critical component to our pavement preservation program. We plan to mill and overlay 5.7 miles in FY23. This includes, Westglen Subdivision, Michaels Grove from Babcock to Durston, Hunters Way from Babcock to Durston, Greenway Subdivision, N 25th from Babcock to Durston, N 24th from Babcock to Beall, Church from Main to Babcock, Church from Olive to Kagy, N 11th from main to Durston, S 10th from Main to Olive, S 9th from Main to Olive, and W Olive from 11th to 8th. There is potential for bike lane striping enhancements with some projects, and they will be coordinated with any necessary utility replacement projects.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

Increases the lifespan of streets within the City of Bozeman

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

This project results in a net decrease in overall maintenance costs over the lifecycle of all pavements.

**FUNDING SOURCES**

Street Maintenance Fund

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Engineering

**PROJECT NUMBER**  
**STR72-19**

**PROJECT NAME**  
Street Improvements - Maintenance & Rehabilitation (Chip Seal) - FY19

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$827,000					

**DESCRIPTION OF PROJECT**

Chip seals are a critical component to our pavement preservation program. We plan to chip seal 15.6 miles in FY19. This includes Oak Springs Subdivision, Diamond Estates Subdivision, Ferguson Meadows Subdivision, Valley Unit Subdivision, Bridger Peaks Estates Subdivision, Cascade Subdivision, Garden Valley Estates Subdivision, Valley Creek Subdivision, Parkway Plaza Subdivision, Babcock from Meagher to main, Fowler from Babcock to Garfield and Garfield from Fowler to 19th. There is potential for bike lane striping enhancements with some projects, and they will be coordinated with any necessary utility replacement projects.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

Increases the lifespan of streets within the City of Bozeman

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

This project results in a net decrease in overall maintenance costs over the lifecycle of all pavements.

**FUNDING SOURCES**

Street Maintenance Fund

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Engineering

**PROJECT NUMBER**  
**STR72-20**

**PROJECT NAME**  
Street Improvements - Maintenance & Rehabilitation (Chip Seal) - FY20

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$913,000				

**DESCRIPTION OF PROJECT**

Chip seals are a critical component to our pavement preservation program. We plan to chip seal 13.5 miles in FY20. This includes Meadow Creek Subdivision, Alder Creek Subdivision, Woodridge Addition, Westridge Subdivision, Thompson Addition, Kagy Crossroads Subdivision, S 11th from Kagy to University Way, West Park Manor Subdivision, Kirk Subdivision, and 15th from Main north. There is potential for bike lane striping enhancements with some projects, and they will be coordinated with any necessary utility replacement projects.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

Increases the lifespan of streets within the City of Bozeman

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

This project results in a net decrease in overall maintenance costs over the lifecycle of all pavements.

**FUNDING SOURCES**

Street Maintenance Fund

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Engineering

**PROJECT NUMBER**  
**STR72-2I**

**PROJECT NAME**  
Street Improvements - Maintenance & Rehabilitation (Chip Seal) - FY21

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
		\$902,500			

**DESCRIPTION OF PROJECT**

Chip seals are a critical component to our pavement preservation program. We plan to chip seal 19.3 miles in FY21. This includes Laurel Glen Subdivision, Baxter Meadows Subdivision, Cattail Creek Subdivision, Crossing 2 Subdivision, West Winds Subdivision, and N 27th Ave from Oak north. There is potential for bike lane striping enhancements with some projects, and they will be coordinated with any necessary utility replacement projects.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

Increases the lifespan of streets within the City of Bozeman

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

This project results in a net decrease in overall maintenance costs over the lifecycle of all pavements.

**FUNDING SOURCES**

Street Maintenance Fund

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Engineering

**PROJECT NUMBER**  
**STR72-22**

**PROJECT NAME**  
Street Improvements - Maintenance & Rehabilitation (Chip Seal) - FY22

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
			\$727,460		

**DESCRIPTION OF PROJECT**

Chip seals are a critical component to our pavement preservation program. We plan to chip seal 13.7 miles in FY22. This includes Bridger Creek Subdivision, Legends at Bridger Creek, Traditions Subdivision, Flanders Creek Subdivision, Norton East Ranch Subdivision, J & D Family Subdivision, Valley West Subdivision, and Babcock from Cottonwood west. There is potential for bike lane striping enhancements with some projects, and they will be coordinated with any necessary utility replacement projects.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

Increases the lifespan of streets within the City of Bozeman

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

This project results in a net decrease in overall maintenance costs over the lifecycle of all pavements.

**FUNDING SOURCES**

Street Maintenance Fund

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Engineering

**PROJECT NUMBER**  
**STR72-23**

**PROJECT NAME**  
Street Improvements - Maintenance & Rehabilitation (Chip Seal) - FY23

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
				\$316,000	

**DESCRIPTION OF PROJECT**

Chip seals are a critical component to our pavement preservation program. We plan to chip seal 6.2 miles in FY23. This includes Loyal Garden Subdivision, Southbridge Subdivision, and Westfield South Subdivision. There is potential for bike lane striping enhancements with some projects, and they will be coordinated with any necessary utility replacement projects.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

Increases the lifespan of streets within the City of Bozeman

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

This project results in a net decrease in overall maintenance costs over the lifecycle of all pavements.

**FUNDING SOURCES**

Street Maintenance Fund

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Street Operations

**PROJECT NUMBER**  
**STR73**

PROJECT NAME  
Replace Skid Steer

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$90,000				

DESCRIPTION OF PROJECT

This to replace our 2003 Skid Steer with 1750 hours. Used mainly in paving operations with the cold planer attached. This is very important in our operation but is also very hard on the equipment. In the last 5 years we have spent over \$26,000 in repairs. Down time during these repairs has been weeks and that interferes with our ability to finish asphalt repairs in a timely manner. Streets uses the skid steer in all aspects of milling, paving and gravel work. When we don't have the skid steer up and running, we are using larger equipment using more fuel. Working in tight spaces is more difficult with a full size loader.

ALTERNATIVES CONSIDERED

Keep running the one we have.

ADVANTAGES OF APPROVAL

Less downtime

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None.

FUNDING SOURCES

100% Street Maintenance District Revenue

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Street Operations

**PROJECT NUMBER**  
**STR74**

PROJECT NAME  
Paint Truck

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$225,000

**DESCRIPTION OF PROJECT**

Pavement marking renewal is a yearly operation because we use environmentally friendly water borne paint. The disadvantage to latex paint is that it has to be renewed at least annually. Currently we have MDT paint for us and due to their busy schedule it is not always done as early in the season as we would like. We are now waiting until mid to late summer to get the double yellow center lines, bike lane lines, skip lines and fog lines painted. MDT's crew is not as dialed in to the needs and wants of our citizens so we are not getting the quality that we and our city is used to. Our crews would get it done in a timelier manner with fewer mistakes. Fresh pavement markings are critical to the traveling public.

**ALTERNATIVES CONSIDERED**

Continue to have MDT paint for us when it is convenient for their schedule and weather permitting. Contract out the painting.

**ADVANTAGES OF APPROVAL**

Producing a quality product that we don't always get with our current MOU with MDT. Being able to paint when we want and as often as we want.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

This will need to be stored inside and we will have to make room for that in our current buildings.

**FUNDING SOURCES**

100% Street Maintenance District Revenue

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Street Maintenance Fund

Engineering

STR75

PROJECT NAME

Annual Pedestrian Ramp Replacement Program

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$100,000

\$100,000

\$100,000

\$100,000

\$100,000

DESCRIPTION OF PROJECT

This annual program provides funding to continue upgrading pedestrian ramps to ADA compliance. A curb/pedestrian ramp provides an accessible route that people with disabilities can use to safely transition from a roadway to a curbed sidewalk and vice versa. Without access to properly developed ramps onto sidewalks, people with disabilities are forced to risk their personal safety by traveling in the street. Upgrading CoB pedestrian ramps will allow the City to be in compliance with Title II of the ADA and Section 504 of the Rehabilitation Act of 1973 (Section 504). This project will be completed in coordination with the Stormwater Divisions Annual Inlet Replacement Program (STRM48).

ALTERNATIVES CONSIDERED

Continue with existing infrastructure, and not meet current ADA regulatory standards

ADVANTAGES OF APPROVAL

Upgrading the curb ramps will increase safety for community members and visitors with disabilities.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No additional operating costs.

FUNDING SOURCES

50% Street Maintenance Fund & 50% Stormwater Fund

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Engineering

**PROJECT NUMBER**  
**STR76**

**PROJECT NAME**  
Downtown Bozeman Creek Culvert Assessment

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$15,000					

**DESCRIPTION OF PROJECT**

Assess the condition of the downtown Bozeman Creek culverts crossing Lamme St, Mendenhall St, Main St, Babcock St, Olive St, and Rouse Ave. These are high risk assets that in the event of a failure, could result in extensive road and business closures throughout the downtown corridor. This project is split between Stormwater (\$15,000) and Street Maintenance (\$15,000).

**ALTERNATIVES CONSIDERED**

Do nothing

**ADVANTAGES OF APPROVAL**

Identifies susceptibility of downtown culverts to critical failure.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

None

**FUNDING SOURCES**

\$15,000 Stormwater, \$15,000 Street Maintenance

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Engineering

**PROJECT NUMBER**  
**STR77**

PROJECT NAME  
Oak and 7th Intersection Upgrade

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$60,000					

**DESCRIPTION OF PROJECT**

This project consists of lane restriping on the westbound leg of the intersection to add a right-hand turn lane. To accommodate the additional lane, a new signal head must also be added to the existing mast arm.

**ALTERNATIVES CONSIDERED**

Wait until Montana Department of Transportation completes upgrades to this intersection, which is still a viable option as this improvement is tentatively being planned by MDT.

**ADVANTAGES OF APPROVAL**

Improve intersection operations as this intersection currently operates at a level-of-service of "D" in the PM peak hour. Upon addition of the right-hand turn lane, the intersection will be constructed to its maximum turning and movement capacity.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Additional operating costs will be minimal due to the addition of a lane at the intersection.

**FUNDING SOURCES**

The Midtown Urban Renewal District is anticipated to fund this intersection upgrade.

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Signs & Signals

**PROJECT NUMBER**  
**STR78**

**PROJECT NAME**  
Replace #2748 - 1999 service truck with a mid size pick up.

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
				\$35,000	

**DESCRIPTION OF PROJECT**

This is a request to replace a 1999, asset #2748, pick-up with over 140,000 miles. It will be 24 years old at time of replacement. The truck would be traded in or auctioned.

**ALTERNATIVES CONSIDERED**

Keep using 1999 model until failure. Lease.

**ADVANTAGES OF APPROVAL**

Increased safety and reliability.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

None.

**FUNDING SOURCES**

None.

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Signs & Signals

PROJECT NUMBER  
STR79

PROJECT NAME  
Sign Making Machine

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$60,000					

DESCRIPTION OF PROJECT

Our 13-year-old machine is no longer reliable. It gets stuck in Chinese font when we try to make street name signs and when IT can get it back to English, it does not function as it should. We can no longer add special symbols like arrows, which we need often. The new machine will print signs ready to go rather than as we do it now where we have to manually cut out the letters by hand. Very time consuming.

ALTERNATIVES CONSIDERED

Order signs as needed from vendors. 2-4 week turn around time.

ADVANTAGES OF APPROVAL

Make signs as needed same day. Make specialty signs as needed.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

None

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Signs & Signals

**PROJECT NUMBER**  
**STR80**

PROJECT NAME  
Utility Terrain Vehicle

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$55,000					

**DESCRIPTION OF PROJECT**

Utility Terrain Vehicle (UTV) for use by the Sign and Signal Crew. These have been used in the Parks and Street Departments and have found that they are very versatile. It would be used for curb painting, pavement markings, weed trimming, auguring postholes, sign installation and work where tight spaces make it easier using the smaller UTV. We would be able to use all the skid steer attachments that the City currently has as well as any hydraulically powered attachment.

**ALTERNATIVES CONSIDERED**

Continue to borrow when Toolcats are available from other departments.

**ADVANTAGES OF APPROVAL**

Efficiency in operations. Maneuverability in tight spaces. Versatility as many attachments can be used for different jobs.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Routine maintenance.

**FUNDING SOURCES**

None

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Street Operations

PROJECT NUMBER  
STR81

PROJECT NAME  
Brine Making Machine With Building

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled \$200,000
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DESCRIPTION OF PROJECT

This is a request for a brine-making machine to replace the use of Magnesium Chloride in the pre wetting of our sand. By wetting the sand as it is applied, it cuts down on the amount of bounce when the sand hits the ground and gives some melting action. In some communities, salt brine is used pre storm to keep the initial snow from bonding to the pavement. This could be used on our known early freeze areas such as roundabouts and shaded areas.

ALTERNATIVES CONSIDERED

Keep using Mag.

ADVANTAGES OF APPROVAL

Less cost per gallon. Mag has a tendency to migrate into wiring looms on the truck. Brine does not.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Less cost after initial investment.

FUNDING SOURCES

None.

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Street Operations

**PROJECT NUMBER**  
**STR82**

PROJECT NAME  
Motor Grader Lease Payoff

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$170,000					

**DESCRIPTION OF PROJECT**

Our 5-year lease will be up in FY19. This grader has been trouble free during the lease and the operators are efficient in its operation. A used grader with the low hours, all preventative maintenance performed and the M Series with joystick controls would be over \$200,000 to purchase. Purchasing for \$170,000 is a good buy and will give us years of service.

**ALTERNATIVES CONSIDERED**

Turn lease unit back in. Lease another new grader and turn this one back in.

**ADVANTAGES OF APPROVAL**

Keeping a grader that we know operationally and mechanically is good. Snow gate stays with the grader where a new one would need a new snow gate.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Normal maintenance.

**FUNDING SOURCES**

None.

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Street Operations

<b>PROJECT NUMBER</b>
<b>STR83</b>

<b>PROJECT NAME</b>						
N. 27th Median Landscaping and Irrigation from Oak to Baxter						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$40,000					

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

Install irrigation, trees and turf where none exists on N 27th from Oak to Baxter.

**ALTERNATIVES CONSIDERED**

Concrete, paving or continue to mow and spray weeds.

**ADVANTAGES OF APPROVAL**

Aesthetics. A landscaped median has shown to calm traffic. Less maintenance than weeds.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

We would add this to our median maintenance contract. \$4,000 per year for mowing and trimming per year.

**FUNDING SOURCES**

None.

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Street Operations

<b>PROJECT NUMBER</b>
<b>STR84</b>

<b>PROJECT NAME</b>						
Plug In Electric Work Truck.						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
			\$60,000		

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

This is a request to add to our fleet an electric work pickup. It would be a 1/2-ton four-wheel drive. Production is expected to start in 2018 with preference given to fleets. With an estimated range of 80 miles between charges, it would be ideal in our operations. Cost per day to charge would be about \$4.00.

**ALTERNATIVES CONSIDERED**

Continue with gas powered trucks.

**ADVANTAGES OF APPROVAL**

Lower operating costs. Less emissions.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Less than gasoline. 240 volt charging station would be needed at the Shops.

**FUNDING SOURCES**

Possible grants.

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Street Operations

**PROJECT NUMBER**  
**STR85**

**PROJECT NAME**  
Replace 1992 Wheel Loader

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$180,000				

**DESCRIPTION OF PROJECT**

This is a request to replace our 1992 CAT Wheel Loader that will be 28 years old at time of replacement. It currently has 11,839 hours. We are spending over \$10,000 per year on maintenance and repairs. We will trade in this loader on the new unit. Since this loader was built, improvements on wheel loaders include 50% reduction in fuel usage per hour, more than 50% emission reduction of Oxides of Nitrogen (NOx) and Particulate Matter (PM), increased operator efficiency, wireless maintenance reminders and better roll over protection (ROPS).

**ALTERNATIVES CONSIDERED**

Keep loader. Budget for repair costs.

**ADVANTAGES OF APPROVAL**

Reliability. Lower maintenance costs, increased productivity.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

None.

**FUNDING SOURCES**

None.

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Street Operations

<b>PROJECT NUMBER</b>
<b>STR86</b>

<b>PROJECT NAME</b>						
S. 27th Median Landscaping and Irrigation from Kurk to Blackwood.						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
			\$20,000		

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

Currently only one median has irrigation. This would extend the irrigation to all three and add turf and trees.

**ALTERNATIVES CONSIDERED**

Continue to mow and spray weeds. Concrete or pave.

**ADVANTAGES OF APPROVAL**

Aesthetics. Landscaped medians have shown to calm traffic. Not letting weeds go to seed.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

This would be added to our Median Maintenance contract. \$2,500 yearly.

**FUNDING SOURCES**

None.

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Street Operations

**PROJECT NUMBER**  
**STR87**

**PROJECT NAME**  
Spot Projects as Recommended by the Bozeman Area Bicycle Advisory Board (BABAB).

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled \$50,000
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**DESCRIPTION OF PROJECT**

This board would like to be able to recommend projects that might be outside the TMP. Project lists will be submitted to Engineering and Streets.

**ALTERNATIVES CONSIDERED**

Only do projects that are part of a larger project.

**ADVANTAGES OF APPROVAL**

When an opportunity arises and the board can prioritize a list, money would be available.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Repainting of markings.

**FUNDING SOURCES**

Transportation Alternatives (TA).

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Street Operations

**PROJECT NUMBER**  
**STR88**

**PROJECT NAME**  
Spot Projects as Recommended by the Pedestrian Traffic and Safety Committee.

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled \$30,000
------	------	------	------	------	-------------------------

**DESCRIPTION OF PROJECT**

This committee would like to be able to recommend projects that might be outside the TMP. Project list will be submitted to Engineering and Streets.

**ALTERNATIVES CONSIDERED**

Only do projects that are part of a larger project.

**ADVANTAGES OF APPROVAL**

When an opportunity arises and the committee can prioritize a list, money would be available.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Repainting of markings.

**FUNDING SOURCES**

Transportation Alternatives (TA).

CIP Project Fund  
Street Maintenance Fund

DEPARTMENT  
Street Operations

PROJECT NUMBER  
STR89

PROJECT NAME  
Spray Patch Truck

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$250,000					

DESCRIPTION OF PROJECT

Our pavement preservation program includes several types of patching from a simple patch to a mill and overlay. We have found spray patching, where oil and aggregate is used to fill the pothole to be very efficient and effective. Spray patching allows pothole patching during a wider range of temperatures and conditions. Currently we are using a trailer-mounted unit that takes at least two operators with one working directly in traffic. It also ties up one dump truck making it unavailable for our mill and overlays when we need all the trucks available. While this always gives us the patch we want, getting set up and then working around and in traffic is not ideal. Traffic control and positioning the truck and trailer often take longer than the patching process. A truck-mounted unit is a much quieter operation and could be used on our 3AM crew by just one operator. We have found spray patches to be a permanent repair that has saved many streets from going over the cliff to reconstruction. Sealing alligator cracking and low spots have prevented failures during the spring that lead to tire breaking potholes that are difficult to patch during wet weather. Spray patching is the main reason we have not had a pothole claim in 3 years. We would trade in or sell our trailer mounted unit.

