CITY OF CREVE COEUR

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

CAPITAL FUND

BUILDING PROJECT BOND FUND

FISCAL YEARS 2020-2024

EXECUTIVE SUMMARY

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

CAPITAL FUND

BUILDING PROJECT BOND FUND

FISCAL YEARS 2020-2024

EXECUTIVE SUMMARY

The Capital Improvement Program (CIP) is the City's long-range plan for improvements to infrastructure, parks, and other community facilities. The CIP is a tool to assess the long-term capital needs, values, and desires of the City and to establish funding of high-priority projects in a timely, cost-effective manner. This plan is a living document and is subject to amendment by the City Council.

The CIP is intended to ensure that policy makers are responsible to the citizens of Creve Coeur with respect to the expenditure of City funds for capital improvements.

To be eligible for the CIP, projects or equipment must have a useful life of at least five years and a minimum cost of $20,000.

CIP Goals

The following are goals of the CIP:

- Provide a planned replacement of deteriorating infrastructure
- Repair deteriorated infrastructure
- Improve operational or functional aspects of existing infrastructure
- Add new facilities and improve the community's infrastructure to enhance the quality of life in Creve Coeur
- Provide for planned replacement of major equipment required for City operations

Relationship between the CIP and the Creve Coeur 2030 Comprehensive Plan

According to the Creve Coeur 2030 Comprehensive Plan: *"Within the Creve Coeur 2030 Comprehensive Plan Update, many projects are identified or implied, as specific projects or as conceptual ideas. These projects and others, resulting from recommendations of the Comprehensive Plan, should be developed and incorporated in the City's annual CIP review process. Further detail and refinement of identified and conceptual projects, facilities, or infrastructure improvement needs will be required as the implementation of the Comprehensive Plan occurs."*

CIP Criteria

A special set of criteria has been identified to assist in assessing and prioritizing CIP projects. Proposed projects reflect the goals of the Comprehensive Plan through their demonstration of these criteria:

- *Availability of Outside Funding*: projects that are eligible for and are likely to be considered for grant funding or shared-cost programs.
- *Beautification:* aesthetic improvements to natural habitats or frequently traveled or visited areas within the City for public enjoyment such as the use of public art on public lands

- *Citizen Demand*: projects that have received a level of demonstrated citizen support or demand, including support of City departments, boards, committees, and commissions.
- *Condition of Existing Facility*: improvements that replace or maintain the City's infrastructure, facilities, or equipment so that it remains in a serviceable, safe, and efficient condition.
- *Coordination (projects, regulations, City-adopted plans)*: projects that fit within planned coordination between multiple projects or agencies to reduce costs or minimize disruption to services, meet state or federal law requirements, or identified in other City-adopted plans.
- *Economic Growth:* projects focused on maintaining housing values and attracting businesses, residents, or visitors to the City. Projects supporting private development must include return on investment ratios or a fully documented cost/benefit analysis.
- *Operating Efficiency*: equipment or facilities improvements to streamline work processes or benefit from technological advancements; projects which reduce the cost of operations will receive priority. Projects which increase the cost of operations shall have identified trade-offs to support those additional costs.
- *Protection & Conservation*: improvements to the City's park system or historical landmarks that allow these facilities to be enjoyed by future generations or projects that reduce the City's environmental impact.
- *Public Safety*: improvements that focus on preserving and protecting the general public from harm and reducing the City's risk exposure.

Development and Adoption of the CIP

By City charter, a five-year CIP is proposed by the City Administrator to the City Council, no later than the second regular meeting in February of each year.

Prior to submittal to the City Council, public input is obtained through the City newsletter, website, and City boards, committees, and commissions.

Prior to the City Council adoption, and as required by City charter, the plan is submitted to the Finance Committee for recommendations and comments. The Planning & Zoning Commission also reviews the plan emphasizing the location, extent, and character of the proposed projects prior to City Council review, approval, and adoption. A public hearing is held by the City Council annually in March or April, prior to adoption.

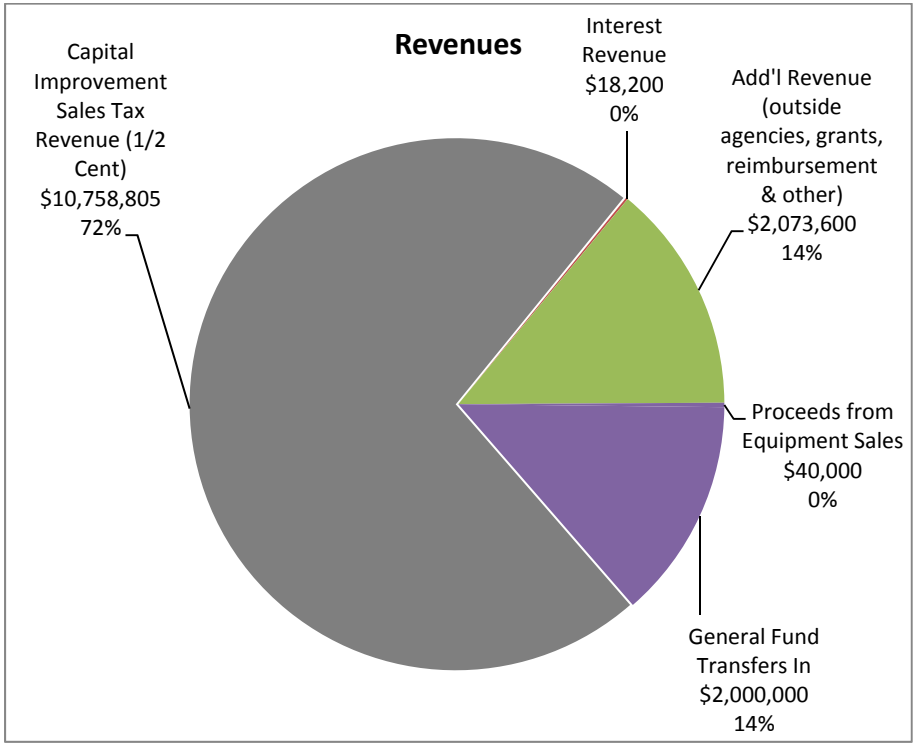
The CIP includes a description of each project with details regarding justification, cost estimate, operating and maintenance budget impact, and funding sources.

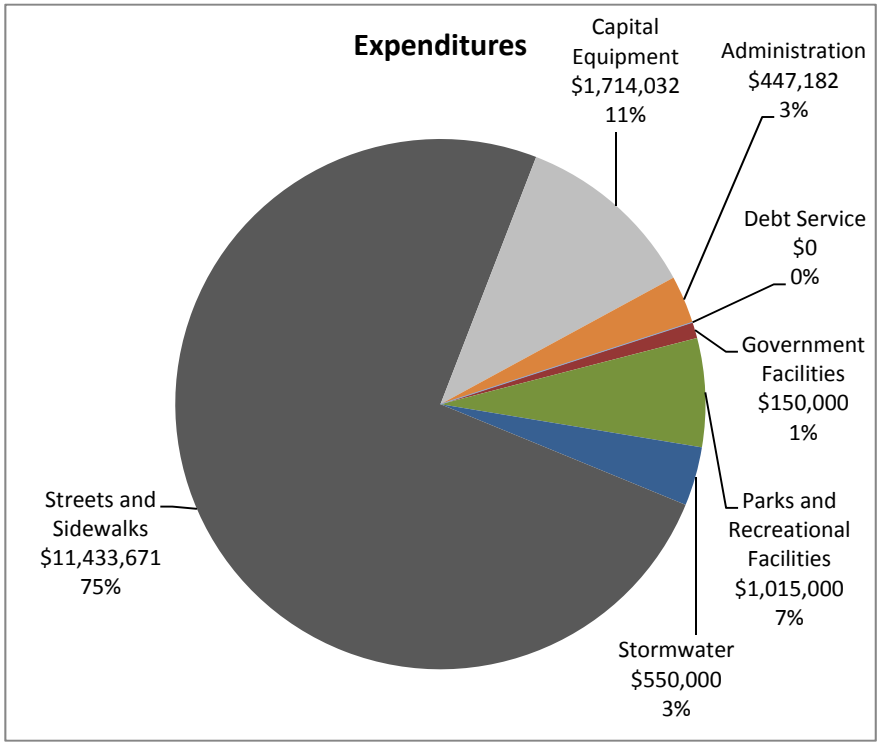
2020-2024 CIP Overview

Capital Fund

Over the next five years, the projected revenues for capital projects total approximately $14.89 million. The 1/2 cent Capital Improvement Sales Tax serves as the primary funding source for these projects. The balance is covered by grants and transfers from the general fund. The total cost of capital projects over the next five years is estimated at $15.31 million. Several projects in the five-year CIP include grant matches and are noted accordingly on project sheets. If the City is awarded a specified grant, future capital improvement plans will include the total associated expenses and revenues in the applicable years.

Capital Fund Revenues and Expenses by Category for FY2020 - FY2024





Building Project Bond Fund (Prop P)

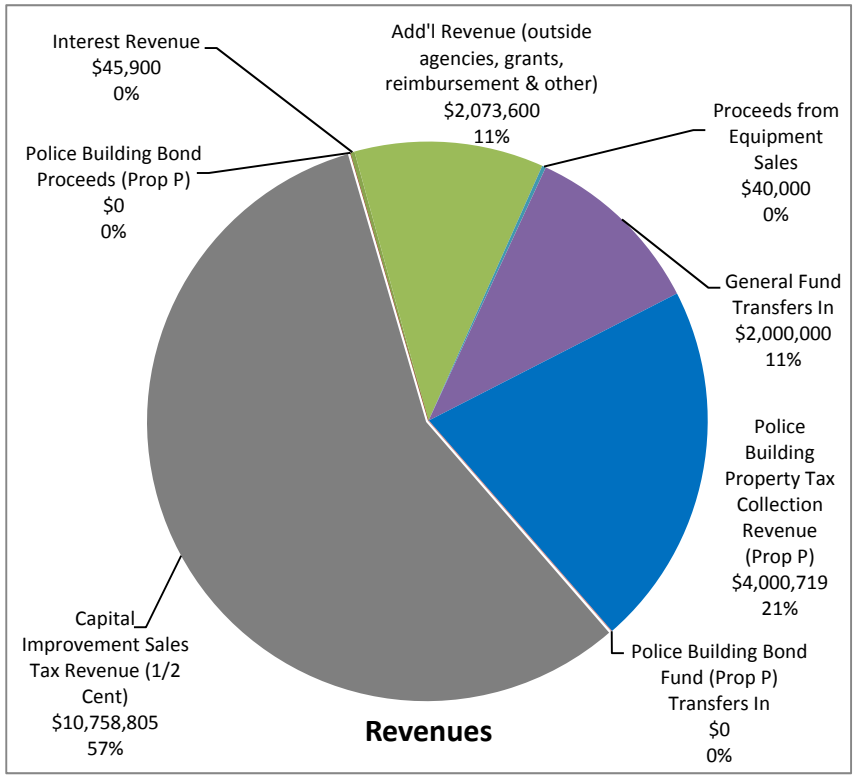
In November 2016, Creve Coeur voters approved a ballot measure authorizing the issuance of general obligation bonds of $10.69 million for the purpose of constructing, furnishing and equipping a new police station on the existing government center property and making safety, security and accessibility

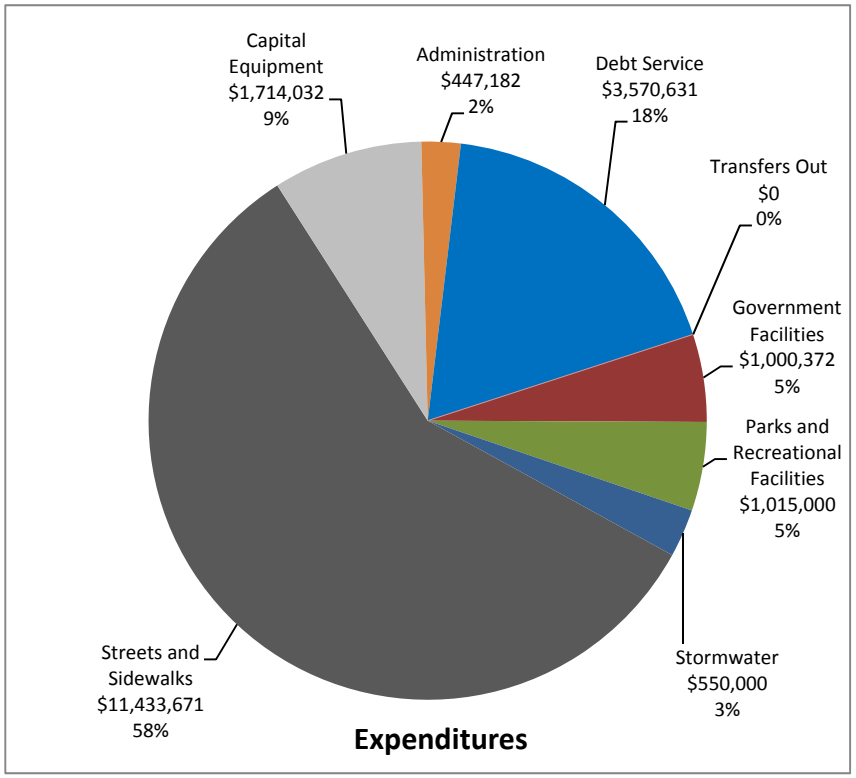
renovations to the existing government center. The expenses for the police building began in FY18 and will continue through FY2020. Accessibility and security improvements to the existing Government Center building are planned for FY2022. The debt service for Prop P will be paid through a 20-year real estate and personal property tax levy, which is anticipated to sunset in 2037.

Combined Capital Fund and Building Project Bond Fund

Over the next five years, the total projected revenues for capital projects in both the Capital and the Building Project Bond funds are estimated to be approximately $18.92 million. The 1/2 cent Capital Improvement Sales Tax and the Building Project Bond Property Tax Collection serve as the primary funding sources for FY2020-FY2024. The total combined projected expenses for capital projects over the next five years is estimated at $19.73 million.

Combined Capital Fund & Building Project Bond Fund Revenues and Expenses by Category for FY2020 - FY2024





**Bond proceeds for the Building Project Bond Fund occurred in FY2017 and therefore are not reflected in FY2020-FY2024 total revenues.*

For more information about the CIP, contact Matt Wohlberg, City Engineer, at mwohlberg@crevecoeurmo.gov or (314) 442-2084.

CAPITAL FUND PROJECTS

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2020-2024

9501 – GOVERNMENT FACILITIES

CAPITAL FUND

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2020-2024

9501 GOVERNMENT FACILITIES - 01

ACCESSIBILITY IMPROVEMENTS (CDBG) — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$20,000	$20,000	$0	$23,850	$20,000	$20,000	$20,000	$20,000	$20,000	

Project Description:
In FY2020, approximately $20,000 of Community Development Block Grant (CDBG) funds have been committed to providing accessibility improvements to the intersection of North New Ballas Road at Magna Carta Drive. This project follows recent efforts to improve pedestrian accessibility along North New Ballas Road and will complement the completion of the Police Building and the pavement improvements to Magna Carta Drive that are expected to will follow.

Existing Condition:
Projects are designed to improve facilities that are out of compliance with the current Americans with Disabilities Act (ADA) regulations.

Justification: *Public Safety; Coordination; Availability of Outside Funding*
Each project seeks to improve ADA compliance through accessibility improvements to government facilities and along public pedestrian routes. The focus of these projects is to provide public safety as well as to upgrade existing facilities.

Operating Budget Impact:
None. Projects that are undertaken as part of this program are relatively small in scope, and the City typically receives 100% reimbursement for the project costs through the CDBG federal grant.

Comments:
The City is designating this funding with the anticipation of receiving grant funding in the amount of $20,000 from the CDBG Commission. This is an annual grant available to municipalities to address accessibility projects. Scheduling of this project is subject to a successful grant application and availability of grant funding.

The funding shown in Prior Years reflects improvements to the pedestrian signal on North New Ballas Road north of Rocky Drive and south of Old Ballas Road in FY2019.

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	20,000
Equipment	$	
Other	$	
Annual Total	**$**	**20,000**

9501 GOVERNMENT FACILITIES - 02

GOVERNMENT CENTER RENOVATIONS (DESIGN) — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$250,000	$0	$250,000	$0	$0	$50,000	$0	$0	$0	$200,000

Project Description:
This project involves designing renovations to the Creve Coeur Government Center following the Police Department's move to the new Police Building. The design is expected to include modifications to the City Council chamber, employee work spaces, and building equipment, such as the electrical service switchgear. Funds are specified in FY2021 for the development of preliminary plans that will help the City determine the scope and cost of various options for improvements to the Government Center.

