



**WORK SESSION MEETING
AGENDA
CITY OF CREVE COEUR
CITY COUNCIL
300 NORTH NEW BALLAS RD
MARCH 27, 2017
6:00 PM**

CALL TO ORDER

ROLL CALL

DISCUSSION ITEMS

- 1. Work Session Minutes Dated March 13, 2017**
- 2. Capital Improvement Program FY2018 to FY2022**
Summary: City staff will review the proposed Capital Improvement Program for Fiscal Years 2018 through 2022, www.creve-coeur.org/cip
- 3. FY2018 Roadway Maintenance Program Recommendations**
Summary: City staff will review the current status of the City's pavement network and the staff recommendations for roadway and sidewalk maintenance in the 2018 fiscal year. Staff will also share projections for repairs in the next few years.
- 4. Capital Equipment Program**
Summary: This presentation will go over the Public Works portion of the 5-year Capital Equipment Account. It will also review the equipment evaluation process used to determine which equipment qualifies for replacement.

Pursuant to Section 610.022 RSMo., the City Council could, at any time during the meeting, vote to close the public meeting and move to closed session to discuss matters relating to litigation, legal actions and/or communications from the City Attorney as provided under Section 610.021(1) RSMo. and/or personnel matters under Section 610.021(13) RSMo. And/or employee matters under Section 610.021(3) RSMo. and/or real estate matters under Section 610.021(2) or other matters as permitted by Chapter 610.

Posted: _____ posted 03/23/2017
Deborah Ryan, MPCC
City Clerk



City Council
300 North New Ballas Rd
Creve-Coeur, MO 63141

SCHEDULED

Meeting: 03/27/17 06:00 PM
Department: Legislative /City Clerk
Category: Report
Prepared By: Debbie Ryan
Initiator: Debbie Ryan
Sponsors:

DRAFT MINUTES (ID # 2372)

DOC ID: 2372

Work Session Minutes Dated March 13, 2017



**WORK SESSION MEETING
MINUTES
CITY OF CREVE COEUR
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300 NORTH NEW BALLAS RD
MARCH 13, 2017
6:00 PM**

Present: Mayor Glantz, Council Members Faron, Travers, Lawrence, Ruzicka, Hoffman, Saunders and Baseley

Also Present: Beth Quindry Consultant from Shockey Consulting, Inc.

Staff Present: Mark Perkins City Administrator, Carl Lumley City Attorney, Jason Jaggi Community Development Director, Tracy Hansen Finance Director, Jim Heines Public Works Director, Matt Wohlberg City Engineer, Jason Valvero Recreation Director, Chief Glenn Eidman, Captain Tim Koncki, and Sharon Stott Assistant to the City Administrator

1. Work Session Meeting Minutes Dated December 12, 2016; January 9, 2017; January 23, 2017; and February 27, 2017

Council Member Hoffman moved, seconded by Council Member Faron to accept the Work Session Meeting Minutes from December 12, 2016, January 9, 2017; January 23, 2017 and February 27, 2017.

Approved by unanimous vote.

2. Draft Strategic Plan FY2018-FY2020 Discussion

Mark Perkins reviewed the Strategic Plan FY2018-FY2020 draft process following work sessions with City Council and staff in January and February. Mr. Perkins encouraged City Council to review the priorities and action items.

Beth Quindry provided an overview of the vision, mission, values, goals, objectives and action items.

City Council discussed ways to incorporate thriving residential neighborhoods in the plan and that the Comprehensive Plan 2030 may serve as the basis for some action items. Mr. Perkins suggested the Diversify Housing Options objective may be where action items can be directed. Ms. Quindry stated there are assumptions throughout the draft document for many areas addressing maintaining residential quality.

City Council discussed and agreed to delete wording "and consider it a strength of our community" from the value regarding celebrating diversity.

City Council discussed and agreed to include resiliency as an objective or value in the plan.

Mr. Perkins explained a staff suggestion under section 1a to have electronic signage at the Creve Coeur Government Center to promote events, public hearings and other meetings. City Council thought it was a good idea to include in the plan.



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Mr. Perkins discussed the action item of the creation of a five to six evening Creve Coeur Leadership Course under section 1b to inform citizens about the different aspects of City Government as a way to encourage community engagement. He stated some cities have reported obtaining new committee and board members following completion of similar programs.

Under 1c, City Council discussed ways to engage youth ~~under~~ in existing City Committees or subcommittees or alternatively, through creation of a youth advisory committee. Recommendations included promoting youth participation through university, high school and local club groups. Ms. Quindry suggested rewording to explore ways to engage youth into the community.

City Council recommended delaying the schedule under 1c regarding forming a working group to consider consolidation of boards/commissions/committees until FY2020, because City Council went through a similar process in FY2014. City Council agreed the creation of a new council guide should be a priority in FY2018.

City Council discussed ~~the~~ rewording and reprioritizing the creation of a City park under 2c. Mr. Perkins stated the Triennial Citizen Survey will be conducted in FY2018 and will be an opportunity to evaluate interest in creating an additional City park followed by researching options should it be a priority to residents.

City Council agreed the wording related to maintaining businesses in Creve Coeur should parallel wording regarding maintaining existing residential housing.

City Council agreed that using community events to promote and reinforce the community brand under section 3c should be an ongoing priority so the action item should be broad, rather than limited to the farmer's market only, as drafted.

City Council discussed 4b regarding emission reductions and evaluation of electric and alternative fuels for City vehicles. Mr. Perkins stated there is a plan to incorporate a charging station for electric vehicles at the new Police Building and other alternative fuel options can be further researched by the Energy and Environment Committee and City staff.

City Council discussed and agreed that encouraging restaurants to join the Green Dining Alliance under section 4c should be a higher priority, moved up to FY2018, and ongoing from that point.

City Council discussed and agreed to switch priorities of action items under 5a to first consider amenities as part of the police station followed by finalizing and adopting a form-based code for downtown.

City Council discussed 5b and agreed to reword "Ensure excellent housing options."



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City Council recommended adding Planning and Zoning Commission to 5c with ongoing efforts to encourage installation of public art.

Ms. Quindry asked Mr. Jaggi to clarify the intention of the action item under 5d regarding exploration of zoning incentives that would encourage public art and other desired features in new development. He explained that although the city currently has zoning incentives in place, there is a need to further define public benefit requirements to better convey the city's expectations.

City Council discussed and agreed to clarify wording under item 1 under 6a to specify referring to closed pension planliability and remove deadline.

Ms. Quindry stated she will incorporate City Council changes ~~discussed~~ in the final draft document and forward it to Mr. Perkins. Mr. Perkins stated he will forward the final draft to City Council and provide ample time to review and schedule another meeting, if necessary, before final approval.

Adjourned at 7:20 p.m.



City Council
300 North New Ballas Rd
Creve-Coeur, MO 63141

SCHEDULED

Meeting: 03/27/17 06:00 PM
Department: City Council
Category: Presentation
Prepared By: Sharon Stott
Department Head: Sharon Stott

STAFF REPORT

Capital Improvement Program FY2018 to FY2022

City staff will review the proposed Capital Improvement Program for Fiscal Years 2018 through 2022, www.creve-coeur.org/cip



City of Creve Coeur

To: Mayor and City Council
 From: Mark Perkins, City Administrator
 Date: February 21, 2017
 Re: Capital Improvement Program Update – FY2018-2022

The proposed Capital Improvement Program (CIP) for the five-year period beginning July 1, 2017 is provided herein. This year, the overview of the five-year capital plan includes the Capital Fund, as well as the Police Building Project Fund and its associated Debt Service.

The plan is also being submitted to the Planning and Zoning Commission and Finance Committee for their review and recommendations. A public hearing before the City Council is scheduled for Monday, April 10. As in previous years, input from the public, City staff, and the City's boards, commissions and committees has been considered as part of the CIP update.

CAPITAL FUND

Capital Fund Revenues

The ½ cent capital improvement sales tax is the major funding source for the CIP. Capital sales tax revenues are projected to be \$2,075,000 at the end of the current fiscal year compared to last year's total of \$2,056,301, or an increase of approximately 0.91%. A conservative 1.25% annual increase in sales tax revenue is projected in fiscal years 2018 through 2022.

A General Fund transfer of \$400,000 is proposed for each year. These transfers provide an important supplemental funding source for the City's street program and are possible due to the City's significant fund balance. General Fund transfers to the Capital Fund are made in most years, and are appropriate based on the transportation-oriented revenue sources of the General Fund which include the County road and bridge, and gasoline tax revenues.

The City has been successful in obtaining grant funding for several street and park projects as indicated on the revenue detail on Exhibit A. It is anticipated that we will be able to obtain future grant funding during the course of the five-year program to supplement the plan as presented.

Capital Fund Expenditures

Capital outlay for the next five years ranges from approximately \$2.4 million to \$3.3 million annually. These figures will likely increase as federal transportation funds are secured for certain projects.

Previously, debt service had comprised a significant portion of the City's CIP dollars since the purchase and construction of Millennium Park in 2000. In FY14, the debt was retired, six years ahead of schedule. By paying off this debt early (\$4,250,897), the city saved a considerable amount in interest.

Status updates for FY17 projects and CIP FY18-22 highlights for each major category follow:

9501 Building & Improvement Projects

Americans with Disabilities Act Improvement (ADA) / Community Development Block Grant (CDBG) (\$11,875/FY17; \$20,000 FY18-FY22) – FY17 Funds were used for ADA accessibility improvements to sidewalk ramps at the intersection of North New Ballas Road at Old Ballas Road. In FY18, funds have been committed to providing accessibility improvements to the pedestrian signals at two intersections: North New Ballas Road at Studt Avenue and Ladue Road at Spoede Road. Staff continue to research suitable uses for federal CDBG funds in FY19 and beyond. Application for these funds and commitment to a particular project typically occurs one year prior to the fiscal year in which the funds are spent.

Public Art – Danforth Plant Science Center Bus Shelter (\$4,000/FY16; \$13,740/FY17) – the project was to include the installation of an artist-designed transit shelter on Olive Boulevard outside the Donald Danforth Plant Science Center to further the goals of the Public Art Master Plan. Planning, engineering and began in FY16 & FY17. The project was terminated in FY17 following the development of the “39 North” planning study and science district and possible conflicts between the projects.

Police & Government Center Space Needs/Preliminary Design/Owner Representative (\$31,493/FY16; \$120,000/FY17) – In FY14 (\$17,574) and FY15 (\$43,538), a space analysis and a needs assessment were completed for the Creve Coeur Government Center. In FY17, the City contracted with an owner representative to manage the building project approved by voters with the passage of a bond measure (Prop P) to construct a new Police Department building and to provide security and accessibility improvements to the Government Center building. As a result of the bond passage, a separate Police Building Fund and related debt has been established and discussed separately in this memo.

Public Works Auxiliary Salt Storage Roof (\$60,000/FY17) – In FY15, a concrete mega block salt storage structure was completed to provide additional salt storage to ensure the City has an adequate supply of salt to treat road pavements during winter months. In FY17, an auxiliary structure will be installed to serve as a canopy for the block storage structure to protect the salt from weather.

Government Center Renovations Design (\$250,000/FY19) – Project involves designing renovations to the Creve Coeur Government Center following the Police Department’s move to the new Police Building in December 2018. The project will include the extensive renovations throughout the building, as well as replacement of the electrical service switchgear.

Public Works Facility Security Fence (\$50,000/FY17) – Project includes the construction of a vinyl coated, chain-link fence around the City’s Public Works maintenance facility located at 996 East Rue de la Banque for security.

Police Firing Range Improvements (\$75,000/FY18) – Projects includes the demolition, disposal, and removal of the current target-retrieval system and bullet trap system in the firing range. The existing range was built in 1974 with a shelf life of 15 years. The \$75,000 project cost will be offset with \$20,000 in proceeds from the Police Department drug seizures.

9506 Park Development Projects

Park Improvements Grant Match (\$0/FY17-FY22) – In FY16, a Golf Course Needs Assessment was conducted (\$10,418). The assessment established priorities and serves as the basis for future grant applications. Miscellaneous park grant matches normally reflected in this category have been earmarked for specific projects highlighted below.

Golf Course Cart Path/Bridge/Fence Replacement (\$484,350/FY17) – The City was successful in receiving a St. Louis Municipal Park Grant to resurface the asphalt cart paths, replace two of the cart bridges, and replace a portion of the fence at the Creve Coeur Golf Course per the Golf Course Needs Assessment. The project cost will be offset by \$455,150 in grant funding.

Ice Arena Refrigerant Switch-Over Grant Match (\$75,000/FY19) – The Ice Arena cooling system currently uses R-22 refrigerant. Beginning January 1, 2020, the production and importation of R-22 refrigerant is prohibited due to environmental and health risks. Project cost is for a grant match for the cost of transitioning to an alternate cooling system estimated to be \$550,000. An application for a Municipal Park Grant is anticipated in FY18 for implementation in FY19.

Playground Safety Surface Replacement (\$75,000/FY17; \$75,000/FY21) – This project includes the replacement of damaged areas and rejuvenation of the rubberized safety surface beneath the City's playgrounds. The playground at Millennium Park was replaced in FY17. Staff will continue to assess the park with the most-needed surface repairs for the funds slated in FY21.

Golf Course Irrigation System Replacement Grant Match (\$25,200/FY21) – This project includes a 6% grant match to replace existing irrigation system at the Creve Coeur Golf Course estimated to cost \$420,000. The existing system is 41 years old and is becoming unserviceable because of its age. Staff will pursue a grant through the St. Louis Municipal Park Grant Commission in FY21.

Park Bridge Replacement (\$75,007/FY17; \$200,000/FY18) – This project includes the design relating to stream bank protection for a vehicular bridge at Malcom Terrace Park which has significant erosion around its foundation. Construction of the stream bank improvements is planned for FY18.

Park and Dielmann Recreation Complex Parking Lot Repairs (\$13,846/FY17) – Completed in FY17, this project came in under budget (originally budgeted \$25,000) and included the patching, crack sealing, sealing and painting of parking lots at the Dielmann Recreation Complex and Beirne Park.

Ice Arena Office Area Improvements (\$25,000/FY18) – This project involves replacement of a large office window with severe water damage and is not energy efficient, replacing the old office carpet, replacing old florescent light fixtures with LED lights, and replacing the ceiling tile in the Dielmann Recreation Complex Ice Arena office area.

Historic Building Renovation and Preservation (\$30,000/FY18) – This project involves an architectural assessment of the current conditions of two historical log cabins in Conway Park and one historic school house in Lake School Park, as well as recommendations and design specifications for improving and maintaining these buildings in a historically conscious manner. All three buildings have structural and deterioration issues that have progressed beyond routine maintenance.

Tennis Court Repairs (\$50,000/FY18; \$35,000/FY21) – This project involves the repairs to and resurfacing of the tennis courts in the City’s parks in order to maintain the quality necessary for safe and enjoyable play. Improvements are planned for Beirne Park in FY18, Conway Park in FY21 and Lake School Park in FY23 (Future).

Park Trail Improvements Grant Match (\$15,000/FY19) – This project involves resurfacing two asphalt trails and the parking lot at Malcolm Terrace Park. The cost reflects the City’s portion (20%) of a \$75,000 project funded by a federal grant through the Recreational Trails Program. City staff will apply for the grant in FY17 and, if successful, construction would be expected in FY19.

9509 Stormwater Projects

Stormwater Master Plan Projects (\$150,000/FY20; \$150,000/FY22) – The Stormwater Master Plan update completed in 2012 identified several projects to be completed over the next several years. The scope of some stormwater projects is greater than what this program can afford, therefore these projects are listed separately below.

Middlebrook Drive Storm Water Improvements (\$1,673/FY16; \$5,000/FY17; \$250,000/FY18) – Project includes replacing the culvert pipes under Middlebrook Drive and making associated repairs to the roadway. In FY13, \$31,075 was spent for the design for this project. In FY16 & FY17, the project’s plans and easement documents were updated. The project has been identified as a high priority by the Stormwater Committee.

Golf Course Dam Stabilization, Pond Siltation Removal & Control Phase 1 & 2 (Phase 1: \$8,127/FY16; \$225,000/FY17; Phase 2: \$70,000/FY18; \$450,000/FY19) – Phase 1 project included repairing the dam which failed in June 2013, de-silting south pond, and installing a bubbler system into the pond to promote a healthier lake system. The repairs for Phase 1 will be completed in FY17. Phase 2 project involves design (FY18) and construction (FY19) for the removal of existing silt from the northern-most lake, and for a built-in mechanical silt/water separator system to capture future silt so it can be more easily maintained. The entire project has been identified as a high priority by the Stormwater Committee.

Alden Lane Culvert Improvements (\$30,605/FY16; \$210,000/FY17) – Project included the design (FY16) and construction (FY17) of an extension to an existing drainage culvert that carries Alden Lane over a creek. The project had been identified as urgent by the Stormwater Committee.

Emerson Road Culvert and Headwall Improvements (project now included in the scope of Emerson Road Improvement Project) – This project involves the removal and replacement of a failing stone and concrete headwall along the west side of Emerson Road and the replacement of the 30” diameter drainage pipe that runs beneath Emerson Road. The City was recently approved a federal grant for the Emerson Road Improvement Project which includes the culvert and headwall improvements. Design of the project is expected in FY18 with construction in FY20. The project has been identified as a high priority by the Stormwater Committee.

9510 Street & Sidewalk Projects

Street and Sidewalk Maintenance Program (\$1,518,000/FY17; \$1,125,000/FY18) – The majority of CIP expenditures are dedicated to preserving the City's streets and sidewalks through concrete-slab replacement, asphalt overlay, and other preservation techniques. Priorities are guided by the City's infrastructure management program and street rating system. In FY16, the City had a complete review of the conditions of the City's pavement network which is used to further assist in prioritization of repairs. \$150,000 in funds planned for FY18 were moved to FY17 in order to condense multiple phases for the Laduemont road work, thereby completing the project more efficiently and timely.

Street Reconstruction (\$326,261/FY17; \$300,000/FY18) – The City maintains a large number of 'composite' streets – asphalt over concrete – and these projects often result in extensive reconstruction. In FY17, the City completed the reconstruction of Lakeshore Drive. Several subdivisions are being considered for FY18.

Coeur De Ville Drive Improvements – (\$11,288/FY16; \$666,444/FY17; \$20,000/FY18; \$50,000/FY19) – An engineering design began in FY14 through FY16 (\$66,661 total) with construction beginning in FY17 with completion in FY19. The City secured a federal grant to cover \$419,533 of the project cost. The project involved the partial reconstruction of the City-owned portion of Coeur de Ville between Parc Provence and Royal Valley Drive, as well as sidewalk repairs and accessibility ramps from Olive Boulevard to Ladue Road. Additional plantings would be installed between Coeur De Ville and I-270 including around the MoDOT equipment storage area to expand the visual barrier. The scope of the project expanded in FY17 to include additional sidewalk replacement, prompting the need for a second phase of construction (FY18 & FY19).

Warson Road Improvement Project (\$55,040/FY16; \$32,154/FY17; \$588,000/FY18) – The City was successful in obtaining a federal grant (\$428,000) for an asphalt resurfacing and sidewalk accessibility improvement project from the City's southern city limits to Olive Boulevard. FY16 reflects design and engineering fees with construction in FY18.

Mason Rd. Sidewalk Infill/Conway Rd. to Olive Blvd. Grant Match (\$10,000/FY17) – The project included a conceptual design for a sidewalk to create a continuous pedestrian route along Mason Road between Clayton Road and Olive Boulevard. Creve Coeur is partnering with St. Louis County and the City of Town & Country on this project, with the intent of pursuing grant funding jointly with these two entities. The grant match has not been included in this five-year CIP plan until the timeline and phasing for this project is better defined.

Emerson Sidewalk Improvement Project (\$43,804/FY16; \$348,542/FY17) – The project includes the addition of a sidewalk along the east side of Emerson Road between Ladue Road and Old Ballas Road. The City has been awarded a federal Transportation Alternatives Program grant that will reimburse the City for up to 80% (\$233,600) of the construction costs associated with the project. The City share represents 20% of the construction cost (\$58,400), 100% of the land acquisition cost (\$15,069), and 100% of the design cost (\$36,594).

Emerson Road Improvement Project (\$65,000/FY18; \$592,000/FY20) – 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 DeSmet Jesuit High School. FY18 cost is for design and engineering, and the FY20 cost represents construction of the project. The City was successful in receiving a federal grant which will fund up to \$444,000 of the construction costs.