ALTERNATIVES CONSIDERED

Keep using current method with trailer mounted unit.

ADVANTAGES OF APPROVAL

One operator operation vs. two. Greater temperature range we can operate. Quicker process so we can get more done.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Normal maintenance costs.

FUNDING SOURCES

None.

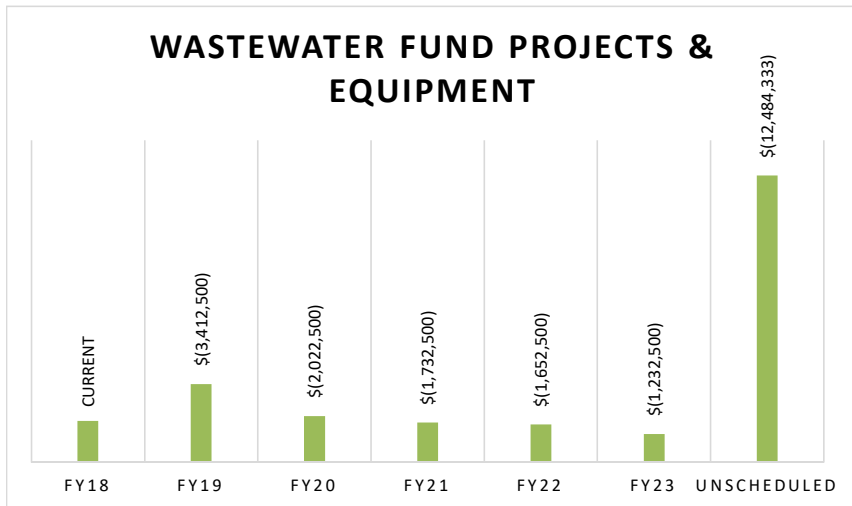


**Wastewater Fund  
Capital Improvement Plan**

Financial Summary	Current Year	Projected					Unscheduled
	FY18	FY19	FY20	FY21	FY22	FY23	
Projected Beginning Reserve Balance Dedicated to CIP	\$ 1,548,414	\$ 1,730,755	\$ 572,718	\$ 872,315	\$ 1,531,576	\$ 2,342,589	\$ -
Plus: Wastewater Revenues Dedicated to CIP	\$ 2,188,800	\$ 2,254,463	\$ 2,322,097	\$ 2,391,760	\$ 2,463,513	\$ 2,537,419	\$ -
Less: FY17 Carryover Capital	\$ (193,959)						
Less: Scheduled CIP Project Costs	\$ (1,812,500)	\$ (3,412,500)	\$ (2,022,500)	\$ (1,732,500)	\$ (1,652,500)	\$ (1,232,500)	\$ (12,484,333)
<b>Projected Year-End Cash Dedicated to CIP</b>	<b>\$ 1,730,755</b>	<b>\$ 572,718</b>	<b>\$ 872,315</b>	<b>\$ 1,531,576</b>	<b>\$ 2,342,589</b>	<b>\$ 3,647,507</b>	

*Assumptions Made for Revenue Estimates*

	Current Year	Projected				
	FY18	FY19	FY20	FY21	FY22	FY23
Estimated Annual Wastewater Revenues	\$ 8,755,198	\$ 8,755,198	\$ 9,017,854	\$ 9,288,390	\$ 9,567,041	\$ 9,854,052
Estimated Annual Increase	0.0%	3%	3%	3%	3%	3%
Total Estimated Revenues	\$ 8,755,198	\$ 9,017,854	\$ 9,288,390	\$ 9,567,041	\$ 9,854,052	\$ 10,149,674
Current Revenues Dedicated to CIP %	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Plus: Increase Dedicated to CIP	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total % Dedicated to CIP	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Total Estimated Revenues Dedicated to CIP	\$ 2,188,800	\$ 2,254,463	\$ 2,322,097	\$ 2,391,760	\$ 2,463,513	\$ 2,537,419



CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
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Wastewater Fund

WW07	Engineering	ANNUAL WASTEWATER PIPE REPLACEMENT PROGRAM - DESIGN	\$22,500	\$22,500	\$22,500	\$22,500	\$22,500	
WW08-19	Engineering	WASTEWATER PIPE REPLACEMENT PROGRAM - CONSTRUCTION IN 2019	\$1,000,000					
WW08-20	Engineering	WASTEWATER PIPE REPLACEMENT PROGRAM - CONSTRUCTION IN 2020		\$1,000,000				
WW08-21	Engineering	WASTEWATER PIPE REPLACEMENT PROGRAM - CONSTRUCTION IN 2021			\$1,000,000			
WW08-22	Engineering	WASTEWATER PIPE REPLACEMENT PROGRAM - CONSTRUCTION IN 2022				\$1,000,000		
WW08-23	Engineering	WASTEWATER PIPE REPLACEMENT PROGRAM - CONSTRUCTION IN 2023					\$1,000,000	
WW27	Engineering	ANNUAL WATERSHED STUDY & STREAM MODELING	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	

Totals by DEPARTMENT

\$1,082,500	\$1,082,500	\$1,082,500	\$1,082,500	\$1,082,500	
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Wastewater Fund

GF227	Finance	ERP REPLACEMENT "SUNGARD REPLACEMENT/UPGRADE"						\$333,333
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Totals by DEPARTMENT

					\$333,333
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Wastewater Fund

PW05	Public Works	PUBLIC WORKS SHOPS MASTER PLAN	\$20,000					
PW06	Public Works	PUBLIC WORKS SHOPS FACILITY CONSTRUCTION		\$670,000				

Totals by DEPARTMENT

\$20,000	\$670,000				
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Wastewater Fund

WW54	Wastewater Op	REPLACE #1783 - 1995 FORD DUMP TRUCK		\$95,000				
WW86	Wastewater Op	WHEELED EXCAVATOR						\$151,000
WW86	Wastewater Op	STEERABLE SEWER TV TRACTOR	\$25,000					

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
	WW87	Wastewater Op	SEWER FLOW METERS	\$35,000					
<i>Totals by DEPARTMENT</i>				\$60,000	\$95,000				\$151,000
<b>Wastewater Fund</b>									
	WW39	WRF	RESURFACE AND REPAINT CLARIFIERS	\$320,000					
	WW49	WRF	ROLL-OFF STORAGE BUILDING CONSTRUCTION & POSSIBLE 2ND SCREW PRESS ENCLOSURE	\$1,500,000					
	WW58	WRF	CHIP SEAL AND TOPCOAT WRF ASPHALT	\$55,000					
	WW69	WRF	WRF FACILITY R&R	\$75,000	\$100,000	\$100,000	\$100,000	\$100,000	
	WW70	WRF	WRF FACILITY ENGINEERING & OPTIMIZATION	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	
	WW76	WRF	THIRD PRETREATMENT SCREEN			\$500,000			
	WW78	WRF	SERVER REPLACEMENT AT WRF (WRFCTRLBAK)				\$10,000		
	WW83	WRF	UFAT GRAVITY THICKENER DRIVE AND ARMS REPLACEMENT				\$400,000		
	WW84	WRF	SERVER REPLACEMENT AT WRF (WRFCTRLPRI)				\$10,000		
	WW85	WRF	WRF PROCESS UPGRADES TO IMPROVE NUTRIENT RECOVERY & CAPACITY						\$12,000,000
	WW88	WRF	RE-TUBE BOILER		\$25,000				
	WW89	WRF	HVAC HEAT LOOP OPTIMIZATION	\$250,000					
<i>Totals by DEPARTMENT</i>				\$2,250,000	\$175,000	\$650,000	\$570,000	\$150,000	\$12,000,000

<i>Summary for Wastewater Fund (26 items)</i>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>Unscheduled</u>
<i>Totals by year:</i>	\$3,412,500	\$2,022,500	\$1,732,500	\$1,652,500	\$1,232,500	\$12,484,333

CIP Project Fund  
Wastewater Fund

DEPARTMENT  
Finance

<b>PROJECT NUMBER</b>
<b>GF227</b>

<b>PROJECT NAME</b>						
ERP Replacement "Sungard Replacement/Upgrade"						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$333,333

<b>DESCRIPTION OF PROJECT</b>
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Replacing/upgrading the current system installed in 1999. This is the system that runs all the financial, community development, land records, utility and business license applications. Although it is unscheduled we are currently looking into this with a possibility of FY20.

**ALTERNATIVES CONSIDERED**

Continue running current SunGard package. Use SunGard.net (NaviLine EDGE) as an improvement to the current system, but not a full replacement.

**ADVANTAGES OF APPROVAL**

Simplified package. Easier to integrate the various applications/programs. Easier to pull out information for end users. Easier compilation of Commission reports and packets for Community Development.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Unknown. Dependent on the option chosen.

**FUNDING SOURCES**

General Fund 33%; Water Fund 33%; Wastewater Fund 33%

CIP Project Fund  
Wastewater Fund

DEPARTMENT  
Public Works

PROJECT NUMBER  
PW05

PROJECT NAME  
Public Works Shops Master Plan

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$20,000					

DESCRIPTION OF PROJECT

Develop a long term master plan for Public Works shop facilities, equipment, and personnel. This includes conducting a needs assessment of space for existing and future employees, equipment, machinery, and rolling stock. There is a severe shortage of enclosed storage for equipment, vehicles, and machinery, resulting in extra wear and tear, additional maintenance costs, and time preparing the equipment on cold mornings. Additionally, there is a lack of space available for existing as well as future staff. This will be split three ways between water (\$20,000), wastewater (\$20,000), and streets (\$20,000).

ALTERNATIVES CONSIDERED

Continue using existing infrastructure.

ADVANTAGES OF APPROVAL

Provide an accurate analysis of the City of Bozeman Public Works space needs for both equipment as well as people.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Depending on the results of the plan, the likely result will be the construction of additional storage and office space.

FUNDING SOURCES

This project will be split 3 ways between Water Fund (\$20,000), Wastewater Fund (\$20,000), and Street Maintenance Fund (\$20,000)

CIP Project Fund  
Wastewater Fund

DEPARTMENT  
Public Works

<b>PROJECT NUMBER</b>
<b>PW06</b>

<b>PROJECT NAME</b>
Public Works Shops Facility Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$670,000				

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

Construct additional facilities recommended in the result of the Public Works Shops Master Plan. This will be split three ways between water (\$670,000), wastewater (\$670,000), and streets (\$670,000).

**ALTERNATIVES CONSIDERED**

Continue using existing infrastructure.

**ADVANTAGES OF APPROVAL**

The construction of a new Public Works facility will provide indoor storage for millions of dollars of equipment, machinery, vehicles, etc. This will both reduce wear and tear and maintenance costs, as well as reduce time spent on preparing equipment on cold mornings.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Normal building maintenance and utility costs.

**FUNDING SOURCES**

This project will be split 3 ways between Water Fund (\$670,000), Wastewater Fund (\$670,000), and Street Maintenance Fund (\$670,000)

CIP Project Fund  
Wastewater Fund

DEPARTMENT  
Engineering

**PROJECT NUMBER**  
**WW07**

**PROJECT NAME**

Annual Wastewater Pipe Replacement Program - Design

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$22,500	\$22,500	\$22,500	\$22,500	\$22,500	

**DESCRIPTION OF PROJECT**

This item provides for design work to be completed every-other year, in anticipation of the Annual System Upgrades. Annual wastewater pipe replacement projects minimize service interruptions or main breaks attributable to aging infrastructure. Annual Wastewater Pipe Replacement Program project would be delayed if not done.

**ALTERNATIVES CONSIDERED**

**ADVANTAGES OF APPROVAL**

Provides survey work needed for design of necessary sewer system maintenance work.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**  
NA

**FUNDING SOURCES**

100% Wastewater Utility Fund

CIP Project Fund  
Wastewater Fund

DEPARTMENT  
Engineering

<b>PROJECT NUMBER</b>
<b>WW08-19</b>

<b>PROJECT NAME</b>						
Wastewater Pipe Replacement Program - Construction in 2019						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$1,000,000					

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

This project would complete design, bid and begin construction in the Spring/Summer of 2019. Priority will be placed on the sewer segment on S Tracy from College to Babcock to coincide with the S Tracy street reconstructions scheduled for FY19. The remaining balance will be used to continue sewer replacements on segments identified as needing repairs. The condition of the sewer system is analyzed nightly to account for daily updates from the Wastewater Operations Department.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

Provides for the construction of necessary wastewater system maintenance work.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

This project results in a net decrease in overall maintenance costs over the lifecycle of all pipes.

**FUNDING SOURCES**

100% Wastewater Fund

CIP Project Fund  
Wastewater Fund

DEPARTMENT  
Engineering

**PROJECT NUMBER**  
**WW08-20**

**PROJECT NAME**  
Wastewater Pipe Replacement Program - Construction in 2020

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$1,000,000				

**DESCRIPTION OF PROJECT**

This project would complete design, bid and begin construction in the Spring/Summer of 2020. Priority will be places on the sewer segment on S Black from College to the Cul-De-Sac to coincide with the S Black street reconstructions scheduled for FY20. The remaining balance will be used to continue sewer replacements on segments identified as needing repairs. The condition of the sewer system is analyzed nightly to account for daily updates from the Wastewater Operations Department.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

Provides for the construction of necessary wastewater system maintenance work.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

This project results in a net decrease in overall maintenance costs over the lifecycle of all pipes.

**FUNDING SOURCES**

100% Wastewater Fund

CIP Project Fund  
Wastewater Fund

DEPARTMENT  
Engineering

**PROJECT NUMBER**  
**WW08-21**

PROJECT NAME  
Wastewater Pipe Replacement Program - Construction in 2021

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
		\$1,000,000			

DESCRIPTION OF PROJECT

This project would complete design, bid and begin construction in the Spring/Summer of 2021. Priority will be placed on the sewer segment on N Tracy from Villard to Peach to coincide with the N Tracy street reconstructions scheduled for FY21. The remaining balance will be used to continue sewer replacements on segments identified as needing repairs. The condition of the sewer system is analyzed nightly to account for daily updates from the Wastewater Operations Department.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Provides for the construction of necessary wastewater system maintenance work.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This project results in a net decrease in overall maintenance costs over the lifecycle of all pipes.

FUNDING SOURCES

100% Wastewater Fund

CIP Project Fund  
Wastewater Fund

DEPARTMENT  
Engineering

<b>PROJECT NUMBER</b>
<b>WW08-22</b>

<b>PROJECT NAME</b>						
Wastewater Pipe Replacement Program - Construction in 2022						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
			\$1,000,000		

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

This project would complete design, bid and begin construction in the Spring/Summer of 2022. Priority will be placed on the sewer segment on N 17th from Durston to the end to coincide with the N 17th street reconstructions scheduled for FY22. The remaining balance will be used to continue sewer replacements on segments identified as needing repairs. The condition of the sewer system is analyzed nightly to account for daily updates from the Wastewater Operations Department.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

Provides for the construction of necessary wastewater system maintenance work.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

This project results in a net decrease in overall maintenance costs over the lifecycle of all pipes.

**FUNDING SOURCES**

100% Wastewater Fund

CIP Project Fund  
Wastewater Fund

DEPARTMENT  
Engineering

<b>PROJECT NUMBER</b>
<b>WW08-23</b>

<b>PROJECT NAME</b>						
Wastewater Pipe Replacement Program - Construction in 2023						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
				\$1,000,000	

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

This project would complete design, bid and begin construction in the Spring/Summer of 2023. Priority will be places on the sewer segment on West Koch Street from 8th to Tracy to coincide with the West Koch Street reconstructions scheduled for FY23. The remaining balance will be used to continue sewer replacements on segments identified as needing repairs. The condition of the sewer system is analyzed nightly to account for daily updates from the Wastewater Operations Department.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

Provides for the construction of necessary wastewater system maintenance work.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

This project results in a net decrease in overall maintenance costs over the lifecycle of all pipes.

**FUNDING SOURCES**

100% Wastewater Fund

CIP Project Fund  
Wastewater Fund

DEPARTMENT  
Engineering

PROJECT NUMBER  
WW27

PROJECT NAME  
Annual Watershed Study & Stream Modeling

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	

DESCRIPTION OF PROJECT

Develop a comprehensive, multi-year watershed study and computer model for the East Gallatin River, which would enable the City and DEQ to better determine stream load allocations and develop a more scientifically valid TMDL for the river segment we discharge to. This will require annual field sample collection, laboratory analytic al work, and detailed computer modeling using calibrated and validated datasets. It is a crucial tool to inform MPDES discharge permit negotiations and compliance with MT numeric nutrient regulations. This project leverages cooperative relationship with Gallatin Local Water Quality District in the performance of field sampling activities, and it has significant potential to affect scope of future upgrades to WRF to meet numeric nutrient limitations imposed by DEQ Circular 12A and implemented through future MPDES discharge permits. Stream modeling may reduce or eliminate the need for future upgrades dependent upon the results of ongoing data collection and model calibrations. Modeling could identify that assimilative capacity is available in the East Gallatin River or that the EGR is nutrient limited. Model also essential to identify nutrient trade opportunities which could be a significant MPDES compliance tool.

#### ALTERNATIVES CONSIDERED

Not undertake this work and risk having to accept the TMDL and waste load allocations the DEQ has proposed in their original draft documents. This decision could greatly limit our ability to appeal future nutrient limitations and could result in non-compliance.

#### ADVANTAGES OF APPROVAL

This watershed study will greatly enhance the City's understand of our impact on the East Gallatin River and enable us to more successfully negotiate future permit limits with the DEQ.

#### ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None, unless additional stream sampling is desired in subsequent years.

#### FUNDING SOURCES

100% Wastewater Fund

CIP Project Fund  
Wastewater Fund

DEPARTMENT  
WRF

<b>PROJECT NUMBER</b>
<b>WW39</b>

<b>PROJECT NAME</b>						
Resurface and Repaint Clarifiers						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$320,000					

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

Sandblast and paint clarifier drives on primary 1 and secondary 3. Beaches and weirs also need replaced on Primary 1 and 2, and on Secondary 1, 2, and 3. The old final clarifiers were installed in the late 1980's and need to be painted and resurfaced to extend their useful life. Painting and resurfacing the clarifier drives and replacing beaches and weirs will preserve the infrastructure and delay the cost of replacement.

**ALTERNATIVES CONSIDERED**

Do nothing

**ADVANTAGES OF APPROVAL**

Replace lost & chipping paint on old clarifiers to prevent further deterioration of existing infrastructure. These clarifiers have not been painted since they were installed in 1985.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

No new operating costs.

**FUNDING SOURCES**

100% Wastewater Funds

CIP Project Fund  
Wastewater Fund

DEPARTMENT  
WRF

PROJECT NUMBER  
WW49

PROJECT NAME  
Roll-Off Storage Building Construction & Possible 2nd Screw Press Enclosure

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$1,500,000					

DESCRIPTION OF PROJECT

Engineering and construction of a roll-off building and 2nd screw press enclosure. Currently, an enclosed area consisting of concrete blankets is suspended by cables and heated with portable propane heaters which keeps the roll-offs from freezing in the truck storage building. The trucks are stored overnight during the winter so the solids inside them do not freeze. The addition would return the needed space in the truck storage building and would reduce heating costs by using the exhaust air from the solids handling building. Less energy would be used if an extension to the roll-off loading area was built. It could use exhaust air from the solids dewatering building to heat it. Also, not using the portable propane heaters would be a cost savings. Installing this screw press will allow not only redundancy but allows for the additional solids handling that the growing community will need. This project will allow for additional storage of roll-offs, polymer totes and the housing of a new screw press.