Existing Condition:
The Creve Coeur Government Center has inadequate space for staff, meetings, archives, and storage. The existing Police Department and the rest of the Government Center will require extensive renovations to move departments to more accessible locations and to make the Government Center more accommodating, helpful, and useful for both residents and staff.

Justification: *Operating Efficiency; Condition of Existing Facility*
Renovation of the Government Center will require careful design in order to create a building layout that promotes efficient and effective service to the City's residents.

Operating Budget Impact:
None.

Comments:
Construction funds will be programmed in the appropriate fiscal years once the renovation plans and the construction schedule become more clearly defined.

Expenditure Type:		
Planning, Design & Engineering	$	250,000
Land Acquisition	$	
Construction	$	
Equipment	$	
Other	$	
Total	**$**	**250,000**

9506 – PARKS AND RECREATIONAL FACILITIES

CAPITAL FUND

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2020-2024

9506 PARKS AND RECREATIONAL FACILITIES – 01

PARK IMPROVEMENTS (GRANT MATCH) CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
TBD	TBD	$30,500	$0	$0	$0	$0	$0	$0	$30,500

Project Description:
Funds listed in this account represent the City's anticipated matching funds for projects funded through Municipal Park Grants, for which the City can apply every two years. The CIP includes specific project descriptions for FY2021 and FY2023. It is anticipated that, if successful, the grant in FY2021 will be used to assist with the Ice Arena Refrigerant Switch Over and that the grant in FY2023 will be used to replace the tennis courts at Beirne Park and Lake School Park. Please refer to those specific project sheets for more information.

Existing Condition:
Numerous aspects of the City's parks (including tennis courts, playgrounds, walking paths, pavilions, ball fields, and other amenities) require maintenance, improvements, or replacement.

Justification: *Availability of Outside Funding; Condition of Ex. Facility; others depend upon the project*
Park grants are competitive. By budgeting for the local match, a grant application can be completed without searching for available funds or making amendments to the program. Available grants may help to address any number of CIP criteria including, but not limited to, improving condition of existing facilities, operating efficiency, beautification, and protection and conservation of the park system or historical landmarks. Finally, these projects are supported by the Parks Master Plan and/or the needs assessments of the Dielmann Recreation Complex (FY2014) and Golf Course (FY2016) and the Parks Master Plan that is underway and expected to be completed in FY2019.

Operating Budget Impact:
The improvements brought by these projects typically replace old or failing systems that require significant maintenance. These improvements should reduce operating costs.

Comments:
The current maximum amount of funding that the City is eligible for through the Municipal Park Grant program is currently $475,000 for a given project. These grants are competitive, and the City's contribution to the project affects the project application score and likelihood of a funding award. The City plans to provide a 6% grant match for its projects in order to maximize the number of points related to the City's contribution, which would make the grant match about $30,500 for a project that receives the maximum grant funding.

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	30,500
Equipment	$	
Other	$	
Total (Future Grant Match)	**$**	**30,500**

Anticipated Municipal Park Grant Application Schedule:

FY2021 – Ice Arena Refrigerant Switchover

FY2023 – Beirne Park and Lake School Park Tennis Court Replacement

FY2025 – Golf Course Irrigation Replacement

FY2027 – Lake School Park Playground Replacement

CREVE-COEUR-FRONTENAC MISSOURI PACIFIC TRAIL STUDY — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$30,000	TBD	$30,000	$0	$30,000	$0	$0	$0	$0	TBD

Project Description:
This project will include surveying and engineering services to create a concept-level plan for a possible walking trail along the former Missouri Pacific Railroad corridor between Malcolm Terrace Park and Villa Coublay Drive. The intent of the project will be to determine whether constructing such a path is feasible. This plan would be coordinated with a similar effort by the City of Frontenac to investigate the possibility of a trail from Villa Coublay Drive east.

Existing Condition:
The area to be studied is a wooded utility corridor.

Justification: *Coordination, Availability of Outside Funding, Citizen Demand*
Residents have requested that the City investigate and create new paths and trails through the recent Citizen Survey, and both the Comprehensive Plan Creve Coeur 2030 and the City's Strategic Plan identify such efforts as near-term priorities.

Operating Budget Impact:
A new trail will require maintenance, but the costs of this maintenance are expected to be limited by the use of wood chips as the walking surface.

Comments:
Construction of this trail would qualify for funding through a Municipal Park Grant or a Recreational Trails Grant.

Expenditure Type:		
Planning, Design & Engineering	$	30,000
Land Acquisition	$	
Construction	$	
Equipment	$	
Other	$	
Total	**$**	**30,000**

9506 PARKS AND RECREATIONAL FACILITIES – 11

MILLENNIUM PARK TRAIL STUDY — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$20,000	TBD	$20,000	$0	$20,000	$0	$0	$0	$0	TBD

Project Description:
This project will include engineering design services to investigate the feasibility of adding walking trails within Millennium Park and possible pedestrian connections to the adjacent neighborhoods.

Existing Condition:
The areas to be studied are a wooded area with no formal paths, the southeast area of Millennium Park just north of the end of Deland Drive, and the east side of Millennium Park near the Questover subdivision common ground.

Justification: *Coordination, Availability of Outside Funding, Citizen Demand*
Residents have requested that the City investigate and create new paths and trails through the recent Citizen Survey, and both the Comprehensive Plan Creve Coeur 2030 and the City's Strategic Plan identify such efforts as near-term priorities.

Operating Budget Impact:
The study itself will not have any impact on the operating budget. Once constructed, however, any new trails and bridges will require maintenance that will have expenses.

Comments:
Construction of a new trail or a new bridge would qualify for funding through a Municipal Park Grant or a Recreational Trails Grant.

Expenditure Type:		
Planning, Design & Engineering	$	20,000
Land Acquisition	$	
Construction	$	
Equipment	$	
Other	$	
Total	**$**	**20,000**

GOLF COURSE POND FOUNTAINS

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$25,000	$0	$25,000	$0	$25,000	$0	$0	$0	$0	$0

Project Description:
This project will involve adding a fountain and an aerator to the south pond at the Creve Coeur Golf Course. In order to do so, the electrical feed needs to be replaced. This project would include replacement of the electrical conduit and wiring that feeds the fountains at all of the ponds.

Existing Condition:
The fountain that was previously used at the south pond of the golf course no longer works, and the electrical feed to this location is not suitable to power a pump, fountain, and aerator for this pond.

Justification: *Beautification; Citizen Demand; Condition of Existing Facility; Protection & Conservation*
The fountains provide an aesthetic appeal to the golf course that has been missed in recent years. A new fountain and an aerator were recommended for the south pond of the golf course as a way to properly circulate the water and help keep the pond healthy following the removal of the silt from the bottom of this pond.

Operating Budget Impact:
The new units will have electricity costs, but this cost is expected to be low relative to the overall electricity budget for the golf course and Dielmann Recreation Complex.

Comments:
Solar power is a consideration for the pump for the aerator and fountain, but staff has some concern that the solar panels could be damaged by golf balls.

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	15,000
Equipment	$	10,000
Other	$	
Total	**$**	**25,000**

DIELMANN RECREATION COMPLEX PARKING LOT LIGHTING — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$40,000	$0	$40,000	$0	$20,000	$20,000	$0	$0	$0	$0

Project Description:
This project will include replacing the existing light fixtures with new and additional LED light fixtures for the two parking lots at the Dielmann Recreation Complex. The purpose of the project is to provide adequate and consistent light for the parking lots to increase safety and functionality of the lots.

Existing Condition:
Currently, the parking lots are lit with light poles that were installed by and are maintained by Ameren. The front parking lot has some older and some newer light fixtures, and the back parking lot only has two light poles, but needs several more to cover the entrance and underserved sections of the lot.

Justification: *Public Safety; Operating Efficiency; Condition of Existing Facility*
The safety of the users of the Dielmann Recreation Complex is a primary concern, and the new lights will help limit the City's risk expose. The current poles provide minimal, inadequate coverage, and these light poles need frequent maintenance. The new poles will have LED fixtures that will provide better, more consistent light output.

Operating Budget Impact:
The project would not change that the City currently pays a monthly fee to Ameren for replacing bulbs that go out and for fixing damages that occur to the poles that are out of the City's control (e.g. wind or storm damage). However, the new LED lights should result in lower monthly electric bills.

Comments:
None.

Expenditure Type:		
Planning, Design & Engineering	$	40,000
Land Acquisition	$	
Construction	$	
Equipment	$	
Other	$	
Total	**$**	**40,000**

9506 PARKS AND RECREATIONAL FACILITIES – 14

HISTORIC BUILDING REHABILITATION AND PRESERVATION — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$40,000	$0	$40,000	$14,093	$35,000	$100,000	$75,000	$0	$0	TBD

Project Description:
This project involves the assessment, improvement, and preservation of three locally historic buildings that are located in the City's Parks: Hackman Cabin and Clester Cabin in Conway Park, and Lake School House in Lake School Park. Following an assessment of these buildings in FY2019, building repairs and stabilization efforts are recommended for the preservation of the structures, with Lake School House in FY2020, Hackman Cabin in FY2021, and Clester Cabin in FY2022.

Existing Condition:
All three of the buildings need significant repairs and improvements to help keep rain and/or animals from entering the buildings.

Justification: *Protection and Conservation; Operating Efficiency; Condition of Existing Facility*
The Parks and Historic Preservation Committee requested that the City invest into these buildings, as they are considered to be part of the heritage of Creve Coeur.

Operating Budget Impact:
Structural repairs to stabilize these buildings are expected to decrease future operating costs for building repairs.

Comments:
Funding in prior years includes the assessment of the cabins in FY2019 and the installation of informational signs for these buildings and the Tappmeyer House in FY2019.
A new roof was added to the Lake School House within the past five years.

Expenditure Type:		
Planning, Design & Engineering	$	9,300
Land Acquisition	$	
Construction	$	210,000
Equipment	$	4,793
Other	$	
Total	**$**	**224,093**

9506 PARKS AND RECREATIONAL FACILITIES – 15

ICE ARENA COMPRESSOR REPLACEMENT — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$30,000	$0	$30,000	$0	$30,000	$0	$0	$0	$0	$0

Project Description:
The project involves the replacement of one (1) 100-ton ice rink plant compressor that is necessary to create and maintain the ice for the ice arena at the Dielmann Recreation Complex.

Existing Condition:
The existing unit is over its recommended hours use total of 45,000 hours. Furthermore, the compressor has internal damage that cannot be repaired and that is causing it to leak oil.

Justification: *Operating Efficiency; Condition of Existing Facility*
The ice plant is made up of three (3) 100-ton compressors, with two running in service and the third as the backup. The system operates in this fashion to allow for servicing of any one compressor at any time and still have two in service to meet the demands of the rink. The compressor is one of the originals form the major renovation of the Ice Arena in 2003.

Operating Budget Impact:
The new compressor is expected to reduce operating costs by requiring less maintenance. There will be a little savings on time and material by not having to add oil to the compressor.

Comments:
None.

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	
Equipment	$	30,000
Other	$	
Total	**$**	**30,000**

9506 PARKS AND RECREATIONAL FACILITIES – 16

TENNIS COURT REPAIRS — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$70,635	$0	$70,635	$35,635	$35,000	$0	$0	$0	$0	$0

Project Description:
This project involves repairs to and resurfacing of the tennis courts in the City's parks in order to maintain the quality of courts necessary for safe and enjoyable play. Improvements to Conway Park are planned for FY2020. These improvements will include minor repairs, repainting, and conversion of one of the courts into pickleball courts.

Existing Condition:
The courts at Conway Park have held up well to recent park improvements, but these courts are in need of rejuvenation.

Justification: *Condition of Existing Facility; Beautification; Citizen Demand; Public Safety*
Tennis courts need to be meticulously maintained in order to make them suitable for play. Cracks, divots, and other defects can influence the bounce of the ball or cause players to trip, and neither condition encourages use of the courts. There has also been a growing demand to add pickleball courts to the City's parks.

Operating Budget Impact:
Maintenance of the tennis courts has increasingly become the job of the City's Public Works staff. Such work is time consuming. New tennis court surfaces would eliminate the need for significant repair efforts in the near future.

Comments:
Tennis court improvements would qualify for funding through the Municipal Park Grant program, but these funds are being used for other City projects.
The courts at Beirne Park were repaired and repainted in FY2018, the cost of which is listed as "prior years."

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	70,635
Equipment	$	
Other	$	
Total	**$**	**70,635**

DIELMANN RECREATION CENTER HVAC REPLACEMENT – PHASE 2

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$110,000	$0	$110,000	$0	$0	$110,000	$0	$0	$0	$0

Project Description:
This project involves the removal and replacement of the remaining air handler and condensing unit that serve the Dielmann Recreation Complex. The replacement of this equipment will complement and complete the air handler, condenser, and boiler units that were replaced in FY2018.

Existing Condition:
The Dielmann Recreation Complex uses two air handlers and two condensing units for its heating and air conditioning. The two units that are proposed to be replaced are beyond their useful lives.

Justification: *Operating Efficiency; Condition of Existing Facility*
New units will be more efficient than the existing units, and the new units are expected to require little or no maintenance for several years.

Operating Budget Impact:
Increased efficiency and limited maintenance should result in lower operating costs.

Comments:
None.

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	
Equipment	$	110,000
Other	$	
Total	**$**	**110,000**

9506 PARKS AND RECREATIONAL FACILITIES – 18

ICE ARENA REFRIGERANT SWITCH-OVER (GRANT MATCH) — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$75,000	TBD	$75,000	$0	$0	$75,000	$0	$0	$0	$0

Project Description:
The current system that cools the ice operates using R-22 (Freon), a product that is already becoming more expensive and will soon become unavailable as a coolant. This project would include transitioning the current cooling system, through retrofit or replacement of the existing equipment, to an alternative coolant such as Ammonia or CO_2. The total cost of this project is estimated to be $550,000. The City Share reflects the remaining $75,000 if the City is awarded a $475,000 Municipal Park Grant. The full project cost will be programmed into the appropriate fiscal years if the City is successful in obtaining a grant for the project.

Existing Condition:
The existing equipment is currently operational, but the three compressors in this system have required frequent maintenance. Even small repairs to the system can result in a loss of coolant and, therefore, require a system "charge" or refill. Vendors who do these repairs are responsible for disposing of lost Freon, and the City often incurs service charges associated with these disposals.

Justification: *Operating Efficiency; Condition of Existing Facility; Coordination; Availability of Outside Funding; Protection & Conservation*
This project directly affects operational efficiency. Under the U.S. Clean Air Act & the Montreal Protocol on Substances that Deplete the Ozone Layer, use of R-22 refrigerant is being phased out of use because of the damage these types of substances can cause to the earth's ozone layer. Starting on January 1, 2020, the U.S. will no longer produce or import R-22; should there be any repair or catastrophic system failure after that date, the City may be unable to recharge the system to maintain cooling.

Operating Budget Impact:
Once the switch over occurs, the cost of maintaining the system will be included in the building's preventive maintenance contract. The real savings will be seen when the system moves away from the expensive R-22 cost, simply due to the lack of supply for R-22 coolant.

Comments: A grant will be applied for in FY2021 and, if approved, the switchover will take place in FY2021.

Expenditure Type:		
Planning, Design & Engineering	$	25,000
Land Acquisition	$	
Construction	$	
Equipment	$	50,000
Other	$	
Total (Grant Match)	**$**	**75,000**

9506 PARKS AND RECREATIONAL FACILITIES – 19

MALCOLM TERRACE PARK TRAIL IMPROVEMENTS (GRANT MATCH) — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$15,000	TBD	$15,000	$0	$0	$15,000	$0	$0	$0	$0

Project Description:
The project involves resurfacing two asphalt trails and the parking lot at Malcolm Terrace Park. The amount of $15,000 represents the City's portion of the cost for a $75,000 project that is funded by a federal grant through the Recreational Trails Program. The actual cost of the project will be programmed into the Capital Improvement Plan if the City is awarded the grant.

Existing Condition:
Asphalt paths are in use at Beirne Park, Conway Park, Malcolm Terrace Park, and Millennium Park. Most of these trails are in good condition and need preventative maintenance to preserve their condition. The paths at Malcolm Terrace Park and an access path to Beirne Park, however, are in poor condition and require resurfacing and localized replacement.

Justification: *Public Safety; Cond. of Existing Facility; Availability of Outside Funding; Citizen Request*
The City's parks are a sense of pride for Creve Coeur, and the City is obligated to provide adequate and safe access to the parks. Pursuit of grant funding to assist with maintaining this access allows the City to meet its obligations at a reduced cost.

Operating Budget Impact:
Asphalt path maintenance can be costly. Replacement of the paths at Malcolm Terrace Park will reduce maintenance costs for the near future.