Mosley Road Improvement Project – Phases 1 & 2 Design & Grant Match (\$150,000/FY19; \$50,000/FY20; \$193,000/FY21; \$234,000/FY22) – The project includes completing the preliminary design for Mosley Road and minor widening, slight vertical and horizontal alignment changes where necessary, stormwater improvements, sidewalk accessibility improvements, and pavement resurfacing. A conceptual design was completed for \$84,768 in FY14-16. Costs associated in FY19-22 reflect a grant match (approx. 35%) of the construction and easement cost, plus 100% of the design cost. Staff applied for federal grant in FY17 to assist with the cost for phase 1. The project is phased into two projects in order to be more favorably considered for the grant. The total project cost is estimated to be \$1,477,000.

New Ballas Improvement Project Grant Match Phase 1, Phase 2 and Phase 3 (\$250,000/FY20; \$25,000/FY21; 330,000/FY22; \$695,000/Future) – The entire 3-phase project includes pavement resurfacing, concrete curb and sidewalk replacement, and accessibility improvements along New Ballas Road from Conway Road to Olive Boulevard. Phase 1 includes 100% of the design for all three phases and improvements on New Ballas Road from Conway Road to Ladue Road. Phase 2 includes improvements from Ladue Road to Magna Carta Drive. Phase 3 continues improvements from Magna Carta Drive to Olive Boulevard. Costs for FY20-22 reflect a grant match. The grant match includes 100% of the cost of design in FY20 and 30% of the construction cost (FY21-FY23).

Fernview Drive Resurfacing Design and Grant Match (\$50,000/FY19; \$65,000/FY21) – The project represents a grant match for asphalt pavement resurfacing along Fernview Drive from Gallagher Road to Olive Boulevard. Fernview Drive qualifies for federal grant assistance, which the City is pursuing in FY17 in order to qualify for reimbursement of up to 80% of the construction cost. Sidewalks were not included as part of this project, because further study and public outreach is required to determine the feasibility of adding sidewalks. A separate “future project” has been included in the CIP for Fernview and Bellerive Estates sidewalks.

North New Ballas Road Sidewalk Phase 2A Design & Grant Match (\$20,669/FY17; \$25,000/FY18; \$52,500/FY19) – This project includes the design and construction of a sidewalk along the west side of North New Ballas Road from Ladue Road to DeSmet Jesuit High School. Staff plans to apply for a federal Transportation Alternatives Program grant to fund 70% of the easement acquisition and construction cost of the project.

Craig Road Concept Improvement Plan (\$40,000/FY18) – This project involves engineering design services to develop concept-level improvement plans for Craig Road between Olde Cabin Road and Olive Boulevard. A concept improvement plan provides better understanding of options for roadway and sidewalk improvements and provides a basis for pursuing federal grant assistance.

9516 Capital Equipment

Proposed funding for capital equipment ranges from \$258,642 to \$354,821 per year over the next five years. Only capital equipment with a cost of \$20,000 or more, and a useful life of five years or longer are included in the CIP.

Public Works Equipment (\$235,000/FY17) – All capital equipment approved in FY17 was purchased under budget (\$38,955). Costs and equipment purchases vary and are described in-depth in the 5-year Fleet Replacement Report FY18-22.

Ice Resurfacing Vehicle Replacement (\$156,000/FY18) – Cost to purchase a new electric ice resurfacing vehicle for the Ice Arena. The current, propane-powered Olympia resurfacer is approximately 14 years old and will be used as a back-up for resurfacing in emergencies.

Police Emergency Command Vehicle Replacement (\$27,955/FY17) – Replaced an existing 2010 Chevrolet Tahoe used for the purpose of emergency management and public safety, as well as the daily operations of the Police Department (PD), with a 2016 Ford Interceptor Utility AWD vehicle. PD received approximately \$10,000 trade-in value for the existing vehicle.

Fairway Mower Replacement (\$30,530/FY17) – Purchased a used fairway mower to replace the 13-year old Jacobsen fairway mower for the Creve Coeur Golf Course.

Police LiveScan Biometric Fingerprint Scanner (\$17,000/FY17) – Cost to replace the 15-year old scanner. Current changes in REJIS/CJIS requirements resulted in numerous updates and standards the current machine cannot meet. The purchase will occur in FY17.

Capital Fund - Future Project List

A list of potential projects for a future CIP is included. Future projects are identified as projects with either no available funding or with a scope and/or estimate that has not been fully developed. These projects are *not* part of the five-year CIP, but may warrant future consideration for funding.

POLICE BUILDING FUND (PROP P)

Police Building Fund Revenues

In November 2016, Creve Coeur residents voted to approve a \$10.69 million bond measure to provide funding to build a new police station on the existing property of the Government Center at 300 N. New Ballas Road. The bonds will be publically sold and revenue received by the City in FY17.

Police Building Fund Expenses

9501 – Building & Improvement Projects

Owner's Representative and Project Manager (\$64,282/FY18; \$64,282/FY19; \$64,282/FY20). In FY17, the City retained Paric (Navigate Building Solutions is the subcontractor) to assist with managing the project for the new police building. In FY17, \$120,000 was allocated from the Capital Fund and reimbursement for this cost is projected to be transferred to the Capital Fund from the Police Building Project Fund in FY17. Owner representative fees for the Police Building are set at a total of \$312,846.

Professional Services (\$781,320/FY18; \$405,070/FY19) – This project includes the professional services required for the Police Building Project, including site survey, building design, site layout, permitting, bidding and construction inspection. Design is expected to be completed in FY18 with most of the testing and construction-related consulting in FY19.

Sitework and Building Construction (\$3,935,384/FY18; \$4,325,384/FY19; \$521,059/FY20) – This phase of the project includes the sitework and building construction of the Police Building Project and various accessibility and security improvement to the existing Government Center. Sitework is expected to be

complete in FY18, building construction is expected to complete in FY19; and accessibility, safety and security improvements to the Government Center are anticipated to be in FY20.

Bond Financing (\$135,000/FY17) – Aspects of this project include the necessary service costs associated with issuing and managing the bonds for the project.

DEBT SERVICE

Debt Service Revenues

The debt service revenues associated with the Police Building Fund will be collected from real estate and property taxes for the next 20 years (sunset in 2037). The tax collection revenue and interest from the estimated \$0.08 tax levy is estimated to generate approximately \$3.9 million for FY18-FY22.

Debt Service Expenses

The debt service expenses associated with the Police Building Fund will be paid through the real and property taxes for the next 20 years (sunset in 2037). The debt service expenditures, including interest and principal expenses, are estimated to be approximately \$3.5 million for FY18-FY22.

ALL PROJECT DESCRIPTIONS

Detailed project description sheets for CIP FY18-FY22 description sheets for Future Projects, as well as the information included herein, are available on the City's website www.creve-coeur.org/cip.

SCHEDULE

The CIP FY18-FY22 Schedule is located on the following page.

CC: Planning & Zoning Commission, Finance Committee, Arts Committee, Economic Development Committee, Stormwater Committee, Parks & Historic Preservation Committee, Horticulture, Ecology & Beautification Committee, Energy & Environment Committee

ATTACHMENTS

Exhibit A – CIP FY18-FY22 Spreadsheet (Capital Fund & Police Building Fund)

Exhibit B – CIP FY18-FY22 Capital Fund Project Descriptions & Future Project Descriptions; Police Building Fund Project Descriptions

Exhibit C – CIP FY18-FY22 Citizen Recommendations & Staff Responses

Exhibit D – CIP FY13-FY22 Overview Spreadsheet

Exhibit E – Capital Fund Future Project List

**CAPITAL IMPROVEMENT PROGRAM
FY 2018-2022 SCHEDULE FOR ANNUAL UPDATE**

December 1, 2016 – January 17, 2017	Solicit input from citizens, City committees, and City staff
January-February 2017	Staff research, analysis and compilation
February 27, 2017	Proposed CIP submitted to City Council, P&Z and Finance City Council Work Session
March 6, 2017	Planning & Zoning Commission Review
March 7 & 21, 2017	Finance Committee Review
March 27, 2016	City Council Work Session
April 10, 2017	Public Hearing before City Council Possible City Council Approval

Exhibit A

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM FY2018-FY2022	FY2016 BUDGETED	FY2016 ACTUAL	FY2017 BUDGETED	FY2017 PROJECTED	FY2018 PROJECTED	FY2019 PROJECTED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED
CAPITAL FUND									
9501 BUILDING & IMPROVEMENT PROJECTS									
02 Accessibility Improvements (CDBG)	20,000	35,698	20,000	11,875	20,000	20,000	20,000	20,000	20,000
13 Public Art - Danforth Plant Science Center Bus Shelter	55,500	4,000	49,000	13,740	-	-	-	-	-
15 Police & Government Center Space Needs/Prelim Design/Owner Rep	55,000	31,493	200,000	120,000	-	-	-	-	-
18 Public Art - CVS Bus Shelter	30,765	62,795	-	-	-	-	-	-	-
21 Public Works Auxiliary Salt Storage Roof	-	-	60,000	60,000	-	-	-	-	-
22 Government Center Renovations (Design)	-	-	-	-	-	250,000	-	-	-
23 Public Works Facility Security Fence	-	-	50,000	50,000	-	-	-	-	-
24 Police Firing Range Improvements					75,000				
Subtotal	161,265	133,986	379,000	255,615	95,000	270,000	20,000	20,000	20,000
% of Total Capital Fund Outlay	5%	5%	9%	6%	3%	9%	1%	1%	1%
9506 PARK DEVELOPMENT PROJECTS									
01 Misc. Park Improvements (Grant Match)	-	10,418	-	-	-	-	-	-	-
06 Golf Course Needs Assessment	-	7,570							
07 Tappmeyer House Exterior Renovation	-	52,687	-	-	-	-	-	-	-
10 Golf Course Cart Path Replacement (Grant Match)	-	-	21,000	484,350	-	-	-		
13 Dielmann Recreation Complex Renovations - Phase 1	-	480,878	-	-	-	-	-		
14 Ice Arena Refrigerant Switch Over (Grant Match)	-	-	-	-	-	75,000	-	-	-
15 Playground Safety Surface Replacement	-	-	75,000	75,000	-	-	-	75,000	-
16 Golf Course Irrigation Replacement (Grant Match)	-	-	-	-	-	-	-	25,200	-
17 Park Bridge Replacement	-	-	75,000	75,007	200,000	-	-	-	-
18 Park and Dielmann Recreation Complex Parking Lot Repairs	-	-	25,000	13,846	-	-	-	-	-
19 Ice Arena Office Area Improvements					25,000	-	-	-	-
20 Historic Building Rehabilitation and Preservation					30,000	-	-	-	-
21 Tennis Court Repairs					50,000	-	-	35,000	-
22 Park Trail Improvements (Grant Match)					-	15,000	-	-	-
Subtotal	-	551,553	196,000	648,203	305,000	90,000	-	135,200	-
% of Total Capital Fund Outlay	0%	22%	5%	14%	9%	3%	0%	5%	0%
9509 STORMWATER PROJECTS									
01 Stormwater Improvements Per Master Plan	-	-	-	-	-	-	150,000	-	150,000
04 Middlebrook Drive Stormwater Improvements	-	1,673	5,000	5,000	250,000	-	-	-	-
10 Golf Course Dam Stabilization, Pond Siltation Removal & Control (Phase I & II)	500,000	8,127	225,000	225,000	70,000	450,000	-	-	-
11 Alden Lane Culvert Improvements	-	30,605	210,000	210,000	-	-	-	-	-
12 Emerson Road Culvert and Headwall Improvements	-	-	20,000	-	-	-	-	-	-
Subtotal	500,000	40,405	460,000	440,000	320,000	450,000	150,000	-	150,000
% of Total Capital Fund Outlay	16%	2%	11%	10%	10%	15%	5%	0%	5%

Exhibit A

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM FY2018-FY2022	FY2016 BUDGETED	FY2016 ACTUAL	FY2017 BUDGETED	FY2017 PROJECTED	FY2018 PROJECTED	FY2019 PROJECTED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED
9510 STREET & SIDEWALK IMPROVEMENTS									
01 Street and Sidewalk Maintenance Program	1,100,000	934,077	1,133,000	1,518,000	1,125,000	1,313,250	1,352,648	1,393,200	1,435,000
02 Street Reconstruction Program	350,000	428,471	350,000	326,261	300,000	300,000	300,000	300,000	300,000
15 Graeser Road Resurfacing	-	12,304	-	-	-	-	-	-	-
19 Olive Blvd. Sidewalk - Mason West Engineering	80,000	-	-	-	-	-	-	-	-
20 Coeur De Ville Drive Improvements	655,000	11,288	675,000	666,444	20,000	50,000	-	-	-
21 Warson Road Improvement Project	55,000	55,040	258,194	32,154	588,000	-	-	-	-
23 Mason Rd Sidewalk Infill/Conway to Olive (Design)	-	-	-	10,000	-	-	-	-	-
25 Emerson Sidewalk Improvement Project (Grant 80% of Construction)	20,178	43,804	292,000	348,542	-	-	-	-	-
26 Emerson Road Improvement Project	-	-	-	-	65,000	-	592,000	-	-
27 Mosley Road Improvement Project - (Design & Grant Match)	-	7,549	-	-	-	150,000	50,000	193,000	234,000
28 New Ballas Road Improvement Project - Phase 1, 2 & 3 (Design & Grant Match)	-	-	-	-	-	-	250,000	25,000	330,000
29 Fernview Drive Resurfacing (Design & Grant Match)	-	-	-	-	-	50,000	-	65,000	-
30 North New Ballas Road Phase 2A (Design and Grant Match)				20,669	25,000	52,500	-	-	-
31 Craig Road Concept Plan				-	40,000	-	-	-	-
Subtotal	2,260,178	1,492,533	2,708,194	2,922,070	2,163,000	1,915,750	2,544,648	1,976,200	2,299,000
% of Total Capital Fund Outlay	71%	59%	66%	64%	64%	64%	85%	79%	84%
New Projects in Bold									
9516 CAPITAL EQUIPMENT									
01 Public Works Capital Equipment	251,905	259,948	273,955	235,000	328,638	279,186	279,695	354,821	258,642
02 Telephone/Voice Recording System	-	65,762	-	-	-	-	-	-	-
03 Ice Resurfacing Vehicle Replacement	-	-	-	-	156,000	-	-	-	-
04 Police Emergency Command Vehicle Replacement	-	-	28,000	27,995	-	-	-	-	-
06 Fairway Mower	-	-	35,000	30,530	-	-	-	-	-
07 Police LiveScan Fingerprint Scanner	-	-	38,000	17,000	-	-	-	-	-
Subtotal	251,905	325,710	374,955	310,525	484,638	279,186	279,695	354,821	258,642
% of Total Capital Fund Outlay	8%	13%	9%	7%	14%	9%	9%	14%	9%
TOTAL CAPITAL FUND OUTLAY	3,173,348	2,544,187	4,118,149	4,576,413	3,367,638	3,004,936	2,994,343	2,486,221	2,727,642
9514 DEBT SERVICE									
N/A	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-
% of Total Year End Figures	0%	0%	0%	0%	0%	0%	0%	0%	0%
TOTAL YEAR END FIGURES (Capital Outlay & Debt Service) - CAPITAL FUND	3,173,348	2,544,187	4,118,149	4,576,413	3,367,638	3,004,936	2,994,343	2,486,221	2,727,642

Exhibit A

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM FY2018-FY2022	FY2016 BUDGETED	FY2016 ACTUAL	FY2017 BUDGETED	FY2017 PROJECTED	FY2018 PROJECTED	FY2019 PROJECTED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED
CAPITAL FUND REVENUES									
Beginning Fund Balance (estimated Cash Basis as of July 1)	1,281,621	1,326,656	1,677,657	1,882,607	1,054,543	629,480	202,925	256,042	401,294
Estimated Capital Improvement Sales Tax Revenue (1/2 Cent)	2,100,938	2,056,301	2,082,005	2,075,000	2,108,030	2,134,380	2,161,060	2,188,073	2,215,424
Estimated Interest Revenue	4,000	1,092	1,500	1,500	7,500	4,000	2,400	3,400	3,800
Est. Addtnl Revenue (Outside agencies, grants, reimbursement & other)	906,533	627,305	823,764	1,245,989	407,045	20,000	464,000	20,000	20,000
Proceeds from Equipment Sales	24,000	15,440	20,000	25,860	20,000	20,000	20,000	20,000	20,000
General Fund Transfers In	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000
Total Revenues & General Fund Transfers In - Capital Fund	3,435,471	3,100,138	3,327,269	3,748,349	2,942,575	2,578,380	3,047,460	2,631,473	2,659,224
Total Anticipated Year End Expenditures	3,173,348	2,544,187	4,118,149	4,576,413	3,367,638	3,004,936	2,994,343	2,486,221	2,727,642
Ending Fund Balance (Cash Basis) - Capital Fund	1,543,744	1,882,607	886,777	1,054,543	629,480	202,925	256,042	401,294	332,877

ESTIMATED ADDITIONAL CAPITAL FUND REVENUE (FUNDING SOURCES)									
Community Development Block Grants for ADA Improvements	20,000	35,337	20,000	11,875	20,000	20,000	20,000	20,000	20,000
STL County Muni Parks Grant / Dielmann Recreation Complex Renovations	475,000	458,137	-	-	-	-	-	-	-
STL County Muni Parks Grant / Golf Course Needs Assessment	-	6,056							
Public Art Bus Shelter - Developer Contribution	-	34,500							
Coeur de Ville Drive Resurface STP-S Grant	367,533	3,642	363,609	363,609	-	-	-	-	-
Warson Road Improvement Project STP-S Grant	44,000	-	206,555	61,755	367,045	-	-	-	-
Emerson Sidewalk Improvement Project TAP Grant	-	-	233,600	233,600	-	-	-	-	-
Credit Missouri American Water Reimbursement	-	89,633	-	-	-	-	-	-	-
STL County Muni Park Grant / Cart Path and Bridge Improvements				455,150	-	-	-	-	-
Capital Fund Reimbursement from Police Building Project Fund (Prop P)				120,000	-	-	-	-	-
Emerson Road Improvement Project STP-S Grant					-	-	444,000	-	-
Proceeds from Police Department Drug Seizures				-	20,000	-	-	-	-
Subtotal	906,533	627,305	823,764	1,245,989	407,045	20,000	464,000	20,000	20,000

New projects in bold

Exhibit A

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM FY2018-FY2022	FY2016 BUDGETED	FY2016 ACTUAL	FY2017 BUDGETED	FY2017 PROJECTED	FY2018 PROJECTED	FY2019 PROJECTED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED
POLICE BUILDING PROJECT FUND (PROP P)									
Beginning Fund Balance (estimated Cash Basis as of July 1)			-	-	10,435,000	5,734,514	973,378	394,937	398,887
Estimated Bond Proceeds			-	10,690,000		-	-	-	-
Estimated Interest Revenue			-	-	80,500	33,600	6,900	3,950	3,950
Transfers In			-	-	-	-	-	-	-
Total Revenues & Transfers In			-	10,690,000	80,500	33,600	6,900	3,950	3,950
9501 BUILDING & IMPROVEMENT PROJECTS									
01 Owner's Representative and Project Manager			-	-	64,282	64,282	64,282	-	-
02 Professional Services				-	781,320	405,070			
03 Sitework and Building Construction				-	3,935,384	4,325,384	521,059		
04 Bond Financing			-	135,000	-	-	-	-	-
Transfers Out			-	120,000	-	-	-	-	-
Total Anticipated Year End Expenditures & Transfers			-	255,000	4,780,986	4,794,736	585,341	-	-
Ending Fund Balance (Cash Basis) - Police Building Project Fund (Prop P)			-	10,435,000	5,734,514	973,378	394,937	398,887	402,837
9514 DEBT SERVICE (PROP P) REVENUES									
Beginning Fund Balance (estimated Cash Basis as of July 1)				-	-	200,665	251,121	305,072	360,233
Estimated Property Tax Collection Revenue				-	769,471	769,471	777,166	777,166	784,937
Estimated Interest Revenue				-	400	2,500	3,100	3,750	4,200
Total Anticipated Revenues				-	769,871	771,971	780,266	780,916	789,137
9514 DEBT SERVICE (PROP P) EXPENSES									
Estimated Expenditures				-	-	-	-	-	-
Estimated Interest Expenses				-	259,206	296,515	286,315	275,755	264,955
Estimated Principal Expenses				-	310,000	425,000	440,000	450,000	460,000
Total Anticipated Expenditures				-	569,206	721,515	726,315	725,755	724,955
Ending Cash Balance				-	200,665	251,121	305,072	360,233	424,415
TOTAL COMBINED CAPITAL PROGRAM (CAPITAL FUND & POLICE BUILDING PROJECT FUND)	FY2016 BUDGETED	FY2016 ACTUAL	FY2017 BUDGETED	FY2017 PROJECTED	FY2018 PROJECTED	FY2019 PROJECTED	FY2020 PROJECTED	FY2021 PROJECTED	FY2022 PROJECTED
Total Combined Revenues & Transfers In	3,435,471	3,100,138	3,327,269	14,438,349	3,792,946	3,383,951	3,834,626	3,416,339	3,452,311
Total Combined Anticipated Year End Expenditures & Transfers	3,173,348	2,544,187	4,118,149	4,831,413	8,717,830	8,521,187	4,305,999	3,211,976	3,452,597
Ending Fund Balance (Cash Basis) - All Capital Funds	1,543,744	1,882,607	886,777	11,489,543	6,564,659	1,427,424	956,051	1,160,414	1,160,129

CITY OF CREVE COEUR

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

CAPITAL FUND

POLICE BUILDING PROJECT FUND

FISCAL YEARS 2018-2022



EXECUTIVE SUMMARY

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

CAPITAL FUND

POLICE BUILDING PROJECT FUND

FISCAL YEARS 2018-2022



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 proposed 2030 Comprehensive Plan

Text from the proposed 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:

- *Public Safety*: focused on preserving and protecting the general public from harm and reducing risk exposure
- *Condition of Existing Facility*: maintaining City infrastructure and facilities in a serviceable condition

- *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
- *Citizen Demand*: level of demonstrated citizen support or demand, including support of City boards, committees and commissions
- *Economic Growth*: projects focused on attracting businesses, residents or visitors to the City
- *Protection & Conservation*: improvements to park system or historical landmarks for future generations or reduce environmental impact
- *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
- *Coordination (projects, regulations, City-adopted plans)*: 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
- *Availability of Outside Funding*: projects that are likely to be considered for grant funding or shared cost programs

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.