ALTERNATIVES CONSIDERED

Construction of an addition not to include the purchase of a new screw press.

ADVANTAGES OF APPROVAL

Installing this screw press will allow not only redundancy but allows for the additional solids handling that the growing community will need. This project will allow for additional storage of roll-offs, polymer totes and the housing of a new screw press.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This addition could be heated with exhaust air from the Solids Handling Building, reducing costs. If a screw press was also housed in this addition, electrical costs for pumping and press operation would be additional.

FUNDING SOURCES

Digester 3 settlement money, amount TBD but estimated at \$1,500,000.

CIP Project Fund  
Wastewater Fund

DEPARTMENT  
Wastewater Operations

<b>PROJECT NUMBER</b>
<b>WW54</b>

<b>PROJECT NAME</b>
Replace #1783 - 1995 Ford Dump Truck

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$95,000				

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

Vehicle maintenance is requesting that the vehicle be replaced due to age. It has a leaking brake booster that needs replaced, and they can't get parts to get it repaired because the parts aren't available for this vehicle anymore. The parts will continue to get harder to purchase in the future to keep this vehicle in service.

**ALTERNATIVES CONSIDERED**

Continue to use older vehicle which is becoming unreliable and costly to maintain.

**ADVANTAGES OF APPROVAL**

Will be a more fuel efficient and lower emissions vehicle. The new vehicle will improve safety of the crews, there would be lower repair costs and it would help maintain current operations levels.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Using an older piece of equipment that becomes more unreliable.

**FUNDING SOURCES**

100% Wastewater Fund

CIP Project Fund  
Wastewater Fund

DEPARTMENT  
WRF

**PROJECT NUMBER**  
**WW58**

PROJECT NAME  
Chip Seal and Topcoat WRF Asphalt

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$55,000					

DESCRIPTION OF PROJECT

Chip Seal and topcoat WRF Asphalt to keep it from deteriorating. The 4.894 acres of asphalt at the WRF facility needs to be protected to extend its useful life. Chip seal 0.402 acres and topcoat 4.492 acres.

ALTERNATIVES CONSIDERED

Do nothing.

ADVANTAGES OF APPROVAL

Chip seal and topcoat will extend the useful life of the existing City infrastructure.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

100% Wastewater Funds

CIP Project Fund  
Wastewater Fund

DEPARTMENT  
WRF

<b>PROJECT NUMBER</b>
<b>WW69</b>

<b>PROJECT NAME</b>
WRF Facility R&R

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$75,000	\$100,000	\$100,000	\$100,000	\$100,000	

**DESCRIPTION OF PROJECT**

Repair and replacement of equipment is an ongoing job at the Bozeman WRF. These funds would be used to repair or replace equipment that fails unexpectedly in an emergency situation. An unforeseen mechanical failure needs to be remedied quickly to protect the quality of facility effluent discharged into the East Gallatin.

**ALTERNATIVES CONSIDERED**

Not having this fund would defer other needed maintenance.

**ADVANTAGES OF APPROVAL**

Most processes run 24/7 and have backup systems but when the first system fails there is no backup system and repairs need to be made immediately. Not all repairs or equipment failures can be predicted and budgeted as a capital improvement project.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

None

**FUNDING SOURCES**

100% Wastewater Funds

CIP Project Fund  
Wastewater Fund

DEPARTMENT  
WRF

**PROJECT NUMBER**  
**WW70**

PROJECT NAME  
WRF Facility Engineering & Optimization

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	

**DESCRIPTION OF PROJECT**

This will allow engineering to be completed on needed projects and to study plant optimization options before spending money on equipment that might not be needed or the proper type. Additionally, this will allow studies to be conducted to make sure the proposed plant optimizations will actually improve the effluent quality at a reasonable expense.

**ALTERNATIVES CONSIDERED**

Order replacement or upgrades to equipment that may not be sized correctly or made of the proper materials. Proceed with optimization projects without knowing if the project will actually improve plant performance.

**ADVANTAGES OF APPROVAL**

The advantage of having funds available to do engineering studies before any project is started will make sure that the right equipment is purchased and that it will perform properly. Optimization studies will predict actual cost/benefit over time to make sure the city is spending its money efficiently.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Currently unknown

**FUNDING SOURCES**

100% Wastewater Funds

CIP Project Fund  
Wastewater Fund

DEPARTMENT  
WRF

**PROJECT NUMBER**  
**WW76**

PROJECT NAME  
Third Pretreatment Screen

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
		\$500,000			

**DESCRIPTION OF PROJECT**

Purchase a third pretreatment screen and the engineering to properly install it. The two installed pretreatment screens are running 24/7 so there is no redundancy to the system. Adding a third screen will increase the capacity of pretreatment to handle increased flows from growth without bypassing the screens. This screen will prevent the clogging of pipes and pumps will preserve the effluent quality of the facility, and all equipment downstream of the screens will be better protected. Pipes and pumps that are not plugged run more efficiently and require less energy to run.

**ALTERNATIVES CONSIDERED**

Do nothing and run the risk of having to bypass the existing screens because they cannot handle the load coming into the plant.

**ADVANTAGES OF APPROVAL**

Protecting downstream infrastructure by not having to bypass the screens.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Additional cost of electricity for the motors on the screen.

**FUNDING SOURCES**

Wastewater Funds and possibly Impact Funds

CIP Project Fund  
Wastewater Fund

DEPARTMENT  
WRF

<b>PROJECT NUMBER</b>
<b>WW78</b>

<b>PROJECT NAME</b>						
Server Replacement at WRF (WRFCTRLBAK)						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
			\$10,000		

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

Replace the WRF server WRFCTRLBAK

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

100% Wastewater Funds

CIP Project Fund  
Wastewater Fund

DEPARTMENT  
WRF

**PROJECT NUMBER**  
**WW83**

**PROJECT NAME**  
UFAT Gravity Thickener Drive and Arms Replacement

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
			\$400,000		

**DESCRIPTION OF PROJECT**

Replacement of the gravity thickener deteriorating mechanism. The UFAT gravity Thickener thickens elutriated fermented sludge before it is sent to the digester thus increasing detention time in the digesters. It is the second stage of the UFAT system that generates Volatile Fatty Acids that are an energy source for the Phosphorus Accumulating Organisms. These POA's are what remove the phosphorus from the wastewater. The gravity Thickener thickens elutriated fermented sludge before it is sent to the digester thus increasing detention time in the digesters.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

Installation planning and purchase of the drive and arms will allow a scheduled shutdown rather than a quick fix when the drive fails.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

No additional costs.

**FUNDING SOURCES**

Not known at this time.

CIP Project Fund  
Wastewater Fund

DEPARTMENT  
WRF

**PROJECT NUMBER**  
**WW84**

PROJECT NAME  
Server Replacement at WRF (WRFCTRLPRI)

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
			\$10,000		

DESCRIPTION OF PROJECT

Replace the WRF server WRFCTRLPRI

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

100% Wastewater Funds

CIP Project Fund  
Wastewater Fund

DEPARTMENT  
WRF

<b>PROJECT NUMBER</b>
<b>WW85</b>

<b>PROJECT NAME</b>						
WRF Process Upgrades to Improve Nutrient Recovery & Capacity						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$12,000,000

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

This project will increase WRF capacity to meet facility plan recommendations and future discharge permit requirements.

**ALTERNATIVES CONSIDERED**

Do nothing and loose a commodity that is a bi-product of anaerobic digestion

**ADVANTAGES OF APPROVAL**

The production of magnesium ammonium phosphate to be sold as a slow release fertilizer will recycle limited nutrients back into the ecosystem. This process will reduce the nitrogen and phosphorus in our sidestream returning to the head of the plant which will in turn reduce the loading on the process.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Maintenance and operating costs that will be offset by income from the sale of the slow release fertilizer.

**FUNDING SOURCES**

100% Wastewater Funds

CIP Project Fund  
Wastewater Fund

DEPARTMENT  
Wastewater Operations

<b>PROJECT NUMBER</b>
<b>WW86</b>

<b>PROJECT NAME</b>						
Steerable sewer TV tractor						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$25,000					

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

This tractor carries our TV camera in our sanitary and storm sewers. This tractor is the only tractor that can carry our new larger digital cameras. Currently, we only have one steerable tractor, so using both sewer trucks at the same time is not possible.

**ALTERNATIVES CONSIDERED**

Use one truck at a time with the larger camera.

**ADVANTAGES OF APPROVAL**

Using both digital cameras at the same time which televise the sewer mains much faster than our older cameras.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**  
NA

**FUNDING SOURCES**  
NA

CIP Project Fund  
Wastewater Fund

DEPARTMENT  
Wastewater Operations

<b>PROJECT NUMBER</b>
<b>WW86</b>

<b>PROJECT NAME</b>						
Wheeled Excavator						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$151,000

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

This would be a trackhoe excavator with wheels instead of tracks. It is a critical piece of machinery in our departments, and it is used to maintain water, sewer, and stormwater infrastructure. The excavator will be split 50/50 with the water fund (W68).

**ALTERNATIVES CONSIDERED**

Continue to use smaller equipment.

**ADVANTAGES OF APPROVAL**

Increased productivity with larger excavator.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

N/A

**FUNDING SOURCES**

\$151,000 Water Fund, \$151,000 Wastewater Fund

CIP Project Fund  
Wastewater Fund

DEPARTMENT  
Wastewater Operations

**PROJECT NUMBER**  
**WW87**

PROJECT NAME  
Sewer Flow Meters

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$35,000					

**DESCRIPTION OF PROJECT**

Two flow meters can record sewer flows in the sewer mains, which is critical for planning for new mains. These meters will be used along with the one we purchased in FY 17. We need multiple flow meters to monitor wet weather events to calibrate our sewer model. With growth, there is also a need to monitor available sewer capacity for new subdivisions.

**ALTERNATIVES CONSIDERED**

Renting additional meters.

**ADVANTAGES OF APPROVAL**

The ability to do in house monitoring of sewer flows.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

\$600 / year for software. \$80 / month for cellular data. (For both meters)

**FUNDING SOURCES**

NA

CIP Project Fund  
Wastewater Fund

DEPARTMENT  
WRF

**PROJECT NUMBER**  
**WW88**

PROJECT NAME  
Re-Tube Boiler

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$25,000				

**DESCRIPTION OF PROJECT**

Current boiler in de-watering building continually has wear on internal components that causes deterioration. Rebuilding will ensure operation, as well as, extend life of boiler and is more economical than replacing the entire boiler.

**ALTERNATIVES CONSIDERED**

Replace and repair tubes individually as they fail.

**ADVANTAGES OF APPROVAL**

The cost of replacing 4 tubes is about the same as what replacing all 20+ would cost.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

None

**FUNDING SOURCES**

None

CIP Project Fund  
Wastewater Fund

DEPARTMENT  
WRF

**PROJECT NUMBER**  
**WW89**

PROJECT NAME  
HVAC heat loop optimization

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$250,000					

**DESCRIPTION OF PROJECT**

Modify heating system to provide for facility needs. The current HVAC system is not adequately heating the digester and buildings. This poses some operational problems that range from inadequate sludge digestion to not being able to provide enough heat to buildings and keep utilities from freezing.

**ALTERNATIVES CONSIDERED**

Some alterations have already been made to the system to maximize the current setup. There is not an easy or cost effective alternative solution that would solve this problem.

**ADVANTAGES OF APPROVAL**

This project would improve the digester operation as well as keep buildings properly heated.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

There will be some increase the energy usage, but this has not been calculated yet.

**FUNDING SOURCES**

100% Wastewater Fund

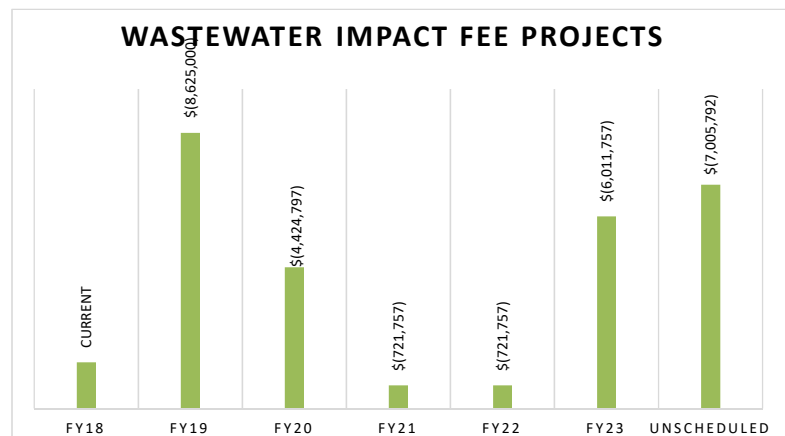


**Wastewater Impact Fee  
Capital Improvement Plan**

Financial Summary	Current Year	Projected					Unscheduled
	FY18	FY19	FY20	FY21	FY22	FY23	
Projected Beginning Reserve Balance Dedicated to CIP	\$ 1,767,460	\$ (315,136)	\$ 327,072	\$ 568,592	\$ 1,260,469	\$ 2,023,028	\$ -
Plus: Impact Fee Revenues Dedicated to CIP	\$ 1,221,150	\$ 1,282,208	\$ 1,346,318	\$ 1,413,634	\$ 1,484,315	\$ 1,558,531	\$ -
Plus: Financing WWIF11		\$ 2,185,000					
Plus: Financing WWIF24		\$ 5,800,000					
Plus: Financing WWIF38			\$ 3,320,000				
Plus: Financing WWIF20 (\$5,290,000)						\$ 3,000,000	
Less: Carryover FY17 Capital Projects	\$ (1,863,746)						
Less: Scheduled CIP Project Costs	\$ (1,440,000)	\$ (8,625,000)	\$ (4,424,797)	\$ (721,757)	\$ (721,757)	\$ (6,011,757)	\$ (7,005,792)
<b>Projected Year-End Cash Dedicated to CIP</b>	<b>\$ (315,136)</b>	<b>\$ 327,072</b>	<b>\$ 568,592</b>	<b>\$ 1,260,469</b>	<b>\$ 2,023,028</b>	<b>\$ 569,802</b>	
Beginning Balance of Payback Improvements:	\$ -	\$ -	\$ 397,500	\$ 1,053,156	\$ 2,640,156	\$ 2,640,156	
Payback District - WWIF11			\$ 655,656				
Payback District - WWIF20				\$ 1,587,000			
Payback District - WWIF27		\$ 397,500					
Payback District - WWIF23							
<b>Ending Balance of Payback Improvements:</b>	<b>\$ -</b>	<b>\$ 397,500</b>	<b>\$ 1,053,156</b>	<b>\$ 2,640,156</b>	<b>\$ 2,640,156</b>	<b>\$ 2,640,156</b>	

*Assumptions Made for Revenue Estimates*

	Current Year	Projected				
	FY18	FY19	FY20	FY21	FY22	FY23
<i>Estimated Annual Wastewater Impact Fee Revenues</i>	\$ 1,221,150	\$ 1,221,150	\$ 1,282,208	\$ 1,346,318	\$ 1,413,634	\$ 1,484,315
<i>Estimated Annual Increase</i>	0.0%	5%	5%	5%	5%	5%
<i>Total Estimated Revenues</i>	\$ 1,221,150	\$ 1,282,208	\$ 1,346,318	\$ 1,413,634	\$ 1,484,315	\$ 1,558,531
<i>Current Revenues Dedicated to CIP %</i>	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<i>Plus: Increase Dedicated to Wastewater Capacity Expansion CIF</i>	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<i>Total % Dedicated to CIP</i>	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b>Total Estimated Revenues Dedicated to CIP</b>	<b>\$ 1,221,150</b>	<b>\$ 1,282,208</b>	<b>\$ 1,346,318</b>	<b>\$ 1,413,634</b>	<b>\$ 1,484,315</b>	<b>\$ 1,558,531</b>



CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
Impact Fees Wastewater									
	WWIF11	Wastewater Im	FRONT STREET INTERCEPTOR	\$2,185,000					
	WWIF20	Wastewater Im	N FRONTAGE RD INTERCEPTOR					\$5,290,000	
	WWIF22	Wastewater Impact Fees	DAVIS-FOWLER INTERCEPTOR (DURSTON RD TO W OAK ST)						\$778,035
	WWIF24	Wastewater Im	DAVIS LANE (LIFT STATION)	\$5,800,000					
	WWIF32	Wastewater Impact Fees	HIDDEN VALLEY (LIFT STATION AND FORCE MAIN)						\$5,190,000
	WWIF33	Wastewater Impact Fees	DAVIS LN LIFT STATION DEBT SERVICE (WWIF24)		\$370,300	\$370,300	\$370,300	\$370,300	\$370,300
	WWIF34	Wastewater Im	ANNIE STREET SANITARY SEWER UPGRADE						\$300,000
	WWIF35	Wastewater Im	BABCOCK SANITARY SEWER UPGRADE		\$245,000				
	WWIF36	Wastewater Impact Fees	BAXTER CREEK BASIN - COTTONWOOD ROAD 18" SANITARY SEWER EXTENSION	\$640,000					
	WWIF37	Wastewater Impact Fees	HUNTERS WAY SEWER CAPACITY UPGRADE		\$350,000				
	WWIF38	Wastewater Impact Fees	NORTON EAST RANCH OUTFALL DIVERSION		\$3,320,000				
	WWIF39	Wastewater Impact Fees	RENOVA STREET SANITARY SEWER MAIN UPGRADE						\$16,000
	WWIF40	Wastewater Impact Fees	FRONT STREET INTERCEPTOR DEBT SERVICE (WWIF11)		\$139,497	\$139,497	\$139,497	\$139,497	\$139,497
	WWIF41	Wastewater Impact Fees	NORTON EAST RANCH OUTFALL DIVERSION DEBT SERVICE (WWIF38)			\$211,960	\$211,960	\$211,960	\$211,960
<i>Totals by DEPARTMENT</i>				\$8,625,000	\$4,424,797	\$721,757	\$721,757	\$6,011,757	\$7,005,792

<i>Summary for Impact Fees Wastewater (14 items)</i>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>Unscheduled</u>
<i>Totals by year:</i>	\$8,625,000	\$4,424,797	\$721,757	\$721,757	\$6,011,757	\$7,005,792

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Impact Fees Wastewater

Wastewater Impact Fees

WWIFI I

PROJECT NAME

Front Street Interceptor

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$2,185,000

DESCRIPTION OF PROJECT

This project consists of construction of ~8,500 LF 18", 21", 24" sewer pipe from manhole E0304 to C0524. Without this wastewater interceptor development in the vicinity of Bozeman Deaconess Health Services, Blackmore Bend Development (new Heeb's store), development on E. Main Street, and development along Haggerty Lane will not be able to occur. The downstream portion of the existing sewer is already at capacity. Additional capacity is needed to serve future development in the vicinity of Bozeman Deaconess Hospital and lands to the south. This project will conform to the City's Wastewater Master Plan. It is estimated that 70% of this project costs will be due to capacity expansion and will be eligible for Wastewater Impact Fees. The remaining 30% of the project costs will need to be provided by a "local share" contribution or other source.