Comments:
The Recreational Trails Program provides up to 80% reimbursement of construction costs for projects totaling up to $125,000. The City's applications for this grant in FY2017 and FY2018 were not successful, but another attempt will be made in FY2020. Should a grant be awarded for this project, the City would have three years to complete the project. Construction would be expected in FY2021.

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	15,000
Equipment	$	
Other	$	
Total (City Share)	**$**	**15,000**

9506 PARKS AND RECREATIONAL FACILITIES – 20

PLAYGROUND SAFETY SURFACE REPLACEMENT — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$175,000	TBD	$175,000	$56,508	$0	$75,000	$0	$0	$100,000	$75,000

Project Description:
This project involves the replacement of damaged areas and rejuvenation or replacement of the rubberized safety surface beneath the City's playgrounds. The surface of the original playground at Millennium Park was replaced in FY2017, because it was the most urgent need. Several other playgrounds will require attention in the near future. The second playground at Millennium Park is scheduled for FY2021, and the surface beneath the playground at Beirne Park is scheduled for FY2024.

Existing Condition:
The rubberized surface beneath the City's playgrounds in Millennium Park, Conway Park, and Beirne Park provides the required protection for children and other users against injury from a fall off of the playground or swing set. The edges of the newer playground surface at Millennium Park were repaired in FY2017, but this surface will need to be replaced by FY2021. Staff will continue to evaluate the surfaces at Conway Park and Beirne Park and will recommend repairs or replacement to these surfaces accordingly. At this time, the safety surface at Beirne Park is expected to be the next to need replacement after Millennium Park.

Justification: *Public Safety; Availability of Outside Funding; Condition of Existing Facility*
Keeping the safety surface of the City's playgrounds in good condition is required for the continuing use of the playgrounds and the safety of the playgrounds' users.

Operating Budget Impact:
None.

Comments:
This work would qualify for grant funding through the Municipal Parks Grant program, but the next several grant opportunities will be directed toward other needs.

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	175,000
Equipment	$	
Other	$	
Total (FY2021 & FY2024)	**$**	**175,000**

CITY ENTRANCE AND PARK IDENTIFICATION SIGNAGE MASTER PLAN — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$20,000	$0	$20,000	$0	$0	$0	$20,000	$0	$0	$0

Project Description:
This project includes the City contracting with a consultant to design new City Entrance signs/monuments, Park Identification signs/monuments, and directional sign leading visitors to City Facilities.

Existing Condition:
City entrance signs are about 15 years old and some are damaged and in need of replacement. We have the same issue with the directional signs leading visitors to City facilities. There has been an interest expressed by the Park and Historical Preservation Committee to construct new signage/monuments at the entrance of each City Park.

Justification: *Condition of Existing Equipment; Beautification; Coordination*
Existing signs are old and in need of replacement. Some signs are missing and others are damaged beyond repair. The park identification signs are extremely old and require replacement, however, a couple of parks have brick monument signs that are fairly new. Development of a Sign Masterplan was included as an action item in the FY2018-2021 Strategic Plan.

Operating Budget Impact:
This is a design and cost estimate for the purchase and construction new signage. There is no effect on the operating budget. Once designed, we can obtain cost estimates and budget funding in future years for the manufacturing and installation of the new signs/monuments.

Comments:
By reviewing the entire signage needs of the city, we will have an opportunity to evaluate the current sign types and locations. Although the signs for Parks may be different than the City Entrance signs, we can create a signage theme so that there are similarities with all City signs thus creating sign branding unique to Creve Coeur.

Expenditure Type:		
Planning, Design & Engineering	$	20,000
Land Acquisition	$	
Construction	$	
Equipment	$	
Other	$	
Total	**$**	**20,000**

9506 PARKS AND RECREATIONAL FACILITIES - 22

ICE ARENA FLOORING REPLACEMENT — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$200,000	$0	$200,000	$0	$0	$0	$0	$200,000	$0	$0

Project Description:
This project involves replacing the rubberized flooring that is around the ice rink, in the player's locker rooms, and in the referee's changing room.

Existing Condition:
A majority of the flooring is the original floor from the major renovation project in 2003 and is near the end of its useful life. Some smaller areas have been replaced due to high traffic areas, including the areas beneath the player's benches and near the public entrance gate area that leads onto the ice rink.

Justification: *Public Safety; Condition of Existing Facility*
The project will focus on preserving and protecting the general public from harm when using the ice rink for public skating, special events, or ice rentals and will reduce the City's risk exposure. The project will update the aging flooring and provide an aesthetic look to match the rest of the facility.

Operating Budget Impact:
The rink's ice will need to be taken out to allow the concrete floor temperature to rise to the manufacturer's recommendation to warranty the installation. This will cause a shutdown of the ice for approximately three weeks, two for the floor project and one for the removal and installation of new ice. The Ice Arena will schedule the replacement of the flooring to coincide with a shutdown of the ice in order to limit the construction impact on ice users and possible revenue losses. Once the floor is installed, there will be minimal upkeep involved.

Comments:
None.

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	200,000
Equipment	$	
Other	$	
Total	**$**	**200,000**

9506 PARKS AND RECREATIONAL FACILITIES – 23

TENNIS COURT REPLACEMENT PROJECT (GRANT MATCH) — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$30,000	TBD	$30,000	$0	$0	$0	$0	$30,000	$0	$0

Project Description:
In FY2023, the City plans to apply for a Municipal Park Grant to substantially fund the replacement of the courts at Lake School Park and Beirne Park with post-tensioned concrete courts. The amount shown in FY2023 is the City's planned grant match for a project that is expected to cost approximately $500,000. Upon successfully obtaining the grant, the actual costs will be programmed into the FY2023 capital budget through a budget adjustment.

Existing Condition:
The courts at Lake School Park and Beirne Park are asphalt courts that have been overlaid several times and cannot be effectively overlaid in the future.

Justification: *Availability of Outside Funding; Protection & Conservation; Beautification; Citizen Demand; Public Safety*
Tennis courts need to be meticulously maintained in order to make them suitable for play. Cracks, divots, and other defects can influence the bounce of the ball or cause players to trip, and neither condition encourages use of the courts.

Operating Budget Impact:
Maintenance of the tennis courts has increasingly become the job of the City's Public Works staff. Such work is time consuming. New tennis courts would eliminate the need for significant repair efforts in the near future.

Comments:
The courts at Beirne Park were repaired and repainted in FY2018, but additional maintenance or improvements to the Beirne Park courts may no longer be effective.

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	30,000
Equipment	$	
Other	$	
Total (Grant Match)	**$**	**30,000**

9509 – STORMWATER

CAPITAL FUND

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2020-2024

9509 STORMWATER - 01

STORMWATER IMPROVEMENTS PER MASTER PLAN — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$0	$0	$0	$0	$0	$150,000	$0	$0	$150,000	$150,000

Project Description:
The 2012 Stormwater Master Plan update identified numerous stormwater-related projects that involve streams and public infrastructure. The City aims to address these issues over time as funding allows and using the master plan benefit rating as a guide. The scope of work for some of the projects listed in the master plan is greater than what this program can afford at the current funding level. These projects have been treated as separate items in the Capital Improvement Plan, but funding for such projects typically replaces the annual funding in this account.
In FY2021, funding is recommended to help address erosion of a creek next to South New Ballas Road.

Existing Condition:
Issues under consideration typically exhibit erosion, deteriorated infrastructure, and/or flooding.

Justification: *Condition of Existing Facility; Public Safety; Citizen Demand, Coordination*
The Stormwater Committee reviewed the issues in the Stormwater Master Plan and agreed that the City's use of public funds should be limited to projects to resolve issues that involve public infrastructure and/or public conveyances of water. Such issues may never be adequately or correctly resolved without the City's initiative, funding, and oversight.

Operating Budget Impact:
None.

Comments:
Funding for FY2017-FY2018 ($150,000/year) were used to offset the expense of the Golf Course Dam Stabilization and Siltation Removal project (FY2017) and the Alden Lane Culvert Repair Project (FY2018). Funding for FY2019 and FY2020 will be used to offset the cost of the Middlebrook Drive Stormwater Improvements.

Expenditure Type:		
Planning, Design & Engineering	$	50,000
Land Acquisition	$	
Construction	$	100,000
Equipment	$	
Other	$	
Annual Total (FY21 & FY24):	**$**	**150,000**

9509 STORMWATER – 04

MIDDLEBROOK DRIVE STORMWATER IMPROVEMENTS — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$292,075	$0	$292,075	$42,075	$250,000	$0	$0	$0	$0	$0

Project Description:
This project involves replacing a failing culvert pipe beneath Middlebrook Drive and making associated repairs to the impacted area of the roadway and the stream. The project will include decorative elements, similar to those included in the Chilton Lane culvert replacement project in 2013. Easements will be required from the adjacent properties in order to complete the project. Trees and bushes will be included in the restoration of disturbed area to replace some of the vegetation that will be removed.

Existing Condition:
The culvert pipe is both undersized and failing, with increasing impact to the pavement of Middlebrook Drive above. In a heavy rain event, the creek flow exceeds the culvert capacity, and the creek overtops the street. The voids around the culvert were addressed in 2014 following a partial collapse of the roadway, but this repair was never expected to last more than a few years.

Justification: *Public Safety; Condition of Existing Facility; Beautification; Coordination*
Analysis of the stream found that the existing culvert pipe does not meet current size requirements, so lining the pipe or in-kind replacement would not be permissible. The Stormwater Committee identified the replacement of this culvert as a high priority in 2016, because the failure of this culvert would limit access to or isolate several homes along Middlebrook Drive. This issue rated highest among reviewed stormwater issues with 175 points, and the project has a benefit-to-cost ratio is 0.6, according to the metrics used in the Stormwater Master Plan.

Operating Budget Impact:
City staff has repeatedly patched the roadway pavement above this culvert, with a significant repair in 2014. This project will eliminate this problem and future needs for such maintenance.

Comments:
The design for this project was completed in FY2013. This project was originally scheduled to be constructed in FY2014; however, the Metropolitan St. Louis Sewer District's (MSD) planned sanitary sewer replacement for this area began in 2016. The City's project was re-scheduled for 2019 (FY2019-FY2020) to allow adequate time for MSD to complete its project and for the City to acquire the easements needed for the project. This project uses funding originally set aside for the FY2019 and FY2020 Stormwater Master Plan projects.

Expenditure Type:		
Planning, Design & Engineering	$	10,000
Land Acquisition	$	1,000
Construction	$	250,000
Equipment	$	
Other (Design FY2013)	$	31,075
Total	**$**	**292,075**

9510 – STREETS AND SIDEWALKS

CAPITAL FUND

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2020-2024

9510 STREETS AND SIDEWALKS – 01

STREET AND SIDEWALK MAINTENANCE PROGRAM — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$1,281,250	$0	$1,281,250	$1,250,000	$1,281,250	$1,313,281	$1,346,113	$1,379,766	$1,414,260	$0

Project Description:
The project includes concrete pavement replacement, asphalt pavement resurfacing, asphalt pavement maintenance, microsurfacing, roadway striping, and sidewalk replacement for the annual maintenance of the City's roadway and sidewalk networks.

Existing Condition:
While the majority of the City's pavement network is in good condition, annual and on-going evaluation of pavement and sidewalk conditions find ageing and failing pavement and sidewalks that need to be addressed.

Justification: *Public Safety; Condition of Existing Facility; Coordination; Citizen Demand*
The City uses a pavement management system to track pavement conditions, and the City aims to evaluate the condition of each street on a four-year rotation. The pavement condition data assists with the prioritization of pavement repairs and maintenance and helps the City preserve its existing infrastructure as efficiently as possible. Federal regulations require that sidewalks meet accessibility standards so that all users have an opportunity to travel safely. The City's sidewalk maintenance program follows the federal regulations and supports the City's Pedestrian Plan.

Operating Budget Impact:
Pavement and sidewalk maintenance programs will improve and preserve the infrastructure and will result in a reduction in the number of pothole repairs and other on-going maintenance needs.

Comments:
Approximately 10% of the annual street and sidewalk improvements are directed toward accessibility improvements to the City's sidewalk network in support of the accessibility transition plan. Larger projects, such as grant-funded improvements, are described in separate project sheets.

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	1,281,250
Equipment	$	
Other	$	
Total (FY2020)	**$**	**1,281,250**

9510 STREETS AND SIDEWALKS – 02

STREET RECONSTRUCTION/REHABILITATION — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$365,000	$0	$365,000	$300,000	$365,000	$300,000	$0	$300,000	$300,000	TBD

Project Description:
The City plans to fully or substantially replace sections of failed residential roadways as part of this project. The various needs of the pavement network are evaluated each year to determine which streets will be reconstructed. The FY2018-FY2021 projects involve rehabilitation of the Ladue Estates subdivision, and Winrock Drive was included in the FY2019 project. Funding in FY2022 will be used to offset the costs for the "South Phase" improvements to Mosley Road. Projects in FY2023 and beyond will be determined after future reviews of pavement conditions.

Existing Condition:
Residential streets that are considered for reconstruction have reached the end of their useful lives and are generally in too poor of condition to gain long-term benefits from the City's typical pavement maintenance programs.

Justification: *Public Safety; Condition of Existing Facility; Citizen Demand*
All of the City's streets will eventually reach the end of their useful lives, fail at a structural level, and require reconstruction. This program provides the City with a tool to address some of its residential streets that are in poor or failing condition that typical maintenance programs can no longer improve.

Operating Budget Impact:
Streets with failing pavement typically require frequent maintenance in the form of pothole patching and emergency pavement repairs, which City staff often performs to address the issues as quickly as possible. Allocation of funds for reconstruction also allows for more of the maintenance budget to be used for maintaining and preserving streets that are in better condition. This allows for the needs of more streets and sidewalks to be addressed and will reduce the number of calls for City staff to make repairs.

Comments:
The budget projections are based upon planned roadway replacement and rehabilitation. These plans typically change due to pavement failures or coordination with utilities or other projects. The amount of funding in FY2020 is greater than normal, because it includes $65,000 of surplus funding that resulted from reducing the scope of the FY2018 rehabilitation project at Ladue Estates Drive East.

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	365,000
Equipment	$	
Other	$	
Total (FY2020)	**$**	**365,000**

Street Reconstruction/Rehabilitation Candidate Examples *(in Alphabetical Order)*	
Street Name	**Pavement Condition Index (0 – 100)**
Country Fair Lane (Interior Loop)	87
Conway Garden Court	62
Ladue Estates Drive	38
Ladue Estates Drive South	42
Ladue Estates Drive West	52
Ladue Meadows Drive	77
Magna Carta Drive	56
Mosley Road	50
Sherwyn Drive	52
Winrock Drive	50

9510 STREETS AND SIDEWALKS – 08

SIGNAL ENHANCEMENT PROJECTS — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$266,128	$87,705	$178,423	$196,128	$70,000	$0	$0	$0	$0	TBD

Project Description:
These projects involve partnerships with the Missouri Department of Transportation (MoDOT), the Olive Boulevard Transportation Development District (Olive TDD), and Saint Louis County to add black powder coat and illuminated street name signs to several traffic signals along Olive Boulevard, Lindbergh Boulevard, and North New Ballas Road. In prior years, MoDOT offered the partnership with the City and the Olive TDD as part of the MoDOT projects to replace the traffic signals at six intersections along Olive Boulevard and Lindbergh Boulevard. The City then partnered with the Olive TDD to add illuminated street name signs to two intersections along New Ballas Road and to complete the Olive TDD's New Ballas sidewalk lighting near Olive Boulevard. The work in FY2020 will involve a partnership with MoDOT and St. Louis County to add black powder coating and illuminated street name signs to two new signalized intersections at a County project to revise the interchange of Olive at Lindbergh.

Existing Condition:
The traffic signals were old and deteriorated at the intersections of Olive at North New Ballas Road, Craig Road, and Mosley Road, and the intersections of Lindbergh at the Chaminade entrance, Ladue Road, and Quailways/Tealbrook. No signals currently exist at the cloverleaf at Olive and Lindbergh.

Justification: *Coordination; Cond. of Existing Facility; Availability of Outside Funding; Beautification*
Including these enhancements to new traffic signals as part of the MoDOT and County projects will be much more cost effective and will result in better products than if completed as part of one or more independent projects to add these enhancements once the traffic signals are in place.

Operating Budget Impact:
The City will be responsible to maintain the illuminated street name signs and the black powder coating on the signal equipment, and the City will be responsible to pay the electric bills for the signs. These costs are expected to be minimal.

Comments:
The outside funding sources include construction reimbursement from the Olive TDD (estimated at $62,000) for the lighting work along New Ballas Road and a development escrow (estimated at $25,705) for illuminated street name signs at the intersections of New Ballas Road at Studt Avenue and at Old Ballas Road. Funding will be added to FY2021 if MoDOT replaces two more signals on Olive that year.