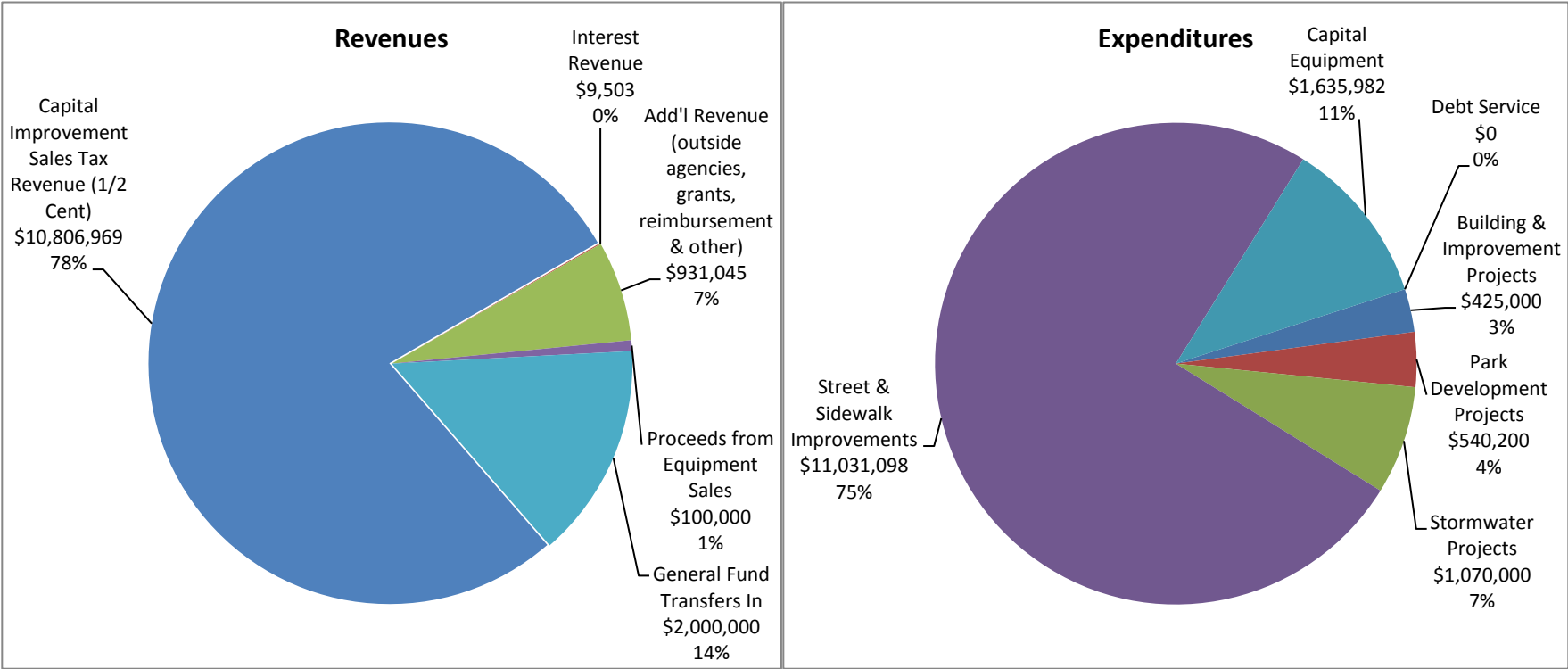
The CIP includes a description of each project with details regarding justification, cost estimate, operating and maintenance budget impact, and funding sources.

2018-2022 CIP Overview

Capital Fund

Over the next five years, the projected revenues for capital projects total approximately \$13.8 million. The 1/2 cent Capital Improvement Sales Tax serves as the primary funding source. 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 \$14.5 million. Several projects in the five-year CIP include grant matches and are noted accordingly on project sheets. If the City receives approval for a specified grant, the total associated expenses and revenues will be reflected in future applicable CIP years.

Capital Fund Revenues and Expenses by Category for FY2018 - FY2022



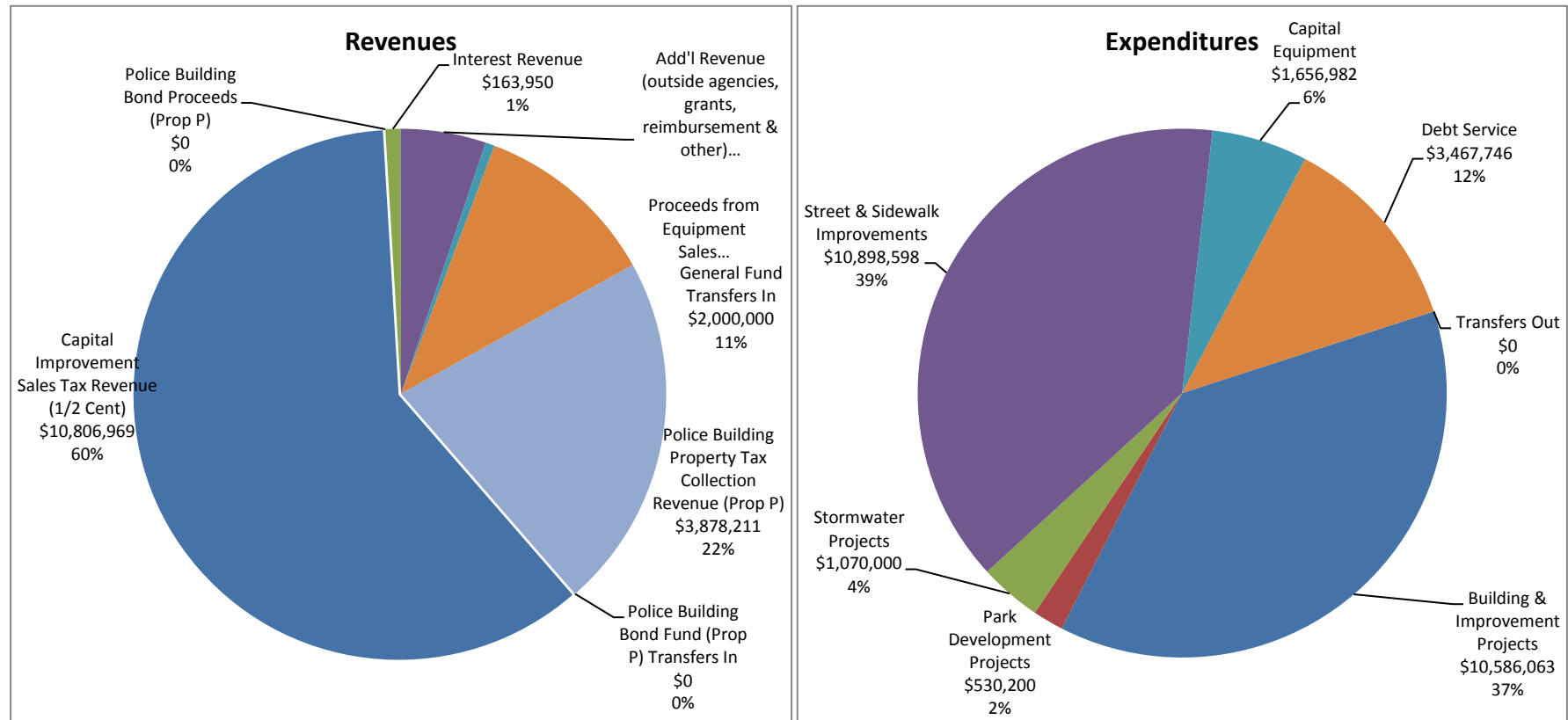
Police Building Fund (Prop P)

On November 8, 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. At this writing, the sale of the bonds and revenue to the City is anticipated to occur in FY17. The expenses for the police station and improvements to the existing government center will occur in FY18-FY22. The debt service for Prop P will be paid through a real estate and personal property tax levy for the next 20 years and is anticipated to sunset in 2037.

Combined Capital Fund and Police Building Fund

Over the next five years, the total projected revenues for capital projects in both the Capital and the Police Building funds are estimated to be approximately \$17.8 million. The 1/2 cent Capital Improvement Sales Tax and the Police Building Property Tax Collection serve as the primary funding sources for FY18-FY22. The total combined projected expenses for capital projects over the next five years is estimated at \$28.2 million.

Combined Capital Fund & Police Building Fund Revenues and Expenses by Category for FY2018 - FY2022



*Bond proceeds for the Police Building Fund are anticipated to occur in FY17 and therefore are not reflected in FY18-FY22 total revenues.

For more information about the CIP, contact Sharon Stott, Assistant to the City Administrator at sscott@crevecoeurmo.gov or (314) 872-2516.

CAPITAL FUND PROJECTS

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2018-2022



CAPITAL FUND**9501 – BUILDING & IMPROVEMENT PROJECTS**

CAPITAL FUND

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM**FISCAL YEARS 2018-2022**

9501 BUILDING & IMPROVEMENT PROJECTS – 02

ACCESSIBILITY IMPROVEMENTS (CDBG)

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$20,000	\$20,000	\$0	\$11,875	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	

Project Description:

In FY2018, approximately \$20,000 of Community Development Block Grant (CDBG) funds have been committed to providing accessibility improvements to the pedestrian signals at two intersections: North New Ballas Road at Studt Avenue and Ladue Road at Spoede Road. This project follows recent efforts to improve pedestrian accessibility along North New Ballas Road and Ladue Road.

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 intersection of North New Ballas Road and Old Ballas Road. Not all of the FY2017 grant was used, because the planned improvements to the intersection of Olive Boulevard and Tempo Drive became a project that was beyond the scope of this grant. The fund balance from FY2017 will be available for work in FY2018.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	20,000
Equipment	\$	
Other	\$	
Annual Total	\$	20,000

9501 BUILDING & IMPROVEMENT PROJECTS - 15

POLICE AND GOVERNMENT CENTER FACILITIES

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$212,605	\$0	\$212,605	\$212,605	\$0	\$0	\$0	\$0	\$0	\$0

Project Description:

This project includes a space-needs analysis and preliminary design for various accessibility, security, aesthetic, and functional improvements throughout the Government Center, including the Police Department, Council Chamber, lobby, community center, storage space, and offices. Designs will include estimates for engineering and construction. These studies resulted in "Proposition P" to fund a new Police Department building that voters approved in November 2016 (FY2017). Improvements associated with Proposition P are included as the "Police Building Project Fund" in the Capital Improvement Plan.

Existing Condition:

The Government Center, which was initially built in the 1940's and was renovated in the late 1980's, is dated and worn. Accessibility, security, functionality, and appearance can be improved throughout the building.

Justification: *Public Safety; Coordination; Operating Efficiency; Condition of Existing Facility*

The project evaluated the condition of the existing Government Center facility, including public safety, accessibility, use of space, functionality, ergonomics, use of technology, aesthetic appeal, and operating efficiency.

Operating Budget Impact:

This project involved studies and designs which have had no impact on the operating budget. However, when that actual construction takes place following the relocation of the Police Department to their new building, these studies will influence improvements that will include energy efficiency elements as well as helping to reduce day-to-day maintenance costs.

Comments:

This project involved the Space Analysis, Needs Assessment, and Preliminary Designs based on those studies. \$120,000 in design funds from FY2017 were spent to hire the Owner's Representative for the Police Building Project. These funds will be refunded to the Capital Fund from the Police Building Project Fund in FY2017.

Expenditure Type:

Planning, Design & Engineering	\$ 212,605
Land Acquisition	\$
Construction	\$
Equipment	\$
Other	\$
Total	\$ 212,605

9501 BUILDING & IMPROVEMENTS - 22

GOVERNMENT CENTER RENOVATIONS (DESIGN)

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$250,000	\$0	\$250,000	\$0	\$0	\$250,000	\$0	\$0	\$0	\$0

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.

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 helpful and useful.

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 as the renovation plans become more clearly defined.

Expenditure Type:

Planning, Design & Engineering	\$ 250,000
Land Acquisition	\$
Construction	\$
Equipment	\$
Other	\$
Total	\$ 250,000

9501 BUILDING & IMPROVEMENTS - 24

POLICE FIRING RANGE IMPROVEMENTS

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$75,000	\$20,000	\$55,000	\$0	\$60,000	\$0	\$0	\$0	\$0	\$0

Project Description:

The project includes the demolition, disposal, and removal of the current target-retrieval system and bullet trap system in the firing range. The project includes the replacement of three (3) shooting lane target retrieval systems, as well as the replacement of the old bullet trap system with a new version. The \$75,000 project cost will be offset with \$20,000 with proceeds from Police Department drug seizures.

Existing Condition:

The existing target retrieval system and the bullet trap system are in need of replacement. The target retrieval system is operated manually, and its design allows it to become inoperable when debris from the range to get stuck inside of it. The bullet trap system accommodates only small arms, and the Police Department needs to use private facilities to train with its rifles.

Justification: *Public Safety, Condition of Existing Facility, Operation Efficiency*

The existing range was purchased in 1974 with a shelf life of 15 years. In 2008, the police department replaced the target retrieval system; however, all other components of the range are original and are in need of updates.

Operating Budget Impact:

Travel time will be reduced for rifle training when officers can train at the Government Center rather than at an off-site range.

Comments:

The improvement of the current range will ensure a more efficient and effective operation for the police firing range. It is also more economically feasible rather than building a new firing range.

Expenditure Type:

Planning, Design & Engineering	\$
Land Acquisition	\$
Construction	\$
Equipment	\$ 75,000
Other	\$
Total	\$ 75,000

CAPITAL FUND**9506 – PARK DEVELOPMENT PROJECTS**

CAPITAL FUND

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM**FISCAL YEARS 2018-2022**

9506 PARK DEVELOPMENT PROJECTS - 01

PARK IMPROVEMENTS (GRANT MATCH)

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
TBD	TBD	\$0	\$0	\$0	\$0	\$0	\$0	\$0	TBD

Project Description:

This project sheet typically represents the City's anticipated matching funds for Municipal Park Grant applications, for which the scope and cost are yet to be determined. The CIP includes specific project descriptions for FY2019 and FY2021 for which the City will pursue these grants. It is anticipated that the grant in FY2019 will be for Ice Arena Refrigerant Switch Over and that the grant in FY2021 will be for updating the Golf Course Irrigation System. See the specific project sheets for more information.

Existing Condition:

None.

Justification: *Availability of Outside Funding; 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).

Operating Budget Impact:

To be determined.

Comments:

The current maximum amount of funding that the City is eligible for through the Municipal Parks 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	\$
Equipment	\$
Other	\$
Total	\$ 0

9506 PARK DEVELOPMENT PROJECTS - 14

ICE ARENA REFRIGERANT SWITCH-OVER (GRANT MATCH)

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	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 to an alternative coolant such as Ammonia or CO₂. The total cost of making this switch over is estimated to be \$550,000. The City Share reflects the remaining \$75,000 if the City is awarded a \$475,000 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. However, 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: *Public Safety; Operating Efficiency; Condition of Existing Facility; Coordination; Availability of Outside Funding; Protection & Conservation*

This project is a result of a public safety issue and will be necessary for the future operation of the ice rink. Under the US 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. This project also directly effects operational efficiency. Starting on January 1, 2020, the US will no longer produce or import R-22; should there be any repair or catastrophic system failure after that date, the City would likely 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 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:

The grant will be applied for in FY2019 and, if approved, the switchover will take place in FY2019.

Expenditure Type:

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

9506 PARK DEVELOPMENT PROJECTS - 15

PLAYGROUND SAFETY SURFACE REPLACEMENT

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$75,000	TBD	\$75,000	\$65,000	\$0	\$0	\$0	\$75,000	\$0	\$0

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.

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 newer playground surface at Millennium Park was repaired in 2016, but it may 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.

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	\$	75,000
Equipment	\$	
Other	\$	
Total	\$	75,000

9506 PARK DEVELOPMENT PROJECTS - 10

GOLF COURSE IRRIGATION SYSTEM REPLACEMENT (GRANT MATCH)

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$25,200	TBD	\$25,200	\$0	\$0	\$0	\$0	\$25,200	\$0	\$0

Project Description:

This project includes replacing the current irrigation system with an updated system that will use less water and allow better control over irrigation. The cost shown above represents a 6% grant match for the anticipated total project cost of \$420,000. 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 current irrigation system is approximately 41 years old. Required repairs have been increasing annually. The current setup is very limited in being able 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 and allow use of less water to achieve the same results, increasing the overall efficiency. Replacement was recommended per the Golf Course Needs Assessment 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 better conserve water resources.

Comments:

The grant will be applied for in FY2021 and, if approved, construction would begin in FY2021. Grant funding will likely be available 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 6% of the project total.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	25,200
Equipment	\$	
Other	\$	
Total	\$	25,200

9506 PARK DEVELOPMENT PROJECTS - 17

PARK BRIDGE REPLACEMENT

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$275,007	\$0	\$275,007	\$75,007	\$200,000	\$0	\$0	\$0	\$0	\$0

Project Description:

This project involves the review of replacement or rehabilitation options for two existing vehicular bridges: the bridge at Malcolm Terrace Park near the end of Townsend Street and the maintenance bridge at the Creve Coeur Golf Course.

Existing Condition:

Both bridges are open to only limited traffic due to their condition. The bridge at Malcolm Terrace Park has significant erosion around its foundation, and the bridge at the Creve Coeur Golf Course is beyond its useful life.

Justification: *Public Safety; Condition of Existing Facility; Operating Efficiency*

Use of these bridges is necessary for the optimal maintenance of the Creve Coeur Golf Course and Malcolm Terrace Park.

Operating Budget Impact:

None.

Comments:

The construction cost is an estimate, as the actual options and requirements for each bridge are not yet fully known.

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. From this review, it appears that the existing bridge can be used in place.

Expenditure Type:

Planning, Design & Engineering	\$ 75,007
Land Acquisition	\$
Construction	\$ 200,000
Equipment	\$
Other	\$
Total	\$ 275,007

9506 PARK DEVELOPMENT PROJECTS – 19

ICE ARENA OFFICE AREA IMPROVEMENTS

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$25,000	\$0	\$25,000	\$0	\$25,000	\$0	\$0	\$0	\$0	\$0

Project Description:

This project involves replacing the office window that has severe water damage and is not energy efficient, replacing the old office carpet, replacing the old florescent light fixtures with LED ones, and replacing the ceiling tile in the Dielmann Recreation Complex Ice Arena office area.

Existing Condition:

The window's wood frame is deteriorating and is now allowing water to penetrate to the inside. The office carpet is soiled and failing in several places. The light fixture ballasts are starting to fail and do not provide even light, and the ceiling tiles are stained and failing.

Justification: *Protection & Conservation; Beautification*

Minor repairs have been done to the window over the past few years, but are becoming ineffective. The new window will be aluminum, not wood, which will hold up the weather better and will be energy efficient. The carpet will be replaced with the same carpet added to Dielmann West meeting room during the renovation project in FY2015, along with the same LED light fixtures and ceiling tile from that renovation.

Operating Budget Impact:

The window in the ice rink office area forms most of one of the walls there, and replacing it should improve the energy efficiency of that space. In addition, the LED lights should decrease the amount of electricity used. A more energy-efficient office should have lower energy bills.