#### ALTERNATIVES CONSIDERED

No action.

#### ADVANTAGES OF APPROVAL

This project will significantly increase the capacity of the trunk sewer, allow for infill and new development along East Main Street, Haggerty Lane, and Bozeman Deaconess Health.

#### ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Impact fees can not fund operating and maintenance costs. The city's wastewater utility will pay for these costs, which are estimated to be a small increment of the city's system as a whole.

#### FUNDING SOURCES

70% Wastewater Impact Fees = \$1,529,864 30% Wastewater Impact Fees for Local Share = \$655,656, recovered via payback district(s).

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Impact Fees Wastewater

Wastewater Impact Fees

WWIF20

PROJECT NAME

N Frontage Rd Interceptor

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$5,290,000

DESCRIPTION OF PROJECT

This project will replace or parallel 11,500' of the North Frontage Road interceptor between Springhill Rd and Bridger Dr. Portions of the interceptor are at or very near capacity and unless improvements are made it will be at or over capacity when the tributary obligated areas are developed. This project will directly increase collection capacity in the southeast and east parts of the city. Development in the southeast part of town within the Community Plan Boundary as well as the east part of town will be tributary to this North Frontage Road Interceptor. There are potentially a great number of private development projects which will not be able to proceed due to the lack of wastewater collection capacity. This project will conform to the City's Wastewater Master Plan. It is estimated that 70% of this project costs will be due to capacity expansion and will be eligible for Wastewater Impact Fees. The remaining 30 % of the project costs will need to be provided by a "local share" contribution or other source.

ALTERNATIVES CONSIDERED

Limit future development in the area.

ADVANTAGES OF APPROVAL

If constructed to the line sizes master planned in the City's Wastewater Facilities plan, capacity will be provided for future growth tributary to this main.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Impact fees can not fund operating and maintenance costs. The city's wastewater utility will pay for these costs, which are estimated to be a small increment of the city's system as a whole.

FUNDING SOURCES

Wastewater Impact Fees, with local share recovered via payback district(s)

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Impact Fees Wastewater

Wastewater Impact Fees

WWIF22

PROJECT NAME

Davis-Fowler Interceptor (Durston Rd to W Oak St)

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$778,035

DESCRIPTION OF PROJECT

This project will replace or parallel 2700' of the Davis-Fowler Interceptor between Durston and Oak. The interceptor between Durston Rd and W Oak will eventually exceed capacity as the Baxter Creek drainage basin develops. In order to convey the ultimate build-out flow, the interceptor will need to be increased from an 18-inch diameter to a 24-inch diameter pipe.

ALTERNATIVES CONSIDERED

Limit future development in the area.

ADVANTAGES OF APPROVAL

If constructed to the line sizes master planned in the City's Wastewater Facilities plan, capacity will be provided for anticipating the long-term future growth in this area

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Impact fees can not fund operating and maintenance costs. The city's wastewater utility will pay for these costs, which are estimated to be a small increment of the city's system as a whole.

FUNDING SOURCES

Wastewater Impact Fees, with local share recovered via payback district

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Impact Fees Wastewater

Wastewater Impact Fees

WWIF24

PROJECT NAME

Davis Lane (Lift Station)

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$5,800,000

DESCRIPTION OF PROJECT

Complete the buildout of the Davis Ln Lift Station.

#### ALTERNATIVES CONSIDERED

Limit future development in the area.

#### ADVANTAGES OF APPROVAL

If constructed to the line sizes master planned in the City's Wastewater Facilities plan, capacity will be provided for anticipating the long-term future growth in this area

#### ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Impact fees can not fund operating and maintenance costs. The city's wastewater utility will pay for these costs, which are estimated to be a small increment of the city's system as a whole.

#### FUNDING SOURCES

Wastewater Impact Fees, with local share recovered via payback district

CIP Project Fund  
Impact Fees Wastewater

DEPARTMENT  
Wastewater Impact Fees

<b>PROJECT NUMBER</b>
<b>WWIF32</b>

<b>PROJECT NAME</b>						
Hidden Valley (Lift Station and Force Main)						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$5,190,000

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

Design and Construct Hidden Valley Lift Station and Force Main. This project will conform to the City's Wastewater Collection Facilities Plan. The Davis Lane Lift Station must be upgraded to accommodate flows from the Hidden Valley Lift Station when the Hidden Valley Lift Station is constructed.

**ALTERNATIVES CONSIDERED**

Limit development on the northwestern edge of the City due to no sanitary sewer availability.

**ADVANTAGES OF APPROVAL**

Increased service area of the City's sanitary sewer system.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Operating costs will be paid from the City's sewer enterprise fund.

**FUNDING SOURCES**

Payback district or other local share contribution from development at the time of construction.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Impact Fees Wastewater

Wastewater Impact Fees

WWIF33

PROJECT NAME

Davis Ln Lift Station Debt Service (WWIF24)

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$370,300

\$370,300

\$370,300

\$370,300

\$370,300

DESCRIPTION OF PROJECT

This project will provide a debt service payment for the City's portion of the Davis Ln Lift Station. If we do not fund this debit service, the City will be in default of our loan. This lift station serves development north of the Cattail Lake Lift Station, and it will conform to the City's Wastewater Master Plan. The Billings Clinic will finance the lift station, and the City will reimburse the Billings Clinic for the City's portion over 5 years. The Billings Clinic will not be reimbursed for their portion of the lift station capacity, which is estimates as 8% of the capacity of the initial lift station construction. The Norton East Ranch Diversion would reduce early operational challenges in the Davis Lane Lift Station due to odors associated with minimal flows.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

This will pay off the City's portion of the Davis Ln Lift Station

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Impact fees can not fund operating and maintenance costs. The city's wastewater utility will pay for these costs, which are estimated to be a small increment of the city's system as a whole.

FUNDING SOURCES

Billings Clinic is constructing the Lift Station and will provide a payback district for the City's portion of the financing.

CIP Project Fund  
Impact Fees Wastewater

DEPARTMENT  
Wastewater Impact Fees

**PROJECT NUMBER**  
**WWIF34**

PROJECT NAME  
Annie Street Sanitary Sewer Upgrade

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$300,000

**DESCRIPTION OF PROJECT**

This project consists of upgrading approximately 1,200 feet of an existing 18-inch sanitary sewer main in the Annie Street alignment to a 21-inch main. Given the current planned development projects, this main will be at capacity in 5-10 years upon buildout of multiple projects.

**ALTERNATIVES CONSIDERED**

No action, but this will limit infill development when the capacity of the sewer main is reached.

**ADVANTAGES OF APPROVAL**

Allows future infill development.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

The additional operating costs will be minimal as this is an upgrade of an existing line.

**FUNDING SOURCES**

Payback district.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Impact Fees Wastewater

Wastewater Impact Fees

WWIF35

PROJECT NAME

Babcock Sanitary Sewer Upgrade

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$245,000

DESCRIPTION OF PROJECT

To accommodate flows from Phase 2 of the Icon Apartments project, Ferguson Farm, and Lupine Village as well as future in-fill development, the existing 10-inch sanitary sewer main in W. Babcock must be upgraded to a 15-inch sanitary sewer main from Manhole L0408 at the intersection of Resort Drive and Babcock to L0412 at the intersection of Babcock and Cottonwood.

ALTERNATIVES CONSIDERED

Do nothing.

ADVANTAGES OF APPROVAL

Allows infill development to proceed as this sanitary sewer main will be at capacity after development of Phase I of Icon Apartments and various site plan applications at Ferguson Farms.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Minimal as this will be a capacity upgrade of an existing sanitary sewer main.

FUNDING SOURCES

Development that depends on this line upgrade will be required to upgrade this main as necessary to serve their projects. However, an upsizing fee from the City is anticipated to support this upgrade.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Impact Fees Wastewater

Wastewater Impact Fees

WWIF36

PROJECT NAME

Baxter Creek Basin - Cottonwood Road 18" Sanitary Sewer Extension

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$640,000

DESCRIPTION OF PROJECT

This project consists of constructing an 18-inch sanitary sewer main from the intersection of Babcock and Cottonwood to the intersection of Cottonwood and Durston per the Wastewater Collection Facilities Plan Update (2015). This section of Cottonwood Road is currently being designed and will be constructed in the summer of 2018, and the sewer improvement must be constructed with the road upgrade, so the road will not need to be excavated for new sewer main construction within the next 2-3 years. The sanitary sewer main identified in the facilities plan is also required to serve any new development upstream of this section of sanitary sewer. The existing 12-inch main capacity is completely dedicated for approved, new development. Any new development served by this line including current site plan applications are dependent on an upgrade of the sanitary sewer at this location (Icon Apartments, Lupine Village, and multiple smaller site plans at Ferguson Farms will require this upgrade in the immediate short term). Also, there will be substantial cost savings to complete the sewer improvement with the Cottonwood Road upgrade. The cost of the project in this item reflects the cost listed in the facility plan, but the cost will be less expensive if completed with the street upgrade.

#### ALTERNATIVES CONSIDERED

The line is at capacity and must be upgraded now, or infill property served by this pipe will not be allowed to proceed.

#### ADVANTAGES OF APPROVAL

Allows immediate use by development as multiple development applications are dependent on this upgrade (Icon Apartments, site plan applications in Ferguson Farms, Lupine Village)

#### ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Additional operating costs are minimal as the proposed upgrade is a replacement of an existing 12-inch main that is at capacity.

#### FUNDING SOURCES

N/A

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Impact Fees Wastewater

Wastewater Impact Fees

WWIF37

PROJECT NAME

Hunters Way Sewer Capacity Upgrade

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$350,000

DESCRIPTION OF PROJECT

Approximately 1,600 feet of sanitary sewer main requires an upgrade from a 12-inch main to a 15-inch main to accommodate infill development including buildout of the MSU Innovation Campus and other infill areas immediately west of S. 19th.

ALTERNATIVES CONSIDERED

No action. This option would not allow buildout of the MSU Innovation Campus and other infill development immediately west of S. 19th.

ADVANTAGES OF APPROVAL

Allows buildout of the MSU Innovation Campus and other infill projects immediately west of S. 19th including a potential student housing project.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Operational costs would remain the same as the existing 12-inch main would be upgraded to a 15-inch main.

FUNDING SOURCES

In-fill development contributions through a direct contribution or a payback district.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Impact Fees Wastewater

Wastewater Impact Fees

WWIF38

PROJECT NAME

Norton East Ranch Outfall Diversion

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$3,320,000

DESCRIPTION OF PROJECT

The existing system does not have enough capacity to collect all of the flows from the full development of the Aajker Creek and Baxter Creek Drainage Basins. Most of the flow is proposed to be collected by a new extension in the Aajker Creek drainage basin and enter the system at the Norton East Ranch Outfall Interceptor. The Norton East Ranch Outfall Interceptor will be constructed from the intersection of Baxter Lane and Flanders Mill Road to the proposed Davis Lane Lift Station north of Interstate 90 and will be a 27-inch sanitary sewer pipe. The project will take pressure off the Baxter Meadows Lift Station which has limited capacity. This project will only be constructed if the Davis Lane Lift Station is constructed. If the Davis Lane Lift Station is not constructed, we will need to divert funds from the Norton East Ranch Outfall to upgrade the existing Baxter Meadows Lift station and sewer interceptor to the lift station.

#### ALTERNATIVES CONSIDERED

1) Upgrade the existing sanitary sewer interceptor and Baxter Meadows Lift Station that serve the Aajker Creek and Baxter Creek Drainage Basins, or 2) do nothing.

#### ADVANTAGES OF APPROVAL

Frees capacity in existing infrastructure to serve infill development while simultaneously opening new areas for development that currently do not have access to the City sanitary sewer system.

#### ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Routine maintenance of sanitary sewer mains including flushing and long-term maintenance.

#### FUNDING SOURCES

Local share contributions from development. New development that connects to the interceptor sewer would be required to pay the assessment associated with a payback district.

CIP Project Fund  
Impact Fees Wastewater

DEPARTMENT  
Wastewater Impact Fees

PROJECT NUMBER  
WWIF39

PROJECT NAME  
Renova Street Sanitary Sewer Main Upgrade

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$16,000

DESCRIPTION OF PROJECT

A small section, 40-feet, of 21-inch sanitary sewer main in Renova Street must be upgraded to a minimum 24-inch main due to the flat slope of this segment of pipe. Upon buildout of the currently planned development projects, this segment of sanitary sewer main will be at capacity in approximately 5-10 years. Further evaluation of this pipe segment is required prior to an upgrade including a survey of the actual grade of the pipe and flow monitoring to verify the need for the upgrade and the results of the City's hydraulic model.

ALTERNATIVES CONSIDERED

Additional flow monitoring and survey data needed to verify the timing and need for this upgrade.

ADVANTAGES OF APPROVAL

Accommodate future development demands on this segment of interceptor sewer.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Minimal due to replacement of an existing, smaller main.

FUNDING SOURCES

N/A



CIP Project Fund  
Impact Fees Wastewater

DEPARTMENT  
Wastewater Impact Fees

**PROJECT NUMBER**  
**WWIF41**

PROJECT NAME  
Norton East Ranch Outfall Diversion Debt service (WWIF38)

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
		\$211,960	\$211,960	\$211,960	\$211,960

DESCRIPTION OF PROJECT

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

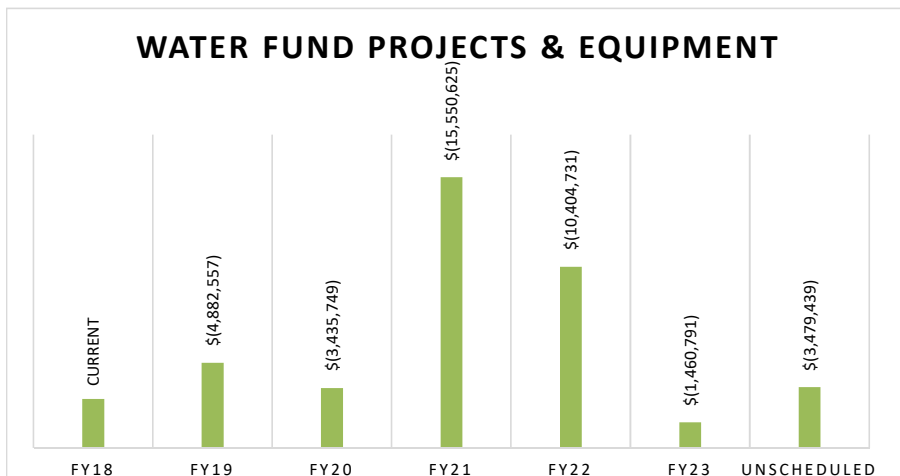
FUNDING SOURCES

**Water Fund  
Capital Improvement Plan**

Financial Summary	Current Year	Projected					Unscheduled
	FY18	FY19	FY20	FY21	FY22	FY23	
Projected Beginning Reserve Balance Dedicated to CIP	\$ 2,219,492	\$ 39,035	\$ (297,171)	\$ (316,751)	\$ 132,443	\$ 557,526	\$ -
Plus: Water Revenues Dedicated to CIP	\$ 2,233,644	\$ 2,796,351	\$ 2,936,169	\$ 3,999,819	\$ 4,119,814	\$ 4,243,408	\$ -
Plus: Loan or Financing for Hyalite Dam Improvements W79				\$ 2,000,000			
Plus: Loan or Financing for Automation Upgrades W71					\$ 6,710,000		
Plus: Loan for Mechanical Upgrades W72		\$ 1,750,000					
Plus: Loan or Financing for Lyman Tank Construction				\$ 10,000,000			
Plus: Loan for water fund portion of WIF40			\$ 480,000				
Less: FY17 Carryover Capital	\$ (1,605,701)						
Less: Scheduled CIP Project Costs	\$ (2,808,400)	\$ (4,882,557)	\$ (3,435,749)	\$ (15,550,625)	\$ (10,404,731)	\$ (1,460,791)	\$ (3,479,439)
<b>Projected Year-End Cash Dedicated to CIP</b>	<b>\$ 39,035</b>	<b>\$ (297,171)</b>	<b>\$ (316,751)</b>	<b>\$ 132,443</b>	<b>\$ 557,526</b>	<b>\$ 3,340,143</b>	<b>\$ (3,479,439)</b>

*Assumptions Made for Revenue Estimates*

	Current Year	Projected				
	FY18	FY19	FY20	FY21	FY22	FY23
Estimated Annual Water Revenues	\$ 8,590,940	\$ 8,590,940	\$ 9,020,487	\$ 9,471,511	\$ 9,755,657	\$ 10,048,326
Estimated Annual Increase		5.0%	5.0%	3.0%	3.0%	3.0%
<b>Total Estimated Revenues</b>	<b>\$ 8,590,940</b>	<b>\$ 9,020,487</b>	<b>\$ 9,471,511</b>	<b>\$ 9,755,657</b>	<b>\$ 10,048,326</b>	<b>\$ 10,349,776</b>
Current Revenues Dedicated to CIP %	21.0%	26.0%	31.0%	31.0%	41.0%	41.0%
Plus: Increase Dedicated to CIP	5.0%	5.0%	0.0%	10.0%	0.0%	0.0%
<b>Total % Dedicated to CIP</b>	<b>26.0%</b>	<b>31.0%</b>	<b>31.0%</b>	<b>41.0%</b>	<b>41.0%</b>	<b>41.0%</b>
<b>Total Estimated Revenues Dedicated to CIP</b>	<b>\$ 2,233,644</b>	<b>\$ 2,796,351</b>	<b>\$ 2,936,169</b>	<b>\$ 3,999,819</b>	<b>\$ 4,119,814</b>	<b>\$ 4,243,408</b>



CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
<b>Water Fund</b>									
	W03	Engineering	ANNUAL WATER PIPE REPLACEMENT PROGRAM - DESIGN	\$22,500	\$22,500	\$22,500	\$22,500	\$22,500	
	W04-19	Engineering	WATER PIPE REPLACEMENT PROGRAM - CONSTRUCTION IN 2019	\$1,200,000					
	W04-20	Engineering	WATER PIPE REPLACEMENT PROGRAM - CONSTRUCTION IN 2020		\$1,200,000				
	W04-21	Engineering	WATER PIPE REPLACEMENT PROGRAM - CONSTRUCTION IN 2021			\$1,200,000			
	W04-22	Engineering	WATER PIPE REPLACEMENT PROGRAM - CONSTRUCTION IN 2022				\$1,200,000		
	W04-23	Engineering	WATER PIPE REPLACEMENT PROGRAM - CONSTRUCTION IN 2023					\$1,200,000	
<i>Totals by DEPARTMENT</i>				\$1,222,500	\$1,222,500	\$1,222,500	\$1,222,500	\$1,222,500	
<b>Water Fund</b>									
	GF227	Finance	ERP REPLACEMENT "SUNGARD REPLACEMENT/UPGRADE"						\$333,333
<i>Totals by DEPARTMENT</i>									\$333,333
<b>Water Fund</b>									
	GIS03	GIS	ASSET MANAGEMENT SOFTWARE		\$50,000				
	GIS04	GIS	AERIAL PHOTOGRAPHY			\$85,000			
	GIS06	GIS	GPS SYSTEM REPLACEMENT	\$17,500					
	GIS08	GIS	LARGE FORMAT PLOTTER - REPLACEMENT	\$20,000					
	GIS12	GIS	FME SERVER	\$20,000					
	GIS13	GIS	VERTICAL ASSET RISK ASSESSMENT (PHASE 2)						\$85,000
	GIS14	GIS	VERTICAL ASSET RISK ASSESSMENT (PHASE 1)						\$20,000
	GIS15	GIS	GIS FIELD VEHICLE REPLACEMENT	\$26,000					
<i>Totals by DEPARTMENT</i>				\$83,500	\$50,000	\$85,000			\$105,000
<b>Water Fund</b>									
	GIS11	Public Works	COMPUTER REPLACEMENTS	368 \$49,048	\$45,369	\$30,125	\$59,231	\$52,291	

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
	PW05	Public Works	PUBLIC WORKS SHOPS MASTER PLAN	\$20,000					
	PW06	Public Works	PUBLIC WORKS SHOPS FACILITY CONSTRUCTION		\$670,000				
<i>Totals by DEPARTMENT</i>				\$69,048	\$715,369	\$30,125	\$59,231	\$52,291	
<b>Water Fund</b>									
	GIS14	SCADA	SCADA UPGRADES & IMPROVEMENTS				\$2,100,000		
	W66	SCADA	METERS, TRANSDUCERS & COMMUNICATIONS (REPLACEMENT SCADA RADIO & STRAP ON FLOW METER)	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	
<i>Totals by DEPARTMENT</i>				\$10,000	\$10,000	\$10,000	\$2,110,000	\$10,000	
<b>Water Fund</b>									
	WC02	Water Conserva	METER SOFTWARE SUBSCRIPTION	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	
	WC03	Water Conservation	MUNICIPAL WATERSHED DATA COLLECTION	\$50,000					
<i>Totals by DEPARTMENT</i>				\$86,000	\$36,000	\$36,000	\$36,000	\$36,000	
<b>Water Fund</b>									
	WIF40	Water Impact Fees	SOURDOUGH TRANSMISSION MAIN – PHASE 2 (FINANCE W90)		\$480,000				
	WIF48	Water Impact Fees	DEBT SERVICE FOR BORROWING - TRANSMISSION MAIN (W89)			\$30,000	\$30,000	\$30,000	\$380,000
<i>Totals by DEPARTMENT</i>					\$480,000	\$30,000	\$30,000	\$30,000	\$380,000
<b>Water Fund</b>									
	W47	Water Operations	REPLACE #2647 - 1998 1/2 TON CHEVY PICKUP			\$27,000			
	W49	Water Operations	REPLACE #3078 - 2002 1/2 TON CHEVY PICKUP				\$27,000		
	W68	Water Operatio	WHEELED EXCAVATOR						\$151,000
	W69	Water Operatio	WATER SYSTEM CONDITION ASSESSMENT		\$100,000		\$100,000		
	W70	Water Operatio	REDUNDANT NORTH 5038 ZONE FEED		\$66,880				
	W71	Water Operations	PRV PHASE 2 - AUTOMATION AND INSTRUMENTATION UPGRADES				\$6,710,000		

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
	W72	Water Operations	PRV PHASE 1 - MECHANICAL AND STRUCTURAL UPGRADES	\$1,750,000					
	W73	Water Operations	PRV ABANDONMENTS (APPROXIMATELY 6 SITES)						\$510,106
	W75	Water Operatio	LEAD SERVICE LINE REPLACEMENT	\$200,000					
	W85	Water Operations	SOUTH UNIVERSITY DISTRICT 12" WATER MAIN	\$296,509					
<i>Totals by DEPARTMENT</i>				\$2,246,509	\$166,880	\$27,000	\$6,837,000		\$661,106
<b>Water Fund</b>									
	W56	WTP	WTP FACILITY R&R	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	
	W57	WTP	WTP FACILITY ENGINEERING & OPTIMIZATION	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	
	W58	WTP	MODULE REPLACE FUND	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	
	W62	WTP	REPLACE #3446 - WTP GMC SIERRA PICKUP		\$45,000			\$0	
	W63	WTP	SOURDOUGH WATERSHED FUEL REDUCTION	\$400,000					
	W78	WTP	HILLTOP TANK INSPECTION AND MIXING SYSTEM	\$130,000					
	W79	WTP	HYALITE DAM AND RESERVOIR OPTIMIZATION IMPROVEMENTS			\$4,000,000			
	W83	WTP	SOURDOUGH INTAKE IMPROVEMENTS						\$2,000,000
	W84	WTP	SOURDOUGH TANK INSPECTION AND IMPROVEMENTS		\$600,000				
	W86	WTP	SOURDOUGH DIVERSION CLEANOUT	\$25,000					
	W87	WTP	LYMAN TANK AND TRANSMISSION MAIN DESIGN	\$500,000					
	W88	WTP	LYMAN TANK AND TRANSMISSION MAIN CONSTRUCTION			\$10,000,000			
<i>Totals by DEPARTMENT</i>				\$1,165,000	\$755,000	\$14,110,000	\$110,000	\$110,000	\$2,000,000

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
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<i>Summary for Water Fund (46 items)</i>				<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>Unscheduled</u>
<i>Totals by year:</i>				\$4,882,557	\$3,435,749	\$15,550,625	\$10,404,731	\$1,460,791	\$3,479,439

CIP Project Fund  
Water Fund

DEPARTMENT  
Finance

<b>PROJECT NUMBER</b>
<b>GF227</b>

<b>PROJECT NAME</b>						
ERP Replacement "Sungard Replacement/Upgrade"						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$333,333

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

Replacing/upgrading the current system installed in 1999. This is the system that runs all the financial, community development, land records, utility and business license applications. Although it is unscheduled we are currently looking into this with a possibility of FY20.

**ALTERNATIVES CONSIDERED**

Continue running current SunGard package. Use SunGard.net (NaviLine EDGE) as an improvement to the current system, but not a full replacement.

**ADVANTAGES OF APPROVAL**

Simplified package. Easier to integrate the various applications/programs. Easier to pull out information for end users. Easier compilation of Commission reports and packets for Community Development.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Unknown. Dependent on the option chosen.

**FUNDING SOURCES**

General Fund 33%; Water Fund 33%; Wastewater Fund 33%

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

GIS

GIS03

PROJECT NAME

Asset Management Software

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$50,000

DESCRIPTION OF PROJECT

Managing infrastructure efficiently continues to be one of the top priorities and goals of the Bozeman City Commission. Assets within the water distribution system, wastewater collection system, and the stormwater system will benefit from modern analysis. Specialized asset management software will build upon existing datasets and systems to assist in delivering the desired level of service for the lowest life cycle cost. Advanced applications are necessary to analyze condition information and criticality to identify and coordinate overlaps and gaps among various assets. Asset management software will be used to better understand opportunities for system repair and improvement across all asset categories. This technology will leverage the strengths of coordinating and scheduling overlapping needs across all infrastructures. Current and future facility planning efforts will benefit from a comprehensive application of asset management as it relates to coordinated infrastructure improvements throughout the city.

ALTERNATIVES CONSIDERED

Continue managing data and workflow using manual processes with limited potential for effective analysis.

ADVANTAGES OF APPROVAL

Using technology to support long term capital planning will aid in rehabilitation/repair/replacement decisions and ultimately result in a prolonged asset lifespan. A fully developed asset management program will assist the organization in continuing to deliver a high level of service in the most sustainable way possible.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Maintenance (first year included) = \$8,000

FUNDING SOURCES

None

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

GIS

GIS04

PROJECT NAME

Aerial Photography

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$85,000

DESCRIPTION OF PROJECT

Aerial photography is used on a daily basis in all levels of city operations to support a wide variety of decisions. Benefits to both the organization and the community include a clear and accurate representation of current conditions in addition to serving as an important historical record during times of high growth. Current aerial photography supports timely decisions based on accurate information and continues to experience unprecedented user demand (i.e., staff reports, Commission presentations, water/sewer/stormwater utilities, public requests, etc.).

ALTERNATIVES CONSIDERED

Use of lower resolution satellite imagery. Partnerships with other agencies.

ADVANTAGES OF APPROVAL

Contributes to on-going acquisition of photos at regular intervals for historical archives. Since 1987 we have not gone more than five years without an update. Measurements and land use determinations are made on a local or regional basis without requiring extensive field time. Used extensively in several on-line and in-house mapping applications. Provides background information for existing and future GIS & CAD datasets and Facility Plans. Meets public demand for current and accurate aerial photography.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

There are no annual operating or maintenance costs associated with this project.

FUNDING SOURCES

None

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

GIS

GIS06

PROJECT NAME

GPS System Replacement

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$17,500

DESCRIPTION OF PROJECT

GPS data provides current and accurate information to support critical decisions. GPS is used to collect a wide variety of location data, including all water, sewer, stormwater, parks, and transportation related assets. This is the second of two planned upgrades to replace equipment originally purchased in 2012. Advancements in technology allow for greater efficiency along with improved accuracy. Major departments that share in the use of this equipment include water/sewer, stormwater, engineering, community development, streets, etc.

ALTERNATIVES CONSIDERED

Contracted data collection services. Rental equipment.

ADVANTAGES OF APPROVAL

Meets the demands of recent expansions in the scope of data collection efforts within Public Works. Maintains our most critical equipment in the GIS Department with current technology.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

There are no annual operating or maintenance costs associated with this project.

FUNDING SOURCES

None

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

GIS

GIS08

PROJECT NAME

Large Format Plotter - Replacement

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$20,000

DESCRIPTION OF PROJECT

Printing large scale maps is critical for the delivery of hard-copy exhibits for both the organization as well as the public. Large format displays facilitate efficient and effective decision making by providing visual context for surrounding infrastructure and development. Large format prints are produced on a daily basis in support of all city departments, including public map sales. Major departments that share in the use of this equipment include water/sewer, stormwater, engineering, community development, streets, etc.

ALTERNATIVES CONSIDERED

Maintain current equipment beyond recommended lifespan (replacement parts become difficult to locate over time). Contracted printing services.

ADVANTAGES OF APPROVAL

Maintains critical equipment in the GIS Department with current technology. Supports on-going printing needs for several departments (including the public).

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

On-going expenses include printing supplies and routine maintenance (approx. \$2,500.00/yr.).

FUNDING SOURCES

None

CIP Project Fund  
Water Fund

DEPARTMENT  
Public Works

<b>PROJECT NUMBER</b>
<b>GIS I</b>

<b>PROJECT NAME</b>						
Computer Replacements						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$49,048	\$45,369	\$30,125	\$59,231	\$52,291	

<b>DESCRIPTION OF PROJECT</b>
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Anticipated Public Works computer replacements.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

**FUNDING SOURCES**

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

GIS

GIS12

PROJECT NAME

FME Server

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$20,000

DESCRIPTION OF PROJECT

Purchase upgrade to an existing database technology which effectively automates the transfer of information between a variety of systems. Database information is used on a daily basis in all levels of our operations to support a wide variety of decisions. Updated technology will result in a more efficient process for managing large volumes of data. Database information is used by almost every department to support many technology systems. Deferring the purchase of this upgrade will not allow for the full realization of potential efficiency of moving large amounts of data between systems. Upgraded FME server technology will leverage the strengths of a wide variety of database systems throughout the organization. Several current and future projects will benefit from automated data transformation including solid waste, stormwater, and water conservation.

ALTERNATIVES CONSIDERED

Continue transferring database information using manual processes with limited potential for increased efficiency.

ADVANTAGES OF APPROVAL

Employees and citizens will have real-time access to a wide variety of information that is typically out of date and hard to attain.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Maintenance (first year included) = \$3,470

FUNDING SOURCES

None

CIP Project Fund  
Water Fund

DEPARTMENT  
GIS

**PROJECT NUMBER**  
**GIS13**

PROJECT NAME  
Vertical Asset Risk Assessment (Phase 2)

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$85,000

**DESCRIPTION OF PROJECT**

Risk assessment (i.e., likelihood vs. consequence) is currently a major factor in considering horizontal infrastructure repair & replacements for both water distribution and wastewater collection systems. This project will execute the implementation plan developed in Phase I to expand the use of risk to vertical assets including reservoirs, groundwater sources, PRV's, booster stations, and treatments plants. A generalized risk policy allows for the comparison of risk across various asset classes on a comparable scale, which then allows for better allocation of CIP funding and effort to the highest risk assets across the entire utility.

**ALTERNATIVES CONSIDERED**

Continue to assess risk for only horizontal infrastructure, while using separate criteria to evaluate vertical assets.

**ADVANTAGES OF APPROVAL**

Completes the need for considering risks for both horizontal and vertical infrastructure.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Dedicated staff time will be needed to maintain the resulting risk model.

**FUNDING SOURCES**

N/A

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

GIS

GIS14

PROJECT NAME

Vertical Asset Risk Assessment (Phase I)

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$20,000

DESCRIPTION OF PROJECT

Risk assessment (i.e., likelihood vs. consequence) is currently a major factor in considering horizontal infrastructure repair & replacements for both water distribution and wastewater collection systems. This project will result in an implementation plan to expand the use of risk to vertical assets including reservoirs, groundwater sources, PRV's, booster stations, and treatments plants. A generalized risk policy allows for the comparison of risk across various asset classes on a comparable scale, which then allows for better allocation of CIP funding and effort to the highest risk assets across the entire utility.

ALTERNATIVES CONSIDERED

Continue to assess risk for only horizontal infrastructure, while using separate criteria to evaluate vertical assets.

ADVANTAGES OF APPROVAL

Completes the need for considering risks for both horizontal and vertical infrastructure.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Dedicated staff time will be needed to maintain the resulting risk model.

FUNDING SOURCES

N/A

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

SCADA

GIS14

PROJECT NAME

SCADA Upgrades & Improvements

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$2,100,000

DESCRIPTION OF PROJECT

Install Wide Area Network infrastructure, connect PRV vaults, verify/install Pressure relief per each Pressure Zone, central site improvements, update historian, and implement pressure management regimes to improve system pressure protection. This will result in improved surveillance of system operation, increased control and understanding of real-time system conditions, and the ability to implement tighter pressure management controls. Additionally, this will improve our understanding of cause/effect allows improved overall system operation including more precise pressure control, real-time updates during abnormal events. This project has a direct impact on our PRV vault upgrades, Reservoir mixing upgrades, new storage reservoir, Pear St. Booster Station upgrade, and remote water quality surveillance system.

ALTERNATIVES CONSIDERED

Status Quo

ADVANTAGES OF APPROVAL

Improved surveillance of system operation, increased control and understanding of real-time system conditions, ability to implement tighter pressure management controls.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

SCADA WAN maintenance expenses, server and hardware maintenance, software maintenance and programming libraries

FUNDING SOURCES

100% Water Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

GIS

GIS15

PROJECT NAME

GIS Field Vehicle Replacement

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$26,000

DESCRIPTION OF PROJECT

The GIS Department collects data for many assets including water, wastewater, stormwater, and all transportation infrastructure. Over 500 hours are spent each year in the field mapping and verifying location information across the city. The vehicle currently in use is a 1998 Chevy 1500 1/2 Ton 4WD Pickup with 98,418 miles (as of 8/3/17). The vehicle replacement policy within Public Works states 100,000 and/or 20 years, putting this vehicle within range. A fuel efficient Prius is recommended and will meet the needs of the department for years to come.

ALTERNATIVES CONSIDERED

Leased vehicle.

ADVANTAGES OF APPROVAL

Replaces an aging, inefficient vehicle.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Standard vehicle maintenance costs.

FUNDING SOURCES

N/A

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

Public Works

PW05

PROJECT NAME

Public Works Shops Master Plan

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$20,000

DESCRIPTION OF PROJECT

Develop a long term master plan for Public Works shop facilities, equipment, and personnel. This includes conducting a needs assessment of space for existing and future employees, equipment, machinery, and rolling stock. There is a severe shortage of enclosed storage for equipment, vehicles, and machinery, resulting in extra wear and tear, additional maintenance costs, and time preparing the equipment on cold mornings. Additionally, there is a lack of space available for existing as well as future staff. This will be split three ways between water (\$20,000), wastewater (\$20,000), and streets (\$20,000).

ALTERNATIVES CONSIDERED

Continue using existing infrastructure.

ADVANTAGES OF APPROVAL

Provide an accurate analysis of the City of Bozeman Public Works space needs for both equipment as well as people.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Depending on the results of the plan, the likely result will be the construction of additional storage and office space.

FUNDING SOURCES

This project will be split 3 ways between Water Fund (\$20,000), Wastewater Fund (\$20,000), and Street Maintenance Fund (\$20,000)

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

Public Works

PW06

PROJECT NAME

Public Works Shops Facility Construction

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$670,000

DESCRIPTION OF PROJECT

Construct additional facilities recommended in the result of the Public Works Shops Master Plan. This will be split three ways between water (\$670,000), wastewater (\$670,000), and streets (\$670,000).

ALTERNATIVES CONSIDERED

Continue using existing infrastructure.

ADVANTAGES OF APPROVAL

The construction of a new Public Works facility will provide indoor storage for millions of dollars of equipment, machinery, vehicles, etc. This will both reduce wear and tear and maintenance costs, as well as reduce time spent on preparing equipment on cold mornings.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Normal building maintenance and utility costs.

FUNDING SOURCES

This project will be split 3 ways between Water Fund (\$670,000), Wastewater Fund (\$670,000), and Street Maintenance Fund (\$670,000)

CIP Project Fund  
Water Fund

DEPARTMENT  
Engineering

<b>PROJECT NUMBER</b>
<b>W03</b>

<b>PROJECT NAME</b>
Annual Water Pipe Replacement Program - Design

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$22,500	\$22,500	\$22,500	\$22,500	\$22,500	

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

This item provides for design work to be completed every year, in anticipation of the Annual Water System Upgrades.

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

Provides for the design of necessary water system maintenance work.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

100% Water Utility Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

Engineering

W04-19

PROJECT NAME

Water Pipe Replacement Program - Construction in 2019

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$1,200,000

DESCRIPTION OF PROJECT

The water replacement program sets aside funds to assess and replace failing water pipes. Priority will go to replace the water pipe associated with the annual street construction (S Tracy from Babcock to College). The remaining funds will be used to conduct water pipe condition assessments and repair identified pipes.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Provides for the construction of necessary water system maintenance work.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This project results in a net decrease in overall maintenance costs over the lifecycle of all pipes.

