



**WORK SESSION MEETING
AGENDA
CITY OF CREVE COEUR
CITY COUNCIL
300 NORTH NEW BALLAS RD
MARCH 14, 2016
6:00 PM**

CALL TO ORDER

ROLL CALL

DISCUSSION ITEMS

- 1. Approval of Work and Joint Work Session Minutes Dated February 22 and 29, 2016**
Summary: Approval of minutes
- 2. Capital Improvement Program Fiscal Years 2017 through 2021**
Summary: City staff will review the proposed Capital Improvement Program for Fiscal Years 2017 through 2021, www.creve-coeur.org/cip
- 3. Fleet Replacement Report**
Summary: This report is an overview of the fleet replacement process. We will also cover the projected 5-year replacement plan.

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 03/10/2016
Deborah Ryan, MPCC
City Clerk



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

SCHEDULED

Meeting: 03/14/16 06:00 PM
Department: Legislative /City Clerk
Category: Report
Prepared By: Debbie Ryan
Initiator: Debbie Ryan
Sponsors:

DRAFT MINUTES (ID # 1831)

DOC ID: 1831

Approval of Work and Joint Work Session Minutes Dated February 22 and 29, 2016

Approval of minutes



**WORK SESSION MEETING
MINUTES
CITY OF CREVE COEUR
CITY COUNCIL
300 NORTH NEW BALLAS RD
FEBRUARY 22, 2016
6:00 PM**

Present: Mayor Barry Glantz, Council Members David Kreuter, Ellen Lawrence, Robert Hoffman, AJ Wang (arrived at 6:28), Cynthia Kramer (arrived at 6:38), Scott Saunders, Charlotte D'Alfonso and Sue Baseley

Staff Present: City Administrator Mark Perkins, Community Development Director Jason Jaggi, Parks and Recreation Director Jason Valvero, Farmers Market Manager Katie Dixon, City Attorney Carl Lumley, Assistant to the City Administrator Sharon Stott and Public Works Director Jim Heines

1. Work Session Minutes Dated February 8, 2016

Council Member Saunders moved, seconded by Council Member D'Alfonso to approve work session minutes of February 8, 2016. Passed by unanimous vote.

2. Farmer's Market Update

Jason Valvero stated the change in the Farmer's Market location last year has increased traffic to the market. Last year the market average 12 vendors at each event. Jason Valvero stated it is very helpful having other departments working with the Parks Department on creating a successful market. Public Works helps with set up and generators when needed and the Police Department is helpful. Market Manager Katie Dixon has been working on marketing ideas to get the word out about the market and to increase vendors. Katie has been working with local schools to have weekly entertainment at the market throughout the season (bands, cheerleaders, etc). Last year the market had a net loss of \$7,422. Staff is looking into additional sponsorships for this year to assist in getting the market operating without a loss.

Katie Dixon stated we have many returning vendors from last year and have spoken with several local famers. Currently working with the vendors to sign on as seasonal vendors instead of weekly.

Council Member D'Alfonso asked what happens to the unsold products from the market.

Katie Dixon stated some vendors will mark down prices, some vendors set up at more than one market and some take and feed their livestock.

Jason Valvero stated staff is excited about this year's market and expect the market to improve each year.

3. Capital Improvement Program FY 2017 - 2021

Mark Perkins reviewed the Capital Improvement Program FY 2017 – 2021 with Council.
(Exhibit A)

Adjourned at 6:54 pm



**JOINT WORK SESSION
AGENDA
CITY OF CREVE COEUR CITY COUNCIL,
PLANNING AND ZONING COMMISSION
AND ECONOMIC DEVELOPMENT COMMITTEE
300 NORTH NEW BALLAS RD
FEBRUARY 29, 2016
6:30 PM**

Present: Mayor Barry Glantz, Council Members Charlotte D'Alfonso, Scott Saunders, David Kreuter, Sue Baseley, Cynthia Kramer and Ellen Lawrence.