Comments:

None.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	25,000
Equipment	\$	
Other	\$	
Total	\$	25,000

9506 PARK DEVELOPMENT PROJECTS – 20

HISTORIC BUILDING REHABILITATION AND PRESERVATION

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$30,000	\$0	\$30,000	\$0	\$30,000	\$0	\$0	\$0	\$0	UNKNOWN

Project Description:

This project involves an architectural assessment of the current conditions of several historic buildings in the City's parks, as well as recommendations and design specifications for improving and maintaining these buildings in a historically conscious manner.

Existing Condition:

Two historic log cabins are located in Conway Park, and a historic school house is located at Lake School Park. All three of these buildings are in need of interior and exterior repairs in order to preserve them from the elements, animals, and time. Tours that once passed through these buildings have been halted due to structural concerns.

Justification: *Protection & Conservation; Beautification*

These buildings were placed in the City's parks and are displayed on the City's website to foster an appreciation of the history in Creve Coeur. Specialized attention is required for these buildings to be maintained as local historical locations.

Operating Budget Impact:

Maintenance of the Conway Park cabins and the Lake School house has become increasingly difficult and costly over the past few years. The structural and deterioration issues facing these buildings has progressed beyond routine maintenance activities that staff are capable of performing.

Comments:

This assessment is intended to provide the City with reliable estimates for maintenance and improvements to these structures. Staff anticipates that the costs of such work will be expensive due to the historic nature of the buildings.

Expenditure Type:

Planning, Design & Engineering	\$ 30,000
Land Acquisition	\$
Construction	\$
Equipment	\$
Other	\$
Total	\$ 30,000

9506 PARK DEVELOPMENT PROJECTS – 21

TENNIS COURT REPAIRS

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$135,000	\$0	\$135,000	\$0	\$50,000	\$0	\$0	\$35,000	\$0	\$50,000

Project Description:

This project involves the 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 are planned for the courts at Bierne Park in FY2018, Conway Park in FY2021, and Lake School Park in FY2023 (future).

Existing Condition:

The tennis courts are in various states, depending on their age, but three locations have cracks and other deterioration that require repairs. The courts at Bierne Park have begun to ravel, making the surface uneven. The courts at Conway Park have held up well to recent park improvements, but these courts are in need of rejuvenation. The courts at Lake School Park are the City's newest, having been resurfaced in FY2010, but even these courts have begun to crack. While cracks have been sealed and patches installed on the courts, these repairs are only temporary fixes.

Justification: *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 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.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	135,000
Equipment	\$	
Other	\$	
Total	\$	135,000

9506 PARK DEVELOPMENT PROJECTS – 22

PARK TRAIL IMPROVEMENTS (GRANT MATCH)

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	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 Bierne 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 Bierne 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:

None.

Comments:

The Recreational Trails Program provides up to 80% reimbursement of construction costs for projects totaling up to \$125,000. The City will apply for the Recreational Trails Program grant in FY2017. Should a grant be awarded for this project, the City would have three years to complete the project. Construction would be expected in FY2019.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	15,000
Equipment	\$	
Other	\$	
Total (City Share)	\$	15,000

CAPITAL FUND**9509 – STORMWATER PROJECTS**

CAPITAL FUND

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM**FISCAL YEARS 2018-2022**

9509 STORMWATER PROJECTS - 01

STORMWATER IMPROVEMENTS PER MASTER PLAN

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$0	\$0	\$0	\$92,836	\$0	\$0	\$150,000	\$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.

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

Expenditure Type:

Planning, Design & Engineering	\$ 50,000
Land Acquisition	\$
Construction	\$ 100,000
Equipment	\$
Other	\$
Annual Total (FY20 & FY22): <i>(see comments)</i>	\$ 150,000

9509 STORMWATER PROJECTS - 04

MIDDLEBROOK DRIVE STORMWATER IMPROVEMENTS

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$291,075	\$0	\$291,075	\$41,075	\$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 creekside 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 is expected to last only 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 scheduled for 2017 (FY2018) to allow adequate time for MSD to complete its project. This project replaces the FY2018 Stormwater Master Plan project.

Expenditure Type:

Planning, Design & Engineering	\$ 10,000
Land Acquisition	\$
Construction	\$ 250,000
Equipment	\$
Other (Design FY2013)	\$ 31,075
Total	\$ 291,075

9509 STORMWATER PROJECTS - 10

GOLF COURSE DAM STABILIZATION & POND SILTATION REMOVAL/CONTROL (PHASE 2)

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs (Phases 1, 2 and Future)						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$765,874	\$0	\$765,874	\$245,874	\$70,000	\$450,000	\$0	\$0	\$0	\$1,200,000

Project Description:

The Phase 2 project involves design and construction for the removal of existing silt from the northern-most lake at the Creve Coeur Golf Course, repairs to the stone wall lining the lake, and for a built-in system to capture future silt so that it can be more easily maintained. This system could be the conversion of the north lake into a fore bay, the introduction of a mechanical silt/water separator, or some other appropriate means.

Existing Condition:

All of the drainage from the Creve Coeur Executive Office Park flows through the lakes at the Creve Coeur Golf Course. Silt and other debris from this drainage area gradually deposits in the golf course lakes. The lakes are currently becoming too shallow to be considered healthy ponds. The result is a series of lakes with green algae during the summer when the course is at its peak use.

Justification: *Condition of Existing Facility; Beautification*

Removal of silt from the lakes is disruptive and damaging to the golf course and is expensive to undertake. Providing a more convenient location for the silt to collect will make it easier to remove and will help keep the lakes deeper and healthier.

Operating Budget Impact:

Controlling siltation through regular maintenance will be expensive, perhaps as much as \$5,000-\$10,000 per year. The alternative to this annual cost would be a silt-removal project every 10-20 years that would cost at least \$100,000 per lake.

Comments:

Phase 1 of this project was completed in FY2017 and involved the fortification and partial reconstruction of the dam at the south end of the lake system, including silt removal from the adjacent lake. Additional improvements not included in the five-year Capital Improvement Plan have been identified and are included in Future Projects for improvements to lakes and drainage channels at the Creve Coeur Golf Course (see specific project description for details).

Expenditure Type:

Planning & Design	\$ 70,000
Land Acquisition	\$
Construction	\$ 450,000
Equipment	\$
Other	\$
Total (FY2018-2019)	\$ 520,000

CAPITAL FUND**9510 – STREET & SIDEWALK IMPROVEMENTS**

CAPITAL FUND

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM**FISCAL YEARS 2018-2022**

9510 STREET & SIDEWALK IMPROVEMENTS - 01

STREET AND SIDEWALK MAINTENANCE PROGRAM

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$1,125,000	\$0	\$1,125,000	\$1,518,000	\$1,125,000	\$1,313,250	\$1,352,648	\$1,393,200	\$1,435,000	\$0

Project Description:

The project includes concrete pavement replacement, asphalt pavement resurfacing, asphalt pavement maintenance, and sidewalk replacement for subdivision streets throughout the City.

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. Specific projects, such as grant-funded improvements, are specifically described in separate project sheets. Additional funds have been requested to substantially increase the scope of the micro-surfacing program so that a standard rotation of streets can be established. \$150,000 in funds that were planned for FY2018 were moved to FY2017 to finish work in a subdivision in fewer seasons than if the funds remained in separate fiscal years.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	1,125,000
Equipment	\$	
Other	\$	
Total (FY2018)	\$	1,125,000

9510 STREET & SIDEWALK IMPROVEMENTS - 02

STREET RECONSTRUCTION

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$300,000	\$0	\$300,000	\$326,261	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$0

Project Description:

The City plans to fully 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. This evaluation was supported by an independent review and recommendation for the priority of repairs in FY2017.

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.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	300,000
Equipment	\$	
Other	\$	
Annual Total (FY2018-FY2022)	\$	300,000

Street Reconstruction Candidate Examples
(in Alphabetical Order)

Street Name	Pavement Condition Index (0 – 100)
Country Fair Lane (Interior Loop)	52
Ladue Estates Drive	40
Ladue Estates Drive East	56
Ladue Estates Drive South	45
Ladue Estates Drive West	63
Magna Carta Drive	58
Sackston Woods Drive	48
Sherwyn Drive	55
Winrock Drive	58

9510 STREET & SIDEWALK IMPROVEMENTS - 20

COEUR DE VILLE DRIVE IMPROVEMENTS

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$816,641	\$419,533	\$397,108	\$746,641	\$20,000	\$50,000	\$0	\$0	\$0	\$0

Project Description:

The project involves rehabilitating Coeur de Ville Drive between Royal Valley Drive and Lake School Park, as well as updating the existing sidewalk from Olive Boulevard to Ladue Road and decorative plantings near Ladue Road. The City was awarded a federal grant to improve Coeur de Ville Drive that will provide up to \$419,533 of assistance for the design and construction of the project. As part of the conditions of this grant, the City needs to extend the project to design and construct sidewalk improvements for portions of Coeur de Ville that were not included in the original project.

Existing Condition:

The City owns and maintains the portion of Coeur de Ville Drive from the entrance to Parc Provence to Royal Valley Drive, and the original project focused on this area. The City learned that it would be responsible for upgrades to sidewalks within the MoDOT section of Coeur de Ville Drive that are outside of pedestrian accessibility standards in the running slope of the sidewalk.

Justification: *Public Safety; Condition of Existing Facility; Availability of Outside Funding; Beautification; Citizen Demand*

The pavement rehabilitation provided a new driving surface, improve drainage, and slightly improved the alignment of the street. The sidewalk design and construction proposed for FY2018 and FY2019 will bring the City within better compliance with the applicable pedestrian accessibility standards.

Operating Budget Impact:

None.

Comments:

The Missouri Department of Transportation owns and maintains much of Coeur de Ville Drive, namely the section between Ladue Road and Royal Valley Drive and the section between Parc Provence and Olive Boulevard.

Expenditure Type:

Planning, Design & Engineering	\$ 96,641
Land Acquisition	\$
Construction	\$ 720,000
Equipment	\$
Other	\$
Total	\$ 816,641

9510 STREET & SIDEWALK IMPROVEMENTS - 21

WARSON ROAD IMPROVEMENT PROJECT

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$675,194	\$428,800	\$246,394	\$87,194	\$588,000	\$0	\$0	\$0	\$0	\$0

Project Description:

The project involves Warson Road from Olive Boulevard to the City limit near Countryshire Place, and the work will include roadway resurfacing and sidewalk accessibility improvements. The City was awarded a federal grant to assist up to \$428,800 of the design and construction costs for this project, which represents 64% of the estimated total cost of \$675,194. The City's share is estimated to be \$246,394 of these costs.

Existing Condition:

The existing roadway pavement has deteriorated and is in need of resurfacing. The sidewalks along Warson Road typically appear to be in good condition, but replacement of the sidewalk is recommended to address accessibility shortcomings. Warson Road was found to have an average pavement condition index (PCI) of 43 in 2016, which indicates that the pavement should be resurfaced within the next few years in order to avoid the need for more extensive repairs, such as replacement.

Justification: *Public Safety; Condition of Existing Facility; Availability of Outside Funding*

The asphalt resurfacing and replacement of sidewalk, curb, and gutter will help eliminate deteriorated and failed areas and will provide a better, safer, and more accessible roadway and sidewalk. Resurfacing the pavement will protect the roadway base and will help control future maintenance expenses for Warson Road.

Operating Budget Impact:

The project will reduce future maintenance expensed by preserving and/or replacing the existing deteriorated infrastructure.

Comments:

Design for the project began in FY2016 and may continue through FY2017. Land Acquisition costs include the title work, appraisals, and estimated compensation for the easements needed for the project. Staff expects that construction for the project will begin in the spring of 2018 (FY2018).

Expenditure Type:

Planning, Design & Engineering	\$ 77,194
Land Acquisition	\$ 10,000
Construction	\$ 588,000
Equipment	\$
Other	\$
Total	\$ 675,194

9510 STREET & SIDEWALK IMPROVEMENTS - 26

EMERSON ROAD IMPROVEMENT PROJECT

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$657,000	\$444,000	\$213,000	\$0	\$65,000	\$0	\$592,000	\$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 DeSmet Jesuit High School. In FY2016, the City was awarded a federal grant that will fund up to \$444,000 of the construction costs for the project.

Existing Condition:

The existing roadway pavement is in marginal condition: its edges are deteriorating, a retaining wall supporting the street is in poor condition, 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 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 DeSmet 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 DeSmet Jesuit High School.

Expenditure Type:

Planning, Design & Engineering	\$ 65,000
Land Acquisition	\$
Construction	\$ 592,000
Equipment	\$
Other	\$
Total	\$ 657,000

9510 STREET & SIDEWALK IMPROVEMENTS - 27

MOSLEY ROAD IMPROVEMENT PROJECT – PHASES 1 AND 2 (DESIGN AND GRANT MATCH) CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs (Phases 1 and 2)						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$713,768	TBD	\$713,768	\$86,768	\$0	\$150,000	\$50,000	\$193,000	\$234,000	\$0

Project Description:

The project includes completing the design for Mosley Road, acquiring the necessary easements, and construction of the roadway improvements in a two-phase project. The roadway work will include minor widening, slight vertical and horizontal alignment changes where necessary, stormwater improvements, sidewalk accessibility improvements, and pavement resurfacing. The City share shown reflects a grant match of about 35% of the anticipated \$1,302,000 cost for construction and easements, plus 100% of the design cost. The total project cost is estimated to be \$1,477,000.

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 Existing 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 study completed in FY2015 for Mosley Road also found several areas where the vertical or horizontal alignment does not meet design standards.

Operating Budget Impact:

The City completes significant pavement patching along Mosley Road on a nearly annual basis. Completing this project would eliminate this need and expense.

Comments:

A conceptual design for Mosley Road was completed for \$86,768 in FY2014-FY2016. Staff applied for a federal grant in FY2017 to assist with the costs for phase 1 of the Mosley Road improvements. This project will be phased into two projects in order to be more favorably considered for this grant.

Expenditure Type:

Planning, Design & Engineering	\$ 261,768
Land Acquisition	\$ 50,000
Construction	\$ 402,000
Equipment	\$
Other	\$
Total (Grant Match + Design)	\$ 713,768

9510 STREET & SIDEWALK IMPROVEMENTS - 28

NEW BALLAS ROAD IMPROVEMENT PROJECT – PHASES 1 - 3 (DESIGN & GRANT MATCH) CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs (Phases 1, 2, 3 & Future)						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$1,300,000	TBD	\$1,300,000	\$0	\$0	\$0	\$250,000	\$25,000	\$330,000	\$695,000

Phase 1 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. The construction for this project would be the first phase of three, with the ultimate limits of work extending to Olive Boulevard. Phase 1 includes design for all three phases. The City applied for federal grant assistance for this project in FY2015, but the application was unsuccessful. The maximum grant amount for Phase 1 is approximately \$750,000. The grant match for Phase 1 (\$550,000) includes 100% of the design and about 30% of the construction cost. 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. Much of the existing sidewalk falls 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 a good candidate for pavement preservation, such as the proposed thin overlay.

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:

Applications will be made for federal grants for Phase 2 (Ladue Road to Magna Carta Drive) and Phase 3 (Magna Carta Drive to Olive Boulevard) if the City is awarded a grant for Phase 1.

Continued – Phase 2 next page...

Phase 1 Expenditure Type:

Planning & Design (FY2020)	\$ 250,000
Land Acquisition	\$
Construction (FY2022)	\$ 300,000
Equipment	\$
Other	\$
Phase 1 Total FY2020 & FY2022 (Grant Match)	\$ 550,000

9510 STREET & SIDEWALK IMPROVEMENTS – 28 (CONTINUED)

NEW BALLAS ROAD IMPROVEMENT PROJECT – PHASES 1 - 3 (DESIGN & GRANT MATCH) CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs (Phases 1, 2, 3 & Future)						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$1,300,000	TBD	\$1,300,000	\$0	\$0	\$0	\$250,000	\$25,000	\$330,000	\$695,000

Continued from previous page...**Phase 2 Project Description:**

The project includes pavement resurfacing, concrete curb and sidewalk replacement, traffic signal painting, illuminated street name signs, and accessibility improvements along New Ballas Road from Ladue Road to Magna Carta Drive. Staff plans to apply for federal grant assistance for this project in FY2019. The maximum grant amount for New Ballas Road is approximately \$750,000. The grant match for Phase 2 includes 100% of the design update and permitting and about 30% of the construction cost. 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:

The asphalt pavement 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 68 in 2016, which indicates that the pavement is generally in “good” condition and that is a good candidate for pavement preservation, such as a thin overlay or resurfacing.

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:

Design for the Phase 2 improvements will be completed as part of Phase 1, if the City is awarded a federal grant for Phase 1. An application a federal grant for the Phase 3 (Magna Carta Drive to Olive Boulevard) improvements is anticipated for early 2020. **Continued – Phase 3 next page...**

Phase 2 Expenditure Type:

Planning & Design (FY2021)	\$ 25,000
Land Acquisition	\$
Construction (Future - FY2023)	\$ 330,000
Equipment	\$
Other	\$
Phase 2 Total FY2021 & FY2023 (Grant Match)	\$ 355,000

9510 STREET & SIDEWALK IMPROVEMENTS – 28 (CONTINUED)
NEW BALLAS ROAD IMPROVEMENT PROJECT – PHASES 1 - 3 (DESIGN & GRANT MATCH) CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs (Phases 1, 2, 3 & Future)						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$1,300,000	TBD	\$1,300,000	\$0	\$0	\$0	\$250,000	\$25,000	\$330,000	\$695,000

Continued from previous page...

Phase 3 Project Description:

The project includes pavement resurfacing, concrete curb and sidewalk replacement, traffic signal painting, illuminated street name signs, and accessibility improvements along New Ballas Road from Magna Carta Drive to Olive Boulevard. Construction for this project would be the third and final phase, with the ultimate limits of work extending from Conway Road to Olive Boulevard. Staff plans to apply for federal grant assistance for this project in FY2020. It appears that the maximum grant amount for New Ballas Road is approximately \$750,000. Phase 3 grant match includes 100% of the design update and about 33% of the construction cost. 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 is generally in “very good” condition and that is a good candidate for pavement preservation, such as the proposed thin overlay or resurfacing.

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 be completed as part of Phase 1, if the City is awarded a federal grant for Phase 1.

Phase 3 Expenditure Type:

Planning & Design (FY2022)	\$ 30,000
Land Acquisition	\$
Construction (FY2024)	\$ 365,000
Equipment	\$
Other	\$
Phase 3 Total FY2022 & FY2024 (Grant Match)	\$ 395,000

9510 STREET & SIDEWALK IMPROVEMENTS - 31

FERNVIEW DRIVE RESURFACING (DESIGN AND GRANT MATCH)

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$115,000	TBD	\$115,000	\$0	\$0	\$50,000	\$0	\$65,000	\$0	\$0

Project Description:

This project involves asphalt pavement resurfacing along Fernview Drive from Gallagher Road to Olive Boulevard. The City share represents approximately 30% of the design and construction phases for what is anticipated to be a \$365,000 project. The full project cost will be included in the appropriate fiscal years if the City successfully obtains a grant for this work.

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 will eventually be necessary to maintain the pavement along Fernview Drive. Fernview is used by about 4,300 vehicles per day, making it one of the most heavily traveled City streets.

Operating Budget Impact:

The project would result in less need for City staff to patch Fernview Drive. Maintenance expenses are expected to be minimal.

Comments:

Fernview Drive qualifies for federal grant assistance, and the City will make an application for a grant for this project in FY2017. Staff estimates that the City could receive up to 70% reimbursement for costs related to this project if such a grant were awarded. 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	\$ 50,000
Land Acquisition	\$
Construction	\$ 65,000
Equipment	\$
Other	\$
Total (Grant Match)	\$ 115,000

9510 STREET & SIDEWALK IMPROVEMENTS – 30

NORTH NEW BALLAS ROAD SIDEWALK PHASE 2A (DESIGN & GRANT MATCH)

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$98,169	TBD	\$98,169	\$20,669	\$25,000	\$52,500	\$0	\$0	\$0	\$0

Project Description:

This project involves the design and construction of a sidewalk along the west side of North New Ballas Road from Ladue Road to DeSmet Jesuit High School. This project is a portion of the larger effort to create continuous sidewalks along both sides of North New Ballas Road from Ladue Road to Olive Boulevard.

Staff plans to apply for a federal Transportation Alternatives Program (TAP) grant to fund 70% of the easement acquisition and construction costs of the project. The full project cost will be included in the appropriate fiscal years if the City successfully obtains a grant for this work.