FUNDING SOURCES

CIP Project Fund

DEPARTMENT

**PROJECT NUMBER**

Water Fund

Engineering

**W04-20**

PROJECT NAME

Water Pipe Replacement Program - Construction in 2020

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$1,200,000

DESCRIPTION OF PROJECT

The water replacement program sets aside funds to assess and replace failing water pipes. Priority will go to replace the water pipe associated with the annual street construction (S Black from College to the Cul-De-Sac). The remaining funds will be used to conduct water pipe condition assessments and repair identified pipes.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Provides for the construction of necessary water system maintenance work.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This project results in a net decrease in overall maintenance costs over the lifecycle of all pipes.

FUNDING SOURCES

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

Engineering

W04-21

PROJECT NAME

Water Pipe Replacement Program - Construction in 2021

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$1,200,000

DESCRIPTION OF PROJECT

The water replacement program sets aside funds to assess and replace failing water pipes. Priority will go to replace the water pipe associated with the annual street construction (N Tracy from Villard to Peach). The remaining funds will be used to conduct water pipe condition assessments and repair identified pipes.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Provides for the construction of necessary water system maintenance work.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This project results in a net decrease in overall maintenance costs over the lifecycle of all pipes.

FUNDING SOURCES

CIP Project Fund

DEPARTMENT

**PROJECT NUMBER**

Water Fund

Engineering

**W04-22**

PROJECT NAME

Water Pipe Replacement Program - Construction in 2022

- New
- Replacement
- Equipment
- Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$1,200,000

DESCRIPTION OF PROJECT

The water replacement program sets aside funds to assess and replace failing water pipes. Priority will go to replace the water pipe associated with the annual street construction (N 17th from Durston to the End). The remaining funds will be used to conduct water pipe condition assessments and repair identified pipes.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Provides for the construction of necessary water system maintenance work.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This project results in a net decrease in overall maintenance costs over the lifecycle of all pipes.

FUNDING SOURCES

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

Engineering

W04-23

PROJECT NAME

Water Pipe Replacement Program - Construction in 2023

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$1,200,000

DESCRIPTION OF PROJECT

The water replacement program sets aside funds to assess and replace failing water pipes. Priority will go to replace the water pipe associated with the annual street construction (West Koch Street from 8th to Tracy). The remaining funds will be used to conduct water pipe condition assessments and repair identified pipes.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Provides for the construction of necessary water system maintenance work.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This project results in a net decrease in overall maintenance costs over the lifecycle of all pipes.

FUNDING SOURCES

CIP Project Fund  
Water Fund

DEPARTMENT  
Water Operations

**PROJECT NUMBER**  
**W47**

**PROJECT NAME**  
Replace #2647 - 1998 1/2 Ton Chevy Pickup

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
		\$27,000			

**DESCRIPTION OF PROJECT**

This project is to replace a 1998 Chevy with 70,779 miles. As our crew grows this type of vehicle is used daily in support of the department's mission. This truck responds to all types of calls from locating to witnessing bores to a support vehicle for excavation jobs. Using an older vehicle becomes more unreliable, but if we had to, we could hold off a year.

**ALTERNATIVES CONSIDERED**

Continue to use older vehicle which is becoming unreliable and costly to maintain.

**ADVANTAGES OF APPROVAL**

Increased reliability and safety for staff.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

As the truck ages there will be unforeseen costs to maintain this vehicle.

**FUNDING SOURCES**

100% Water Fund

CIP Project Fund  
Water Fund

DEPARTMENT  
Water Operations

**PROJECT NUMBER**  
**W49**

PROJECT NAME  
Replace #3078 - 2002 1/2 Ton Chevy Pickup

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
			\$27,000		

DESCRIPTION OF PROJECT

This project replaces a 2002 Chevy pickup with 85,816 miles. This truck is used for leak detection, locating, and fire hydrant flushing, which are 3 critical programs for our department. This truck will be replaced with a more fuel efficient vehicle.

ALTERNATIVES CONSIDERED

Continue to use older piece of equipment which is becoming unreliable and costly to maintain.

ADVANTAGES OF APPROVAL

Increased reliability and safety for staff.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

As the truck ages there will be unforeseen costs to maintain this vehicle.

FUNDING SOURCES

100% Water Fund

CIP Project Fund  
Water Fund

DEPARTMENT  
WTP

<b>PROJECT NUMBER</b>
<b>W56</b>

<b>PROJECT NAME</b>
WTP Facility R&R

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	

**DESCRIPTION OF PROJECT**

Repair and replacement fund for the WTP. Having this item in the budget will allow for unexpected and rapid repair of equipment, in the event of failure. This will result in shorter down time and not defer other planned projects. Without this fund, maintenance could be deferred for up to a year.

**ALTERNATIVES CONSIDERED**

Not having this fund would defer other needed maintenance.

**ADVANTAGES OF APPROVAL**

If systems fail, they need to be repaired immediately. If the failure is unexpected, other items that have been budgeted for will need to be postponed. Not all repairs or equipment failures can be predicted and budgeted as capital improvement projects

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

None

**FUNDING SOURCES**

100% Water Funds

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

WTP

W57

PROJECT NAME

WTP Facility Engineering & Optimization

New

Replacement

Equipment

Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	

DESCRIPTION OF PROJECT

WTP Facility Engineering & Optimization. The longer the water treatment plant is in operation, operators become familiar with the processes and come up with ideas to optimize the process. This line item will allow for engineering studies on the operators ideas before the expense of changing the process. In particular, the plan for this budget items is to improve the process from the raw water intakes to the treated water reservoirs. It will allow studies to be conducted to make sure that proposed optimizations will actually improve the process at a reasonable expense. Through the optimization of the plant with engineering studies the process will be streamlined and will save money in the future.

#### ALTERNATIVES CONSIDERED

Proceed with optimization projects without knowing if the project will actually improve plant performance.

#### ADVANTAGES OF APPROVAL

The advantage of having funds available to do engineering studies before any project is started will make sure that the right equipment is purchased and that it will perform properly. Optimization studies will predict actual cost/benefit over time to make sure the city is spending its money efficiently.

#### ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

#### FUNDING SOURCES

100% Water Funds

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

WTP

W58

PROJECT NAME

Module Replace Fund

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$50,000

\$50,000

\$50,000

\$50,000

\$50,000

DESCRIPTION OF PROJECT

Without the timely replacement of the membranes at the end of their useful lifespan, the whole treatment process will need to be shut down. Because this treatment process is relatively new, we do not have a firm estimate on the lifespan of the membranes. We expect them to last at least ten years but they could last twenty. This "savings account" will provide for rapid acquisition and replacement of the membrane modules when the time comes, instead of waiting for the next budget cycle. The costs for these replacements would be significant and typically need to be planned for after 10 years. This will be an on-going item for the next 20 years.

ALTERNATIVES CONSIDERED

Determine funding source at the time these replacements are needed.

ADVANTAGES OF APPROVAL

If a membrane module at the plant needs to be replaced, the cost will be significant. This will allow the city to save money over time.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

100% Water Funds

CIP Project Fund  
Water Fund

DEPARTMENT  
WTP

**PROJECT NUMBER**  
**W62**

PROJECT NAME  
Replace #3446 - WTP GMC Sierra Pickup

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$45,000			\$0	

DESCRIPTION OF PROJECT

This truck replaces #3446, the plant's sampling vehicle. This truck currently has over 100,000 miles on it and is driven approximately 35 miles per day, 365 days per year.

ALTERNATIVES CONSIDERED

Continue driving #3446 and risk break downs and increased maintenance costs.

ADVANTAGES OF APPROVAL

A new truck would be more reliable and result in lower repair and maintenance costs.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Minimal Maintenance Costs

FUNDING SOURCES

100% Water Funds

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

WTP

W63

PROJECT NAME

Sourdough Watershed Fuel Reduction

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$400,000

DESCRIPTION OF PROJECT

Sourdough fuel reduction will protect investments in WTP pre-membrane sedimentation process and membrane filters by reducing wildfire impacts on raw water quality in sourdough. This will reduce wildfire risk in sourdough drainage and increases resiliency against catastrophic wildfire, and should lessen wear and tear on processes and components in event of wildfire impacted source water. Additionally, it provides a safer environment for fire suppression to occur in the event of. This project works in dovetail with USFS BMW project, and will not happen unless BMW project goes.

ALTERNATIVES CONSIDERED

Do nothing

ADVANTAGES OF APPROVAL

Provides landscape level fuel reduction that dovetails with the USFS BMW project. reduces susceptibility of catastrophic wildfire in Sourdough municipal watershed. Reduces impacts to public and watershed closures during work activities

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Unknown

FUNDING SOURCES

\$270,000 DNRC Special State Fire Assistance Grant

CIP Project Fund  
Water Fund

DEPARTMENT  
SCADA

<b>PROJECT NUMBER</b>
<b>W66</b>

<b>PROJECT NAME</b>					
Meters, Transducers & Communications (Replacement Scada Radio & Strap On Flow Meter)					

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	

**DESCRIPTION OF PROJECT**

Meters, Transducers & Communications (Replacement Scada Radio & Strap On Flow Meter) for the SCADA Technician. The City's SCADA Technician needs funds to perform their necessary job functions. Failure of electronic devices needed to perform the job cannot be foreseen or scheduled. This fund would allow funds for that equipment. SCADA directly impacts water distribution, WRF, and WTP. Improved SCADA will result in cost savings through water conservation.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

This fund will allow the Technician to repair or replace important equipment in a more timely manner.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

None

**FUNDING SOURCES**

100% Water Funds

CIP Project Fund  
Water Fund

DEPARTMENT  
Water Operations

<b>PROJECT NUMBER</b>
<b>W68</b>

<b>PROJECT NAME</b>						
Wheeled Excavator						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$151,000

<b>DESCRIPTION OF PROJECT</b>
-------------------------------

This would be a trackhoe excavator with wheels instead of tracks. It is a critical piece of machinery in our departments, and it is used to maintain water, sewer, and stormwater infrastructure. The excavator will be split 50/50 with the wastewater fund (WW86).

**ALTERNATIVES CONSIDERED**

Continue to use smaller equipment .

**ADVANTAGES OF APPROVAL**

Increased productivity with larger excavator.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

N/A

**FUNDING SOURCES**

\$151,000 Water Fund, \$151,000 Wastewater Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

Water Operations

W69

PROJECT NAME

Water System Condition Assessment

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$100,000

\$100,000

DESCRIPTION OF PROJECT

Prepare and evaluate condition assessment plan and execute water main condition assessments in high risk portions of the city. These are major assets whose failure could affect a large population of end-users. Work-a round may be possible with heavy burden on Utility resources. Additionally, these studies could produce substantial & quantifiable benefits that improves product quality, processes, or adoption of best industry practices. Depending on the results, these studies could result in follow-up R&R.

ALTERNATIVES CONSIDERED

No inspection

ADVANTAGES OF APPROVAL

Doing planned condition assessment can provide a cost effective mechanism of identifying likely asset failures and thereby offering the opportunity of repairing the deficiency or the whole asset if needed prior to failure. Additionally, CA often can identify assets in good working condition, so only required repairs are completed thereby saving significant money in replacing assets in good working order.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No

FUNDING SOURCES

100% Water Fund

CIP Project Fund  
Water Fund

DEPARTMENT  
Water Operations

**PROJECT NUMBER**  
**W70**

PROJECT NAME  
Redundant North 5038 Zone Feed

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$66,880				

DESCRIPTION OF PROJECT

Evaluate, and upgrade as required, 2nd location of redundant feed of 5130 Zone water into North (5038) Zone. This will ensure alternative source of water exists and is sufficient to feed North Zone in time when Lyman Creek source is unavailable. This provides a second path for water to move from South Zone to North Zone in event that Lyman source is unavailable. This project will meet the City's hydraulic criteria. It could be performed in conjunction with Pear St. Booster Upgrade to facilitate testing and commissioning.

ALTERNATIVES CONSIDERED

Continue with single connection between pressure zones

ADVANTAGES OF APPROVAL

Use existing facilities and connectivity to provide redundant back up source of water

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

100% Water Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

Water Operations

W71

PROJECT NAME

PRV Phase 2 - Automation and Instrumentation Upgrades

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$6,710,000

DESCRIPTION OF PROJECT

Upgrade pressure instrumentation, automate valve actuation, and provide a LAN connection and SCADA programming for real-time monitoring and remote control of PRV settings. Without this project, system operators are without vital data on system operating conditions. Limited real time data allows operators to anticipate, diagnose, or correct abnormal operating conditions.: Standardized pressure control offers improved protections from surge conditions which are a likely cause of pipe failure. It will also improve service levels to existing customers where pressure transients cause leaks in sprinkler systems or within customer premises.

ALTERNATIVES CONSIDERED

Status quo operation

ADVANTAGES OF APPROVAL

Improve water distribution operations through increased understanding of system operating characteristics. Improve responsiveness to dynamic operating conditions. Facilitate improved access to existing sites now requiring confined space entry procedures. Standardize and improve surge control features throughout system.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Debt service (if any) to construct, power costs, SCADA maintenance, vault maintenance, instrument maintenance, programming libraries

FUNDING SOURCES

100% Water Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

Water Operations

W72

PROJECT NAME

PRV Phase I - Mechanical and Structural Upgrades

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$1,750,000

DESCRIPTION OF PROJECT

Upgrade hatch/entry, valving, piping, pressure settings, sump pumps and provide power, which will provide operators with a safe working environment, and sets PRVs at operating pressures at pressure zone interfaces consistent with the WFPU recommendations. Additionally, it will provide necessary upgrades to equipment, piping and valving in PRV vaults to reduce likelihood of failures. Standardized pressure controls offers improved protections from surge conditions, which are likely causes of pipe failure. It improves service levels to existing customers where pressure transients cause leaks in sprinkler systems or within customers' premises.

ALTERNATIVES CONSIDERED

Status quo operation

ADVANTAGES OF APPROVAL

Improve water distribution operations through increased understanding of system operating characteristics. Improve responsiveness to dynamic operating conditions. Facilitate improved access to existing sites now requiring confined space entry procedures. Standardize and improve surge control features throughout system.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Debt service (if any) to construct, power costs, SCADA maintenance, vault maintenance, instrument maintenance, programming libraries

FUNDING SOURCES

100% Water Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

Water Operations

W73

PROJECT NAME

PRV Abandonments (approximately 6 sites)

- New
- Replacement
- Equipment
- Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$510,106

DESCRIPTION OF PROJECT

Abandon (in place) existing PRV's serving Northwest 4940 Pressure Zone, at sites to be determined through detailed hydraulic modeling. Install looped mains to maintain connectivity. This project will be done in conjunction with other transmission main improvements serving Northwest zones. This will reduce system complexity, and simplifies control strategy, which is critical with additional improvements planned within service area, yet maintains sufficient connectivity between zones per Hydraulic criteria. Additionally, it will create an opportunity for PRV's feeding zone to create undesired chattering of PRV's fighting each other via control strategy. Chattering of valves can lead to undesired hydraulic transients in system.

ALTERNATIVES CONSIDERED

Status quo

ADVANTAGES OF APPROVAL

Avoid costs of equipping sites with SCADA and related infrastructure. Reduce future operating expenses associated with PRV vault operation and control. Simplify zone operation by reducing number of required PRV's to feed zone.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Avoid costs of equipping sites with SCADA and related infrastructure. Reduce future operating expenses associated with PRV vault operation and control

FUNDING SOURCES

100% Water Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

Water Operations

W75

PROJECT NAME

Lead Service Line Replacement

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$200,000

DESCRIPTION OF PROJECT

This is the last year of a two year project that will be used to hire a contractor to assist water crews in replacing lead service lines. Removing lead service lines is critical to maintaining a high level of health and safety for our customers. This line removal meets recommendations of the National Drinking Water Advisory Council for total removal of all lead service lines. City of Bozeman water crews are assisting with the lead service line replacements.

ALTERNATIVES CONSIDERED

Continue using just COB water crews to replace the lead service lines, extending the program by several years. We have a commitment to the community that they will all be replaced by FY19.

ADVANTAGES OF APPROVAL

The City of Bozeman will no longer have any lead service lines

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

N/A

FUNDING SOURCES

100% Water Fund

CIP Project Fund  
Water Fund

DEPARTMENT  
WTP

<b>PROJECT NUMBER</b>
<b>W78</b>

<b>PROJECT NAME</b>
Hilltop Tank Inspection and Mixing System

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$130,000					

**DESCRIPTION OF PROJECT**

Inspect reservoir. Furnish and Install Mixer(s), Power and Control and update Reservoir SCADA to include remote monitoring capability of mixer(s). Without mixing of tank contents, Water Quality can be impacted, cold weather operation can create damage to reservoir contents. Freeze protection reduces risk of ice damage to cathodic protection system, tank interior.

**ALTERNATIVES CONSIDERED**

Installation of separate inlet and outlet configurations per each Reservoir

**ADVANTAGES OF APPROVAL**

Least expensive way to effect reservoir mixing and added freeze protection

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Energy costs for mixing; SCADA maintenance, scheduled mixer maintenance,

**FUNDING SOURCES**

100% Water Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

WTP

W79

PROJECT NAME

Hyalite Dam and Reservoir Optimization Improvements

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$4,000,000

DESCRIPTION OF PROJECT

Armoring of the control tower (to enable some year-over-year storage capacity) and control upgrades to improve winter operation. Current vulnerability of Bozeman to drought is very high, due to the lack of sources that are robust in drought (large raw water reservoirs with year-over-year storage capacity, large rivers, or groundwater). Hyalite Reservoir is capable of providing year-over-year storage, but is not operated in that manner due to concerns of ice damage to the control tower. This increases the risk of an extremely dry year resulting in the inability to fill the Hyalite reservoir with enough water for the City and irrigation uses. This project could potentially remove the 20% surcharge the City pays for Hyalite releases.

ALTERNATIVES CONSIDERED

Continue to deal with current Hyalite dam operation

ADVANTAGES OF APPROVAL

Drought mitigation, improved water use and cost efficiencies

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Unknown

FUNDING SOURCES

100% Water Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

WTP

W83

PROJECT NAME

Sourdough Intake Improvements

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$2,000,000

DESCRIPTION OF PROJECT

Sourdough intake improvements to increase efficiency of existing diversion infrastructure. Project calls for replacement of existing surface diversion, installation of sub-surface collection system within stream bed gravels to capture water during surface freeze-off events, new instrumentation and controls. This will increase the resiliency of the Sourdough water supply by reducing, or potentially eliminating, periods and frequency of surface water freeze-off.

ALTERNATIVES CONSIDERED

Keep existing diversion configuration and continue to deal with intermittent freeze-off problems of the source

ADVANTAGES OF APPROVAL

Increases efficiency of diversion operations

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Unknown

FUNDING SOURCES

100% Water Fund

CIP Project Fund  
Water Fund

DEPARTMENT  
WTP

**PROJECT NUMBER**  
**W84**

PROJECT NAME  
Sourdough Tank Inspection and Improvements

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$600,000				

DESCRIPTION OF PROJECT

This project would entail taking the Sourdough Tank offline (once the WTP'S 5.3 million gallon storage tank is online), inspecting it and repairing it as necessary. This project may or may not include reconfiguration of the inlet/outlet configuration to provide flow-through hydraulics. The condition of the overflow and inlet/outlet pipes is poor. The last dive inspection found concrete aggregate from the ceiling on the floor of the tank. The hydraulics to and from the tank are suspected to be suboptimal. An installed mixer will also need to be considered. This project is critical to ensure that the Sourdough tank is reliable and operating well.