Planning and Zoning Commission Present: James Faron, Muriel Hall, Beth Kistner, Charles Pullium, Gene Rovak,

Economic Development Committee Present: Robert Bockersman, David Schafly,

Staff Present: Community Development Director Jason Jaggi, City Attorney Carl Lumley, City Administrator Mark Perkins, Chief Eidman, City Planner Whitney Kelly, EDC Staff Liason Andrea Muskopf and City Clerk Debbie Ryan

Additional Guests: Don Magruder, Ted Ruzicka, Kevin Peterson Ayers Saint Gross, Kate Colington of HR&A, Beth Letscher of St. Louis Economic Development Partnership, Andrew Casavant, Ayers Saint Gross

1. Plant Bioscience and Technology Area Master Plan

Kevin Peterson of Ayers Saint Gross reviewed what the Plant Bioscience and Technology Area Master Plan is, the area it covers and the vision of what it will be. (Exhibit A)

Beth Letscher of the St. Louis Economic Development Partnership stated the Partnership applied for a Research and Innovative Strategies Grant and was awarded the \$500,000 grant. The grant is to develop a strategy to develop a Plant Bioscience and Technology Area. Ayers Saint Gross was hired by the Partnership to be the consultant on the project. The company is based out of the Baltimore area and has experience in this area of development.

Gene Rovak asked if the power point that was just shown going to be available to access publicly.

Kevin Peterson stated yes, it will be available on the website.

Gene Rovak stated the city is in the middle of a Comprehensive Plan update and stated the consultants on this project should be working with the City and H3 to make certain the Comp Plan will be reflective of the vision of the area.

Kevin Peterson stated they could engage directly with H3 regarding the area and project.

Sue Baseley asked what the plan is to market this idea to local businesses that will be included in the Master Plan.

Kevin Peterson stated the consultants plan to discuss the vision and identity of the plan and area with current anchors in the area.

Beth Kistner asked if the area is going to be exclusively plant and science based businesses.



**AGENDA
CITY OF CREVE COEUR
CITY COUNCIL
300 NORTH NEW BALLAS RD
FEBRUARY 29, 2016
6:30 PM**

Kate Colington stated no, but looking for a strong bio/plant science businesses and working on some flexibility on businesses that would enhance or feed to the key businesses.

Ted Ruzicka asked what the consultants see as the biggest challenge.

Kevin Peterson stated there are a couple of key overlay areas that have multiple owners.

Ted Ruzicka asked does Ayers Saint Gross have any similar areas/clients that they have completed similar successful projects to the one that is being planned for here.

Kate Colington stated recently complete Rhode Island which is very familiar to this project.

Cynthia Kramer asked what helped determine the footprint of the plan area.

Beth Letscher stated the area covers property south of Olive Blvd and West of Lindbergh.

Mark Perkins stated the area was chosen because the space is located directly adjacent to the core anchors for the project.

Bob Bockersman stated everyone want to be with a winner and we have great anchors.

Charlotte D'Alfonso asked how do consultants plan to keep price points steady so that rent isn't too high and is priced too high for young professionals.

Beth Letscher stated the plan is for the space to be subsidized and that would allow the Economic Development Partnership to provide lower rent space.

David Kreuter asked if the consultants would include advertising of the area when marketing the plan. Many local people do not know how great this area is or what is going on here.

James Faron asked the consultants to design the plan so that the area will be more welcoming to the general public as well as those that will work and live in the area.

Beth Kistner asked what the roll of Creve Coeur is to the consultants as opposed to the developers.

Beth Letscher stated it is up to the city how involved they would like to be in this project and process. The consultants and committee is still exploring several options.

Ted Ruzicka asked if the EDC Partnership is going to decide how the grant funds are spent.

Beth Letscher stated the grant is currently for planning the project. Once the project is planned another entity will take charge of the project.

Charlotte D'Alfonso stated Creve Coeur has so much to offer with schools/locations/hospitals, etc.

Ellen Lawrence stated this is a very exciting plan and asked what the follow up is for development once the Master Plan is completed.



**AGENDA
CITY OF CREVE COEUR
CITY COUNCIL
300 NORTH NEW BALLAS RD
FEBRUARY 29, 2016
6:30 PM**

Kevin Peterson stated there will be market research in place that will assist in following the plan through.

Ellen Lawrence asked what the consultants see as the biggest challenge for this plan.

Kevin Peterson stated connectivity of all of the parcels of land.

David Kreuter stated the Monsanto campus is a very secure campus and it is fairly closed off from the rest of the area as far as accessibility.