Existing Condition:

No sidewalk currently exists along the west side of North New Ballas Road from Ladue Road to DeSmet Jesuit High School. Four homes along North New Ballas Road, Santino Court, and the Emerald Green subdivision have no access to pedestrian facilities on 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. North 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.

Expenditure Type:

Planning, Design & Engineering	\$	30,669
Land Acquisition	\$	15,000
Construction	\$	52,500
Equipment	\$	
Other	\$	
Total (Design & Grant Match)	\$	98,169

9510 STREET & SIDEWALK IMPROVEMENTS – 31

CRAIG ROAD CONCEPT IMPROVEMENT PLAN

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$40,000	\$0	\$40,000	\$0	\$40,000	\$0	\$0	\$0	\$0	\$0

Project Description:

The project involves engineering design services to develop concept-level improvement plans for Craig Road between Olde Cabin Road and Olive Boulevard. Such plans allow the City to better understand its options for roadway and sidewalk improvements and provide a firm basis for pursuing federal grant assistance for those improvements.

Existing Condition:

Craig Road is currently in fair condition, but its traffic flow is hampered by non-standard intersections with Olde Cabin Road and Office Parkway.

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:

None.

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 plan.

Expenditure Type:

Planning, Design & Engineering	\$ 40,000
Land Acquisition	\$
Construction	\$
Equipment	\$
Other	\$
Total	\$ 40,000

CAPITAL FUND**9516 – CAPITAL EQUIPMENT**

CAPITAL FUND

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM**FISCAL YEARS 2018-2022**

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 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$328,638	\$0	\$328,638	\$235,000	\$328,638	\$279,186	\$279,695	\$354,821	\$258,642	\$0

Project Description:

City equipment costing greater than \$20,000 and having a useful life of at least five years based on replacement schedule. All Public works equipment listed below is for the replacement of existing equipment that is at least 10 years old.

Existing Condition:

Equipment has reached the end of its useful 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 our 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 result in significant increases in repair bills not to mention 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 FY2018 as replacements for older equipment:

- Two-ton Dump Truck with Plow and Spreader\$ 125,000
- One-ton Dump Truck with Plow and Spreader\$ 83,842
- Skid Steer.....\$ 65,000
- Leaf Vacuum (Diesel Powered)\$ 54,796
- \$ 328,638**

Public Works staff plans to trade-in or sell the replaced equipment at auction after the new replacements arrive. 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	\$ 328,638
Other	\$
Total	\$ 328,638

9516 CAPITAL EQUIPMENT - 03

ICE RESURFACING VEHICLE REPLACEMENT

CAPITAL FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$156,000	\$0	\$156,000	\$0	\$156,000	\$0	\$0	\$0	\$0	\$0

Project Description:

This project involves purchasing a new electric ice-resurfacing vehicle to replace the current propane 2003 Olympia Ice Resurfacer.

Existing Condition:

The current Olympia vehicle is about 14 years old, and replacement is recommended for FY18. The actual usage is figured in hours with each hour equating to about 35 miles. The current machine has 5,776 hours (210,000 miles) with an average of approximately 450 hours per year. The life of this machine is expected to be 12 to 14 years.

Justification: *Condition of existing facility; Operating efficiency; Protection and Conservation*

Without a properly functioning ice resurfacer, operations at the ice arena would have to be suspended. This is critical, because the ice is used daily throughout the entire year, and there is little to no time available for extensive repairs. The City collects about \$15,000 in ice rental fees in a typical week. An electric resurfacer is proposed because it would produce zero emissions, which is important in an indoor facility. The proposed electric resurfacer is projected to have the same operational and equipment costs over its life as a new propane resurfacer would.

Operating Budget Impact:

Maintenance and repair costs are approximately \$2,000/annually; however, as a unit ages, its cost of maintenance can substantially increase. A new ice resurfacer would be expected to have minimal initial maintenance.

Comments:

The current Olympia resurfacer will become the back-up resurfacer for use in emergencies, replacing the current back-up resurfacer that is a 1970's model that few know how to operate.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	
Equipment	\$	156,000
Other	\$	
Total	\$	156,000

CAPITAL FUND**FUTURE PROJECTS**

CAPITAL FUND

CAPITAL IMPROVEMENT PROGRAM**FISCAL YEARS UNKNOWN**

FUTURE PROJECTS LIST

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 world 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 PROJECTS LIST

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

FUTURE PROJECT LIST

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 include 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, 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 FY2018-FY2022.

Operating Budget Impact:

TBD

Comments:

CIP grant matches for FY2018-FY2022 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

FUTURE PROJECT LIST

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

FUTURE PROJECT LIST

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
\$700,000	TBD	TBD	\$0	\$0	\$0	\$0	\$0	\$0	\$700,000

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	\$ 100,000
Land Acquisition	\$ 100,000
Construction	\$ 500,000
Equipment	\$
Other	\$
Total	\$ 700,000

FUTURE PROJECT LIST

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

FUTURE PROJECT LIST

FUTURE PROJECT: GOLF COURSE STORMWATER SYSTEM 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
\$1,200,000	\$0	\$1,200,000	\$0	\$0	\$0	\$0	\$0	\$0	\$1,200,000

Project Description:

The scope of this project includes those improvements to the lakes and drainage channels at the Creve Coeur Golf Course that have been identified but not included in the five-year CIP projections. Future projects include: dam replacement, south channel improvements, silt removal of the center two 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 has failed, and the lakes have accumulated silt and 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:

Significant improvements are proposed for the lake system in FY2017-FY2019, including a stabilization repair for the dam, silt removal from the southern-most and northern-most lakes, fore bay system for the north pond, and repairs to the stone retaining wall at the north pond.

Expenditure Type:

Planning, Design & Engineering	\$ 100,000
Land Acquisition	\$
Construction	\$ 1,100,000
Equipment	\$
Other	\$
Total	\$ 1,200,000

FUTURE PROJECT LIST

FUTURE PROJECT: HIBLER ROAD RECONSTRUCTION – EAST OF FALAISE

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
\$800,000	\$0	\$800,000	\$0	\$0	\$0	\$0	\$0	\$0	\$800,000

Project Description:

The scope of this project involves the realignment of the vertical profile of the street, roadway widening, sidewalk construction, and curb installation. New stormwater facilities and utility relocation would be required to accommodate improvements.

Existing Condition:

This section of Hibler Road is a narrow, two-lane asphalt road with small ditches along each side for drainage. On each side of the road, there are trees immediately adjacent to the pavement that form a small wooded area of common ground for neighboring subdivisions.

Justification: *Public Safety; Condition of Existing Facility*

Reconstructing this section of road would improve the pavement condition and improve safety by increasing sight distance at the hills, removing trees, widening the road, installing curbs, and adding pedestrian access. Hibler Road is identified as a “third priority” in the Creve Coeur Pedestrian Plan.

Operating Budget Impact:

Minimal impact to the operating budget is anticipated for the roadway, but ongoing maintenance of features to clean stormwater runoff may be necessary. The costs associated with this maintenance will depend upon the type and scope of the water-quality infrastructure that is required.

Comments:

The City will be required to include water-quality infrastructure into the project due to the roadway reconstruction and the addition of curbing and stormwater facilities. Additional right of way and utility relocation appear to be necessary for any widening east of Hibler Oaks Drive.

Expenditure Type:

Planning, Design & Engineering	\$	100,000
Land Acquisition	\$	200,000
Construction	\$	500,000
Equipment	\$	
Other	\$	
Total	\$	800,000

FUTURE PROJECT LIST

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

FUTURE PROJECT LIST

FUTURE PROJECT: LINDBERGH PEDESTRIAN BRIDGE/LIGHT INDUSTRIAL DISTRICT STREETScape 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
>3,000,000	TBD	TBD	\$0	\$0	\$0	\$0	\$0	\$0	>\$3,000,000

Project Description:

A pedestrian bridge is contemplated over Lindbergh Boulevard to link the plant science and light industrial areas to the services west of Lindbergh Boulevard. Sidewalks, street lights, and new road surfaces are also needed.

Existing Condition:

There is currently no pedestrian connection across the interchange of Olive Boulevard and Lindbergh Boulevard. The road surfaces are severely broken in many locations and the street lights are present only in limited locations.

Justification: *Beautification; Citizen Demand; Condition of Existing Facility; Availability of Outside Funding*

There is increasing development pressure on the "LI" Light Industrial District to convert properties to high-tech. This area promises to be a significant benefit to community identity and economic development; however, the current conditions are not attractive to these uses. Proposed improvements are supported by the 2002 Comprehensive Plan. The sidewalk bridge would connect the sidewalks on Olive Boulevard on either side of the Lindbergh Boulevard interchange. The Creve Coeur Pedestrian Plan lists sidewalks along Olive Boulevard are listed as "first priority" and sidewalks along Old Olive Street Road and Lindbergh Boulevard as "second priority."

Operating Budget Impact:

The City will be required to maintain any decorative and/or non-standard facilities that are installed within the Olive Boulevard, Old Olive Street Road, and Lindbergh Boulevard rights of way.

Comments:

The Missouri Department of Transportation (MoDOT) owns and operates Olive Boulevard, Old Olive Street Road, and Lindbergh Boulevard. MoDOT would require the City enter into a maintenance agreement for any decorative and/or non-standard items. This project requires MoDOT approval and permitting. Grant funding is available for this sort of a project, but the City would likely need to contribute more than 50% of the cost in order to receive a grant.

Expenditure Type:

Planning, Design & Engineering	\$
Land Acquisition	\$
Construction	\$
Equipment	\$
Other	\$
Total	\$ >3,000,000

FUTURE PROJECT LIST

FUTURE PROJECT: LINDBERGH STREETScape ENHANCEMENT PROJECT

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
\$1,600,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,600,000

Project Description:

This project would aim to improve the appearance of the Lindbergh Boulevard corridor with a variety of street-enhancement elements, such as: landscape beds and tree plantings at the Olive/Lindbergh interchange, sandblasting old paint off the concrete median and applying stain, painting the signal mast arms and overhead signs black, and installing illuminated street name signs. These efforts would likely be in conjunction with the envisioned "39 North" plant science district.

Existing Condition:

For the most part, Lindbergh Boulevard is a four-lane road with a concrete barrier as a median between the northbound and southbound lanes. The traffic signals are old and either galvanized or painted yellow. There is an asphalt pedestrian path on each side of the road in the shoulder area.

Justification: *Beautification, Citizen Demand; Economic Growth*

Lindbergh Boulevard is one of the principal corridors near the eastern city limits of Creve Coeur. Streetscape enhancements may be helpful in attracting businesses and/or visitors to the city and the project has been recommended by some citizens. Proposed improvements are part of the 2003 Lindbergh Streetscape Master Plan.

Operating Budget Impact:

Depending on whether irrigation is included as part of this project, and the amount of landscaping that is installed, annual maintenance costs could be significant. The City would need to pay ongoing electrical expenses for any lighting that is installed, as well as maintenance costs for any decorative or non-standard items.

Comments:

City staff will continue to pursue grants and partnerships to assist with the cost to construct some or all of the designed improvements. The Missouri Department of Transportation (MoDOT) owns and operates Lindbergh 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	\$ 100,000
Land Acquisition	\$
Construction	\$ 1,500,000
Equipment	\$
Other	\$
Total	\$ 1,600,000

FUTURE PROJECT LIST

FUTURE PROJECT: MASON ROAD SIDEWALK INFILL (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
\$460,000	TBD	\$460,000	\$0	\$0	\$0	\$0	\$0	\$0	\$450,000

Project Description:

The project involves the City's participation in a joint, four-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 \$450,000 represents the estimated Creve Coeur portion of the grant match for a St. Louis County 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 a federal grant for the various phases of the project.

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. The City may become involved in three of the four phases of the Mason Road pedestrian improvements. 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 Transportation Alternatives Program. This program is available only when funding allows.

Expenditure Type:

Planning, Design & Engineering	\$ 10,000
Land Acquisition	\$
Construction	\$ 450,000
Equipment	\$
Other	\$
Total (Grant Match)	\$ 460,000

FUTURE PROJECT LIST

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
\$75,000	\$0	\$75,000	\$0	\$0	\$0	\$0	\$0	\$0	\$75,000

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	\$ 5,000
Land Acquisition	\$
Construction	\$
Equipment	\$ 70,000
Other	\$
Total	\$ 75,000

FUTURE PROJECT LIST

FUTURE PROJECT: OFFICE PARK SIDEWALK IMPROVEMENTS (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
\$335,000	TBD	\$335,000	\$0	\$0	\$0	\$0	\$0	\$0	\$335,000

Project Description:

The project will involve sidewalk and curb replacement along Olde Cabin Road, Office Parkway, and Craig Road within the Creve Coeur Executive Office Park. The new sidewalk would be increased to six feet wide to be consistent with the Creve Coeur Pedestrian Plan and would include sidewalk lighting. The City intends to pursue a federal Transportation Alternatives Program grant for this project. The amounts shown represent the City's portion of the project, which are anticipated to be approximately 35% of the total project cost. The actual costs of the project will be included in future years if the grant is awarded.

Existing Condition:

The sidewalks within the Office Park are generally structurally sound, but these sidewalks are not technically accessible and are not as would be required by the City's current sidewalk standards. Few pedestrian crossings exist in this area.

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 any further roadway improvements to the streets in the Office Park would require that the City address the accessibility issues along the sidewalks at the same time. 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:

These sidewalk improvements qualify for federal grant assistance, but an application failed in FY2016. Staff estimates that this project would qualify for approximately \$500,000 - \$600,000 in grant assistance.

Expenditure Type:

Planning, Design & Engineering	\$ 75,000
Land Acquisition	\$ 20,000
Construction	\$ 240,000
Equipment	\$
Other	\$
Total (Design + Grant Match)	\$ 335,000

FUTURE PROJECT LIST

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
\$1,750,000	TBD	TBD	\$0	\$0	\$0	\$0	\$0	\$0	\$1,750,000

Project Description:

This project will improve the geometry of the intersection by re-aligning lanes and extending right turn lanes. As an additional improvement, the existing traffic signals will be replaced with new black powder-coated posts and mast arms, and updated pedestrian signals.

Existing Condition:

The New Ballas Road lane alignment is offset between the north and south sides of Olive Boulevard. The traffic signal equipment is getting older and will soon require replacement. 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 equipment is outdated and 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	\$ 50,000
Construction	\$ 1,500,000
Equipment	\$
Other	\$
Total	\$ 1,750,000

FUTURE PROJECT LIST

FUTURE PROJECT: NEW BALLAS ROAD SIDEWALK PHASE II

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
\$340,000	TBD	TBD	\$0	\$0	\$0	\$0	\$0	\$0	\$340,000

Project Description:

This project is designed to fill in gaps in the pedestrian network on the west side of New Ballas Road from Rocky Road to Ladue Road.

Existing Condition:

The sidewalk on the west side of New Ballas Road has number of gaps between Rocky Drive and Ladue Road. The City and DeSmet Jesuit High School constructed a sidewalk along the Post Office frontage and across DeSmet frontage. No sidewalk exists between Rocky Drive and the Post Office and from Emerald Green south to Ladue 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.

Phase "2A" is included as a design and grant application in FY2017. If successful, this project would involve creating a portion of this sidewalk from Ladue Road to the existing sidewalk at DeSmet High School.

Expenditure Type:

Planning, Design & Engineering	\$	40,000
Land Acquisition	\$	
Construction	\$	300,000
Equipment	\$	
Other	\$	
Total	\$	340,000

FUTURE PROJECT LIST

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
\$1,250,000	TBD	TBD	\$0	\$0	\$0	\$0	\$0	\$0	1,250,000

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 six feet wide to be consistent with the Creve Coeur Pedestrian Plan and would include sidewalk lighting.

Existing Condition:

The pavement within the Creve Coeur Executive Office Park is generally in good condition, although the micro-surfacing from 2011 has begun to wear off. 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. Staff estimates that this project would qualify for approximately \$500,000 - \$600,000 in grant assistance.

Expenditure Type:

Planning, Design & Engineering	\$ 100,000
Land Acquisition	\$
Construction	\$ 1,150,000
Equipment	\$
Other	\$
Total	\$ 1,250,000

FUTURE PROJECT LIST

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. The playground at Millennium Park has the most urgent need, and replacement of this safety surface is scheduled for FY2017. Several other playgrounds will require attention in the near future.

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 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 Parks Grant program.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	75,000
Equipment	\$	
Other	\$	
Total (Per Park)	\$	75,000

FUTURE PROJECT LIST

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

FUTURE PROJECT LIST

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
\$270,000	TBD	TBD	\$0	\$0	\$0	\$0	\$0	\$0	\$270,000

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 \$270,000. Planning, design and engineering (\$30,000) 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	\$ 30,000
Land Acquisition	\$
Construction	\$ 240,000
Equipment	\$
Other	\$
Total	\$ 270,000

FUTURE PROJECT LIST

FUTURE PROJECT: STUDDT 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 Studdt 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 is appraised by the St. Louis County Assessor at \$812,900 in 2015. 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 Studdt 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 Studdt 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

FUTURE PROJECT LIST

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	TBD	\$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 LIST

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	\$0	\$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 LIST

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
\$80,000	\$0	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$80,000

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. 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. The design for improvements along Olive will need to be approved by MoDOT. A portion of this concept design (from Fernview west to Mill Crossing) was developed in FY 2013-FY 2014, but this study was postponed indefinitely and was moved to a future project.

Expenditure Type:

Planning, Design & Engineering	\$ 80,000
Land Acquisition	\$
Construction	\$
Equipment	\$
Other	\$
Total	\$ 80,000

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.

POLICE BUILDING PROJECT FUND PROJECTS

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2018-2022



POLICE BUILDING PROJECT FUND

9501 – BUILDING & IMPROVEMENT PROJECTS

POLICE BUILDING PROJECT FUND

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2018-2022



9501 BUILDING & IMPROVEMENT PROJECTS – 01

OWNER'S REPRESENTATIVE AND PROJECT MANAGER

POLICE BUILDING PROJECT FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$192,846	\$0	\$192,846	\$0 **	\$64,282	\$64,282	\$64,282	\$0	\$0	

Project Description:

The residents of Creve Coeur passed Proposition P in FY2017 to provide funding for a new police station. The City has retained the services of Navigate Building Solutions to assist with managing the project for the new police building. Navigate will manage and coordinate the day-to-day activities of the design, bidding, and construction phases of the project.

Existing Condition:

City staff does not have the capacity to manage this project in addition to its existing responsibilities.

Justification: *Public Safety; Citizen Demand; Coordination; Operating Efficiency*

Hiring a consultant to assist with the new police building project will allow staff to maintain its current level of service for the City's other programs and services.

Operating Budget Impact:

The consultant will help limit the number of staff hours required for this project.

Comments:

** The total contract with the Navigate Building Solutions is \$312,846. The City hired Navigate in FY2017 through the Capital Fund immediately following the passage of Proposition P to assist with initiating the architectural services for the project. \$120,000 was allocated from the Capital Fund in FY2017, and reimbursement for this cost is projected to be transferred to the Capital Fund from the Police Building Project Fund in FY2017.

Expenditure Type:

Planning, Design & Engineering	\$ 192,846
Land Acquisition	\$
Construction	\$
Equipment	\$
Other	\$
Total ** (See Comments)	\$ 192,846

9501 BUILDING & IMPROVEMENT PROJECTS – 02

PROFESSIONAL SERVICES

POLICE BUILDING PROJECT FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$1,186,390	\$0	\$1,186,390	\$0	\$781,320	\$405,070	\$0	\$0	\$0	

Project Description:

The residents of Creve Coeur passed Proposition P in FY2017 to provide funding for a new police station. Professional services will be required for the Police Building Project, including site survey, building design, site layout, permitting, bidding, and construction inspection. A majority of the design is expected to be completed in FY2018 with most of the testing and construction-related consulting in FY2019.

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 estimate for these services includes a design contingency of approximately 5% of the estimated construction cost. This contingency would provide for services that are needed to evaluate and resolve additional or unforeseen issues with the project.

Expenditure Type:

Planning, Design & Engineering	\$ 792,500
Land Acquisition	\$
Construction	\$
Equipment	\$
Other (Contingency)	\$ 393,890
Total	\$ 1,186,390

9501 BUILDING & IMPROVEMENT PROJECTS – 03

SITEWORK AND BUILDING CONSTRUCTION

POLICE BUILDING PROJECT FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$8,781,827	\$0	\$8,781,827	\$0	\$3,935,384	\$4,325,384	\$521,059	\$0	\$0	

Project Description:

The residents of Creve Coeur passed Proposition P in FY2017 to provide funding for a new police station. This phase of the project includes the sitework and building construction for the Police Building Project and various accessibility and security improvements to the Creve Coeur Government Center. Sitework is expected to be complete in FY2018, building construction is expected to be complete in FY2019, and accessibility, safety, and security improvements to the Government Center are expected in FY2020.