Expenditure Type:		
Planning, Design & Engineering	$	30,592
Land Acquisition	$	
Construction	$	235,536
Equipment	$	
Other	$	
Total	**$**	**266,128**

9510 STREETS AND SIDEWALKS – 09

PAVEMENT CONDITION RATINGS UPDATE — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$45,000	$0	$45,000	$0	$45,000	$0	$0	$0	$0	$0

Project Description:
The project involves engineering consulting services to provide an independent assessment of the City's pavement conditions and ride quality. These pavement conditions are used as a tool to guide the recommendations of City staff for the annual pavement improvement programs.

Existing Condition:
The pavement conditions were independently evaluated in FY2016. Since then, City staff have updated the condition ratings of about one quarter of the City's streets each year. The City does not have the equipment to efficiently or effectively measure ride quality.

Justification: *Condition of Existing Facility; Operating Efficiency*
Pavement condition ratings need to be up to date in order for them to be reliable tools for planning pavement repairs and for judging the performance of the pavement management program.

Operating Budget Impact:
None.

Comments:
None.

Expenditure Type:		
Planning, Design & Engineering	$	45,000
Land Acquisition	$	
Construction	$	
Equipment	$	
Other	$	
Total	**$**	**45,000**

9510 STREETS AND SIDEWALKS – 10

EMERSON ROAD IMPROVEMENT PROJECT (FEDERAL STP GRANT) — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$678,508	$444,000	$234,508	$75,508	603,000	$0	$0	$0	$0	$0

Project Description:
The project includes pavement widening and resurfacing, new curb and gutter, and enclosed stormwater facilities along the City-maintained section of Emerson Road from Old Ballas Road to De Smet Jesuit High School. In FY2016, the City was awarded a federal grant that will fund up to $444,000, which is approximately 74% of the estimated construction cost for the project.

Existing Condition:
The existing roadway pavement is in marginal condition: its edges are deteriorating, a retaining wall supporting the street is failing, and the street width is insufficient. The City's portion of Emerson Road was found to have an average pavement condition index (PCI) of 44 in 2016, which indicates that the pavement is in need of significant improvements.

Justification: *Public Safety; Condition of Existing Facility; Availability of Outside Funding*
Emerson Road does not meet current standards for width and safety. The project will increase the roadway width and will improve drivers' sight lines by lowering the peak of the hill just north of De Smet Jesuit High School.

Operating Budget Impact:
Fixing the street and the failing headwall will reduce the number of maintenance calls to fix Emerson.

Comments:
The Emerson Road Improvement Project follows a concept plan that was developed for Emerson Road in FY2011. The sidewalk improvements that were part of this concept plan will be completed through the Emerson Road Sidewalk Improvement Project in FY2017, for which the City received a federal grant to assist with construction costs. The Missouri Department of Transportation owns Emerson Road south of De Smet Jesuit High School.

Expenditure Type:		
Planning, Design & Engineering	$	71,508
Land Acquisition	$	4,000
Construction	$	603,000
Equipment	$	
Other	$	
Total	**$**	**678,508**

9510 STREETS AND SIDEWALKS – 11

FERNVIEW DRIVE RESURFACING (FEDERAL STP GRANT) — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$392,423	$250,000	$142,423	$56,423	$0	$336,000	$0	$0	$0	$0

Project Description:
This project involves asphalt pavement resurfacing along Fernview Drive from Gallagher Road to Olive Boulevard. The City was awarded a federal grant that will reimburse up to $250,000 (approximately 74%) of the construction cost for this project.

Existing Condition:
Fernview Drive consists of an asphalt street with concrete curbs and gutters between Gallagher Road and Olive Boulevard. Fernview Drive has sections that are currently in good condition, but some sections have deteriorated. Fernview has an average pavement condition index (PCI) of 59, meaning that it is in "fair" condition with the need for a resurfacing soon. This average PCI balances very good sections with PCI in the 80's with poor sections with PCI in the 40's.

Justification: *Public Safety; Availability of Outside Funding; Citizen Demand*
The roadway resurfacing is needed to maintain the pavement along Fernview Drive before more substantial rehabilitation becomes necessary. Fernview is used by about 4,300 vehicles per day, making it one of the most heavily traveled City streets in a residential area.

Operating Budget Impact:
The project will result in less need for City staff to patch Fernview Drive. Future maintenance expenses are expected to be lower due to this project.

Comments:
Sidewalks were not included as part of this project, because further study and public outreach is required to determine the feasibility of adding sidewalks to Fernview Drive. A separate "future project" has been included in this Capital Improvement Plan for Fernview and Bellerive Estates sidewalks.

Expenditure Type:		
Planning, Design & Engineering	$	56,423
Land Acquisition	$	
Construction	$	336,000
Equipment	$	
Other	$	
Total	**$**	**392,423**

9510 STREETS AND SIDEWALKS – 12

FERNVIEW SIDEWALK CONCEPT PLAN — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$35,000	$0	$35,000	$0	$35,000	$0	$0	$0	$0	TBD

Project Description:
This project will extend the design for the Fernview Drive Improvement Project to review the options for and feasibility of adding a sidewalk along Fernview Drive between Olive Boulevard and Gallagher Road. This will be a separate project from the roadway resurfacing project on Fernview Drive.
This project will involve public outreach, as public support will be essential if easements are necessary to construct the sidewalk.

Existing Condition:
There are no sidewalks along Fernview Drive, a street that carries over 4,000 vehicles on an average day. Most of the subdivisions on the east and west sides of Fernview Drive have sidewalks, but these stop short of Fernview.

Justification: *Public Safety; Availability of Outside Funding; Citizen Demand; Coordination*
Residents have requested that the City add sidewalks and better pedestrian connectivity through the recent Citizen Survey. The addition of sidewalks to Fernview is supported by both the Comprehensive Plan Creve Coeur 2030 and the City's Strategic Plan.

Operating Budget Impact:
None.

Comments:
The City has received a federal grant for improvements to the pavement of Fernview Drive, and a project to add a sidewalk to Fernview would also qualify for grant funding. A "future project" is included in this Capital Improvement Plan for Fernview and Bellerive Estates sidewalks. This study will involve only Fernview Drive.

Expenditure Type:		
Planning, Design & Engineering	$	35,000
Land Acquisition	$	
Construction	$	
Equipment	$	
Other	$	
Total	**$**	**35,000**

9510 STREETS AND SIDEWALKS – 13

MOSLEY ROAD IMPROVEMENT PROJECT (FEDERAL STP GRANT) — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$1,622,364	$760,000	$862,364	$227,364	$20,000	$130,000	$1,245,000	$0	$0	$0

Project Description:
Improvements to Mosley Road will involve roadway resurfacing, localized roadway reconstruction adjust the vertical alignment, and sidewalk improvements from Olive Boulevard to Ladue Road. The City was awarded a federal Surface Transportation Program (STP) grant for 80% of the anticipated costs for the right-of-way and construction phases for the improvements between Olive Boulevard and Tureen Drive. The design for the project and the improvements south of Tureen Drive will be fully funded by the City. This project has been included in previous capital improvement plans as two phases. The two phases will be combined into one project to limit certain construction costs and to limit the impact on residents along Mosley Road.

Existing Condition:
Mosley Road is an asphalt street that last saw major roadway work in 2000 with the addition of the existing sidewalk. The pavement is failing in areas, but the general need for the roadway is resurfacing. The roadway width is also inconsistent, with some areas less than 20 feet wide. Mosley Road was found to have an average pavement condition index (PCI) of 54 in 2016, which indicates that the pavement is a good candidate for resurfacing.

Justification: *Public Safety; Condition of Ex. Facility; Citizen Demand; Availability of Outside Funding*
Of the City's principal roadways, the condition of Mosley Road is one of the worst. Complaints are common regarding the pavement condition, poor ride quality, and stormwater drainage issues. A preliminary design completed in FY2015 for Mosley Road also found several areas where the vertical or horizontal alignments do not meet design standards.

Operating Budget Impact:
The City completes significant pavement patching along Mosley Road nearly every year. Completing this project would eliminate this need and expense.

Comments:
A conceptual design for Mosley Road was completed for $86,768 in FY2014-FY2016. FY2022 Roadway Reconstruction funds will be used to offset the cost of the improvements to Mosley south of Tureen Drive.

Expenditure Type:		
Planning, Design & Engineering	$	227,364
Land Acquisition	$	150,000
Construction	$	1,245,364
Equipment	$	
Other	$	
Total	**$**	**1,622,364**

9510 STREETS AND SIDEWALKS – 14

NEW BALLAS ROAD IMPROVEMENTS – PHASE 1 (DESIGN & GRANT MATCH) CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$390,000	TBD	$390,000	$0	$0	$0	$150,000	$36,000	$204,000	$0

Project Description:
The project includes the replacement of approximately 25% of the concrete pavement, joint replacement, and diamond grinding of the pavement surface along North New Ballas Road between Olive Boulevard and Craig Road. The project would also include sidewalk improvements and updates to highlight the signal at Cityplace Drive and the four-way stop at American Legion Drive. The City applied for federal Surface Transportation Program funding for this project in FY2019. The amount shown represents 100% of the design and 80% of the estimated cost for the right-of-way and construction phases of the project. The full project cost will be included in the appropriate fiscal years if the City is successfully obtains a grant for this work.

Existing Condition:
Areas of the concrete pavement are in good condition, but many areas are in poor condition and require replacement. Joint deterioration is the primary issue along this section of North New Ballas Road, and this issue causes poor ride quality. Much of the existing sidewalk was constructed in the early 1990's and falls short of the current accessibility standards. This section of North New Ballas Road was found to have an average pavement condition index (PCI) of 75 in 2016.

Justification: *Public Safety; Condition of Existing Facility; Availability of Outside Funding; Beautification*
New Ballas Road is the City's largest street and one of two City-maintained streets classified as a minor arterial. Preservation of this street's pavement is a high priority, both for the traveling public and to control future costs. The deteriorating concrete pavement, sidewalks, curbs, and entrances require a significant investment to correct, and grant assistance for the work will make affording these improvements much more manageable. An alternative to grant funding would be to devote approximately 10% of the City's annual concrete repairs to this section of New Ballas Road for the next 5-10 years.

Operating Budget Impact:
This project will eliminate joint patching needs and sidewalk issues that require staff attention.

Comments:
None.

Expenditure Type:		
Planning & Design (FY2022)	$	150,000
Land Acquisition (FY2023)	$	36,000
Construction (FY2024)	$	204,000
Equipment	$	
Other	$	
Total (Design & Grant Match)	**$**	**390,000**

9510 STREETS AND SIDEWALKS – 15

OLD OLIVE/LINDBERGH INTERSECTION RECONSTRUCTION (DESIGN & GRANT MATCH) CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$381,088	TBD	$381,088	$31,088	$0	$0	$125,000	$10,000	$215,000	$0

Project Description:
This project involves the reconstruction of the intersection of Lindbergh Boulevard and Old Olive Street Road in order to provide full access in all directions. A traffic signal would be added to this intersection, as would a pedestrian/bicycle crossing. The costs shown represent approximately 10% of what is expected to be a $2.5 million project. Staff plans to apply for the MoDOT Cost Share program for approximately 50% of the cost of the project and then to apply for federal Surface Transportation Program funding for approximately 40% of the project cost. Both applications are anticipated for FY2020. If the City is awarded this funding, then the full cost and grant funding will be included in the appropriate years.

Existing Condition:
The existing intersection of Lindbergh Boulevard and Old Olive Street Road allows only right-in, right-out access for Old Olive on both sides of Lindbergh. A concrete barrier along the Lindbergh median prohibits any east-west vehicular or pedestrian crossing of this intersection.

Justification: *Availability of Outside Funding; Coordination*
The proposed improvements to this intersection are supported by the Comprehensive Plan Creve Coeur 2030 and the 39 North Master Plan, and these improvements provide the best chance for a pedestrian or bicycle crossing of Lindbergh Boulevard in that area.

Operating Budget Impact:
The City will most likely need to take over the maintenance of Old Olive Street Road from the Missouri Department of Transportation in return for the funding for this project. The ongoing maintenance cost for Old Olive Street Road could be significant.

Comments:
Conceptual plans for this intersection have been developed as part of the Old Olive great streets study, which was completed through a partnership of St. Louis County, the St. Louis Economic Development Partnership, and the City of Creve Coeur. Funding in "prior years" represents design costs in FY2019 to refine the project plans and estimates in preparation for the funding applications. Future improvements to Old Olive Street Road are likely to qualify for federal funding, although the classification of Old Olive may change following its removal from the state roadway system.

Expenditure Type:		
Planning, Design & Engineering	$	156,088
Land Acquisition	$	10,000
Construction	$	215,000
Equipment	$	
Other	$	
Total (Design & Grant Match)	**$**	**381,088**

9510 STREETS AND SIDEWALKS – 16

CRAIG ROAD IMPROVEMENTS (DESIGN AND GRANT MATCH) — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$349,800	TBD	$349,800	$39,800	$0	$50,000	$0	$50,000	$10,000	$200,000

Project Description:
The project involves improvements to the intersection layout, pavement, and sidewalks of Craig Road between Old Ballas Road and Olive Boulevard. The project includes several phases: concept development and traffic study (FY2019), preliminary design and grant application (FY2021), final design (FY2023), and construction (FY2025). The costs shown are for the full design cost and for an estimated 20% of the construction cost. The full cost of the project will be included upon award of a grant for the project.

Existing Condition:
The pavement of Craig Road is currently in fair condition, but its traffic flow is hampered by non-standard intersections with Olde Cabin Road and Office Parkway. The sidewalks along Craig Road are generally inadequate and have poor accessibility at the intersections.

Justification: *Public Safety; Cond. of Existing Facility; Availability of Outside Funding; Citizen Request*
Craig Road receives significant traffic from the Creve Coeur Executive Office Park and from those traveling between Olive Boulevard and New Ballas Road. Improvements to the intersections along Craig Road are recommended to improve the flow and safety of this traffic and to provide better sidewalk crossings at these intersections.

Operating Budget Impact:
The pavement and sidewalks of Craig Road are in increasing need of maintenance. Roadway resurfacing and sidewalk reconstruction would reduce future maintenance costs.

Comments:
Craig Road was recently reclassified to become eligible for federal roadway grants. Improvements to the sidewalk system in the Creve Coeur Executive Office Park are being pursued through the Transportation Alternatives Program grant, which may coincide with or incorporate this project.

Expenditure Type:		
Planning, Design & Engineering	$	139,800
Land Acquisition (FY2024)	$	10,000
Construction (FY2025)	$	200,000
Equipment	$	
Other	$	
Total (Design and Grant Match)	**$**	**349,800**

9510 STREETS AND SIDEWALKS – 17

NEW BALLAS ROAD IMPROVEMENTS – PHASE 2 (DESIGN & GRANT MATCH) CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$425,000	TBD	$425,000	$0	$0	$0	$0	$0	$100,000	$325,000

Project Description:
The project includes pavement resurfacing, concrete curb and sidewalk replacement, and accessibility improvements along New Ballas Road from Conway Road to Ladue Road. The project will also include extending the existing planted median toward Conway Road, pedestrian connections to the bus stops along the east side of New Ballas, and a review of the traffic operations at New Ballas and Ladue Road. The grant match for Phase 1 ($425,000) includes 100% of the design costs and 20% of the estimated land acquisition and construction costs. The full project cost will be included in the appropriate fiscal years if the City is successful in obtaining a grant for the work.

Existing Condition:
The asphalt pavement is generally in good condition, but many of the concrete sidewalks, curbs, and entrances are in poor condition. Although much of the sidewalk and curbing was replaced in FY2019, areas still fall short of the current accessibility standards. South New Ballas Road was found to have an average pavement condition index (PCI) of 70 in 2016, which indicates that the pavement is generally in "very good" condition and that is currently an appropriate candidate for pavement preservation. The pavement will be 20 years old at the time of the anticipated construction for this project, and the pavement condition is expected to have deteriorated by then to the point that resurfacing is necessary.

Justification: *Public Safety; Condition of Existing Facility; Availability of Outside Funding; Beautification*
New Ballas Road is the City's largest street and one of two City-maintained streets classified as a minor arterial. Preservation of this street's pavement is a high priority, both for the traveling public and to control future costs. The deteriorating sidewalks, curbs, and entrances require a significant investment to correct, and grant assistance for the work will make affording these improvements much more manageable.

Operating Budget Impact:
This project will eliminate pavement patching needs and sidewalk issues that require staff attention.

Comments:
The City applied for federal grant assistance for improvements to this section of New Ballas Road in FY2015, but the application was unsuccessful due to the good condition of the road at that time. This project is the second of what is expected to be four phases of work along New Ballas Road.