Kate Colington, stated the vision is to have a larger building with multiple tenants with employees and have the anchor businesses stay as they are.

Sue Baseley asked who on Creve Coeur staff will be contact for coordinating with this project.

Mark Perkins stated Jason Jaggi and himself.

Kevin Peterson asked if everyone could go on line and register at mysidewalk.com. Sign in and choose participant. Create an account. Only take a few minutes. On the website people/residents/interested parties will be able to submit their responses to the questions that will be listed. There everyone can list any amenities that they would like to see in the area. All responses will assist in creating a more complete plan.

Cynthia Kramer stated the local schools and there is a local junior college that have excellent STEM programs. This is where the biotech companies could educate for future work force.

Gene Rovak stated we need to do some public outreach for this program.

Ellen Lawrence asked if there would be more question on the mysidewalk.com website and suggested including the school districts in the planning process.

Kevin Peterson stated the schools have not been contact yet but they will be part of the planning process.

Beth Kistner asked that the consultants contact as many adjoining property owners of the proposed development area and get them on board and give them as much information as possible up front. Since this is fairly under the radar at the moment, someone can get false information and blow it out of proportion. This project needs to be proactive/transparent and all-inclusive with as many parties as possible.

Beth Letscher stated the city is included in the very early stages of planning and there are plans to include anyone near the development area.

Sue Baseley stated she has already heard concerns regarding the heavy traffic on Olive and how this redevelopment is only going to add to the problem.

Beth Letscher stated the consultants have already hired a transportation engineer for this issue.

Adjourned at 8:02 p.m.



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

Meeting: 03/14/16 06:00 PM
Department: City Council
Category: Presentation
Prepared By: Sharon Stott
Department Head: Sharon Stott

SCHEDULED

STAFF REPORT

Capital Improvement Program Fiscal Years 2017 through 2021

City staff will review the proposed Capital Improvement Program for Fiscal Years 2017 through 2021, www.creve-coeur.org/cip

HISTORY:

02/22/16

City Council

CONTINUED

Next: 03/14/16



City of Creve Coeur

To: Mayor and City Council
 From: Mark Perkins, City Administrator
 Date: February 18, 2016
 Re: Capital Improvement Program Update – FY2017-2021

The proposed Capital Improvement Program (CIP) for the five-year period beginning July 1, 2016 is provided herein. 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 11. 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.

Revenues

The ½ cent capital improvement sales tax is the major funding source for the CIP. Capital sales tax revenues are projected to be \$2,050,000 at the end of the current fiscal year compared to last year's total of \$2,026,656, or an increase of approximately 1.2%. Even though the City is projecting a slight increase for FY2016, other years have had smaller increases even decreases. Therefore, a conservative 1.25% annual increase in sales tax revenue is projected in years 2017 through 2021.

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.

Expenditures

Capital outlay for the next five years will range from approximately \$2.7 million to \$4.1 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 (\$4,164,994), the city saved a considerable amount in interest.

Status updates for FY16 projects and CIP FY17-21 highlights for each major category follow:

9501 Building & Improvement Projects

Americans with Disabilities Act Improvement (ADA) / Community Development Block Grant (CDBG) (\$28,800/FY16; \$20,000/FY17-FY21) – FY16 Funds will be used for ADA accessibility improvements to sidewalk ramps at the intersection of Town & Four Drive and Town & Four Parkway. In FY17, funds have been committed to providing accessibility improvements to the pedestrian signals at two intersections: North New Ballas Road at Old Ballas Road, and Olive Boulevard at Tempo Drive. Staff continue to research suitable uses for federal CDBG funds in FY18 and beyond.

Public Art – Danforth Plant Science Center Bus Shelter (\$17,740/FY16; \$49,000/FY17) – the project includes 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. Cost in FY15 (\$4,616) was used to obtain three artist-designed concepts. Planning, engineering and construction began in FY16 and is anticipated to be complete in early FY17.

Police & Government Center Facilities (\$45,000/FY16; \$200,000/FY17) – In FY14 (\$17,574) and FY15 (\$43,538), a space analysis, needs assessment were completed and some preliminary designs for future renovations or new facilities. The last major renovation occurred in 1987, when the building was converted from an elementary school to the Government Center. In late FY15 and FY16, phase 2 of the preliminary design was completed including sharing the results of the information with the public. In the fall of 2016, the City will seek approval from the residents for a bond measure to construct a new Police Department building and to renovate the existing Government Center building. If the bond measure is successful, the funding in FY17 will be used to begin the design phase. If the bond measure fails, the funding in FY17 will be used to begin needed improvements to the Government Center.