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:

The construction costs include the following major aspects:

• Sitework.....	\$ 1,334,209
• Building Construction	\$ 6,142,669
• Construction Contingency (5%)	\$ 393,890
• Equipment, Furniture, and Technology	\$ 390,000
• Accessibility, Safety, and Security Improvements	\$ 521,059
	\$ 8,781,827

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	7,476,878
Access., Safety, Security Imp.	\$	521,059
Equipment	\$	390,000
Other (Contingency)	\$	393,890
Total	\$	8,781,827

9501 BUILDING & IMPROVEMENT PROJECTS – 04

BOND FINANCING

POLICE BUILDING PROJECT FUND

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Future
\$135,000	\$0	\$135,000	\$135,000	\$0	\$0	\$0	\$0	\$0	

Project Description:

The residents of Creve Coeur passed Proposition P in FY2017 to provide funding for a new police station. This aspect of the project includes the costs associated with issuing and managing the bonds for the project.

Existing Condition:

None.

Justification: *Public Safety; Citizen Demand; Coordination; Operating Efficiency*

These services are necessary to manage the bond measure that was approved by Proposition P.

Operating Budget Impact:

None.

Comments:

\$135,000 is estimated to be needed for the underwriting and issuance of the bonds in FY2017.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	
Equipment	\$	
Other (Financing)	\$	135,000
Total (FY2017)	\$	135,000

Exhibit C
CAPITAL IMPROVEMENT PROGRAM FISCAL YEARS 2018-2022
CITIZEN RECOMMENDATIONS & STAFF RESPONSES

12 Property Owners on Fairways Circle (received 6/2016)

- The fence along Fairways Circle and adjacent to the Creve Coeur golf course is beyond repairs due to aging, rust and overgrowth. The only solution is to replace the fence with a new one.
 - **Staff Response (submitted 1/2017):** The fence along the east side of the Creve Coeur Golf Course will be replaced in early 2017. The City was successful in obtaining a Municipal Park Grant to make this and other improvements to the golf course. The fence replacement was a known need for the golf course, but the subdivision's support for the work encouraged the City to include it as part of the project.

Peter Wittenberg, 124 Bellington Lane (received 6/12/2016)

- No pedestrian crosswalk at Olive and Old Olive, Unsafe intersection - there is no crosswalk marking from the southeast corner across Olive and no walk light. Add a pedestrian crosswalk and protected walk light across Olive from the mall to Schnucks.
 - **Staff Response (submitted 1/3/2017)** - This intersection is owned and maintained by MoDOT, and we will forward this request to them for review. A new crosswalk across Olive is not planned through the current project, and City staff understands that this would be due to the combination of the width of Olive at this location and the lack of a wide enough median to provide a refuge island for the crosswalk. The nearest pedestrian crossing would be at Olive and Spoede.
- Missing pedestrian crosswalk at Olive and Spoede - No crosswalk across Olive on west side. Add a pedestrian crosswalk and protected walk light across Olive from the sidewalk on Spoede
 - **Staff Response (submitted 1/3/2017)** - This intersection is owned and maintained by MoDOT, and we will forward this request for their review. The current MoDOT project will include improvements to the Olive/Spoede intersection. A new crosswalk across the west side of this intersection is not planned. Pedestrians are encouraged to use the crosswalk on the east side of the intersection. MoDOT's project includes cutting back the median at the entrance to the Briarcliff subdivision on the north side of this intersection to accommodate the pedestrian path there.
- Missing pedestrian crosswalk at Olive & Mosley - No crosswalk across Mosley. Add a pedestrian crosswalk and protected walk light across Mosley on the south side of Olive.
 - **Staff Response (submitted 1/3/2017)** - This intersection is owned and maintained by MoDOT, and we will forward this request to them for review. The current MoDOT project on Olive will construct new ramps at this intersection and will create a crosswalk across Mosley Road. The crosswalk across Olive will remain.
- Plaza Land Rover on Olive - The sidewalk is shared with a display of cars. Unfortunately, the dealer sometimes parks cars blocking wheelchair access and access ramps. Teach the car dealer to be careful to leave a path sufficient for wheelchair access on the sidewalk
 - **Staff Response (submitted 1/3/2017)** - City staff will notify Plaza Motors that they are required to keep the pedestrian path open. If this problem persists, then enforcement actions may need to be taken.
- Walk lights at 270 & Olive - Walk lights not on enough. It is possible to have the walk lights on for several times as long as currently without any problem for cars. Completely rethink when the

walk lights should be on. They need to be off when a car can drive across the crosswalk, but on otherwise.

- **Staff Response (submitted 1/3/2017)** - This intersection is owned and maintained by MoDOT, and we will forward this request to them for review. The timing and sequence of the signals is developed by MoDOT traffic engineers and would need to meet specific requirements. This intersection is owned and maintained by MoDOT, and we will forward this request to them for review. This appears to be an enforcement issue, and we will pass this on to the Police Department for their review.
- 270 N to Olive East - Cars often do not stop at the red light for right turn on red. This is particularly dangerous for one walking west as the view of the off-ramp is impeded. Mount a mirror on a pole so that a pedestrian can view the cars coming up the onramp.
 - **Staff Response (submitted 1/3/2017)** - This intersection is owned and maintained by MoDOT, and we will forward this request to them for review. We will ask that MoDOT consider painting crosswalk lines here.
- Coeur de Ville near Saint Monica Church - There is not a marked crosswalk near Olive. There is one somewhat further down Coeur de Ville. Add a marked crosswalk across Coeur de Ville for those walking on Olive.
 - **Staff Response (submitted 1/3/2017)** - This intersection is owned and maintained by MoDOT. The current phase of the City's Coeur de Ville Rehabilitation Project is now substantially complete. This project included moving the crosswalk that was located next to one of the St. Monica entrances to the intersection of Olive and Coeur de Ville. This provided a straighter and more intuitive pedestrian path for those walking along Olive. The new crossing includes new ramps, crosswalks, and a pedestrian pushbutton to alert motorists of the presence of pedestrians.
- 270 S to Olive W - Just as with 270 N to Olive E, pedestrians cannot see the cars coming on the off-ramp. Mount a mirror on a pole so that a pedestrian can view the cars coming up the onramp.
 - **Staff Response (submitted 1/3/2017)** - This intersection is owned and maintained by MoDOT, and we will forward this request to them for review. We will ask that MoDOT consider painting crosswalk lines here. This crossing appears to be oriented to provide the shortest distance possible at this on-ramp. The design of the ramp on the west side of this crossing forces pedestrians to stop and turn perpendicular to the on-ramp, and this has been found to encourage pedestrians to look for on-coming vehicles
- Missing sidewalk Olive - Missing sidewalk from Saint Monica Church to Pulaski Bank. Add a sidewalk
 - **Staff Response (submitted 1/3/2017)** – This intersection is owned and maintained by MoDOT, and we will forward this request to them for review. We will ask that MoDOT consider painting crosswalk lines here. This crossing appears to be oriented to provide the shortest distance possible at this on-ramp. The design of the ramp on the west side of this crossing forces pedestrians to stop and turn perpendicular to the on-ramp, and this has been found to encourage pedestrians to look for on-coming vehicles
- Landscaping blockage Olive - Several businesses along Olive are not trimming vegetation to allow easy access to pedestrians. Teach landscapers to leave an 8 foot high window over sidewalks - no tree branches, no bushes blocking pedestrian access to the whole sidewalk.
 - **Staff Response (submitted 1/3/2017)** - The public right of way at this location is owned and maintained by MoDOT. We will forward this request to them for review. City staff will watch for landscaping encroachments into the pedestrian path and will contact business owners to correct any issues that are found or reported.

- Westgate lack of wheel chair ramps at Tempo - Several locations of curbs at the Westgate shopping center and Paragon building do not have wheelchair accessible curb ramps.
 - **Staff Response (submitted 1/3/2017)** - The pedestrian accommodations within the Westgate shopping center are the responsibility of that shopping center to maintain. Staff will notify the shopping center of this request.
- Landscaping blockage at Tempo - Apartments along Olive are not trimming vegetation to allow easy access to pedestrians. Teach landscapers to leave an 8 foot high window over sidewalks - no tree branches, no bushes blocking pedestrian access to the whole sidewalk.
 - **Staff Response (submitted 1/3/2017)** - City staff will review whether the tree branches along this sidewalk encroach upon the pedestrian path and will notify the apartment complexes to have the branches trimmed, if necessary. The sidewalk along the west side of Tempo is not continuous and has a dead end in the trees and honeysuckle that have overgrown it. We can add this section of sidewalk to our trimming schedule
- Missing sidewalk at Mason - There is no sidewalk along Mason from Bellerive Springs to Hibler. Add a sidewalk for the approximately 0.5 miles of Mason that still does not have a sidewalk.
 - **Staff Response (submitted 1/3/2017):** Mason Road is owned and maintained by St. Louis County. The City is working with St. Louis County and Town and Country to develop a plan for a continuous sidewalk from Olive Boulevard to Clayton Road. This plan is nearly complete and may serve as a basis for future projects
- Ballas S to Ladue W - Drivers do not always stop for right turn on red and visibility is blocked because of a hill. Pedestrians travelling east cannot see cars. Add a mirror on the walk island to provide pedestrian visibility.
 - **Staff Response (submitted 1/3/2017):** Staff will notify the Police Department of this report. The City has recently hired an engineer to develop plans to improve the sidewalk along the west side of New Ballas Road from Ladue to De Smet High School. The visibility concern should be addressed through the implementation of those plans. Construction of a section of this sidewalk is expected to occur in late 2017.
- Landscaping blockage Spoede - Several residences are not cutting back plants and debris that reduce the usable sidewalk. It is pretty landscaping, but prevents pedestrian access. Teach landscapers to leave an 8 foot high window over sidewalks - no tree branches, no bushes blocking pedestrian access to the whole sidewalk.
 - **Staff Response (submitted 1/3/2017)** - Staff will notify the adjacent property owners to remind them of their responsibility to maintain their vegetation as issues arise. The City has an annual trimming program that clears vegetation away from the street and sidewalk. This trimming is typically completed in the spring and summer of each year.
- Pedestrian Safety at Lindbergh & Olive - There is no safe way for pedestrians to cross Lindbergh. Because of the poor MoDOT design, there is no good way for pedestrians to cross. I don't see a cheap way, anything other than a pedestrian bridge.
 - **Staff Response (submitted 1/3/2017)** - This intersection is owned and maintained by MoDOT. We will forward this request to them for review. A planning study is currently underway for this section of Creve Coeur, and pedestrian connectivity is a significant portion of that study. The current version of that study calls for a fully redesigned intersection that provides a pedestrian crossing. This study can be found at <http://plantsciencemasterplan.com/#>

- Pedestrian Safety at Lindbergh & Ladue - There is no safe way for pedestrians to cross Lindbergh. Some traffic lights, walk lights, and crosswalks would help significantly. There is a further problem that Ladue doesn't seem to want to add sidewalk all the way to Lindbergh.
 - **Staff Response (submitted 1/3/2017):** This intersection is owned and maintained by MoDOT. We will forward this request to them for review. There is a crosswalk across the north side of this intersection, and all crosswalks at this intersection appear to have pedestrian buttons and signals. Ladue Road falls within the City of Ladue as it extends east of this intersection. We will notify Ladue of this request.

Ed and Mary Tokas, Country Forest Subdivision, 12395 Woodline Drive (received 12/6/2016)

- Strategic placement of gentle rolling speed bumps along Falaise as a deterrent to those who shortcut through our subdivision and to those who drive over 20 miles an hour. The gentle rolling speed bumps we are suggesting are not the large deep kind that would interfere with Firetrucks and other emergency vehicles. Instead, we are asking for similar speed bumps like those placed on Chasselle a nearby street off Mason.
 - **Staff Response (submitted 1/3/2017):** The request is for speed tables similar to those on Chasselle Lane rather than for speed bumps. The Creve Coeur Fire Department will not allow speed bumps on streets, because these will damage fire trucks responding to calls. The City has a Traffic Mitigation Plan that is managed by the Police Department. Residents may petition the Police Department and the City's Police and Safety Committee to investigate whether conditions warrant traffic-calming devices such as speed tables. More information regarding the Traffic Mitigation Plan can be found on the City's website at: <http://www.creve-coeur.org/index.aspx?NID=170> . We will also forward this request to the Police Department for their information.

Michael Grant, 12377 Falaise Drive (received 12/6/2016)

- Installation of a sidewalk for the Country Forest Subdivision on the east side of Falaise Drive where there is common ground on approximately 20% of the East side of the road with the roadway at its widest portion bordering this area. Hibler and Tempo only have sidewalks on one side of them and would keep Falaise Drive wide enough for resident use of on street parking when necessary as is the case on Tempo. A sidewalk along the East side makes sense economically, aesthetically and would provide added safety for pedestrians, car traffic and subdivision homeowners alike by keeping pedestrian traffic in front of homes along Falaise Drive.
 - **Staff Response (submitted 1/3/2017):** City staff has investigated this request in previous years and feels that this could be a good improvement project. However, the need for easements, meeting ADA requirements, and the cost to construct the sidewalk could be significant hurdles to overcome. The suggestion of putting the sidewalk on the east side of the street is a good one, particularly for the section of Falaise south of Country Glen. It appears that the most feasible location for the sidewalk north of Country Glen would be on the north/west side of Falaise due to the retaining wall on the opposite side of the street.

Tony & Joan Koester, 414 Briergreen Ct, Country Forest Subdivision (received 12/6/2017)

- Include curbs on Briergreen Ct., in Country Forest Subdivision
 - **Staff Response (submitted 1/3/2017)** - Replacement of any damaged curbs on this street would probably not be a capital improvement project on its own. This work would be incorporated into the annual concrete pavement replacement programs. Pavement

evaluations are completed each year to determine the streets that will be repaired for the upcoming construction season. Staff will evaluate the curbs on Briergreen this winter, and these will be evaluated along with all of the repair needs in the City so that repairs can be prioritized. Ideally, we would schedule any curbing replacement on Briergreen to be completed within a year prior to the next microsurfacing application, which will probably be in a few years for Briergreen. Failed curbing may be addressed in the meantime through patching or isolated replacement.

Robert Kent, 13084 Ferntrails Lane (received 12/14/2016)

- Move engineering to complete the west Olive Boulevard sidewalk and Fernview Drive re-engineering from the Future Project status to the current Capital Improvement budget for installation in FY18. This request is consistent with a promise made by the City to accomplish this project and subsequently install the sidewalk in accordance with a legal settlement between the City and the Holy Cross Lutheran Church.
 - **Staff Response (submitted 1/3/2017):** Olive Boulevard is owned and maintained by MoDOT. MoDOT required that the City fully update the pedestrian accommodations at the intersection of Fernview and Olive as part of this project, and this requirement made the project cost much more than was anticipated. The City decided to focus its efforts on maintaining sidewalks within its right of way rather than to introduce new sidewalks within MoDOT's right of way. Staff is not aware of any standing agreements with Holy Cross Lutheran Church regarding this sidewalk or any related obligations. Staff understands that the City has refunded the funds deposited by Holy Cross Lutheran Church for the purposes of future sidewalk development along Olive.

Steve Becker (received 12/19/2016)

- Poor condition of pavement on Plantation Drive – repair requested in FY18. [Mr. Becker had submitted a similar request in summer 2016.]
 - **Staff Response (submitted 1/3/2017):** Repairs to Plantation Drive would probably not qualify as a capital improvement project as a stand-alone project. These repairs would be included in the City's annual concrete pavement replacement program. The approach outlined in the message that staff sent to Mr. Becker in the summer of 2016 has not changed. The projections for the City's concrete pavement replacement program can be found on the City's website at: <http://www.creve-coeur.org/DocumentCenter/View/6163>. Staff anticipates that the concrete program will include Plantation Drive in the next few years. Repairs to Plantation Drive - and every other street in Creve Coeur - will be considered for the upcoming construction season. While it remains likely that this plan will remain substantially the same, we will need to wait until the spring, after the pavement evaluations are complete, to prepare the updated repair projections.

Margie Jaffee (received 12/15/2016)

- Replacement of the Beirne Park in the summer of 2017. The courts are in serious in serious need of replacement, with their myriad of cracks throwing off the bounce and trajectory of balls, ruining the experience of playing tennis.
 - **Staff Response (submitted 12/15/2016):** Staff is receiving project requests for the 2018-2022 Capital Improvement Project list. Public Works staff planned to introduce this project to the 5-year plan and your support will help during the project evaluation process.

Yvonne Darrow (received 12/19/2017)

- Beirne Park courts there are in disrepair and basically unplayable.
 - **Staff Response (submitted 12/19/2016):** City staff plans to recommend this project for the 2018-2022 CIP Project list.

Richard Kutta (received 1/9/2017)

- Winterize rest rooms at 4 parks: Beirne, Malcom Terrace, Conway and Lake School. Capital cost \$100,000 to include furring walls, drywall walls and ceiling, insulation, exhaust fan, infrared heat, plumbing supply modifications. Justification make parks and playgrounds accessible year-around for walking, sports, fitness and enjoyment by all residents.
 - **Staff Response (submitted 1/9/2017):** Thank you for the suggested improvement to the City's parks. We have received a similar request from you before, and we will consider this among the other parks capital improvements projects.

Alexis Corrigan, 12384 Woodline Dr. (received 1/8/2017)

- Install a sidewalk on Falaise Drive, preferably on the east side where we mostly have common ground to make the community much more walkable, and safe as narrowing Falaise would naturally slow down traffic that runs through the sub-division. A floating sidewalk (similar to the one on Hibler) that does not encroach too much on resident's properties would be received much better. Add Falaise Drive on the re-paving list as a result of significant wear throughout the subdivision with more erosion happening in the cul-de-sac's. Along with the unsightliness of the erosion, there is gravel that can get tracked into yards and homes.
 - **Staff Response (submitted 1/9/2017):** City staff has investigated the request for a sidewalk along Falaise Drive in previous years and feels that this could be a good improvement project. However, the need for easements, meeting ADA requirements, and the cost to construct the sidewalk could be significant hurdles to overcome. City staff is currently reviewing the conditions of all of its streets to lay out the recommended street repairs for the next few years. The needs of the Country Forest subdivision will be included in this review. As you have noted, the microsurface application that was completed several years ago is wearing off. Staff anticipates that the subdivision will receive a similar application in the future, and staff will present its recommended schedule for the program to the City Council in the spring as part of the CIP process. In the meantime, potholes and other concerns will be addressed as typical street maintenance.

Trina Bremerkamp, 15 Falling Leaves Ct. (received 1/19/2017)

- I live in Ladue Lake Estates and the streets in the back part of the subdivision are really bad. Some sections are OK but then other sections are very broken up. And the continuous patching is really looking bad and doesn't last. Many sections need new concrete in lieu of more patching.
 - **Staff Response (submitted 1/23/2017):** Individual streets are not identified in the CIP, only the pavement maintenance program budget as a whole. Public Works staff has identified Ladue Lake as an area of focus for concrete slab replacement this year. As other subdivisions this will be a multi-year effort to replace damaged street and sidewalk slabs. We anticipate working in this subdivision as well as others between July and November 2017.