Expenditure Type:		
Planning & Design (FY2024)	$	100,000
Land Acquisition (FY2025)	$	25,000
Construction (FY2026)	$	300,000
Equipment	$	
Other	$	
Total (Design & Grant Match)	**$**	**425,000**

9516 – CAPITAL EQUIPMENT

CAPITAL FUND

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2020-2024

9516 CAPITAL EQUIPMENT - 01

PUBLIC WORKS CAPITAL EQUIPMENT — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$88,948	$0	$88,948	$312,372	$88,948	$609,713	$278,075	$356,290	$297,506	$0

Project Description:
Capital equipment includes City equipment costing greater than $20,000 and having a useful life of at least five years based on replacement schedule. The Public works equipment listed below is for the replacement of existing equipment that is 16 years old.

Existing Condition:
The current equipment has reached the end of its useful and dependable life. Significant maintenance costs can be expected if this equipment is kept in service.

Justification: *Public Safety; Condition of Existing Facility; Operating Efficiency*
Replacement of the equipment noted below is necessary to provide services to the residents and repair the City's infrastructure. Without replacement, it will not only have an effect on public safety, it will also affect the City's operating efficiency due to down time for equipment repairs.

Operating Budget Impact:
Replacement of older equipment helps reduce the overall annual maintenance costs of the Public works fleet. Holding on to older equipment will likely result in significant increases in repair bills and a reduction in efficiency and ability to provide service to the residents due to an increase in downtime cause by equipment failure.

Comments:
The following major equipment purchases are planned for FY2020 as replacements for older equipment:

- One-ton Dump Truck with Plow and Spreader ..... $ 88,948

$ 88,948

Public Works staff plans to trade-in or sell the replaced equipment at auction after the new replacement vehicle arrives. The amount of revenue from the auctioned equipment will help offset the cost to purchase new equipment.

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	
Equipment	$	88,948
Other	$	
Total (FY2020)	**$**	**88,948**

9516 CAPITAL EQUIPMENT – 05

GOLF COURSE SPRAYER REPLACEMENT — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$35,000	$0	$35,000	$0	$35,000	$0	$0	$0	$0	$0

Project Description:
Purchase a new sprayer to replace the current combination of a 1997 Toro 3100 workman and 2004 Toro Spray system.

Existing Condition:
The current spray system and chassis are aging, and replacement should occur in FY21. The current chassis is 21 years old and has 3394 hours operating time, with an average of approximately 130 hours per year. The life expectancy of the chassis is 12 to 14 years. The current spray system is 14 years old, with an average life expectancy of 10 to 12 years.

Justification: *Condition of Existing Unit; Operating Efficiency*
The current chassis and sprayer combination has passed its useful life and is becoming costly and time-consuming to maintain. The operating efficiency of the course would increase by use of new sprayer technologies such as speed and turn control, spraying accuracy as well as reduced emissions.

Operating Budget Impact:
Maintenance and repair costs are approximately $750 annually; however, as the unit ages the cost of maintenance can substantially increase. The anticipated annual maintenance costs for a newer unit for the first 5 years is less than $200 per year.

Comments:
The city only has one sprayer and the downtime caused by maintenance repairs can impact pesticide control on all turf areas. Increased pressure from disease and weeds will have a negative impact on turf conditions and can deter golfers from play. Greens are sprayed every 10 to 14 days throughout the growing season to prevent disease pathogens from infecting play areas, as well as foliar fertilizer application. Greens are sprayed around 10 times annually to apply pre and post emergence weed and insect control. Fairways, tees, and rough areas are sprayed as much as 10 times annually to prevent and cure disease, insects, and weeds. A new sprayer is preferred to a used one due to lack of quality used sprayers available to purchase. Upon arrival of purchased sprayer, the old spray system would be traded in or sent to auction to help offset cost. The current chassis would be used by golf maintenance staff as a material handler.

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	
Equipment	$	35,000
Other	$	
Total	**$**	**35,000**

9516 CAPITAL EQUIPMENT – 05

PHONE SYSTEM REPLACEMENT — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$48,500	$0	$48,500	$0	$0	$48,500	$0	$0	$0	$0

Project Description:
This project involves the replacement of the phone system used by the City's staff. The existing system will no longer be warranted or supported after 2021.

Existing Condition:
While the existing system is in fair condition, it seems likely that it will need a software or server upgrade in or around FY2021. .

Justification: *Condition of Existing Unit; Operating Efficiency*
Technical support for the phone system is essential to keeping it functional. The City's staff cannot perform their jobs without a functional phone system.

Operating Budget Impact:
A monthly licensing fee would be added to the operating budget of approximately $25,800/year. This fee would be slightly offset by eliminating current PRI for phone ($10,092/year) and phone maintenance ($2,000/year).

Comments:
Due to Toshiba eliminating its telecommunications division, the current phone system will be unsupported in 2021, requiring the need to move to a new system that is up to date and supported.

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	
Equipment	$	48,500
Other	$	
Total	**$**	**48,500**

ADMINISTRATION

CAPITAL FUND

CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2020-2024

ADMINISTRATION

PROJECT MANAGER — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$85,075	N/A	$85,075	$83,000	$85,075	$87,202	$89,382	$91,616	$93,906	$0

Description:
This item includes the costs associated with the full-time salary and benefits for a Project Manager to oversee projects in the Capital Improvement Fund.

Existing Condition:
The project manager assists the Public Works Department-Administration Division with monitoring construction activity, preparing contract documents, performing design surveys, and developing review processes in order to ensure compliance with codes and specifications for capital improvement projects for the City of Creve Coeur.

Justification: *Operating Efficiency*
The responsible and effective administration of the City's capital improvement projects, and grant-related projects in particular, requires significant staff time. Projects often have similar schedules, and multiple projects often require immediate attention at the same time. The City's Public Works Administration staff is too small to consistently accommodate the demands of these projects while also meeting the expectations for the various other services provided by the Department of Public Works.

Operating Budget Impact:
Annual costs for this position may include ongoing employee training, city equipment, cell phone, and general supplies, which are anticipated to be approximately $1,000 per year.

Comments:
Prior to FY2019, this position was fully funded through the General Fund – Public Works/Administration operating budget.

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	
Equipment	$	
Other	$	85,075
Total (FY2020)	**$**	**85,075**

FUTURE PROJECTS

CAPITAL FUND

CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS UNKNOWN

FUTURE PROJECT: BEIRNE PARK PEDESTRIAN BRIDGE REPLACEMENT — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
$150,000	TBD	$150,000	$0	$0	$0	$0	$0	$0	$150,000

Project Description:
This project would involve the removal and replacement of a wooden pedestrian bridge that crosses Monsanto-Sunswept Creek to connect Foxbrook Drive to Beirne Park. The replacement bridge would be a pre-fabricated steel bridge with a wooden walking surface, smaller in width but similar in construction to those at the Creve Coeur Golf Course.

Existing Condition:
The existing bridge is made of steel trusses that support a wooden walking surface and wooden safety rails. The wooden elements of the bridge are deteriorating, and several elements have already been replaced.

Justification: *Public Safety; Condition of Existing Facility; Availability of Outside Funding; Citizen Demand*
The condition of some of the wooden walking surface has become a concern due to the uneven and sometimes slick surface.

Operating Budget Impact:
Public Works staff makes periodic repairs to this bridge following inspections and in response to complaints from nearby residents who use the bridge to access the park. A new, pre-fabricated bridge would virtually eliminate maintenance costs for the near future.

Comments:
This project would qualify for a Municipal Park Grant.
An alternative to this project would be to have the City's Public Works staff replace the wooden elements of the bridge. The cost of this work would be substantially less than the proposed pre-fabricated bridge.
The next revisions to the regulatory flood plain are expected to identify a floodway and a 100-year flood plain for the section of Monsanto-Sunswept Creek that this bridge spans. The impact to this bridge will be that changes to it might require a more significant design effort than if completed previously.

Expenditure Type:		
Planning, Design & Engineering	$	50,000
Land Acquisition	$	
Construction	$	100,000
Equipment	$	
Other	$	
Total	**$**	**150,000**

STREETS AND SIDEWALKS

FUTURE PROJECT: BRIDGE AND CULVERT REHABILITATION — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
UNKNOWN	$0	UNKNOWN	$0	$0	$0	$0	$0	$0	UNKNOWN

Project Description:
The City is responsible for the maintenance of several drainage culverts that carry creeks and streams beneath the City's roadways. This project involves the design and construction needed to address maintenance, repair, or replacement of these culverts as they become necessary.

Existing Condition:
Four of the City's culverts appear on the State of Missouri's state-wide register and are inspected annually by both City and State staff. These culverts are currently in good condition.

Justification: *Public Safety*
Past projects to repair culverts at Chilton Lane, Alden Lane, and Middlebrook Lane were undertaken after the failures of these culverts and when those failures threatened the roadway above. Effective and structurally sound culverts are required to keep stormwater from becoming a hazard to the driving public.

Operating Budget Impact:
Regular inspections will require some staff time to undertake. Consultants may be required to specific issues.

Comments:
None.

Expenditure Type:		
Planning, Design & Engineering	$	TBD
Land Acquisition	$	TBD
Construction	$	TBD
Equipment	$	
Other	$	
Total	**$**	**TBD**

PARKS AND RECREATIONAL FACILITIES

FUTURE PROJECT: CERTIFIED NATURE EXPLORER CLASSROOM — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
$25,000	$0	$25,000	$0	$0	$0	$0	$0	$0	$25,000

Project Description:
The proposed outdoor classroom could be located in Malcom Terrace Park or Millennium Park. This classroom would include elements such as music & movement area, a place to do nature art, a place to build, climb or crawl, a place to gather or play in water and will include signage throughout.

Existing Condition:
None.

Justification: *Protection & Conservation; Beautification*
The goal will be to create an area that can be utilized for both programming provided by the City as well as a place for birthday parties, meeting place for play or scout groups and outdoor classroom for local schools. Having a Certified Nature Explorer Classroom in a Creve Coeur park supports the CIP criteria by enhancing the usefulness and beautification of the environment by providing a nature-rich outdoor space for current and future generations to use the natural word as an integral part of learning.

Operating Budget Impact:
Minimal impact to the operating budget is anticipated – similar to adding playground equipment.

Comments:
None.

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	25,000
Equipment	$	
Other	$	
Total	**$**	**25,000**

FUTURE PROJECT: CREEKSIDE/BELLERIVE TRAIL (GRANT MATCH) — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
$25,000	TBD	$25,000	$0	$0	$0	$0	$0	$0	$25,000

Project Description:
The project involves the creation of a new asphalt trail to extend from the Creekside at Mason subdivision to Bellerive Elementary School, which would provide a pedestrian connection from Rue de Fleur and Bellerive Estates Drive to Mason Road. The amount of $25,000 represents the City's portion of the cost for a $125,000 project that is funded by a federal grant through the Recreational Trails Program (RTP). The actual cost of the project will be programmed into the appropriate years of the Capital Improvement Plan if the City is awarded the grant.

Existing Condition:
Several parcels of common ground connect along the south side of the creek and provide the opportunity for a pedestrian and bicycle pathway.

Justification: *Public Safety; Availability of Outside Funding; Citizen Request*
The City's parks are a sense of pride for Creve Coeur, and the City is obligated to provide adequate and safe access to the parks. Pursuit of grant funding to assist with maintaining this access allows the City to meet its obligations at a reduced cost.

Operating Budget Impact:
The City may assume responsibility to mow and otherwise maintain the common ground areas where the paths would be installed. Mowing costs are estimated to be approximately $2,000/year.

Comments:
Support from the Parkway School District and the subdivision trustees will be sought before the City pursues a grant for this project. Easements will be required to construct the project.

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	25,000
Equipment	$	
Other	$	
Total (Grant Match)	**$**	**25,000**

PARKS AND RECREATIONAL FACILITIES

FUTURE PROJECT: CONWAY PARK LAKE DREDGING — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
$250,000	N/A	$250,000	$0	$0	$0	$0	$0	$0	$250,000

Project Description:
The project involves the removal of silt and other debris that has accumulated at the bottom of the lake at Conway Park.

Existing Condition:
This sediment has reduced the depth of the lake to the point where the fountain can no longer be used and the overall health of the pond is diminishing.

Justification: *Condition of Existing Facility; Beautification*
The lake at Conway Park is a key element of the landscape toward the north end of the park. Maintaining this as a healthy and attractive lake will help to preserve the visual appeal of Conway Park and will help to provide a positive experience for park patrons.

Operating Budget Impact:
Maintaining the fountain requires more significant staff time than if the fountain were in deeper water.

Comments:
None.

Expenditure Type:		
Planning, Design & Engineering	$	30,000
Land Acquisition	$	
Construction	$	220,000
Equipment	$	
Other	$	
Total (Grant Match)	**$**	**250,000**

PARKS AND RECREATIONAL FACILITIES

FUTURE PROJECT: CONWAY PARK PATH RECONSTRUCTION — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
$260,000	TBD	$260,000	$0	$0	$0	$0	$0	$0	$260,000

Project Description:
This project would involve the full-depth reclamation of the pavement of the asphalt walking path at Conway Park and the construction of a new, 10-foot-wide asphalt path over the newly fortified base. This method is preferred, because the existing path and its base would be ground up and integrated into the soil to provide a strong base for the new path.

Existing Condition:
The walking path at Conway Park is approximately 0.8 miles long. It connects the parking lot at the south end of the park to the City's dog park, and it loops around the park's lake to provide a commonly used walking path. This asphalt path is typically 6-7 feet wide. It has begun to fail in multiple locations, in part because the path is barely wide enough to allow all of the tires of the City's maintenance vehicles to consistently remain on the pavement. The result is that these vehicles put a lot of stress on the edges of the asphalt, and this has caused sections of the asphalt to crack.

Justification: *Cond. of Existing Facility; Beautification; Citizen Demand; Availability of Outside Funding*
The dog park is one of the most popular amenities in the City's parks, and staff has received requests from park patrons to repair this path. The current choice is to either replace sections of the path at its current width or to replace all of the path at a width that allows for better access. Some of the broken areas of the path have developed into hazards, and these areas have been temporarily closed until the City's Public Works crews or a contractor can replace that section of path.

Operating Budget Impact:
The existing path requires annual repairs. The proposed path would reduce or eliminate such maintenance for the foreseeable future.

Comments:
This work would qualify for funding through a Municipal Park Grant.

Expenditure Type:		
Planning, Design & Engineering	$	10,000
Land Acquisition	$	
Construction	$	250,000
Equipment	$	
Other	$	
Total (Grant Match)	**$**	**260,000**

PARKS AND RECREATIONAL FACILITIES

FUTURE PROJECT: DIELMANN RECREATION COMPLEX RENOVATIONS - PHASE 2 — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
UNKNOWN	TBD	TBD	$0	$0	$0	$0	$0	$0	UNKNOWN

Project Description:
A needs analysis for the Dielmann Recreation Complex was completed in 2013 and used as a guide for Round 15 Municipal Park Grant Commission construction grant awarded in 2015. Phase I renovations included updates to the lobby, creation of a centralized check-in desk for the building, and updated and expanded meeting room space, as well as energy efficiency upgrades. Future phases could include additional energy efficiency upgrades such as interior and exterior lighting, parking lot modifications for better traffic flow, additional updates to the East Meeting Room, such as the addition of a catering kitchen, direct entry from the east parking lot, a north facing clearstory for additional light in the ice arena, and additional on-ice lounge or locker room facilities.

Existing Condition:
The existing building is functional but inefficient from staffing, logistic, and energy standpoints.

Justification: *Availability of Outside Funding; Beautification; Citizen Demand; Operating Efficiency; Condition of Existing Facility*
This project was designed based on public input, and may be possible for future grant funding; however, several other priority projects have been slated for Municipal Park Grant funding for FY2019-FY2023.

Operating Budget Impact:
TBD

Comments:
CIP grant matches for FY2019-FY2023 have been earmarked for other upgrades or improvements at the Creve Coeur Golf Course and Park System.

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	
Equipment	$	
Other	$	
Total	**$**	**TBD**

STREETS AND SIDEWALKS

FUTURE PROJECT: DOWNTOWN STREETSCAPE AND INFRASTRUCTURE — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
UNKNOWN	TBD	UNKNOWN	$0	$0	$0	$0	$0	$0	UNKNOWN

Project Description:
The downtown plan calls for a significant investment into the City's Central Business District, which is generally the area bounded by Olive Boulevard on the north, Old Ballas Road on the east and south, and Interstate 270 on the west. Improvements to the public rights of way in this area include pavement, gutters, wide sidewalks, cross-walks, signals, and street furniture beyond items that are developer expenses.

Existing Condition:
Excluding the perimeter roads, only the Studt Avenue pavement meets the downtown zoning requirements. Everything else will need to be purchased.