Public Art – CVS Bus Shelter (\$38,101/FY16) – Project includes an artist-designed bus shelter for the location at the CVS Pharmacy located at 11560 Olive Blvd. FY12 (\$6,636) and FY15 (\$6,205) costs include artist and structural designs for the shelter. Design for the project exceeded initial cost estimations due to numerous underground utilities. FY16 costs include construction and inspection for the shelter and base. Costs for the project are subsidized by the developer of the CVS lot (\$30,000). At this writing, installation of the bus shelter is anticipated to be complete in spring 2016.

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 to treat road pavements during winter months. The auxiliary structure will be used as a canopy for the block storage structure to protect the salt from weather and serve as equipment storage as well.

Government Center Electrical Switchgear Replacement (\$250,000/FY19) – Projects includes the replacement of the incoming electrical service switchgear boxes in the lower level boiler room of the Government Center. The switchgear controls the main feed from Ameren U.E. to the Creve Coeur Government Center. The City's insurance provider has recommending the City replace the panel because the company that created the unit has been out of business for years and replacement parts are no longer available.

9506 Park Development Projects

Park Improvements Grant Match (\$14,525/FY16; \$0/FY17-FY21) – In FY16, a Golf Course Needs Assessment was conducted. 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 large park projects highlighted separately below.

Tappmeyer House Renovation (\$52,687/FY16) – The Tappmeyer House was in need of significant repairs to the exterior of the house. FY15 funds (\$40,978) were used to acquire a professional building inspector report which the City used as part of the bid documents and to conduct a number of smaller repair projects. In FY16, completion of painting and repair to the exterior of the house occurred.

Golf Course Cart Path Replacement Grant Match (\$21,000/FY17) – This project is a 6% grant match to replace the asphalt cart path with asphalt at the Creve Coeur Golf Course per the Golf Course Needs Assessment. Staff anticipates applying for a St. Louis Municipal Parks Grant Commission grant for the project estimated to cost \$350,000.

Certified Nature Explorer Classroom (\$25,000/FY20) – Proposed outdoor classroom for either Malcolm Terrace Park or Millennium Park to create a programming/play area.

Dielmann Recreation Complex Renovations – Phase 1 (\$472,588/FY16) – The City received a regional parks commission grant in the amount of \$435,456 for construction of improvements to the building, including lighting and flooring replacement, a centralized desk and other renovations to improve the operational efficiency and usage of the facility per the Dielmann Recreation Complex Needs Assessment. In FY15 funds (\$9,501) were used for design and the start of construction. In FY16, construction was completed and grant reimbursement will be received.

Ice Arena Refrigerant Switch-Over Grant Match (\$33,000/FY19) – The Ice Arena cooling system currently uses R-22. 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.

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

9509 Stormwater Projects

Stormwater Master Plan Projects (\$150,000/FY20; \$150,000/FY21) – The Stormwater Master Plan 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 (\$5,000/FY17; \$250,000/FY18) – Project

includes replacing the culvert pipes under Middlebrook Drive and making associated repairs to the roadways. In FY13, \$31,075 was spent for the design for this project. 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: \$15,000/FY16; \$225,000/FY17; Phase 2: \$70,000/FY18; \$450,000/FY19) – Phase 1 project includes repairing the dam which failed in June 2013, and de-silting south ponds, and installing a bubbler system into the pond to promote a healthier lake system. 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 (\$20,000/FY16; \$210,000/FY17) – Project includes the design (FY16) and construction (FY17) of an extension to an existing drainage culvert that carried Alden Lane over a creek. The project has been identified as urgent by the Stormwater Committee.

Emerson Road Culvert and Headwall Improvements (\$20,000/FY17; \$50,000/FY18) – 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 project has been identified as high by the Stormwater Committee.