Exhibit D
TEN-YEAR CAPITAL IMPROVEMENT PROGRAM
(COMBINED CAPITAL FUND AND POLICE BUILDING FUND)
REVENUE AND EXPENDITURES SUMMARY FY2013-FY2022

REVENUES	Actual 2013	Actual 2014	Actual 2015	Actual 2016	Projected 2017	Projected 2018	Projected 2019	Projected 2020	Projected 2021	Projected 2022
Beginning Fund Balance (est. Cash Basis as of July 1)	1,580,402	1,250,169	720,228	1,326,656	1,882,607	11,489,543	6,564,659	1,427,424	956,051	1,160,414
City Sales Tax	1,898,578	1,984,134	2,026,656	2,056,301	2,075,000	2,108,030	2,134,380	2,161,060	2,188,073	2,215,424
Police Building Bond Fund (Prop P)					10,690,000	0	0	0	0	0
Interest on Investments	38,836	95,664	1,326	1,092	1,500	88,400	40,100	12,400	11,100	11,950
Police Building Property Tax Collection					0	769,471	769,471	777,166	777,166	784,937
Other Agency Funding	571,725	826,191	465,735	627,305	1,245,989	407,045	20,000	464,000	20,000	20,000
Proceeds from Equipment Sales	0	36,279	29,963	15,440	25,860	20,000	20,000	20,000	20,000	20,000
Transfers In from Other Funds	400,000	3,150,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000
TOTAL REVENUES	2,909,139	6,092,268	2,923,680	3,100,138	14,438,349	3,792,946	3,383,951	3,834,626	3,416,339	3,452,311

EXPENDITURES	Actual 2013	Actual 2014	Actual 2015	Actual 2016	Projected 2017	Projected 2018	Projected 2019	Projected 2020	Projected 2021	Projected 2022
Buildings & Improvements	69,432	37,573	131,123	133,986	390,615	4,875,986	5,064,736	605,341	20,000	20,000
Park Development Projects	3,732	42,118	70,698	551,553	648,203	305,000	90,000	0	135,200	0
Stormwater Projects	70,308	223,496	17,313	40,405	440,000	320,000	450,000	150,000	0	150,000
Street Overlay/Repair	1,850,047	1,698,043	1,971,768	1,492,533	2,922,070	2,163,000	1,915,750	2,544,648	1,976,200	2,299,000
Capital Equipment	252,284	238,843	171,385	325,710	310,525	484,638	279,186	279,695	354,821	258,642
Debt Service	993,569	4,250,897	0	0	0	569,206	721,515	726,315	725,755	724,955
Transfers Out	0	0	0	0	120,000	0	0	0	0	0
TOTAL CAPITAL EXPENDITURES	3,239,372	6,490,970	2,362,287	2,544,187	4,831,413	8,717,830	8,521,187	4,305,999	3,211,976	3,452,597
ENDING FUND BALANCE (CASH BASIS)	1,250,169	851,467	1,281,621	1,882,607	11,489,543	6,564,659	1,427,424	956,051	1,160,414	1,160,129

**Bold=New or combined Items FY17-FY22 as a result of Police Building Prop P passage in November 2016.*

FUTURE PROJECT LIST (in alphabetical order)	NOTES
Certified Nature Explorer Classroom	Transferred from CIP FY17-FY21 to Future Project List
Creekside/Bellerive Estates Trail	Grant match est. to be \$25,000
Dielmann Complex Renovations - Phase II	Phase I in CIP FY15/FY16 - completed
Downtown Streetscape & Infrastructure	Per Business District / Downtown Area Implementation Strategy Plan
Fernview Drive/Bellerive Estates Drive Sidewalk Project (est. \$700,000)	Per Pedestrian Plan; Fernview Resurfacing in CIP FY19-FY22
Fernview at Olive Intersection Improvements (est. \$850,000)	
Golf Course Stormwater Improvements (est. \$1.2 million)	Phase 2 Improvements in FY18-FY19 of CIP
Hibler Road Reconstruction - East of Falaise (est. \$800,000)	Easements and/or right of way required
Ladue Road Improvements at I-270	Per Pedestrian Plan
Lindbergh Blvd. Flyover at Old Olive/Light Industrial District Infrastructure Improvements (est. >\$3 million)	Per Comp. Plan & Pedestrian Plan; private planning study underway
Lindbergh Blvd. Streetscape Enhancement Project (est. \$1.6 million)	Phase I - transferred from CIP FY19 to Future Project List pending implementation of "39 North"
Mason Road Sidwalk Infill (est. \$1.1 million)	Grant Match est. to be \$460,000; transferred from CIP FY17-FY21 to Future Project List
Millennium Park Parking Lot Lighting	
New Ballas & Olive Intersection Improvements (est. \$1.75 million)	
New Ballas Rd. - Phase II Sidewalk - Rocky Dr. to Ladue Rd. (\$340,000)	Easements required; Phase 2A is included as a FY2017 design and grant application
Office Park Roadway and Sidewalk Improvements (est. \$1,250,000)	Design & Grant Match (est. \$335,000)
Park Playground Safety Surface Repairs (est. \$75,000 each)	Included in CIP FY21; additional surfaces need repair in future
Public Art in City Parks and Properties	
Public Works Equipment Storage Building (est. \$270,000)	Tranferred from CIP FY16-FY20 to Future Project List
Studt Extension from Old Ballas to Craig (est. >\$1 million)	Per Central Business District Land Use Plan 2005
West Olive Median Enhancements, Phase II - Mason to Fernview (est. \$2.2 million)	
West Olive Sidewalk Concept Study - Mason to West City Limit (est. \$80,000)	Tranferred from CIP FY17-FY21 due to loss of interest by area cities for connections to this sidewalk

Future Projects are identified projects which either have no available funding or do not have a fully developed scope or estimate. See Future Project Sheets for more information.

***New/changes projects in bold**



300 North New Ballas Road • Creve Coeur, Missouri 63141
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www.creve-coeur.org

March 21, 2017

Sharon Stott
Assistant to the City Administrator
City of Creve Coeur
300 North New Ballas
Creve Coeur Mo 63141

Re: Proposed Capital Improvement Plan (CIP) for Fiscal Years 2018-2022

Dear Ms. Stott:

The Planning and Zoning Commission, at its meeting of March 20, 2017, reviewed the draft Capital Improvement Plan for fiscal years 2018-2022. By unanimous vote, the Commission recommends approval of the proposed CIP by the City Council with the following suggestions:

- Creation of a separate table or chart summarizing the total cost attributable to Park and Recreation activities including the continued operation of the golf course, including the stormwater projects on the golf course property, and the ice arena; and
- Inclusion of revenue sources in such table or chart to show City's portion versus any grant funding provided with the overall project costs.

If you have any questions, please contact the Planning Division staff.

Sincerely,

Beth Kistner, Chair
Planning & Zoning Commission

BK:wck

CC: Mark Perkins, City Administrator
Jason Jaggi, Director of Community Development



City Council
300 North New Ballas Rd
Creve-Coeur, MO 63141

SCHEDULED

Meeting: 03/27/17 06:00 PM
Department: Public Works Department
Category: Report
Prepared By: Matt Wohlberg
Department Head: Jim Heines

STAFF REPORT

FY2018 Roadway Maintenance Program Recommendations

City staff will review the current status of the City's pavement network and the staff recommendations for roadway and sidewalk maintenance in the 2018 fiscal year. Staff will also share projections for repairs in the next few years.



DEPARTMENT OF PUBLIC WORKS STAFF MEMORANDUM

DATE: March 23, 2017

TO: Mark Perkins, City Administrator

CC: Jim Heines, Director of Public Works

FROM: Matt Wohlberg, P.E., City Engineer
Rich Beran, P.E., Civil Engineer

SUBJECT: Repair Location Recommendations
FY2018 Roadway Maintenance Program

The Department of Public Works proposes the roadway maintenance program outlined below for the 2018 fiscal year. This program is divided into five different projects, each of which have their own account in the capital improvement plan: concrete pavement improvements, sidewalk improvements, asphalt pavement improvements, microsurfacing, and roadway reconstruction/rehabilitation.

Staff plans to release bids for this work in April and May of 2017 so that the work can be completed before November, 2017. Some work may extend into the spring of 2018, if necessary.

Pavement Condition Definitions

The City hired a consultant in 2016 to measure the pavement conditions and the smoothness of the ride for every City-maintained street. City staff updates the condition information for approximately one quarter of the City's pavement network each year to keep this information relevant. The smoothness information, however, will eventually need to be updated by a similar consultant.

Two aspects of the pavement data that are used in this report require some explanation:

1. PCI. The pavement condition index (PCI) for each street is developed based upon the number of cracks, potholes, and other defects that be seen. This index is on a scale of 0-100, where 100 represents perfect pavement with no problems.
2. Roughness Index. The amount of vertical change in the street is measured along its length, and this is converted into an index that reflects the level of discomfort a driver might experience by using that street. This index is on a scale of 0-100, where 100 represents a perfectly smooth street.

Roadway Selection

The City invests a significant portion of its annual budget into street and sidewalk maintenance and improvements. As is typical for most communities, the City's investment must be prioritized and coordinated in order to make it as effective as possible. To this end, staff makes its repair recommendations based upon two goals:

- 1) to find the most impact for the money spent to perform the maintenance, and
- 2) to make repairs that improve the lives of the citizens of Creve Coeur.

To achieve the first goal, the number of motorists using the roadway, the cost of the repair, and the condition of the street are weighed for each street. The opportunity cost of not doing a repair is also considered, and this is an important decision factor for roads that are on the verge of deteriorating to a point where a particular repair can no longer be effective, and thus becoming much more expensive to fix. This first goal, therefore, is to perform the right repair on the right street at the right time. This is pavement management in its most basic form.

The City has adopted a “neighborhood approach” for street repairs in an attempt to achieve the second goal. Where possible, streets within a subdivision are targeted so to improve as much of the pavement in that subdivision as possible within a span of one or several consecutive years. While this will mean that some of the streets addressed each year might be in better condition than a few others in the City, it will also mean that repairs are concentrated in an area for a short time rather than having these repairs performed piecemeal each (and perhaps every) year. The intent is to create a condition in which future repair needs are similar throughout each neighborhood. This leads to clearer and more intuitive planning of projects. This should also minimize the inconvenience to the residents in each area.

Concrete Pavement Replacement

Work involved in this program will include the removal and replacement of failed concrete pavement slabs, curbs, gutters, and sidewalks. New accessible pedestrian curb ramps will also be installed as needed near street repair locations. More detail regarding sidewalk improvements is included in the next section.

The proposed concrete pavement replacement program is listed below, along with the current pavement condition index (PCI) and roughness index for each street with pavement replacement:

Pavement Slab Replacement

<u>Street Name</u>	<u>PCI</u>	<u>Roughness Index</u>
Camfield Square (Phase 2).....	46.....	39
Castleton Court	63.....	34
Conway Downs Drive.....	45 *	67 *
Falling Leaves Court (Phase 1).....	72.....	50
Gascogne Court.....	66.....	39
Hammermill Drive	64.....	36
Lakeshore Drive.....	71 *	51 *
Libourne Court.....	79.....	61
Peekskill Drive.....	81.....	63
Runnymede Drive (Phase 1)	66.....	40

** Indicates an average condition rating for multiple street segments.*

Curbing Replacement

Auburndale Drive	Ladue Court
Conway Lake Drive	Twin Creek Lane
Conway Wold Byway	Wallingshire Drive
Creekside Lane	West Walling Drive

These streets are proposed to be included in this program for one or several of the following reasons: pavement conditions, previous commitments, support of other projects, and future planning.

Pavement Conditions. City staff reviews the concrete pavement network at the end of each winter to prioritize the repair needs for concrete pavement and curbing. Aging, cracked, and broken pavement and curbing exists throughout the City in quantities that exceed what the City could afford to replace in any given year. Hazardous and potentially hazardous pavement and curbing failures have been given the highest priority for replacement, and all of the pavement identified as such is included in the proposed program.

- **Local Failures and PCI.** The pavement condition index (PCI) shown for each street represents the average condition for the entire street. One localized failure will lower the street's condition, but it might not make a big impact to the street's PCI, particularly for longer streets. Concrete conditions usually vary from one slab to the next. It is quite possible to have a hazardous slab failure requiring replacement on a street with a high PCI.

Failed and potentially hazardous slabs have developed on Runnymede Drive, Conway Downs Drive, Montmartre Drive, Gascogne Court, and Ladue Aire Court. (The City's Public Works staff will replace the hazardous slabs identified on Montmartre Drive and Ladue Aire Court.) The proposed program expands beyond the few hazardous slabs on Gascogne Court to address other priority replacement needs for this street, and this is expected to significantly improve the condition of Gascogne Court, reducing the need for further repairs in the foreseeable future.

- **Joint Deterioration.** Spalling (i.e. deteriorating) joints present another problem for PCI. When patched, joint spalling is a relatively low-severity problem which will not significantly lower a street's PCI, particularly if the rest of the concrete slab is in good condition. Joint spalling along many of the concrete joints on a street can become a problem, not just for the number of slabs that are affected, but because the failure of one or two joint patches can change the pavement conditions overnight.

Concrete slabs can be in very good condition except for their joints. Joint issues often impact adjacent slabs, spreading out the problem. Spalling can be addressed in several ways, but badly spalled joints should be cut out and replaced. If many of the street's joints have this problem, then the best long-term solution becomes full slab replacement. Unfortunately, the cost to replace much of the street is expensive and will seem disproportionate to the street's PCI.

Libourne Court and Runnymede Drive are a good examples of streets that are recommended for repairs due to generally poor concrete joints.

- **Roughness Index.** The IMS investigation into the roughness of the City's streets offers an insight into the level of joint deterioration on concrete streets. A low (poor) roughness index on a street with a good PCI could indicate that the street has significant joint deterioration. Several streets in the proposed program (Runnymede Drive, Castleton Court, Hammermill Drive, Gascogne Court, and Camfield Square) reflect this situation in varying degrees. The repair recommendations for these streets in particular aim to make the street smoother, not just structurally sound.

Previous Commitments. It is often difficult or impractical to commit enough resources to address all of the repair needs of a subdivision – or in some cases, a single street – in one year. Therefore, several repair efforts are phased into consecutive years.

The proposed program continues improvements in the Westchester Estates subdivision with repairs to two of its concrete streets (Lakeshore Drive and Peekskill Drive) following the completion of the reconstruction efforts there in FY2017. City staff expects to finish repairs in this subdivision in FY2019.

The FY2017 program involved the first phase of repairs to Camfield Square. Staff proposes to complete the repairs to this street in FY2018.

Staff also proposes to begin multi-year repairs to the Ladue Lake subdivision (with Falling Leaves Court) and to Runnymede Drive with the FY2018 roadway program. The repairs in the Ladue Lake subdivision are expected to be completed through two fiscal years, and the repairs to Runnymede Drive are expected to require at least three fiscal years to complete.

Support for Other Projects and Future Planning. It is common that more than one type of project or approach is required or recommended to address the needs of a street or sidewalk. This tends to occur with sidewalk projects that require street work (or vice versa) and with composite streets (i.e. concrete streets with an asphalt overlay).

- Sidewalk projects. Work is proposed on Falling Leaves Court, in part, to support sidewalk improvements in the Ladue Lake subdivision.
- Asphalt resurfacing projects. Approximately 700 linear feet of concrete curb and gutter replacement is required along streets in the proposed asphalt pavement resurfacing project.
- Microsurfacing projects. Another 300 linear feet of concrete curb and gutter are required along the streets that are included in the proposed microsurfacing project.

Sidewalk Improvements

The City is obligated to continue improve the accessibility of its sidewalks. Accessibility improvements are typically made in conjunction with adjacent roadway projects. The proposed FY2018 sidewalk program includes approximately 3,300 linear feet of sidewalk replacement and 14 new accessible curb ramps. Specifically, these improvements are focused in the following locations:

Ladue Lake Subdivision. The proposed program begins a multi-year effort to improve the accessibility in the Ladue Lake subdivision, beginning at Falling Leaves Court and progressing west and south toward Ladue Road. This work is expected to last through at least FY2019.

Microsurfacing Program. Several of the streets that are recommended for microsurfacing in FY2018 have sidewalks along them. These streets include Conway Lake, Conway Wold Byway, Twin Creek Drive, and Hammersmith Drive. Accessibility improvements will be made along these streets, including new ramps where needed, removal of tripping hazards, and replacement of broken sidewalk.

The sidewalk improvements in the Ladue Conway Estates subdivision that were anticipated for FY2018 were accelerated so that these could be completed in FY2017. Otherwise, the proposed program would be larger.

Asphalt Resurfacing

Asphalt resurfacing typically involves the removal and replacement of the top two inches of asphalt pavement on a roadway. This becomes necessary as the pavement surface dries out and cracks. Full-depth patching is often needed to replace all of the pavement in areas where the base fails and potholes form. For asphalt streets, base failure occurs if the base was insufficient to begin with or the base is weakened, often by getting wet through cracks in the pavement.

This program targets asphalt and composite streets whose condition is declining. Resurfacing is one of the last forms of maintenance available to the City for an asphalt street before the road needs to be rebuilt.

The asphalt resurfacing program proposed for FY2018 includes the following asphalt roadways:

Wesland Estates Subdivision

<u>Street Name</u>	<u>PCI</u>	<u>Roughness Index</u>
Auburndale Drive.....	33.....	65
Wallingshire Drive.....	51.....	40
West Walling Drive	68 *	60 *

<u>Street Name</u>	<u>PCI</u>	<u>Roughness Index</u>
Bellerive Springs Drive.....	75.....	55
Creekside Lane.....	27.....	33
Ladue Court	60.....	32
Research Boulevard (Phase 1)	40.....	71
Winfield Pointe	32.....	28

** Indicates an average condition rating for multiple street segments.*

Whereas the FY2017 program focused almost exclusively on composite streets, no composite streets are proposed for resurfacing through the FY2018 roadway maintenance program. However, the proposed program includes thin overlays to strengthen relatively short, but significantly distressed, sections of Country Fair Drive and Manga Carta Drive.

Notable elements of the proposed asphalt resurfacing program include:

- The work that is proposed for the Wesland Estates subdivision would complete repairs in that subdivision from FY2016 that involved patching throughout the subdivision and the resurfacing of North Walling Drive.
- Resurfacing of Creekside Lane and Winfield Pointe address two of the City's lowest-rated residential asphalt streets.
- The work proposed for Research Boulevard would involve the portion of Research south of Gateway Boulevard. This project would be the first of what is anticipated to be a four-year process to invest approximately \$500,000 into resurfacing Research Boulevard, Andes Boulevard, and Ambassador Boulevard in the City's light-industrial area. These three streets are currently good candidates for asphalt resurfacing, but they will not be forever. The proposal is to begin work in this area before these roads deteriorate to the point where resurfacing is no longer an option.

Microsurfacing

The proposed microsurfacing project will include minor street repairs and the application of a thin, asphaltic surface treatment to the entire roadway surface. This surface treatment is typically aimed at asphalt and composite roads that are in good condition, where its purposes are to help seal the pavement from water infiltration and to preserve the street's driving surface. Microsurfacing can also be used to slow the deterioration of local roads with distressed asphalt that are nearing the need for structural improvements like asphalt resurfacing.

The microsurfacing product has evolved and improved such that the curing time had been reduced and the durability increased. Staff continues to be impressed by the results of the FY2017 microsurfacing program and had proposed an expansion of scope of the program for FY2018 as a result. The goal is to create a program that will return to a microsurfacing candidate roadway within the expected 8-10 year lifespan of the microsurfacing application.

The roadways proposed for this project are:

Belle Coeur Subdivision (Note Chasselle Lane is not included.)

<u>Street Name</u>	<u>PCI</u>	<u>Roughness Index</u>
Chamblee Lane	60 *	59 *
Champeix Lane	60 *	58 *
Clion Lane.....	51.....	54
Coulange Court	46.....	42
Cuisseaux Court.....	60.....	38

Country Fair Subdivision

<u>Street Name</u>	<u>PCI</u>	<u>Roughness Index</u>
Country Fair Drive (Entrance).....	57.....	59
Country Fair Drive (Center).....	91.....	73
Country Fair Drive (Loop).....	49 *	52 *

Streets and Subdivisions along Conway Road

<u>Street Name</u>	<u>PCI</u>	<u>Roughness Index</u>
Conway Gardens Lane.....	38.....	50
Conway Lake Court	58.....	49
Conway Lake Drive	58 *	64 *
Conway Wold Byway	66.....	47
Hammersmith Drive.....	68.....	44
Twin Creek Drive	35.....	52

Streets and Subdivisions along the West Side of Lindbergh Boulevard

<u>Street Name</u>	<u>PCI</u>	<u>Roughness Index</u>
Lawrence Drive.....	45.....	48
Quailways Drive	69 *	63 *
Sunswept Subdivision	56 *	47 *

Additional Streets

<u>Street Name</u>	<u>PCI</u>	<u>Roughness Index</u>
Ladue Pine Woods Drive	91.....	73
Emerald Green Drive	72 *	64 *
Alden Lane.....	48.....	37
Chilton Lane.....	46.....	45

* Indicates an average condition rating for multiple street segments.

The microsurfacing project targets subdivisions and groups of similar streets in order to make the program more intuitive, more efficient, and less expensive to implement.

Most of the streets in the proposed program (Conway Wold Byway, Ladue Pine Woods Drive, and Alden Lane, as examples) are in relatively good condition and will probably be candidates for another microsurfacing application when the program cycles back to them in 8-10 years. However, for streets like Twin Creek and Country Fair, the current pavement conditions likely mean that the proposed microsurfacing may be the last before asphalt resurfacing will be necessary.

Roadway Reconstruction/Rehabilitation

With the completion of the reconstruction of Lakeshore Drive in FY2017, the City needed to determine the most appropriate street to address next through this program. The City hired Cochran Engineering to review the options available for four areas where significant pavement failures had occurred or where a significant pavement area is near the end of its useful life, making them likely candidates for roadway reconstruction or rehabilitation. These four areas are the Country Fair subdivision, the Ladue Estates subdivision, Magna Carta Drive, and the Sackston Woods subdivision.