Justification: *Economic Growth; Public Safety; Beautification*
The City has had this district in the Comprehensive Plan since 1969, and it is not reasonable to expect that all of the costs within the public rights-of-way can be borne by the development community. Without public investment, the likelihood of development is increasingly remote. Proposed improvements are supported by the 2006 Creve Coeur Central Business District / Downtown Area Implementation Strategy Report.

Operating Budget Impact:
Operating costs are unknown, but these are expected to be low. The City will be required to enter into a maintenance agreement with the Missouri Department of Transportation for any non-standard or decorative features along Olive Boulevard.

Comments:
Median planters and street lights will be extended east along Olive Boulevard through the Central Business District by the Olive Boulevard Transportation Development District in 2016. Further enhancements to Olive Boulevard may not be possible due to limited right of way.

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	
Equipment	$	
Other	$	
Total	**$**	**TBD**

STREETS AND SIDEWALKS

FUTURE PROJECT: FALAISE SIDEWALK FEASIBILITY STUDY — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
$20,000	N/A	$20,000	$0	$0	$0	$0	$0	$0	$20,000

Project Description:
This project will explore the feasibility of a sidewalk along Falaise Drive, from Cross Creek Drive to Hibler Road.

Existing Condition:
There are currently no sidewalks along Falaise Drive. Pedestrians have the option to use the paved shoulder of Falaise, but this shoulder is not technically accessible. The streets to the north and south (Cross Creek Drive and Hibler Road, respectively) both have concrete sidewalks.

Justification: *Public Safety; Availability of Outside Funding; Citizen Demand; Coordination*
Some residents of the Country Forest Subdivision have requested that the City add a sidewalk to Falaise Drive. In addition, a majority of residents requested better pedestrian connectivity through the recent Citizen Survey. The addition of sidewalks to Falaise is supported by both the Comprehensive Plan Creve Coeur 2030 and the City's Strategic Plan.

Operating Budget Impact:
None.

Comments:
This project would involve public meetings to discuss the options available for the sidewalk.

Expenditure Type:		
Planning, Design & Engineering	$	20,000
Land Acquisition	$	
Construction	$	
Equipment	$	
Other	$	
Total	**$**	**20,000**

STREETS AND SIDEWALKS

FUTURE PROJECT: FERNVIEW AT OLIVE INTERSECTION IMPROVEMENTS — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
$850,000	TBD	TBD	$0	$0	$0	$0	$0	$0	$850,000

Project Description:
This project involves improvements to the intersection of Fernview Drive at Olive Boulevard, including new traffic signals, pavement widening, pedestrian facilities, and illuminated street name signs.

Existing Condition:
The intersection of Fernview Drive and Olive Boulevard has old traffic signal equipment and poor islands and grades, and these conditions combine to create a barrier for future sidewalk projects along Olive Boulevard and along Fernview Drive.

Justification: *Public Safety; Availability of Outside Funding; Condition of Existing Facility*
The intersection improvements at Fernview and Olive would allow for pedestrian improvements where no pedestrian facilities currently exist.

Operating Budget Impact:
The City would need to maintain illuminated street name signs and other non-standard items added to the intersection of Fernview and Olive, but this expense is expected to be minimal.

Comments:
Olive Boulevard is owned and maintained by the Missouri Department of Transportation and this project would require MoDOT approval and permitting. Olive Boulevard and Fernview Drive qualify for federal grant assistance. The City could receive up to 80% reimbursement for costs related to this project if such a grant was awarded.

Expenditure Type:		
Planning, Design & Engineering	$	100,000
Land Acquisition	$	
Construction	$	750,000
Equipment	$	
Other	$	
Total	**$**	**850,000**

STREETS AND SIDEWALKS

FUTURE PROJECT: FERNVIEW DRIVE / BELLERIVE ESTATES DRIVE SIDEWALK — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
$1,050,000	TBD	TBD	$0	$0	$0	$0	$0	$0	$1,050,000

Project Description:
The project will involve the addition of a sidewalk along Fernview Drive and Bellerive Estates Drive to connect the sidewalk on Mason Manor Drive to Olive Boulevard. These streets serve as the main roadway for much of the residential area in Ward 4 and have recently been reclassified as "minor collectors." This reclassification allows for roadway and sidewalk improvements to be considered for federal grants.

Existing Condition:
No sidewalk currently exists along Fernview Drive or Bellerive Estates Drive, and no continuous sidewalk exists through the surrounding residential neighborhoods.

Justification: *Public Safety; Availability of Outside Funding*
The addition of a sidewalk along both Fernview Drive and Bellerive Estates Drive would provide a designated area for pedestrians that would be safer than the street, which is the only current option. Fernview Drive and Bellerive Estates Drive are each listed as "third priority" in the Creve Coeur Pedestrian Plan.

Operating Budget Impact:
This sidewalk would not significantly impact the City's operating budget, but maintaining the sidewalk as an accessible pedestrian route would eventually become part of the capital improvement program.

Comments:
The proposed sidewalk would pass through approximately 50 properties. It is likely that the City would need to acquire easements from some of the affected property owners in order to adjust the lawns and driveways to allow the sidewalk to pass through. Fernview Drive and Bellerive Estates Drive were recently reclassified as "minor collector" roadways, a classification which qualifies these streets for federal grant assistance. The City would likely apply for a federal Transportation Alternatives Program grant for this project. This grant would require an aggressive schedule for easement acquisition.

Expenditure Type:		
Planning, Design & Engineering	$	150,000
Land Acquisition	$	150,000
Construction	$	750,000
Equipment	$	
Other	$	
Total	**$**	**1,050,000**

PARKS AND RECREATIONAL FACILITIES

FUTURE PROJECT: GOLF COURSE IRRIGATION SYSTEM REPLACEMENT — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
$875,000	TBD	$875,000	$10,500	$0	$0	$0	$0	$0	$860,000

Project Description:
This project includes replacing the current irrigation system with a new system that will use less water and will allow better control over irrigation. The cost shown above includes the design of the new irrigation system that was completed in FY2018. The anticipated construction cost is up to $860,000, if the current trend of increasing materials costs continues.

Existing Condition:
The current irrigation system is over 40 years old. Required repairs have been increasing annually. The current setup is very limited in its ability to isolate areas of the system. Therefore, when there is a break or other repair is required, there is a significant area of the system that must closed-off and drained before it can be repaired. Not only does this result in water waste, but it also endangers the health of the turf, resulting in additional watering, chemical, and labor costs to bring that area back to health.

Justification: *Cond. of Ex. Facility; Operating Efficiency; Conservation; Outside Funding, Coordination*
The current system is becoming unserviceable because of its age. Additionally, a newer system can be controlled more specifically to both minimize the system loss when a repair is required, increasing the overall efficiency. Replacement of the irrigation system was recommended by the Golf Course Needs Assessment that was completed in FY2015.

Operating Budget Impact:
Once the initial install of the system has occurred, the cost of upkeep will be minimal for the next 10 years. A new irrigation system will require less maintenance and will better conserve water resources.

Comments:
Grant funding is possible through the St. Louis Municipal Park Grant Commission. This grant has a maximum award of $475,000 per project requiring the City to match at least 5% of the project total. Costs shown for prior years includes the design of the new irrigation system in FY2018.

Expenditure Type:		
Planning, Design & Engineering	$	15,000
Land Acquisition	$	
Construction	$	430,000
Equipment	$	430,000
Other	$	
Total	**$**	**875,000**

FUTURE PROJECT: GOLF COURSE MAINTENANCE BRIDGE — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
$150,000	$0	$150,000	$0	$0	$0	$0	$0	$0	$150,000

Project Description:
This project involves the replacement of the vehicular maintenance bridge at the Creve Coeur Golf Course with a pair of drainage culverts. A study in FY2019 found that construction of culverts would give the City more flexibility and would cost less than construction of a new bridge.

Existing Condition:
The existing bridge consists of old utility poles laid across the channel with wooden planks attached to the top to create a driving surface. The bridge is sinking on one side, the wood is rotting, and the planks often break and need to be replaced.

Justification: *Public Safety; Condition of Existing Facility; Operating Efficiency*
The existing bridge is used on a limited basis due to its condition. It is closed to heavy vehicles. Replacement of the bridge would allow for more use of the southeast corner of the golf course property.

Operating Budget Impact:
This maintenance bridge serves as the most direct access to the southeastern corner of the Golf Course. Using alternate routes takes longer and can cause damage to the course.

Comments:
None.

Expenditure Type:		
Planning, Design & Engineering	$	45,000
Land Acquisition	$	
Construction	$	105,000
Equipment	$	
Other	$	
Total	**$**	**150,000**

FUTURE PROJECT: GOLF COURSE SOUTH FENCE REPLACEMENT — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
$75,000	$0	$75,000	$0	$0	$0	$0	$0	$0	$75,000

Project Description:
This project involves the replacement of a deteriorated fence along the south property line of the Creve Coeur Golf Course. This fence is in two sections, one on each side of Marford Drive.

Existing Condition:
All of the existing fence is old and in some state of disrepair. The fence on the east side of Marford Drive no longer reaches the ground, as the hillside below has eroded over time to the point where some of the fence footings are exposed. The fence on the west side of Marford Drive is overgrown with dense brush, and its condition has not been determined.

Justification: *Public Safety; Condition of Existing Facility; Citizen Demand*
Several residents on the east side of Marford Drive whose properties share the fence line with the Golf Course have requested that this fence be replaced. The fence is necessary to separate residential areas from areas of active play on the course.

Operating Budget Impact:
None.

Comments:
The replacement of the fence on the east side of Marford Drive is estimated to cost approximately $25,000, and the fence on the west side of Marford Drive would be $50,000 or more.

Expenditure Type:		
Planning, Design & Engineering	$	5,000
Land Acquisition	$	0
Construction	$	70,000
Equipment	$	
Other	$	
Total	**$**	**75,000**

STORMWATER / PARK AND RECREATIONAL FACILITIES

FUTURE PROJECT: GOLF COURSE STORMWATER SYSTEM IMPROVEMENTS (PHASE 2) CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
$1,700,000	$0	$1,700,000	$0	$0	$0	$0	$0	$0	$1,700,000

Project Description:
The scope of this project includes improvements to the lakes, dam, and drainage channels at the Creve Coeur Golf Course. Future projects include: dam replacement, south channel improvements, silt removal of the northern three lakes, and replacing the gabion rock lining the lakes with boulders and aquatic plants.

Existing Condition:
The lake system that runs through the Creve Coeur Golf Course was originally constructed as a series of stormwater detention lakes as part of the Creve Coeur Executive Office Park development, which is immediately north of the golf course. The dam at the south end of this system failed in 2013, and a temporary repair was made to the dam in FY2017. The lakes have accumulated silt, and the lakes are no longer deep enough to allow for fountains or to be healthy enough to resist algae growth during the summer.

Justification: *Condition of Existing Facility; Beautification, Citizen Demand*
The lakes are filling in with silt and debris, which must be removed to restore adequate water depth to support healthy ponds that continue to function as settlement basins. Suspended solids are significant pollutants in stormwater runoff, and settling ponds are recommended at the upstream end of a retention/detention system to allow the solids to settle out of the stormwater before the water flows into area creeks and streams.

Operating Budget Impact:
The anticipated maintenance costs for the stormwater facilities are expected to be approximately $15,000 per year for the next 20 years.

Comments:
The City has invested approximately $250,000 in studies, design, and repairs to this system from FY2013-FY2017. The most significant of these costs came in FY2017 for a project to remove silt from the southern-most lake and to stabilize the dam.

Expenditure Type:		
Planning, Design & Engineering	$	150,000
Land Acquisition	$	
Construction	$	1,500,000
Equipment	$	50,000
Other	$	
Total	**$**	**1,700,000**

STREETS AND SIDEWALKS

FUTURE PROJECT: LADUE ROAD IMPROVEMENTS AT I-270 — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
UNKNOWN	TBD	TBD	$0	$0	$0	$0	$0	$0	UNKNOWN

Project Description:
The project will require the evaluation of the traffic flow of Ladue Road between New Ballas Road and Coeur de Ville Drive, including the Ladue Road interchange at Interstate 270. Following the traffic study, the project would involve the design and construction of improvements to provide better traffic management and access to get on and off I-270.

Existing Condition:
Ladue Road intersects New Ballas Road, Emerson Road, Interstate 270, and Coeur de Ville within a quarter of a mile. This area is heavily used during morning and evening rush hours as commuters use this route for work, local hospitals, and schools. Turning lane lengths are generally inadequate to accommodate this congestion, and several of the turning movements from these intersections are in conflict.

Justification: *Public Safety; Condition of Existing Facility*
The existing intersection and roadway configuration causes traffic congestion and difficulties navigating across lanes of traffic to gain access to I-270. Improvement of access to Interstate 270 at Ladue Road would provide motorists with a better alternative to access the highway and could relieve pressure at the Olive/270 interchange.

Operating Budget Impact:
The City will be required to maintain any decorative and/or non-standard facilities that are installed within the rights of way of the Missouri Department of Transportation (MoDOT), including Interstate 270, Emerson Road, Ladue Road, and Coeur de Ville Drive.

Comments:
Interstate 270, Emerson Road, Ladue Road, and Coeur de Ville Drive are owned and maintained by MoDOT, and improvements to these roadways will require MoDOT approval. The City will explore grant and cost-sharing opportunities to implement this project. If changes are required to the I-270 overpass at Ladue Road, the scale and cost of this project will likely exceed what can be expected to receive federal funding through the Surface Transportation Program, which is typically sought for major roadway projects. Other funding sources may be required.

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	
Equipment	$	
Other	$	
Total	**$**	**TBD**

STREETS AND SIDEWALKS

FUTURE PROJECT: LADUE ROAD RESURFACING (DESIGN AND GRANT MATCH) — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
$500,000	TBD	$500,000	$0	$0	$0	$0	$0	$0	$500,000

Project Description:
The project will involve asphalt resurfacing, full-depth asphalt pavement repairs, signal improvements, and sidewalk improvements along Ladue Road, from Emerson Road to Lindbergh Boulevard. Staff plans to apply for federal grant assistance for this project. The grant match for this phase includes 100% of the design, and 80% of the land acquisition and construction costs. The full project cost is expected to be approximately $2.5 million and will be included in the appropriate fiscal years if the City successfully obtains a grant for this work.

Existing Condition:
Ladue Road is an asphalt minor arterial roadway in Creve Coeur that was last repaved by St. Louis County in 2012 as part of the transfer of the street following the closure and reconstruction of Interstate 64 (Highway 40). Ladue Road is currently in good condition, but several of the full-depth repairs that were completed in 2012 have begun to fail. The asphalt pavement will be over 20 years old by the time a project with grant funding reaches construction, and it is expected that the pavement will need to be resurfaced at that time.

Justification: *Public Safety; Condition of Existing Facility; Availability of Outside Funding*
Approximately 10,000 vehicles use Ladue Road each day. Preservation of the pavement of Ladue Road is a high priority.

Operating Budget Impact:
Resurfacing Ladue Road should have minimal impact on the operating budget. Most of the repairs and improvements to Ladue Road become capital improvement projects due to the scope and location of the work.

Comments:
Due to the scope of this project, it may need to be separated into two phases.

Expenditure Type:		
Planning, Design & Engineering	$	250,000
Land Acquisition	$	50,000
Construction	$	200,000
Equipment	$	
Other	$	
Total (Design & Grant Match)	**$**	**500,000**

FUTURE PROJECT: LAKE SCHOOL PARK PLAYGROUND REPLACEMENT — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
$350,000	TBD	$350,000	$0	$0	$0	$0	$0	$0	$350,000

Project Description:
This project would involve the replacement of the playground at Lake School Park. The new playground would have accessible components and would have a suitable safety surface beneath it.

Existing Condition:
The existing playground at Lake School Park was constructed in 2003. It is in poor condition, and replacement parts for some of the elements are no longer available. The retaining walls and mulch that were used beneath the playground do not provide the fall protection that is required for new playgrounds.

Justification: *Public Safety; Condition of Existing Facility; Availability of Outside Funding*
Sections of the existing playground have been or will soon be closed due to the current conditions and the inability to find replacement parts.

Operating Budget Impact:
Public Works staff maintains this playground and the areas around it. As its condition worsens, staff will spend increasing amounts of time inspecting the playground and making repairs. A new playground will require less staff time.

Comments:
This project would qualify for a Municipal Park Grant, and an application for this project is anticipated in FY2027. If a Municipal Park Grant helps to pay for this playground, then nearly all of the cost of the project will be covered by the grant. The playground may not be able to be maintained in good working order for that long, and it may need to be closed for a time before it can be replaced.