ALTERNATIVES CONSIDERED

Wait for critical failure

ADVANTAGES OF APPROVAL

Rehabilitation of critical storage infrastructure for several decades to come.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

100% Water Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

Water Operations

W85

PROJECT NAME

South University District 12" Water Main

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$296,509

DESCRIPTION OF PROJECT

Extend the water main service to the South University District with a 12" water pipe, as described in the 2016 Water Facility Plan. This will coincide with WWIF27, resulting in overall efficiencies and mobilization cost savings.

ALTERNATIVES CONSIDERED

No action.

ADVANTAGES OF APPROVAL

Cost savings by building coincidentally with WWIF27

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs

FUNDING SOURCES

Impact Fee and possible payback district.

CIP Project Fund  
Water Fund

DEPARTMENT  
WTP

**PROJECT NUMBER**  
**W86**

PROJECT NAME  
Sourdough Diversion cleanout

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$25,000					

DESCRIPTION OF PROJECT

The Diversions need to be cleaned every 7 to ten years to remove accumulated sediment, rock, and debris. Last time it was done was 2010 and the pool behind the dam has diminished in size due to the sediment and rock accumulation.

ALTERNATIVES CONSIDERED

Build a larger diversion dam. Do Nothing and let sediment build up and have no pool to insure water flow into the system.

ADVANTAGES OF APPROVAL

Will ensure less freeze off during cold weather. Deeper pool, larger ice covering for insulation. and less sediment entering the plant.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

none

FUNDING SOURCES

none

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

WTP

W87

PROJECT NAME

Lyman Tank and Transmission Main Design

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$500,000

DESCRIPTION OF PROJECT

Design of new Lyman Storage (5MG), new transmission design, chlorination/fluoridation design and CA based repairs design to existing transmission main. This is necessary for construction of Lyman tank and transmission project. Without the design the Tank and Transmission Main Construction (WIF35) will not be able to continue.

ALTERNATIVES CONSIDERED

Status quo operation of existing Lyman system

ADVANTAGES OF APPROVAL

Provides bid plans and cost estimates for construction and obtains DEQ approvals needed for construction

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

N/A

FUNDING SOURCES

100% Water Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

WTP

W88

PROJECT NAME

Lyman Tank and Transmission Main Construction

- New
- Replacement
- Equipment
- Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$10,000,000

DESCRIPTION OF PROJECT

Construct a new 5MG storage tank at Lyman, decommission existing Lyman storage tank, Condition Assessment-based repairs of the existing Lyman transmission main, new supply main tie in to new storage tank, new transmission main tie in from new storage tank to existing transmission main, new chlorination/fluoridation feed facility. Decommission Pear Street Booster Station if Hydraulic Grade Line of tank raised to meet Sourdough Tank. The Lyman water supply is a critical element of the city's overall water supply portfolio accounting for roughly 20% of annual supply volume to the city currently. The source provides supply redundancy and resiliency as it is geographically removed from the Sourdough/Hyalite source and provides an independent connection to the distribution system. The effective available water supply is increased since the new storage system will not leak and will expand the number of customers able to be supplied by Lyman water. Likelihood of failure of Lyman supply system will be dramatically reduced by replaced storage. It will also complete new transmission and Condition Assessment-based rehab to existing transmission.

ALTERNATIVES CONSIDERED

Status quo operation of existing Lyman system

ADVANTAGES OF APPROVAL

Replaces lyman storage tank which is at the end of its useful life. Increases effective available supply as existing tank leaks at a rate exceeding 100 gpm. If new storage sited at an elevation to match HGL of Sourdough Tank then Pear Street Booster Station can be decommissioned which reduces annual operating costs for power. CA-based rehab reduces likelihood of failure of critical transmission infrastructure.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Anticipated operating cost reduction related to pear street booster decommissioning. Operating costs for new tank and transmission comparable to

FUNDING SOURCES

100% Water Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

Water Conservation

WC02

PROJECT NAME

Meter Software Subscription

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	

DESCRIPTION OF PROJECT

Software upgrades to provide for flow management alerts to customers and individualized water use assessments. This project is vital to both water conservation and water and sewer operations. A mechanism must be established to alert customers of leaks and inefficient water usage in real time. Delays in relaying this information are costly for customers and harm relations between utility and customers. This project will provide best practice standards for empowering customers with real time information about their water usage.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Catches leaks very early and educates customers about individual water usage to reduce water consumption.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

NA

FUNDING SOURCES

Water Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

Water Conservation

WC03

PROJECT NAME

Municipal Watershed Data Collection

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$50,000

DESCRIPTION OF PROJECT

Installation of instrumentation for data collection to quantify and monitor Bozeman's water supplies, including snowpack and streamflow. Understanding municipal watersheds' seasonal and total annual water supplies is crucial to monitoring and preparing for drought events and planning for future water supply needs. Incorporating real-time local water supply data into the drought monitoring tool will provide the City with the data needed to make accurate, timely, data-driven decision making in face of a drought event. These data will also assist with planning for long range water supply needs.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

These real-time data will provide City staff with the information needed to make accurate timely data-driven decision making in face of a drought event and for future water supply planning. These data will support the 2013 Integrated Water Resources Plan and 2017 Drought Management Plan.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

May lead to annual costs for additional data collection (stream gaging and/or SNOTEL snowpack data)

FUNDING SOURCES

None

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

Water Impact Fees

WIF40

PROJECT NAME

Sourdough Transmission Main – Phase 2 (Finance W90)

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$480,000

DESCRIPTION OF PROJECT

The project consists of constructing approximately 8,000 feet of 30-inch DIP transmission main, which will start at the end of the Phase I connection point and go to the Sourdough Plant. This project is critical to overcome vulnerabilities presented by the aging and unknown condition of the existing transmission main between the City's WTP and Sourdough Tank. This transmission main will provide additional capacity from the WTP to the Sourdough reservoir, improving connectivity between the WTP and the City. This will reduce the risk of not having adequate potable water and fire flow supplies to the City in the event of a failure to the existing bar-wrapped 30" main. This project's cost and administration could be improved if combined with the new 3,000 feet of 48" bypass pipe.

#### ALTERNATIVES CONSIDERED

Conduct a condition assesment of the existing 30-inch concrete pipe and repair/rehabilitate as necessary.

#### ADVANTAGES OF APPROVAL

The condition of the existing transmission main from the WTP to the Sourdough reservoir is currently unknown. Approval of this project will provide redundancy for this main, and mitigate the risk and consequence of its failure.

#### ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating & Maintenance Costs: Impact Fees can not be spent on annual operations and maintenance costs. The Water Utility will see incremental increases in general maintenance costs.

#### FUNDING SOURCES

\$4,320,000 Water Impact Fees. \$480,000 Water Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

Water Impact Fees

WIF48

PROJECT NAME

Debt Service for Borrowing - Transmission Main (W89)

New

Replacement

Equipment

Project

FY19

FY20

FY21

FY22

FY23

Unscheduled

\$30,000

\$30,000

\$30,000

\$380,000

DESCRIPTION OF PROJECT

These are the estimated annual amounts owned for borrowing for WIF40 - Sourdough Transmission Main project. Payments will begin in the fiscal year following borrowing.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

The project can be constructed before cash is on hand.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating & Maintenance Costs: Impact Fees can not be spent on annual operations and maintenance costs. The Water Utility will see incremental increases in general maintenance costs.

FUNDING SOURCES

Water Utility Revenue Bonds will be issued, with repayments made by the Utility (10%) and Impact Fee Fund (90%)

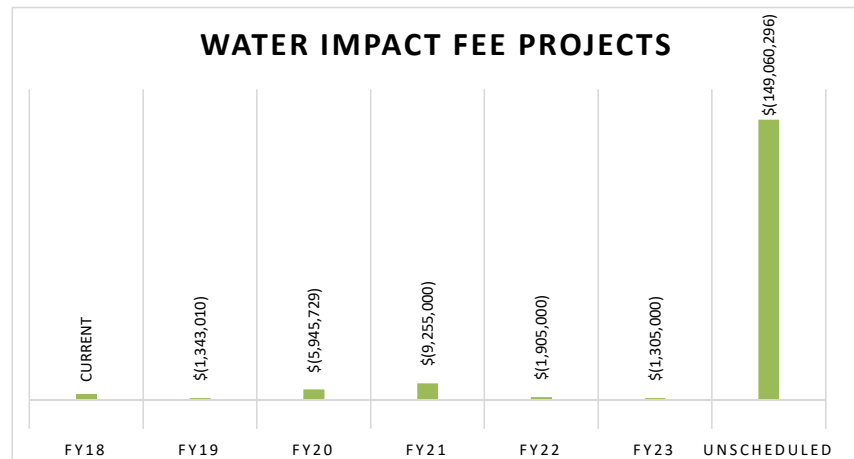


**Water Impact Fee  
Capital Improvement Plan**

Financial Summary	Current Year	Projected					Unscheduled
	FY18	FY19	FY20	FY21	FY22	FY23	
Projected Beginning Reserve Balance Dedicated to CIP	\$ 2,104,525	\$ (1,118,623)	\$ (578,563)	\$ (227,069)	\$ 594,016	\$ 868,905	\$ -
Plus: Impact Fee Revenues Dedicated to CIP	\$ 1,793,400	\$ 1,883,070	\$ 1,977,224	\$ 2,076,085	\$ 2,179,889	\$ 2,288,883	\$ -
Plus: Loan for Well Field WIF32				\$ 8,000,000			
Plus: Loan for Sourdough Transmission Main, PH 2 WIF40			\$ 4,320,000				
Less: Carryover FY17 Capital Projects	\$ (1,826,548)						
Less: Scheduled CIP Project Costs	\$ (3,190,000)	\$ (1,343,010)	\$ (5,945,729)	\$ (9,255,000)	\$ (1,905,000)	\$ (1,305,000)	\$ (149,060,296)
<b>Projected Year-End Cash Dedicated to CIP</b>	<b>\$ (1,118,623)</b>	<b>\$ (578,563)</b>	<b>\$ (227,069)</b>	<b>\$ 594,016</b>	<b>\$ 868,905</b>	<b>\$ 1,852,789</b>	

*Assumptions Made for Revenue Estimates*

	Current Year	Projected				
	FY18	FY19	FY20	FY21	FY22	FY23
Estimated Annual Water Impact Fee Revenues	\$ 1,793,400	\$ 1,793,400	\$ 1,883,070	\$ 1,977,224	\$ 2,076,085	\$ 2,179,889
Estimated Annual Increase	0.0%	5%	5%	5%	5%	5%
<b>Total Estimated Revenues</b>	<b>\$ 1,793,400</b>	<b>\$ 1,883,070</b>	<b>\$ 1,977,224</b>	<b>\$ 2,076,085</b>	<b>\$ 2,179,889</b>	<b>\$ 2,288,883</b>
Current Revenues Dedicated to CIP %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Plus: Increase Dedicated to Water Capacity Expansion CIP	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Total % Dedicated to CIP</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
<b>Total Estimated Revenues Dedicated to CIP</b>	<b>\$ 1,793,400</b>	<b>\$ 1,883,070</b>	<b>\$ 1,977,224</b>	<b>\$ 2,076,085</b>	<b>\$ 2,179,889</b>	<b>\$ 2,288,883</b>



CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
Impact Fees									
Water									
	WIF05	Water Impact Fees	WEST TRANSMISSION MAIN - PHASE 1 CONSTRUCTION						\$28,006,293
	WIF14	Water Impact Fees	LOAN DEBT SERVICE - WTP 5.3MG CONCRETE WATER STORAGE RESERVOIR	\$600,000	\$600,000	\$600,000	\$600,000		\$6,800,000
	WIF21	Water Impact F	S 11TH 12" WATER MAIN EXTENSION	\$136,010					
	WIF25	Water Impact Fees	DAVIS 12" WATER MAIN & VALLEY CENTER 16" WATER MAIN EXTENSION		\$725,729				
	WIF27	Water Impact F	5126 WEST SOURDOUGH RESERVOIR 1						\$9,757,500
	WIF28	Water Impact Fees	5126 WEST SOURDOUGH RESERVOIR 1 - SITING			\$350,000			
	WIF30	Water Impact F	EAST TRANSMISSION MAIN						\$7,167,372
	WIF32	Water Impact Fees	GROUNDWATER WELL FIELD AND TRANSMISSION CONSTRUCTION			\$8,000,000			
	WIF33	Water Impact Fees	GROUNDWATER WELL FIELD AND TRANSMISSION MAIN DESIGN	\$500,000					
	WIF36	Water Impact Fees	WEST TRANSMISSION MAIN PLANNING STUDY						\$400,000
	WIF37	Water Impact Fees	SOURDOUGH CANYON NATURAL STORAGE - PLANNING AND DESIGN		\$150,000				\$350,000
	WIF38	Water Impact Fees	SOURDOUGH CANYON NATURAL STORAGE CONSTRUCTION						\$8,000,000
	WIF40	Water Impact Fees	SOURDOUGH TRANSMISSION MAIN – PHASE 2		\$4,320,000				
	WIF41	Water Impact Fees	WEST TRANSMISSION MAIN - PHASE 1 DESIGN						\$2,907,235
	WIF42	Water Impact Fees	WEST TRANSMISSION MAIN - PHASES 2-5 DESIGN & CONSTRUCTION						\$61,669,396
	WIF43	Water Impact Fees	DEBT SERVICE FOR BORROWING - WELL FIELD				\$1,000,000	\$1,000,000	\$10,800,000
	WIF45	Water Impact Fees	DEBT SERVICE FOR BORROWING - TRANSMISSION MAIN			\$305,000	\$305,000	\$305,000	\$3,445,000
	WIF46	Water Impact Fees	WATER MAIN OVERSIZING, OAK ST AND RYUN SUN WAY	\$107,000					

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY19	FY20	FY21	FY22	FY23	Unscheduled
	WIF47	Water Impact Fees	GRAF AND S. 27TH WATER TRANSMISSION MAIN OVERSIZING		\$150,000				
	WIF48	Water Impact F	4975 SOUTHWEST RESERVOIR 1						\$9,757,500
<i>Totals by DEPARTMENT</i>				\$1,343,010	\$5,945,729	\$9,255,000	\$1,905,000	\$1,305,000	\$149,060,296

<i>Summary for Impact Fees Water (20 items)</i>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>Unscheduled</u>
<i>Totals by year:</i>	\$1,343,010	\$5,945,729	\$9,255,000	\$1,905,000	\$1,305,000	\$149,060,296

CIP Project Fund  
Impact Fees Water

DEPARTMENT  
Water Impact Fees

PROJECT NUMBER  
WIF05

PROJECT NAME  
West Transmission Main - Phase I Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$28,006,293

DESCRIPTION OF PROJECT

The project consists of a constructing a new transmission main from the Sourdough water treatment plant to the southwestern edge of the existing distribution network (S.19th and Graf St.) to serve future anticipated growth and provide water delivery redundancy. This second transmission line from the WTP to the City's distribution system is critical to provide a second path to get potable water from the WTP into the City, as well as to adequately serve the rapidly growing western portions of the City with potable water and fire flows. Potable water delivery and fire flows will be improved in the southwest, west and northwest portions of the City. This transmission line connects to the existing distribution system at a location that enables the existing Sourdough and Hill top tanks to be filled even if the Sourdough pipeline is out of service. This project mitigates the risk of not having enough potable water to serve the City's residents or provide fire suppression.

ALTERNATIVES CONSIDERED

Construct a parallel transmission line between the Sourdough Water Treatment Plant to Kagy Boulevard.

ADVANTAGES OF APPROVAL

Provides transmission capacity to current and growing peak day and fire flow demands on Bozeman's western flanks, generally west of 19th Ave. All existing transmission capacity is on the eastern edge of the city's distribution system which presents hydraulic issues as the water demand centroid moves westward. The transmission also provides redundant transmission in the event of failure of sourdough transmission mains.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating & Maintenance Costs: Impact Fees can not be spent on annual operations and maintenance costs. The Water Utility will see incremental increases in general maintenance costs.

FUNDING SOURCES

Developer contributions

CIP Project Fund  
Impact Fees Water

DEPARTMENT  
Water Impact Fees

<b>PROJECT NUMBER</b>
<b>WIF14</b>

<b>PROJECT NAME</b>						
Loan Debt Service - WTP 5.3MG Concrete Water Storage Reservoir						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$600,000	\$600,000	\$600,000	\$600,000		\$6,800,000

<b>DESCRIPTION OF PROJECT</b>
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Repayment of debt used to finance construction of WIF03, a 5.3 million gallon concrete water storage reservoir.

**ALTERNATIVES CONSIDERED**

Payoff loan principal

**ADVANTAGES OF APPROVAL**

Increased water storage to meet the needs of our growth community, and the requirement of MDEQ. Increased system water pressure in the southern part of the City.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Requires minimal operation and maintenance. Checking of valves, level sensors and vents on an annual basis and diver inspection and vacuuming every five years. Estimated at \$4,000 annually.

**FUNDING SOURCES**

100% Water Impact Fees

CIP Project Fund  
Impact Fees Water

DEPARTMENT  
Water Impact Fees

PROJECT NUMBER  
WIF21

PROJECT NAME  
S 11th 12" water main extension

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$136,010					

DESCRIPTION OF PROJECT

Extension of 12" diameter main per AE2S WFPU in S 11th avenue from current terminus to Graf Street. It provides for future looped water system per AE2S WFPU, and increases hydraulic capacity of system beyond minimum 8" main. This reduces severity and consequences of water system outages due to future looping and provides for minimum fire flows. Impact Fees fund capacity above 8" main which is minimum local share. Local share could be reimbursed to City through a "payback district" established by City Commission. This will be completed in conjunction with the S 11th Ave road improvements.

ALTERNATIVES CONSIDERED

Forego project and don't loop water system in this area

ADVANTAGES OF APPROVAL

Provides for water main construction at time of road construction and implements WFPU update for G&D water infrastructure

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

n/a

FUNDING SOURCES

Developer contribution (Graf's) for their "local share" of main would need to be reimbursed through a "payback district" established by the City Commission

CIP Project Fund  
Impact Fees Water

DEPARTMENT  
Water Impact Fees

PROJECT NUMBER  
WIF25

PROJECT NAME  
Davis 12" Water Main & Valley Center 16" Water Main Extension

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$725,729				

DESCRIPTION OF PROJECT

Extension of 12" water main in Davis Ln from Catamount to Valley Center & Extension of 16" diameter water main in Valley Center from Davis to 27th. 16" main is per AE2S WFPU. 12" main extends existing 12" main in Davis. These mains needed to support development south of East Valley Center between Davis and 27th. This provides for future looped water system per AE2S WFP, and reduces severity and consequences of water system outages due to future looping and provides for minimum fire flows. This will be completed in connection with development of Billings Clinic. Other affected projects include the 12" main in Davis along the proposed alignment of Phase 5 of West Transmission Main in the AE2S WFPU. WTM diameter contemplated at 36" in Davis from Catamount to Valley Center.