Cochran collected and reviewed pavement samples from each street, developed preliminary cost estimates for roadway improvement options, and provided recommended approaches for addressing each subdivision. The report containing Cochran's analysis and recommendations is attached for reference.

In short, Cochran recommended that the City preserve its composite streets and subdivisions (such as Country Fair, Ladue Estates, and Magna Carta) as long as possible through maintenance and thin overlays. Cochran recommended the full reconstruction of Sackston Woods because the thickness of this asphalt street is less than the St. Louis County standard of 9".

Staff has already begun to implement parts of these recommendations and proposes repairs in line with these recommendations for the FY2018 pavement maintenance program:

- *Country Fair Subdivision.* Staff proposes a thin overlay over the worst portions of Country Fair Lane and then a microsurface over the rest of the subdivision through the FY2018 program to provide immediate improvements and to help preserve the pavement. Resurfacing of the subdivision is projected in about five years.
- *Ladue Estates Subdivision.* Several areas of this subdivision have been addressed as they have failed. Work has included on-going curb patching and slab replacement in FY2013. More significant improvements are proposed for FY2018, as detailed below.
- *Magna Carta Drive.* A thin overlay was installed in FY2017 to strengthen an area where no additional patches were possible. In doing so, the overlay postponed the emergency of the street. An additional thin overlay is being considered for FY2018 from New Ballas Road to Coeur de Royale Drive to support the road for the construction traffic related to the new police building.
- *Sackston Woods Drive.* Overlays have been applied to this subdivision in FY2013 and FY2017 to address the deteriorating and failing pavement. Staff proposes to include the asphalt portion of the Sackston Woods subdivision in the FY2019 asphalt resurfacing program. While the subdivision does not meet the St. Louis County standard for

thickness, few asphalt streets in the City do. Staff proposes asphalt resurfacing with base repairs for a portion of the street, particularly the western cul-de-sac.

In addition to the analysis by Cochran, staff reviewed the pavement and repair options and estimates that resurfacing with concrete base repairs will likely be the most cost-effective option for the City to provide long-lasting improvements for the composite subdivisions. For the Ladue Estates subdivision, staff estimates that the resurfacing/rehabilitation improvements can be completed in two years, whereas full reconstruction could take up to four years to complete. Staff finds that the monetary and opportunity cost to fully reconstruct the combination subdivisions are too great, and staff recommends to pursue the resurfacing and rehabilitation approach.

Staff proposes to begin work in the Ladue Estates subdivision in FY2018. The Ladue Estates subdivision generally consists of four segments:

<u>Street Name</u>	<u>PCI</u>	<u>Roughness Index</u>
Ladue Estates Drive (West)	63	51
Ladue Estates Drive (Center).....	40	56
Ladue Estates Drive (East).....	56	57
Ladue Estates Drive (South)	45 *	46 *

** Indicates an average condition rating for multiple street segments.*

The proposal for FY2018 is to rehabilitate and resurface the center and south segments of the subdivision as “Phase 1.” “Phase 2” is expected to involve rehabilitating and resurfacing the west and east segments of the subdivision in FY2019.

Program Costs

City staff estimates that completion of the proposed FY2018 Roadway Maintenance Program will cost approximately \$ 1,425,000.

FY2018 transfer to FY2017

The City amended the FY2017 budget and the projected FY2018 budget to effectively transfer \$160,000 from FY2018 into FY2017 to fund the second phase of the concrete improvements to the Ladue Conway Estates subdivision. This transfer resulted in a lower-than-usual budgets for the FY2018 concrete pavement replacement and sidewalk replacement programs. The same amount of work will be completed as was originally planned, but the roadway and sidewalk work in the Ladue Conway Estates subdivision will be completed prior to FY2018.

The adjusted budget would be as follows:

Ladue Conway Estates Concrete Pavement.....	\$ 110,000
Ladue Conway Estates Sidewalk.....	\$ 50,000
Total Transfer to FY2017	\$ 160,000

Original FY2018 Roadway Maintenance Budget.....	\$ 1,585,000
Transfer to FY2017.....	- \$ 160,000
Adjusted FY2018 Budget	\$ 1,425,000

The project breakdown for the adjusted FY2018 roadway program is proposed to be:

Concrete Pavement Replacement	\$ 400,000
Sidewalk Replacement.....	\$ 50,000
Asphalt Resurfacing.....	\$ 450,000
Microsurfacing.....	\$ 200,000
Reconstruction	\$ 300,000
City Work (Patching for Microsurfacing, etc.).....	\$ 25,000
Total	\$ 1,425,000

Attachments: Pavement Investigation and Evaluation (Cochran Engineering)



City Council
300 North New Ballas Rd
Creve-Coeur, MO 63141

Meeting: 03/27/17 06:00 PM
Department: Public Works Department
Category: Presentation
Prepared By: Jim Heines
Department Head: Jim Heines

SCHEDULED

STAFF REPORT

Capital Equipment Program

This presentation will go over the Public Works portion of the 5-year Capital Equipment Account. It will also review the equipment evaluation process used to determine which equipment qualifies for replacement.



DEPARTMENT OF PUBLIC WORKS OFFICE MEMO

DATE: March 15, 2017

TO: Mark Perkins, City Administrator

FROM: Jim Heines, Director of Public Works

SUBJECT: Fleet Replacement Report FY 2018-FY 2022

Program History

Each year Public Works staff evaluates our fleet of vehicle and equipment as a component to the annual Capital Improvement Program update. A number of factors are examined in determining the optimum fleet size and replacement schedule. The criteria used to determine vehicle and equipment life is a national standard promoted by the American Public Works Association (APWA). Key Factors used in determining the vehicle life cycles include:

- The ability to minimize safety risks by driving vehicles with state of the art safety equipment and newer components.
- Reduced downtime for employees driving vehicles that require minimal repair and maintenance
- Enhanced employee morale and organizational public image
- Reduction in the expense incurred to maintain and repair vehicles

In addition to the items listed above the APWA promotes the use of a point system to determine when each vehicle should be considered for replacement. Five factors about each vehicle are evaluated and points are assessed to each category. The replacement factors and point assessments are as follows:

<u>Factor Evaluated</u>	<u>Points Assessed</u>
Vehicle Age	1 point per year
Miles	1 point per 10,000 miles
Reliability	1 to 5 points
Maintenance and repair costs	1 to 5 points
Condition	1 to 5 points

Point Ranges

Under 18 points	Condition I	Excellent
18-22 points	Condition II	Good
23-27 points	Condition III	Qualifies for replacement
28 points and above	Condition IV	Needs immediate consideration

The attached 5-year CIP projections provide a projected schedule for replacement of our fleet. Below is a description of our major equipment, its uses and projected replacement schedule.

Please note that these are projections and all equipment is evaluated annually to determine which pieces of equipment should be replaced.

Two-ton Trucks

These trucks are the base of our operations and the number of two-ton fleet is largely determined by our leaf vacuuming service as well as snow removal services. In the past, due to the continued review of our operations and evaluation of our fleet needs, we have gradually reduced the size of our two ton fleet from 14 two-ton trucks down to our recommended optimum of 9 trucks. This in part is due to converting our fleet over time to heavy duty diesel trucks as well as stream lining our operations and trimming the fleet to meet our needs.

During FY 2008 and FY 2009 the city purchased 2 GMC Diesel powered two-ton trucks each year, so four trucks were purchased in a span of two years. Multiple two-ton GMC trucks were replaced in 2008 and 2009 to make up for skipping two-ton truck replacements in 2003 and 2005. This was the last two years that GMC produced a truck this size. When downsizing the fleet we auctioned off our older trucks which left the oldest trucks to be the 2008s. This being the case, Public Works staff recommended to not replace two-ton trucks in FY 2016 & FY 2017.

It is recommended that we begin replacing two-ton trucks again in FY 2018. Over the next four years we plan to replace two 2008 GMC and two 2009 GMC trucks. These replacements should carry us through FY2021 and will get us back onto a 12 yr. replacement cycle.

Leaf season consumes a substantial amount of manpower and capital resources for several months each year. To provide the level of service expected by our residents we must deploy at least 8 trucks and vacuums with 3-man crews during the peak season. In an effort to keep 8 trucks and leaf vacs on the road, a fleet of 9 trucks is necessary, having one in reserve for break downs. Unfortunately, the leaf vacuum trailers are too heavy to pull with the smaller one-ton trucks.

To provide snow removal services we have split our crew into two 12-hour shifts. This allow the city to deploy 6 two-ton plow trucks and, by recruiting drivers from other departments, several one-ton trucks are also part of the snow removal fleet. If we are to continue to provide snow plow service at the current level it is imperative that we have at least two back up, two-ton plow trucks available for drivers to access in the event of break downs which happens quite often during storms.

In the past, when our two-ton fleet had mainly gas motors, hydraulic breaks, and weaker drivelines with spilt speed axles we experienced break downs quite often and needed a number of reserve trucks. Since we have been transitioning to diesel trucks with heavy duty drivelines and air breaks the fleet has not experiences as much truck down time. Outside of the leaf collection season and snow plow operations, these trucks are used regularly to haul asphalt, rock, mulch, dirt, water tanks, and other materials and supplies to job sites around the city.

Although the APWA reports that the national standard is a ten year replacement schedule for these vehicles, our goal is to rotate the two-ton fleet using a 12 year life cycle. As our diesel trucks age, we will continue to evaluate their condition and better know if the life cycle can be further extended.

Chipper Trucks

Public works has 2 chipper trucks in our fleet to pull the three chippers. Two of these trucks are used on a regular basis and designated for chipping only, containing 25 cubic yard Arbortech Chipper beds mounted to the chassis to maximize load size. A third truck can be accessed from our two-ton fleet above by attaching a 10 cubic yard bolt-on box that slides into the back of the dump bed. This is usually one of our oldest trucks and is used in this capacity for one or two years before it is sent to auction. The backup truck is only utilized in the event of extreme storms in a massive effort for storm damage cleanup

Although the chipper trucks are used for approximately 9 months of the year, we feel that by converting our chipper truck fleet to Diesel, we will be able to get 12 years of service. This will allow the two chipper trucks to fit into the 12 year replacement schedule along with the 9 two-ton trucks above, and the Bucket truck (below) thus having a twelve year rotation by replacing one of these trucks each year.

Bucket Truck

The city has one bucket truck in our fleet, a 1996 International 2-ton chassis with a 35 ft. Altec boom with a man-bucket and crane hook which was purchased from the city of Clayton in 2007. This truck is necessary for tree removal/ pruning operations as well as servicing the decorative lighting, banners, and holiday decorations on Olive or in parking lots. With proper preventative maintenance, annual safety inspections and certification, we hope to keep the truck in our fleet until FY 2021. At that point, we would plan to look at the used equipment market due to our limited usage and a comparatively high cost of a new bucket truck.

One-ton Trucks

Although Public Works has 9 trucks rated in the one-ton range, 3 of these trucks are committed to specific duties year round such as: concrete foreman's truck which is also a service body truck for concrete tools and equipment, a pothole patch truck which remains on the ready and full of cold patch material year round, and a water tank truck that is also a snow truck in the winter. This leaves 6 one-ton trucks available for day to day operations and projects. These tasks include:

- Asphalt and concrete road repairs
- Sidewalk repairs
- Median and ROW maintenance
- Small stormwater projects
- Dirt and turf repairs
- Tree removals
- Landscape and median planting/mulching
- Parks maintenance

Our one-ton trucks are the heart of our fleet during the construction season. They are used for smaller projects and delivering tools and materials to most job sites especially in hard-to-get-to locations. Although the APWA national average recommended replacement for these trucks is

10 years, we have been replacing one-ton trucks in the 12 to 15 year range. Public Works experiences a significant amount of down time from these trucks so we have recently started changing the one-ton fleet over to diesel power also in hopes to get better reliability from these vehicles.

Future one-ton purchases will include two styles of truck. Diesel powered one-ton 350 series trucks will be purchased for our normal work trucks, and replacement snow plow trucks will be a more beefy truck, diesel powered 550 series trucks. The main difference between these two types of trucks is the payload. The 350 series truck has a GPRW of 14,000 lbs. whereas the 550 series truck has a GPRW of 18,000. In addition to upgrading the trucks to diesel, and higher payload rating, staff recommends migrating towards a 10 year replacement cycle to reduce repair costs and increase reliability.

Pick-up Trucks

Over the past 6 years, Public Works staff has trimmed the pickup truck fleet from 9 trucks to 6 trucks in an effort to be more efficient with our fleet. We believe that the 6 trucks that we have now are as lean as our fleet can go. We have combined several duties to some of the trucks in an effort to increase efficiency. Each of these trucks are assigned to specific duties such as:

1. Operation Superintendent truck
2. Park Foreman truck
3. Asphalt Foreman Truck/Flatbed for asphalt tools and supplies
4. Engineering/Inspectors Truck located at City Hall
5. Service body sign repair/replacement truck
6. Small pickup truck used for parts and supply pickup

The APWA national average recommended replacement for these trucks is 7-10 years. Although our oldest pickup truck is 11 years old, Public Works has been fairly successful in maintaining a 10 year replacement schedule. Staff recommends we continue with this effort.

Leaf Vacuum

Public Works staff has been converting the leaf vacuum fleet from gas to diesel power engines. This has helped create a more reliable and powerful fleet. Due to the resulting reduction in breakdowns and downtime, we have been able to reduce the size of our leaf vacuum fleet from 13 to 10 operating units.

To be able to provide service to the residents at the expected level, we have 8 vacuums on the street during the peak fall season. Staff recommends the optimum fleet size to be 10 leaf vacuums (8 on the road + 2 in reserve). Although there are no APWA life expectancy standards available for this equipment, from past experiences, a 10-year replacement schedule is recommended for this type of equipment.

Skid Steer

Public Works has 2 skid steers in our fleet. These units are used for a number of operations and at times both units on the same jobsite with different attachments working concurrently. Some uses include:

- Asphalt milling/replacements
- Concrete removals and replacements
- Moving supplies and equipment around the shop yard and jobsites
- Loading trucks
- Grading/Excavating
- Using attachments: augers, trenchers, millers, sweepers, punch bit, pavement breaker, snow box mulch bucket, etc.

The APWA national average recommended replacement for this equipment is 10 years. We had hoped to get up to 15 years from these units, however, we have seen a significant increase in repairs on the 2007 Skid Steer due to vibration and hard use of this equipment while running the miller and other attachments. Staff is recommending a 10 year replacement on these units.

Backhoe

The city replaced a 1986 John Deere Backhoe in 2008 with another John Deere Backhoe. This piece of equipment is used for a number of tasks which include:

- Pavement removals
- Loading trucks on job sites
- Repairing/replacing bridges in parks and golf course
- Small stormwater projects
- Installing drain pipes
- Grading

Although The APWA national average recommended replacement for this equipment is 10 years, through preventative maintenance and storing equipment under cover, staff is anticipating a 20 year service life for the backhoe.

Front Loader

The city replaced a 1992 John Deere Front Loader in 2011 with another John Deere Front Loader. This piece of equipment is used for a number of tasks which include:

- Moving leaf Mulch and wood chips
- Loading trucks on job sites and for snow operations
- Lifting equipment into dump trucks
- Moving pallets of materials and supplies at the shop yard
- Repairing/replacing bridges in parks and golf course
- Placing gabion rock and storm pipe on smaller projects
- Grading

Although The APWA national average recommended replacement for this equipment is 10 years, through preventative maintenance and storing equipment under cover, staff is anticipating a 20 year service life for the backhoe.

Capital Equipment Purchasing

When recommending vehicle and equipment purchases, Public Works staff reviews a number of options before making the final recommendation such as:

- Purchase new from the MoDOT Cooperative Purchase Program for vehicles and equipment
- City bidding specific vehicles and equipment
- Rent/Lease programs
- Used vehicle/equipment purchases.

Over the years we have found that the MoDOT Cooperative Purchase Program has the best pricing for new vehicles and equipment. Generally new equipment purchased from this program are as much as 37% less than MSRP and 20% less than the city bidding out an individual purchase.

When pricing used equipment we have found that cost to purchase a used unit that is a couple of years old with low miles/hours is comparable to the cost of a new unit with a warranty through the State Cooperative Purchase Program.

Although Rent/Lease programs can keep your fleet stocked with newer trucks, it can be a costly option. Past investigations for these programs have revealed that lease payments over a three year period will equal the cost of purchasing a new unit. In addition, staff met with Enterprise Leasing in 2014 to revisit leasing for trucks and found that they did not lease the two –ton trucks. Upon further discussions about one-ton and pickup trucks, they commented that they cannot compete with the state purchase pricing we receive on trucks through the MoDOT State Cooperative Bids.

Conclusion

Although we have used the rotational method in the past to determine replacement schedules as well as identifying which vehicles and equipment are to be replaced for the past four years we have used a method of evaluating vehicles and equipment which is accepted nationwide by APWA organizations. The results is not much different than the rotational method we used before, however we now have a means to evaluate age, condition, miles, repair costs, down time and appearance. The attached CIP 5-year Equipment Replacement schedules are merely guides used for long term planning and strategies.

The city also recently hired a certified mechanic to perform preventative maintenance and repairs to all of our vehicles and equipment. We have already experienced a reduction in the cost to repair vehicles and expect the trend to continue.

The Public Works department has been tracking preventative maintenance, repairs and down time on our new Fleet Maintenance program for better track purposes. This will help us in evaluating the factors used to assigns points to determine the condition of our fleet when making decisions on replacement.

The Public Works staff understand that a major investment is made each year on these purchases and an even larger investment has been made over the years on our fleet. Staff utilizes every bit of information available to make wise choices regarding when it is time to replace vehicles and equipment. Although we feel we have optimized the size of our fleet to maximize efficiency while staying within budgeted funding limits, we will continue to look for ways to streamline the fleet and increase efficiency while best meeting service related expectations of the residents.

FY 2018-2022 Public Works Proposed Fleet Replacement

FY 2018 Public Works Fleet Replacement Schedule

<u>Item</u>	<u>Cost</u>	<u>Trade/Auction</u>
Two-ton Dump Truck with Plow and Spreader	\$ 125,000.00	2008 Two-ton Dump Truck
One-ton Dump Truck with Plow and Spreader	\$ 83,842.00	2005 One-ton Dump Truck
Leaf Vacuum (Diesel Powered)	\$ 54,796.00	2008 Leaf Vacuum (Gas Powered)
Skid Steer	\$ 65,000.00	2008 Bobcat Skid Steer
	<u>\$ 328,638.00</u>	

FY 2019 Public Works Fleet Replacement Schedule

<u>Item</u>	<u>Cost</u>	<u>Trade/Auction</u>
Two-ton Dump Truck with Plow and Spreader	\$ 128,750.00	2008 Two-ton Dump Truck
3/4 ton Pickup with Plow	\$ 46,998.00	2005 3/4-ton Pickup with Plow
Leaf Vacuum (Diesel Powered)	\$ 56,440.00	2009 Leaf Vacuum (Diesel Powered)
3/4-ton Pickup Truck with Plow	\$ 46,998.00	2011 3/4-ton Pickup
	<u>\$ 279,186.00</u>	

FY 2020 Public Works Fleet Replacement Schedule

<u>Item</u>	<u>Cost</u>	<u>Trade/Auction</u>
Two-ton Dump Truck with Plow and Spreader	\$ 132,613.00	2009 Two-ton Dump Truck
One-ton dump Truck with Plow and Spreader	\$ 88,948.00	2007 One-ton Dump Truck
Leaf Vacuum (Diesel Powered)	\$ 58,134.00	2010 Leaf Vacuum (Diesel Powered)
	<u>\$ 279,695.00</u>	

FY 2021 Public Works Fleet Replacement Schedule

<u>Item</u>	<u>Cost</u>	<u>Trade/Auction</u>
Two-ton Dump Truck with Plow and Spreader	\$ 136,592.00	2009 Two-ton Dump Truck
Bucket Truck (Used)	\$ 100,000.00	1996 Bucket Truck
Leaf Vacuum (Diesel Powered)	\$ 59,879.00	2011 Leaf Vacuum (Diesel Powered)
Limb Chipper	\$ 58,350.00	2007 Limb Chipper
	<u>\$ 354,821.00</u>	

FY 2022 Public Works Fleet Replacement Schedule

<u>Item</u>	<u>Cost</u>	<u>Trade/Auction</u>
Two-ton Dump Truck with Plow and Spreader	\$ 140,690.00	2010 Two-Ton Dump Truck
Skid Steer	\$ 73,159.00	2012 Skid Steer
Leaf Vacuum (Diesel Powered)	\$ 61,676.00	2012 Leaf Vacuum (Diesel Powered)
	<u>\$ 275,525.00</u>	