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	350,000
Equipment	$	
Other	$	
Total	**$**	**350,000**

PARKS AND RECREATIONAL FACILITIES / STORMWATER

FUTURE PROJECT: MALCOLM TERRACE PARK BRIDGE AND STREAM REHABILITATION — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
$500,000	$0	$500,000	$0	$0	$0	$0	$0	$0	$500,000

Project Description:
This project involves the rehabilitation of a section of Deer Creek in Malcolm Terrace Park that has eroded its banks and threatens a vehicular bridge at the end of Townsend Drive. This bridge is currently closed due to the erosion around its foundations. The creek bank stabilization would extend around and upstream from this bridge.

Existing Condition:
A structural review in FY2017 found that the bridge remains structurally sound. The concern is the erosion around the bridge's foundations. There is little vegetation or armoring along the stream banks to limit further erosion of the stream banks in this area.

Justification: *Public Safety; Operating Efficiency*
The bridge provides the best vehicular access to the south portion of Malcolm Terrace Park, and this access is the most convenient and efficient to use for maintenance and emergency vehicles.

Operating Budget Impact:
There is a nominal additional cost for maintenance staff to use the low-water crossing upstream of this bridge, but this bridge is not always accessible. When it is not accessible, maintenance is postponed.

Comments:
The City received a Bridge Engineering Assistance Program (BEAP) grant from the Missouri Department of Transportation (MoDOT) in FY2017 that fully funded a preliminary review of the Malcolm Terrace Park bridge. This review found that the existing bridge can be used in place.

Expenditure Type:		
Planning, Design & Engineering	$	50,000
Land Acquisition	$	0
Construction	$	450,000
Equipment	$	
Other	$	
Total	**$**	**500,000**

FUTURE PROJECT: MASON ROAD SIDEWALK INFILL — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
$1,435,000	TBD	TBD	$10,000	$0	$0	$0	$0	$0	$1,425,000

Project Description:
The project involves the City's participation in a joint, five-phase project with Saint Louis County and the City of Town and Country to create a continuous pedestrian route along Mason Road between Clayton Road and Olive Boulevard. The amount of $1,435,000 represents the estimated cost to the City for its portion of three phases of the project, plus $10,000 for the City's share of the cost to develop a concept plan for the sidewalk. The actual contributions to the project will be programmed into the appropriate fiscal years if the partnership is successful in obtaining one or more federal grants for the various phases of the project. These projects are envisioned to be added onto future St. Louis County projects to improve Mason Road.

Existing Condition:
No continuous sidewalk currently exists along Mason Road from Conway Road to Olive Boulevard. Gaps are present between Conway Road and Ladue Road and then for much of Mason Road between Ladue Road and Hibler Road.

Justification: *Public Safety; Coordination; Availability of Outside Funding; Citizen Demand*
This project will provide pedestrian accessibility along Mason Road where few pedestrian facilities currently exist. Completion of the sidewalk along Mason Road identified as a "Second Priority" project in the Creve Coeur Pedestrian Plan.

Operating Budget Impact:
None.

Comments:
Mason Road is owned and maintained by Saint Louis County. The City and the City of Town and Country developed a conceptual design plan for a continuous pedestrian route along Mason Road from Clayton Road to Olive Boulevard in FY2017. St. Louis County has recently been awarded a federal grant to provide new sidewalks at the intersections of Mason Road with Conway Road. Future improvements to the Mason Road sidewalk will qualify for federal grant assistance, which would likely come through the Surface Transportation Program (if with a St. Louis County roadway project) or the Transportation Alternatives Program (if as stand-alone projects).

Expenditure Type:		
Planning, Design & Engineering	$	235,000
Land Acquisition	$	250,000
Construction	$	950,000
Equipment	$	
Other	$	
Total	**$**	**1,435,000**

PARKS AND RECREATIONAL FACILITIES

FUTURE PROJECT: MILLENNIUM PARK PARKING LOT LIGHTING — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
$80,000	$0	$80,000	$0	$0	$0	$0	$0	$0	$80,000

Project Description:
The project would involve adding lights to the parking lot at Millennium Park. These lights would be of the same style and would resemble the layout of the parking lot lights of the new Barnes Jewish Hospital parking lots adjacent to the Millennium Park lot.

Existing Condition:
The Millennium Park parking lot is currently not lit.

Justification: *Public Safety; Coordination*
Parking lot lighting will improve public safety for the lot in the evenings and will make the lighting consistent between the new and existing parking lots.

Operating Budget Impact:
There will be an on-going electrical bill for the lights, but this cost is expected to be low.

Comments:
None.

Expenditure Type:		
Planning, Design & Engineering	$	10,000
Land Acquisition	$	
Construction	$	
Equipment	$	70,000
Other	$	
Total	**$**	**80,000**

PARKS AND RECREATIONAL FACILITIES

FUTURE PROJECT: MILLENNIUM PARK PLAYGROUND REPLACEMENT — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
$400,000	TBD	$400,000	$0	$0	$0	$0	$0	$0	$400,000

Project Description:
This project would involve the replacement of the equipment and safety surface of the main playground at Millennium Park.

Existing Condition:
The existing playground at Millennium Park was constructed in the early 2000's. It is heavily used, especially by camps over the summer. The equipment is ageing, and replacement parts for the playground are becoming more difficult to find.

Justification: *Public Safety; Condition of Existing Facility; Availability of Outside Funding*
If replacement parts cannot be found for a playground element, then that section of the playground may be closed to use.

Operating Budget Impact:
Public Works staff maintains this playground and the areas around it. As its condition worsens, staff will spend increasing amounts of time inspecting the playground and making repairs. A new playground will require less staff time.

Comments:
This project would qualify for a Municipal Park Grant.

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	400,000
Equipment	$	
Other	$	
Total	**$**	**400,000**

STREETS AND SIDEWALKS

NEW BALLAS ROAD IMPROVEMENT PROJECT – PHASE 3 (DESIGN & GRANT MATCH) CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
$350,000	TBD	$350,000	$0	$0	$0	$0	$0	$0	$350,000

Project Description:
The project includes pavement resurfacing, concrete curb replacement, illuminated street name signs, and accessibility improvements along New Ballas Road from Ladue Road to Magna Carta Drive. Construction for this project is envisioned to be the third of four phases of improvements to New Ballas Road, with the ultimate limits of work extending from Conway Road to Craig Road.
Staff plans to apply for federal grant assistance for this project. The grant match for this phase includes 100% of the design, and 80% of the land acquisition and construction costs. The full project cost will be included in the appropriate fiscal years if the City successfully obtains a grant for this work.

Existing Condition:
The asphalt pavement along New Ballas Road is generally in good condition, but many of the concrete sidewalks, curbs, and entrances are in poor condition. Much of the existing sidewalk falls short of the current accessibility standards. North New Ballas Road was found to have an average pavement condition index (PCI) of 72 in 2016, indicating the pavement was generally in "very good" condition at that time. New Ballas Road was last resurfaced in 2008, meaning that it will be over 20 years old and will need to be resurfaced by the time this project moves to construction.

Justification: *Public safety; Condition of Existing Facility; Availability of Outside Funding; Beautification*
New Ballas Road is the City's largest street and one of two City-maintained streets classified as a minor arterial. Preservation of this street's pavement is a high priority, both for the traveling public and to control future costs. The deteriorating sidewalks, curbs, and entrances require a significant investment to correct, and grant assistance for the work will make affording these improvements much more manageable.

Operating Budget Impact:
This project will eliminate pavement patching needs and sidewalk issues that require staff attention.

Comments:
The design for the Phase 3 improvements will include the design of Phase 4 (i.e. Magna Carta to Olive) in an effort to maximize efficiency and continuity of the design.

Expenditure Type:		
Planning & Design	$	200,000
Land Acquisition	$	20,000
Construction	$	230,000
Equipment	$	
Other	$	
Total (Design and Grant Match)	**$**	**450,000**

STREETS AND SIDEWALKS

NEW BALLAS ROAD IMPROVEMENT PROJECT – PHASE 4 (DESIGN & GRANT MATCH) CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
$270,000	TBD	$270,000	$0	$0	$0	$0	$0	$0	$270,000

Project Description:
The project includes pavement resurfacing, concrete curb replacement, illuminated street name signs, and accessibility improvements along New Ballas Road from Magna Carta Drive to Olive Boulevard. Construction for this project is envisioned to be the fourth and final phase of improvements to New Ballas Road, with the ultimate limits of work extending from Conway Road to Craig Road.
Staff plans to apply for federal grant assistance for this project. The grant match for this phase includes 100% of the design, and 80% of the land acquisition and construction costs. The full project cost will be included in the appropriate fiscal years if the City successfully obtains a grant for this work.

Existing Condition:
The asphalt pavement along New Ballas Road is generally in good condition, but many of the concrete sidewalks, curbs, and entrances are in poor condition. Much of the existing sidewalk falls short of the current accessibility standards. North New Ballas Road was found to have an average pavement condition index (PCI) of 72 in 2016, indicating the pavement was generally in "very good" condition at that time. New Ballas Road was last resurfaced in 2008, meaning that it will be over 20 years old and will need to be resurfaced by the time this project moves to construction.

Justification: *Public safety; Condition of Existing Facility; Availability of Outside Funding; Beautification*
New Ballas Road is the City's largest street and one of two City-maintained streets classified as a minor arterial. Preservation of this street's pavement is a high priority, both for the traveling public and to control future costs. The deteriorating sidewalks, curbs, and entrances require a significant investment to correct, and grant assistance for the work will make affording these improvements much more manageable.

Operating Budget Impact:
This project will eliminate pavement patching needs and sidewalk issues that require staff attention.

Comments:
The design for the Phase 4 improvements will be completed as part of a joint design for Phases 3 and 4, if the City is awarded a federal grant for Phase 3.

Expenditure Type:		
Planning & Design	$	20,000
Land Acquisition	$	20,000
Construction	$	230,000
Equipment	$	
Other	$	
Total (Design and Grant Match)	**$**	**270,000**

STREETS AND SIDEWALKS

FUTURE PROJECT: NEW BALLAS ROAD/OLIVE BOULEVARD INTERSECTION IMPROVEMENTS — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
$1,850,000	TBD	TBD	$0	$0	$0	$0	$0	$0	$1,850,000

Project Description:
This project will improve the geometry of the intersection by re-aligning the through lanes and extending turn lanes. The traffic signals (to be installed by MoDOT in FY2019) will need to be relocated for this project.

Existing Condition:
The New Ballas Road lane alignment is offset between the north and south sides of Olive Boulevard. Pedestrian facilities at this intersection are limited, and the existing signal equipment and medians force the one crosswalk across Olive to be crooked.

Justification: *Public Safety; Condition of Existing Facility; Availability of Outside Funding*
The intersection of Olive Boulevard and North New Ballas Road is one of the principal intersections in the City. The geometry and visibility of the intersection pose potential hazards. Improvements to this intersection would also impact and improve the pedestrian crossings. Sidewalks along both Olive Boulevard and North New Ballas Road are listed at "first priority" in the Creve Coeur Pedestrian Plan.

Operating Budget Impact:
No significant operating budget increase is anticipated to result from this project.

Comments:
Olive Boulevard is owned and maintained by the Missouri Department of Transportation and this project would require MoDOT approval and permitting. Olive Boulevard and New Ballas Road qualify for federal grant assistance. The City could receive up to 80% reimbursement for costs related to this project if such a grant were awarded.

Expenditure Type:		
Planning, Design & Engineering	$	200,000
Land Acquisition	$	150,000
Construction	$	1,500,000
Equipment	$	
Other	$	
Total	$	1,850,000

STREETS AND SIDEWALKS

FUTURE PROJECT: NEW BALLAS SIDEWALK IMPROVEMENTS PHASE 2B — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
$400,000	TBD	TBD	$0	$0	$0	$0	$0	$0	$400,000

Project Description:
This project is designed to fill in the gap in the pedestrian network on the west side of New Ballas Road between Magna Carta Drive and Rocky Drive. This project would involve removing and replacing a retaining wall and landscaping within the project limits.

Existing Condition:
Following the completion of the North New Ballas Sidewalk Improvements Phase 2A Project, there will be a continuous sidewalk along both sides of North New Ballas Road from Ladue Road to Magna Carta Drive. No sidewalk exists between Magna Carta Drive and Rocky Drive on the west side of North New Ballas Road.

Justification: *Public Safety; Citizen Demand; Availability of Outside Funding*
Providing a sidewalk where none exists would improve accessibility and protect the general public walking along the area. New Ballas Road is identified as a "first priority" in the Creve Coeur Pedestrian Plan.

Operating Budget Impact:
None.

Comments:
It will be necessary to obtain easements for this project. New Ballas Road is classified as a minor arterial roadway and therefore qualifies for federal grant assistance for roadway and sidewalk projects.

The City was awarded a federal Transportation Alternatives Program grant in FY2018 for the "Phase 2A" sidewalk improvements. "Phase 2A" involves creating a new sidewalk from Ladue Road to the existing sidewalk at De Smet High School. Construction of this project will be completed in late FY2019.

Expenditure Type:		
Planning, Design & Engineering	$	50,000
Land Acquisition	$	25,000
Construction	$	325,000
Equipment	$	
Other	$	
Total	**$**	**400,000**

STREETS AND SIDEWALKS

FUTURE PROJECT: OFFICE PARK ROADWAY AND SIDEWALK IMPROVEMENTS — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
$1,350,000	TBD	TBD	$0	$0	$0	$0	$0	$0	$1,350,000

Project Description:
The project will involve asphalt pavement resurfacing and sidewalk replacement along Olde Cabin Road, Office Parkway, and Craig Road within the Creve Coeur Executive Office Park. The new sidewalk would be increased to at least six feet wide to be consistent with the Creve Coeur Pedestrian Plan and would include sidewalk lighting. Roadway improvements would include the changes to several intersections along Craig Road that will be recommended through a concept study in FY2019.

Existing Condition:
The pavement within the Creve Coeur Executive Office Park is generally in fair condition: the micro-surfacing from 2011 is wearing off and pavement repairs are becoming more frequent. The sidewalks within the Office Park are generally structurally sound, but these sidewalks are not technically accessible. Any further micro-surfacing or resurfacing would require that the City address the accessibility issues along the sidewalk at the same time.

Justification: *Condition of Existing Facility; Coordination; Economic Development; Availability of Outside Funding*
The roads and sidewalks within the Creve Coeur Executive Office Park are heavily used by the businesses located there and serve as the means to access the City's Dielmann Recreational Complex. Maintenance of the pavement will be needed soon, and the scope of the sidewalk improvements and the longer life of the pavement resurfacing make a resurfacing project for the pavement repairs more logical than another surface treatment. Sidewalks along Craig Road (South of Olive), Office Parkway, and Olde Cabin Road are listed as "third priority" sidewalks in the Creve Coeur Pedestrian Plan.

Operating Budget Impact:
None.

Comments:
The cost breakdown for the project includes approximately 75% for sidewalk replacement, lighting, and curbing, and 25% for pavement resurfacing. These sidewalk improvements qualify for federal grant assistance, but an application failed in 2015.

Expenditure Type:		
Planning, Design & Engineering	$	100,000
Land Acquisition	$	50,000
Construction	$	1,200,000
Equipment	$	
Other	$	
Total	**$**	**1,350,000**

FUTURE PROJECT: OLD OLIVE STREET ROAD IMPROVEMENTS — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
TBD	TBD	TBD	$0	$0	$0	$0	$0	$0	TBD

Project Description:
This project involves the transformation of Old Olive Street Road from part of the state-maintained Olive/Lindbergh interchange to a City-maintained street that incorporates a new intersection at Old Olive Street Road and Lindbergh Boulevard, improved pedestrian access, street lighting, and other "great streets" elements into its design. The City entered into a partnership with the St. Louis Economic Development Partnership (SLEDP) and St. Louis County in FY2018 to begin a study into what this project would entail.

Existing Condition:
Old Olive Street Road is currently owned and maintained by the Missouri Department of Transportation. Old Olive is on the state's roadway network, because its two halves serve as two ramps for the interchange of Olive Boulevard and Lindbergh Boulevard. An upcoming project by St. Louis County will overhaul this interchange, which will end the State's need for Old Olive Street Road. Current discussions involve transitioning Old Olive Street Road from the State network to the City's network.

Justification: *Beautification; Citizen Demand; Condition of Existing Facility; Availability of Outside Funding*
Improvements to Old Olive Street Road would be consistent with the Comprehensive Plan Creve Coeur 2030 and the 39 North Master Plan. The Creve Coeur Pedestrian Plan lists sidewalks along Old Olive Street Road as "second priority."

Operating Budget Impact:
Adding Old Olive Street Road to the City's network will increase operations and maintenance costs. If Old Olive is provided to the City in good condition, the initial maintenance costs would be expected to be low.

Comments:
Old Olive Street Road qualifies for federal grant assistance.
Improvements to Old Olive Street Road will be significant, and these will probably be completed in up to three phases. The intersection of Lindbergh Boulevard and Old Olive Street Road has been included in the CIP as a separate project, and this project is not included among the three phases of improvements.