ALTERNATIVES CONSIDERED

Billings Clinic may occupy this land. Fire flow demands may require large diameter mains above the minimum 8" diameter typical local share in order to meet the Clinic's fire flow requirement, thus reducing the overall impact fee contribution

ADVANTAGES OF APPROVAL

Implements WFPU update for G&D infrastructure

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

n/a

FUNDING SOURCES

Developer contribution (Billings Clinic) for their "local share" of main

CIP Project Fund  
Impact Fees Water

DEPARTMENT  
Water Impact Fees

PROJECT NUMBER  
WIF27

PROJECT NAME  
5126 West Sourdough Reservoir I

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$9,757,500

DESCRIPTION OF PROJECT

The project consists of a constructing a new gravity fed ground storage reservoir to the south/southwest of the City, which would tie into the West Water Transmission Main – Phase I and serve the existing City water distribution system. This reservoir supplies water to the City’s existing distribution network, to provide necessary storage capacity for the entire system, as well as contributes to adequate water supply capacity for future development along the City's western half. In the near term the storage provided by this reservoir will augment storage provided by the City's existing Sourdough and Hilltop Tanks. In the long-term it provides storage for the west and northwest areas of the City. This project mitigates the risk of not having enough potable water and fire flow in the southwest area of the City. This project is directly tied to construction of the West Water Transmission Main - Phase I.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Two of the City's three existing reservoirs are located along the Sourdough Transmission main (Sourdough and Hilltop Tanks). If the Sourdough transmission main or either of these tanks are off-line for any reason (i.e. maintenance, natural disaster, break, etc.), the City would have inadequate storage and supply. An additional reservoir located on the West Transmission Main – Phase I provides storage redundancy, allowing for routine inspection and maintenance of both water storage facilities/transmission mains, mitigates the risk of and reduces the consequence of a failure on the existing Sourdough transmission main or Sourdough or Hilltop tanks. It also contributes to satisfying required storage capacity for the system, as well as ensuring adequate potable water and fire flows to the City's southwest areas.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating & Maintenance Costs: Impact Fees can not be spent on annual operations and maintenance costs. The Water Utility will see an incremental increase in general maintenance cost. Current cost estimate of \$XX.XX annually.

FUNDING SOURCES

100% Water Impact Fees

CIP Project Fund  
Impact Fees Water

DEPARTMENT  
Water Impact Fees

**PROJECT NUMBER**  
**WIF28**

PROJECT NAME  
5126 West Sourdough Reservoir I - Siting

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
		\$350,000			

**DESCRIPTION OF PROJECT**

Siting study and land acquisition for 5MG ground storage reservoir to serve 5126 Pressure Zone from West Transmission Main. The West Sourdough Reservoir will be the next necessary reservoir for the City to continue to provide adequate potable water and fire flow. Proper siting of this reservoir will provide redundant supply to Sourdough and Hilltop Reservoirs. It will increase water storage capacity by 5MG, and will provide greater efficiency in providing potable water and fire flows to the City's western areas. Better ability to take Sourdough or Hilltop reservoirs offline and still provide sufficient storage. Other affected projects include groundwater planning, engineering and construction West Transmission Main study, design, construction; reservoir design, construction projects.

**ALTERNATIVES CONSIDERED**

Wait until the need for the reservoir is more imminent

**ADVANTAGES OF APPROVAL**

Procurement of land while it is available, and less expensive

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Unknown

**FUNDING SOURCES**

100% Water Impact Fees

CIP Project Fund  
Impact Fees Water

DEPARTMENT  
Water Impact Fees

PROJECT NUMBER  
WIF30

PROJECT NAME  
East Transmission Main

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$7,167,372

DESCRIPTION OF PROJECT

The project consists of a constructing a new transmission main that would ensure adequate water supply capacity for future developments located both east and northeast of the existing distribution system (extending approximately from East Kagy Blvd to Kelly Canyon Rd and Story Hill Rd). Without this transmission main, potable water and fire flows will eventually become insufficient in the east and northeast portions of the City. This main also supplies the future East Mountain Zone, which has a substantial demand. This project better connects the east and northeast portions of the City with the supply from the City's WTP. In conjunction with the west transmission mains, it will provide a more looped supply for the majority of the City. What safety or risk measures are mitigated with this project: This project mitigates the risk of having inadequate potable water and fire flows to the City's east and northeast areas. This project leverages improvements in delivery of water due to the Sourdough Main replacement or paralleling. It will also enable siting of storage in the City's east and northeast areas.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

The creation of an East Water Transmission Main is necessary to supply adequate water and fire flows to future developments in the eastern portion of the City's distribution system. This transmission line will also provides additional looping and redundancy to the City.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating & Maintenance Costs: Impact Fees can not be spent on annual operations and maintenance costs. The Water Utility will see incremental increases in general maintenance costs.

FUNDING SOURCES

Developer contributions

CIP Project Fund  
Impact Fees Water

DEPARTMENT  
Water Impact Fees

**PROJECT NUMBER**  
**WIF32**

PROJECT NAME  
Groundwater Well Field and Transmission Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
		\$8,000,000			

**DESCRIPTION OF PROJECT**

Water right permitting and mitigation plan; purchase of mitigation water rights; construction of aquifer recharge or other mitigation infrastructure; acquisition of land for well field site; construction of wells, power, power backup, instrumentation and controls, SCADA, control building and site improvements; and transmission main construction to tie GW supply into the existing system. This is absolutely critical for meeting long-range water supply needs and enhancing overall water supply resiliency and redundancy. It enhances connectivity by providing a redundant water supply source in the event of Sourdough WTP outage.

**ALTERNATIVES CONSIDERED**

Status quo operation

**ADVANTAGES OF APPROVAL**

Improve water distribution operations through increased understanding of system operating characteristics. Improve responsiveness to dynamic operating conditions. Facilitate improved access to existing sites now requiring confined space entry procedures. Standardize and improve surge control features throughout system.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Debt service (if any) to construct, power costs, SCADA maintenance, vault maintenance, instrument maintenance, programming libraries

**FUNDING SOURCES**

Capital funding for water right permitting and water could be augmented with cash in lieu of water rights fund, water fund

CIP Project Fund  
Impact Fees Water

DEPARTMENT  
Water Impact Fees

**PROJECT NUMBER**  
**WIF33**

PROJECT NAME  
Groundwater Well Field and Transmission Main Design

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$500,000					

DESCRIPTION OF PROJECT

Design of groundwater well field and transmission main including necessary appurtenances, instrumentation and controls, and DEQ approvals. This is necessary for construction of groundwater supply source, but it will require DEQ construction approval; amendments if needed to other DEQ documents such as Source Water Delineation and Assessment Report and Source Water Protection Plan. This project utilizes the hydrogeologic model developed for the Groundwater Investigation and test well data.

ALTERNATIVES CONSIDERED

Don't develop a GW supply

ADVANTAGES OF APPROVAL

Provides bid plans and cost estimates for construction and obtains DEQ approvals needed for construction.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

N/A

FUNDING SOURCES

100% Water Impact Fees

CIP Project Fund  
Impact Fees Water

DEPARTMENT  
Water Impact Fees

PROJECT NUMBER  
WIF36

PROJECT NAME  
West Transmission Main Planning Study

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$400,000

DESCRIPTION OF PROJECT

Planning study to identify key design parameters for WTM, right of way, route alignment, and timing for bringing WTM online. Eventual construction of the West Transmission Main is necessary to provide redundancy for the Sourdough Transmission Main as well as adequate potable water and fire flow for the City's west, northwest and north areas, and it provides capacity sufficient for UBO and delivery of 34 MGD from future WTP expansion. Conveyance of water to the City's western, northwestern and northern areas will be more efficient than moving water through downtown and existing PRVs.

ALTERNATIVES CONSIDERED

Defer the study further out, deferring eventual construction of the West Transmission Main.

ADVANTAGES OF APPROVAL

Identify key design parameters, right-of-way, route and permitting for the West Transmission Main, so that design and construction can proceed once funds are available.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

100% Water Impact Fees

CIP Project Fund  
Impact Fees Water

DEPARTMENT  
Water Impact Fees

PROJECT NUMBER  
WIF37

PROJECT NAME  
Sourdough Canyon Natural Storage - Planning and Design

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$150,000				\$350,000

DESCRIPTION OF PROJECT

Alternatives planning and design for sour dough natural storage enhancement project. This project will increase resiliency of Sourdough watershed to drought impacts and provides augmented water supply, protects existing municipal water rights, and it augments water supply capacity of sourdough watershed. This impacts the City's long-term water rights and helps close the approaching water supply gap. This project could have potential FEMA involvement for flood control. Other affected projects include final sizing of West Transmission Main. It will also inform long-term groundwater needs.

ALTERNATIVES CONSIDERED

Postpone

ADVANTAGES OF APPROVAL

Implements IWRP, augments Sourdough water supply capacity, and increases resiliency of Sourdough water supply by providing 'storage' to reduce the susceptibility of drought impacts

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Unknown

FUNDING SOURCES

Potential opportunity for federal drought and flood hazard mitigation grants, state RRGL funds. Cash in lieu of water rights fund.

CIP Project Fund  
Impact Fees Water

DEPARTMENT  
Water Impact Fees

**PROJECT NUMBER**  
**WIF38**

PROJECT NAME  
Sourdough Canyon Natural Storage Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$8,000,000

**DESCRIPTION OF PROJECT**

Construction of natural water storage infrastructure alternatives planned and designed in project WFP\_53 that augment water supply availability, reduce susceptibility to drought impacts, and maximize existing water rights. This project provides enhanced water supply availability to support future growth and development, and reduces drought susceptibility and peak runoff impacts. Leveraging potential exists with federal/state grants, federal/state cooperative agreements (consistent with fed initiatives to increase drought resiliency in western states and consistent with recommendations in state water plan to increase storage in closed basins). Project implements recommendations of the IWRP to develop storage in Sourdough.

**ALTERNATIVES CONSIDERED**

Project specific alternatives evaluated with project WFP\_53. Water supply alternatives evaluated in IWRP.

**ADVANTAGES OF APPROVAL**

Augments Sourdough Creek water supply, reduces susceptibility to drought impacts and maximizes existing water rights

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Unknown

**FUNDING SOURCES**

Federal hazard mitigation grants (drought hazard and flood hazard). State renewable resource grant and loan program.

CIP Project Fund  
Impact Fees Water

DEPARTMENT  
Water Impact Fees

PROJECT NUMBER  
WIF40

PROJECT NAME  
Sourdough Transmission Main – Phase 2

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$4,320,000				

DESCRIPTION OF PROJECT

The project consists of constructing approximately 8,000 feet of 30-inch DIP transmission main, which will start at the end of the Phase I connection point and go to the Sourdough Plant. This project is critical to overcome vulnerabilities presented by the aging and unknown condition of the existing transmission main between the City's WTP and Sourdough Tank, and will provide additional capacity from the WTP to the Sourdough reservoir. This project will mitigate the risk of not having adequate potable water and fire flow supplies to the City in the event of a failure to the existing bar-wrapped 30" main. This project's cost and administration could be improved if combined with the new 3,000 feet of 48" bypass pipe.

ALTERNATIVES CONSIDERED

Conduct a condition assesment of the existing 30-inch concrete pipe and repair/rehabilitate as necessary.

ADVANTAGES OF APPROVAL

The condition of the existing transmission main from the WTP to the Sourdough reservoir is currently unknown. Approval of this project will provide redundancy for this main, and mitigate the risk and consequence of its failure.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating & Maintenance Costs: Impact Fees can not be spent on annual operations and maintenance costs. The Water Utility will see incremental increases in general maintenance costs.

FUNDING SOURCES

\$4,320,000 Water Impact Fees. \$480,000 Water Fund

CIP Project Fund  
Impact Fees Water

DEPARTMENT  
Water Impact Fees

PROJECT NUMBER  
WIF41

PROJECT NAME  
West Transmission Main - Phase I Design

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$2,907,235

DESCRIPTION OF PROJECT

Design of the first phase of the West Transmission Main, the criteria for which would be developed in the West Transmission Main Planning Study (WIF36). This project will reduce the consequence of a failure on the Sourdough Transmission Main, by providing a second pipeline to convey water to the City from the WTP, and water delivery to the City's western side will become more efficient. The Sourdough Transmission Main is currently a single point of failure for conveyance of water from the Sourdough WTP. Other affected projects include subsequent phases of West Transmission Main design and construction, and construction of storage reservoirs on the City's west side.

ALTERNATIVES CONSIDERED

Defer design and construction of West Transmission Main

ADVANTAGES OF APPROVAL

Potential to install the transmission main before significant growth and development occur along the route, reduced consequence of failure to Sourdough Transmission Main

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

100% Water Impact Fees

CIP Project Fund  
Impact Fees Water

DEPARTMENT  
Water Impact Fees

**PROJECT NUMBER**  
**WIF42**

**PROJECT NAME**  
West Transmission Main - Phases 2-5 Design & Construction

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$61,669,396

**DESCRIPTION OF PROJECT**

The project consists of remaining phases (2 thru 5) of the west Transmission Main, completing the transmission loop around the city's western flank. Extending the West Transmission Line further north into the City's future western and northwestern developments to ensure adequate potable water and fire flow for west and northwest Bozeman residents. The northwest portion of the City remains the least well connected area to the distribution system. Flow to the northwest must come through the existing PRVs from the Sourdough and Hilltop Tanks, or from the northeast Lyman source. This main will bring water from the WTP well into the northwest portion of the City. Therefore, this project mitigates the risk of not having enough potable water or fire flow to serve the City's west residents. This project will also provide the ability for the City to connect additional storage reservoirs on the City's southwest and west to satisfy maximum day demand and fire flows.

**ALTERNATIVES CONSIDERED**

Do not complete west transmission main loop.

**ADVANTAGES OF APPROVAL**

Further extending the West Water Transmission Main would provide the following: distribution redundancy, and adequate water supply and fire flows for future development on the City's west and northwest sides.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating & Maintenance Costs: Impact Fees can not be spent on annual operations and maintenance costs. The Water Utility will see incremental increases in general maintenance costs.

**FUNDING SOURCES**

Developer contributions

CIP Project Fund  
Impact Fees Water

DEPARTMENT  
Water Impact Fees

**PROJECT NUMBER**  
**WIF43**

PROJECT NAME  
Debt Service for Borrowing - Well Field

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
			\$1,000,000	\$1,000,000	\$10,800,000

**DESCRIPTION OF PROJECT**

These are the estimated annual amounts owned for borrowing for WIF32 - Well Field and WIF40 - Sourdough Transmission Main project. Payments will begin in the fiscal year following borrowing.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

The project can be constructed before cash is on hand.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating & Maintenance Costs: Impact Fees can not be spent on annual operations and maintenance costs. The Water Utility will see incremental increases in general maintenance costs.

**FUNDING SOURCES**

Water Utility Revenue Bonds will be issued, with repayments made by the Impact Fee Fund.

CIP Project Fund  
Impact Fees Water

DEPARTMENT  
Water Impact Fees

**PROJECT NUMBER**  
**WIF45**

**PROJECT NAME**  
Debt Service for Borrowing - Transmission Main

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
		\$305,000	\$305,000	\$305,000	\$3,445,000

**DESCRIPTION OF PROJECT**

These are the estimated annual amounts owned for borrowing for WIF40 - Sourdough Transmission Main project. Payments will begin in the fiscal year following borrowing.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

The project can be constructed before cash is on hand.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating & Maintenance Costs: Impact Fees can not be spent on annual operations and maintenance costs. The Water Utility will see incremental increases in general maintenance costs.

**FUNDING SOURCES**

Water Utility Revenue Bonds will be issued, with repayments made by the Utility (10%) and Impact Fee Fund (90%)

CIP Project Fund  
Impact Fees Water

DEPARTMENT  
Water Impact Fees

**PROJECT NUMBER**  
**WIF46**

**PROJECT NAME**  
Water Main Oversizing, Oak St and Ryun Sun Way

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
\$107,000					

**DESCRIPTION OF PROJECT**

This project consists of upsizing water mains from 8-inches to 12-inches per the Water Master Plan if the proposed Canvasback Subdivision proceeds to approval. The Canvasback Subdivision will be required to install the mains, and the City would pay the difference in cost between an 8-inch and a 12-inch pipe required by the 2017 Water Master Plan.

**ALTERNATIVES CONSIDERED**

Do nothing and require the developer to bear the full cost of the 12-inch transmission main.

**ADVANTAGES OF APPROVAL**

Supports implementation of the water transmission pipe network described in the 2017 Water Master Plan.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Incremental cost of water main operations.

**FUNDING SOURCES**

NA

CIP Project Fund  
Impact Fees Water

DEPARTMENT  
Water Impact Fees

**PROJECT NUMBER**  
**WIF47**

PROJECT NAME  
Graf and S. 27th Water Transmission Main Oversizing

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
	\$150,000				

DESCRIPTION OF PROJECT

This project consists of upsizing water mains from 8-inches to 12-inches per the Water Master Plan if the proposed Canvasback Subdivision proceeds to approval. The Canvasback Subdivision will be required to install the mains, and the City would pay the difference in cost between an 8-inch and a 12-inch pipe required by the 2017 Water Master Plan.

ALTERNATIVES CONSIDERED

Do nothing and require the developer to bear the full cost of the 12-inch transmission main.

ADVANTAGES OF APPROVAL

Supports implementation of the water transmission pipe network described in the 2017 Water Master Plan.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Incremental cost of water main operations.

FUNDING SOURCES

N/A

CIP Project Fund  
Impact Fees Water

DEPARTMENT  
Water Impact Fees

<b>PROJECT NUMBER</b>
<b>WIF48</b>

<b>PROJECT NAME</b>						
4975 Southwest Reservoir I						

- New
- Replacement
- Equipment
- Project

FY19	FY20	FY21	FY22	FY23	Unscheduled
					\$9,757,500

<b>DESCRIPTION OF PROJECT</b>
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The project consists of a constructing a new ground storage reservoir southwest of town, which would tie into the West Transmission Main – Phase 2 and serve the City’s future western and northern water distribution system.

**ALTERNATIVES CONSIDERED**

None

**ADVANTAGES OF APPROVAL**

An additional reservoir located on the West Transmission Main – Phase 2 would help provide the following: promote storage redundancy within the system, allow for routine inspection and maintenance of both water storage facilities/transmission mains, reduce the consequence of failure of future transmission mains (i.e. mitigates risk), aids in supplying water to the City’s distribution network, and ensures adequate water supply capacity for future development.

**ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED**

Annual Operating & Maintenance Costs: Impact Fees can not be spent on annual operations and maintenance costs. The Water Utility will see an incremental increase in general maintenance cost. Current cost estimate of \$XX.XX annually.

**FUNDING SOURCES**

100% Water Impact Fees