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	
Equipment	$	
Other	$	
Total	**$**	**TBD**

PARKS AND RECREATIONAL FACILITIES

FUTURE PROJECT: PARK PLAYGROUND SAFETY SURFACE REPAIRS — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
$75,000	TBD	TBD	$0	$0	$0	$0	$0	$0	$75,000

Project Description:
This project involves the replacement of damaged areas and rejuvenation of the rubberized safety surface beneath the City's playgrounds.

Existing Condition:
The City has four playgrounds in three parks that use a rubberized safety surface to provide the required fall protection against injury if a child were to fall off of a playground or swing set. The surfaces in Millennium Park were originally installed in 2002 and 2006, Beirne Park in 2009, and Conway Park in 2011. These surfaces begin to show significant wear after about 10-12 years of use, at which time replacement or significant maintenance is recommended.

Justification: *Public Safety; Availability of Outside Funding; Condition of Existing Facility*
Keeping the safety surface of the City's playgrounds in good condition is required for the continuing use of the playgrounds and the safety of the playgrounds' users.

Operating Budget Impact:
None.

Comments:
This work would qualify for grant funding through the Municipal Park Grant program.

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	75,000
Equipment	$	
Other	$	
Total (Per Park)	**$**	**75,000**

PARKS AND RECREATIONAL FACILITIES / GOVERNMENT FACILITIES

FUTURE PROJECT: PUBLIC ART IN CITY PARKS AND PROPERTIES — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
TBD	TBD	TBD	$0	$0	$0	$0	$0	$0	$0

Project Description:
This project would involve commissioning, installing, and/or renting art pieces to be displayed on City properties and in the City's parks.

Existing Condition:
Several art pieces are currently on display at the Creve Coeur Government Center, Millennium Park, Conway Park, and Malcolm Terrace Park.

Justification: *Beautification; Citizen Demand*
The Creve Coeur Arts Committee seeks to identify locations and install art on public lands to further the goals of the Public Art Master Plan, which was approved in 2012.

Operating Budget Impact:
City staff will encourage the artists to incorporate ease of maintenance into his design. Ongoing maintenance of the art pieces may be required, but these costs are anticipated to be minimal.

Comments:
The art projects will require reviews from the Parks and Historic Preservation Committee (if located in a park) and the Arts Committee.

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	
Equipment	$	
Other	$	
Total	**$**	**TBD**

GOVERNMENT FACILITIES

FUTURE PROJECT: PUBLIC WORKS EQUIPMENT STORAGE BUILDING — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
$300,000	TBD	$300,000	$0	$0	$0	$0	$0	$0	$300,000

Project Description:
The project involves the planning, design, engineering and construction for the demolition of the existing residential structure at 1030 North Lindbergh Boulevard and construction of an equipment storage shed at this property. The new building will have a floor area of approximately 5,600 square feet and will house the City's leaf vacuums, limb chippers, and other equipment that is stored on this site when not in use. The total project cost is estimated to be $300,000. Planning, design and engineering ($50,000) will provide better estimates of cost to be programmed into the appropriate future fiscal year.

Existing Condition:
The existing house is deteriorated and has little value to the operations of the Public Works Department. The basement stays wet, the grading and the subsurface drains are such that storm water infiltrates through the back door of the basement, and the roof and chimney leak into the upstairs portion of the house. The site currently provides no shelter for the City's equipment that is stored there.

Justification: *Condition of Existing Facility; Operating Efficiency*
The existing structure on this site provides little benefit to the Public Works Department. The property at 1030 N. Lindbergh Blvd is used as an equipment storage lot, a transfer station for the leaf and limb collection programs, a project supply lot, and a restroom facility for City workers. Currently the equipment is stored outside in the elements, which cause accelerated aging through exposure to UV as well as extreme temperature change, rain, and snow.

Operating Budget Impact:
A new structure will have water, electric and sewer hookups, but monthly utility costs are expected to be minimal (approximately $3,000/annually). The structure proposed would be a concrete block building with a metal roof requiring minimal maintenance. Another positive impact on the operating budget will be a reduction in maintenance on equipment as well as increasing its service life.

Comments:
None.

Expenditure Type:		
Planning, Design & Engineering	$	50,000
Land Acquisition	$	
Construction	$	250,000
Equipment	$	
Other	$	
Total	**$**	**300,000**

STREETS AND SIDEWALKS

FUTURE PROJECT: STUDT EXTENSION – OLD BALLAS ROAD TO CRAIG ROAD — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
>$1,000,000	$0	$0	$0	$0	$0	$0	$0	$0	>$1,000,000

Project Description:
This downtown plan recommended that Studt Avenue be extended east beyond Old Ballas Road, to Craig Road. This will require the purchase of the office building at 677 Craig Road prior to construction of the road.

Existing Condition:
The office property is in fair condition but is small and does not appear to be fully occupied. It was appraised by the St. Louis County Assessor at $825,500 in 2018. There is no right-of-way present and no reusable pavement.

Justification: *Public Safety; Condition of Existing Facility*
The intersection of North New Ballas Road and Olive Boulevard has a very low level of service for those going northbound to Olive Boulevard. Extending Studt Avenue would draw motorists well east of New Ballas Road, through the future downtown area, before turning on Craig Road to reach Olive Boulevard. Connecting Studt Avenue to Craig Road will also extend alternate access to the Creve Coeur Fire Department. Proposed improvements are supported by the 2005 Creve Coeur Central Business District Land Use Plan.

Operating Budget Impact:
Unknown.

Comments:
None.

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	
Equipment	$	
Other	$	
Total	**$**	**>1,000,000**

STREETS AND SIDEWALKS

FUTURE PROJECT: TRAIL CONNECTIVITY STUDIES — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
TBD	TBD	TBD	$0	$0	$0	$0	$0	$0	TBD

Project Description:
This project will involve the study of possible off-street trail connections to improve walkability and bikeability in Creve Coeur. Several trail areas have been identified for future review and consideration including, but not limited to, an area between Conway and Ladue roads, an area between Malcom Terrace Park to Spoede Road, and a trail connection near Millennium Park, from Mason Road through the Creekside at Mason Subdivision to Bellerive Elementary School.

Existing Condition:
While there are trails in several Creve Coeur parks, there are opportunities to create a more extensive greenway and pathway network for bicycle and pedestrian connectivity throughout the city.

Justification: *Citizen Demand; Protection & Conservation; Beautification; Coordination; Avail. of Outside Funding*
The Creve Coeur 2030 Comprehensive Plan and the Strategic Plan FY18-20 suggest the development of greenways to increase connectivity in Creve Coeur as an action item. A more robust trail network will provide better public access to community amenities and a variety of on- and off-street connections to promote cycling and walking as viable transportation options.

Operating Budget Impact:
Increasing the City trail infrastructure would require ongoing maintenance that would could impact the operating budget. In addition, proposed trails would most likely require easements from all property owners along the trail with associated costs that are yet to be determined.

Comments:
The design and construction of a new trail would qualify for federal and state grants. A study into a particular trail would be encouraged by support from residents directly along that trail, particularly those from whom the City would require easements for the project. Such support would be critical to successfully completing a project with grant funding and the specific schedules that accompany that funding.

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	
Equipment	$	
Other	$	
Total	**$**	**TBD**

STREETS AND SIDEWALKS

FUTURE PROJECT: WEST OLIVE MEDIAN ENHANCEMENTS PHASE II (MASON TO FERNVIEW) CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
$2,200,000	$0	$2,200,000	$0	$0	$0	$0	$0	$0	$2,200,000

Project Description:
This project includes the construction of landscaped medians with decorative lighting in the medians along Olive Boulevard. Additional right-turn lanes may also be constructed to help manage traffic at signalized intersections. Replacement of traffic control signals with an upgraded black powder coat, Accessible Pedestrian Signals/cross walk signals, and illuminated street name signs are also planned as part of this project.

Existing Condition:
Olive Boulevard from Mason Road west to Fernview Drive is typically four lanes wide with a two-way lane between the east-bound and west-bound lanes. There are many points to make left turns to either the north or south, thus causing congestion and safety concerns.

Justification: *Public Safety; Economic Development; Beautification*
Olive Boulevard serves as a principal roadway in Creve Coeur. Improvements to the traffic flow and aesthetics along Olive will benefit many residents and visitors to the City.

Operating Budget Impact:
The City will be required to maintain any decorative and/or non-standard facilities that are installed within the Olive Boulevard right of way.

Comments:
The Missouri Department of Transportation (MoDOT) owns and operates Olive Boulevard. MoDOT will require that the City enter into a maintenance agreement for any decorative and/or non-standard items. This project will require MoDOT approval and permitting.

Expenditure Type:		
Planning, Design & Engineering	$	200,000
Land Acquisition	$	
Construction	$	2,000,000
Equipment	$	
Other	$	
Total	**$**	**2,200,000**

FUTURE PROJECT: WEST OLIVE MEDIAN IRRIGATION CONTROL — CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
$40,000	$0	$40,000	$0	$0	$0	$0	$0	$0	$40,000

Project Description:
This project will involve evaluating the City's existing irrigation control system for the landscaped medians along Olive Boulevard from Cross Creek Drive to Mason Road. Following the evaluation, the project would include making adjustments or replacements to the system to make it function properly and efficiently.

Existing Condition:
The plants in the landscaped medians of Olive Boulevard rely upon an irrigation system to survive. The median irrigation control system is not fully connected to the irrigation system and does not function as it was intended. The system is currently running off of batteries and is often operated manually, which can be daily, on-site operation of the system at certain times of the year.

Justification: *Condition of Existing Facility; Economic Development; Beautification*
The City has invested in and takes pride in its landscaped medians. A functional irrigation system is vital to keeping the plants in the medians alive and thriving.

Operating Budget Impact:
On-site staff operation of the irrigation system, and the staff time needed for the traffic control and the safety concerns about working in the Olive medians, could be avoided with a wireless operational system that allows for controlling the system from an office.

Comments:
Proper functionality of the irrigation system is recommended prior to implementing any new, long-term planting plans for the Olive medians.

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	
Equipment	$	40,000
Other	$	
Total	**$**	**40,000**

FUTURE PROJECT: WEST OLIVE SIDEWALK CONCEPT STUDY (MASON TO WEST CITY LIMIT) CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 20__	FY 20__	FY 20__	FY 20__	FY 20__	Future
$95,600	$0	$95,600	$5,600	$0	$0	$0	$0	$0	$95,600

Project Description:
The project involves engineering design services to evaluate the available options and to develop a preliminary plan to create a continuous, accessible pedestrian route along approximately 7,000 linear feet of the south side of Olive Boulevard, from Mason Road to Highway 141. The intent would be to provide a continuous sidewalk through both Creve Coeur and the City of Chesterfield. Infill sidewalk and accessibility improvements will be needed between Mason Road and Fernview Drive, but intersection improvements, retaining walls, and a pedestrian crossing at Creve Coeur Creek will likely be required to extend the sidewalk to Highway 141.

Existing Condition:
No continuous sidewalk currently exists along the south side of Olive Boulevard between Mason Road and the west city limit near Highway 141. Significant obstacles to creating this sidewalk include the intersection of Olive at Fernview, the crossing of Creve Coeur Creek, and existing grades.

Justification: *Public Safety; Coordination; Availability of Outside Funding*
The project will add and improve pedestrian accessibility along Olive Boulevard. This project would qualify for a federal Transportation Alternatives Program grant due to the sidewalk improvements, and it may qualify for a federal Surface Transportation Program grant with the anticipated traffic signal and intersection improvements at Fernview and Olive. A concept plan will allow the City to understand the scope of work for this project and will assist the City in any grant application(s) for the project. This sidewalk is identified as a "first priority" in the Creve Coeur Pedestrian Plan.

Operating Budget Impact:
None.

Comments:
Olive Boulevard is owned and maintained by the Missouri Department of Transportation, and this design would need to be approved by MoDOT. A portion of this concept design (from Fernview west to Mill Crossing) was developed in FY2013-FY2014, but this study was postponed indefinitely and was moved to a future project.

Expenditure Type:		
Planning, Design & Engineering	$	95,600
Land Acquisition	$	
Construction	$	
Equipment	$	
Other	$	
Total	**$**	**95,600**

Additional Comments:
The original intent was to develop a plan to create a continuous sidewalk along Olive Boulevard through both Creve Coeur and Chesterfield. Chesterfield informed the City in the fall of 2015 that they were no longer interested in participating in this plan, negating the overall goal for the project. Furthermore, with the cost of projects increasing, the City decided to focus on maintenance and improvements to the City's infrastructure, as opposed to a study in how to improve MoDOT's infrastructure.

BUILDING PROJECT BOND FUND PROJECTS

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2020-2024

9501 – POLICE BUILDING CONSTRUCTION

BUILDING PROJECT BOND FUND

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2020-2024

9501 POLICE BUILDING CONSTRUCTION – 01

PROPOSITION P

PROFESSIONAL SERVICES

BUILDING PROJECT BOND FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$1,200,914	$0	$1,200,914	$1,175,914	$25,000	$0	$0	$0	$0	

Project Description:
Professional services for the construction of the new Police Department building are required for site survey, building design, site layout, permitting, bidding, and construction inspection. These services include the consultant hired as the City's representative and project manager for the project. A majority of the design was completed in in FY2017 and FY2018. Construction-related services began in FY2018 and are expected to be finished with the anticipated completion of the building in FY2019. Some design costs may extend into FY2020.

Existing Condition:
None.

Justification: *Public Safety; Citizen Demand; Coordination; Operating Efficiency*
These services are necessary for the Police Building Project, and staff does not have the capacity to provide these services.

Operating Budget Impact:
None.

Comments:
The residents of Creve Coeur passed Proposition P in FY17 to provide funding for a new police station and accessibility, safety, and security improvements to the Creve Coeur Government Center.

Expenditure Type:		
Police Building Design Services	$	712,322
Owner Rep/Project Manager	$	345,374
Survey & Other Design Services	$	62,500
Land Acquisition	$	
Construction	$	
Equipment	$	
Other (Contingency)	$	80,718
Total	**$**	**1,200,914**

9501 POLICE BUILDING CONSTRUCTION – 02 **PROPOSITION P**

SITE WORK AND BUILDING CONSTRUCTION

BUILDING PROJECT BOND FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$8,331,802	$0	$8,331,802	$8,027,489	$304,313	$0	$0	$0	$0	$0

Project Description:
This phase of the project includes all aspects of the site work, building construction, finishes, and furnishing of the new building for the Police Department. The City has hired United Construction to complete the majority of these construction services. Site work is expected to be complete in FY2018, and the building is expected to be complete, fully functional, and occupied in FY2019.

Existing Condition:
The existing Police Department is housed in the Creve Coeur Government Center building, and the existing facilities were found to be inadequate and inefficient to renovate.

Justification: *Public Safety; Citizen Demand; Coordination; Operating Efficiency*
A new police building was found to be the most appropriate means to provide for the current and future needs of the Police Department, which will allow the Police Department to continue to provide excellent services to the residents of Creve Coeur.

Operating Budget Impact:
None.

Comments:
None.

Expenditure Type:		
Planning, Design & Engineering	$	
Land Acquisition	$	
Construction	$	7,642,489
Equipment	$	385,000
Other (Contingency)	$	304,313
Total	**$**	**8,331,802**

9501 POLICE BUILDING CONSTRUICTION – 03 **PROPOSITION P**

GOVERNMENT CENTER ACCESSIBILITY AND SECURITY IMPROVEMENTS

BUILDING PROJECT BOND FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Future
$521,059	$0	$521,059	$0	$0	$0	$521,059	$0	$0	

Project Description:
This project involves assessment of and improvements to various aspects of the Creve Coeur Government Center building in order to bring the building into better compliance with current accessibility and security standards and expectations.

Existing Condition:
The Creve Coeur Government Center is a renovated elementary school. Several aspects of the layout and features of the building do not meet the current standards for accessibility or security.

Justification: *Public Safety; Citizen Demand; Coordination*
These improvements were specifically outlined in the bond referendum. As a public building, the Creve Coeur Government Center is expected to be accessible and secure, both for visitors and City staff.

Operating Budget Impact:
Accessibility and security renovations are expected to have minimal impact on the operating budget. These renovations may replace ageing equipment or facilities, which should decrease the maintenance costs associated with them.

Comments:
The residents of Creve Coeur passed Proposition P in FY17 to provide funding for a new police station and accessibility, safety, and security improvements to the Creve Coeur Government Center.

Expenditure Type:		
Planning, Design & Engineering	$	50,000
Land Acquisition	$	
Construction	$	396,059
Equipment	$	75,000
Other	$	
Total	**$**	**521,059**