9510 Street & Sidewalk Projects

Street and Sidewalk Maintenance Program (\$1,183,000/FY16; \$1,133,000/FY17) – 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 will further assist in prioritization of repairs. The City is awaiting the final report at this writing. In FY16 funds have been or will be used from this account to pay for resurfacing projects along Williamsburg Road and North Walling Drive; significant concrete slab replacement along Somerton Ridge Drive, Wedgewood Drive, and in the Royal Manor subdivision; and microsurfacing in the Broadview Farms, Ridgemoor Forest, and Mason Forest subdivisions. Additional street work included City-wide asphalt and concrete pavement repairs, sidewalk replacement along Old Ballas Road, and pavement striping along Ladue Road and Mosley Road. The City received reimbursement (\$83,434) from Missouri American Water for restoration associated with a water main replacement project along Williamsburg Road as part of the roadway resurfacing project.

Street Reconstruction (\$400,000/FY16; \$350,000/FY17) – The City maintains a large number of 'composite' streets – asphalt over concrete – and these projects often result in extensive reconstruction. In FY16, the City will reconstruct New Salem Drive and a portion of New London Drive. In FY2017, staff recommends to finish reconstruction of New London Drive and to continue on to Lakeshore Drive to complete the reconstruction needs in within the Westchester Estates subdivision.

Mosley Road Preliminary Engineering (\$35,000/FY15) – Preliminary engineering was started in FY14 (\$53,333) and completed in FY15 for the development of a project scope and budget for grant purposes for future inclusion in the City's CIP.

Graeser Road Overlay (\$445,507/FY15; \$12,304/FY16) – Federal funds were secured to cover \$429,000 of the total cost of this project (\$645,000), which includes an asphalt overlay from Ladue Road to Olive Boulevard and curbing, gutter, and sidewalk repairs including accessibility ramps. In FY13 and FY14 (\$51,830 total), the engineering for the project was completed. Construction began in FY15 and was completed in FY16.

Coeur De Ville Drive Improvements – (\$10,852/FY16; \$675,000/FY17) – An engineering design began in FY14 through FY16 (\$66,661 total) with construction in FY17. The City has secured a federal grant to cover \$419,533 of the project cost, which includes reconstruction of the city-owned portion between Olive Boulevard and Ladue Road as well as curbing, gutter, and sidewalk repairs including accessibility ramps. Additional plantings would be installed between Coeur De Ville and I-270 including around the MoDOT equipment storage area to expand the visual barrier.

Warson Road Improvement Project (\$40,000/FY16; \$258,194/FY17; \$250,000/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 FY17 and FY18.

Mason Rd. Sidewalk Infill/Conway Rd. to Olive Blvd. Grant Match (\$20,000/FY19; \$70,000/FY20) – The project includes survey, design, and construction of sidewalk to create a continuous pedestrian route along Mason Road between Conway Road and Olive Boulevard. In FY19 costs are for design and engineering followed by a 20% grant match for FY20 for the anticipated total project cost of \$450,000. Creve Coeur is partnering with St. Louis County and the City of Town & Country on this project.

Lindbergh Streetscape Enhancement Project Phase I (\$175,000/FY19) – This project includes painting the traffic signal mast arms black and installing illuminated street name signs at the three signalized intersections. This proposed project is a reduced scope of the Lindbergh Streetscape Enhancement Project identified on the Future Projects list.

Emerson Sidewalk Improvement Project (\$38,999/FY16; \$292,000/FY17) – The project involves the addition of a sidewalk along the east side of Emerson Road between Ladue Road and Old Ballas Road to connect an existing sidewalk along the frontage of DeSmet Jesuit High School. FY15 (\$12,595) and FY16 are for preliminary design and engineering with construction in FY17. The City was awarded a federal Transportation Alternatives Program grant which covers \$233,600 of the cost.

Emerson Road Improvement Project Grant Match (\$65,000/FY18; \$150,000/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. FY17 cost is for design and engineering with a grant 20% match for FY18. The City applied for grant assistance in FY15.

Mosley Road Improvement Project (\$150,000/FY18; \$50,000/FY19; \$200,000/FY20; \$200,000/FY21) – 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. FY20 & FY21 reflects a grant match of 37% of the anticipated \$1,625,000 construction cost.

New Ballas Improvement Project Grant Match Phase 1, Phase 2 and Phase 3 (\$250,000/FY18; \$50,000/FY19; \$330,000/FY21) – 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 FY18-9 and FY20 reflect a grant match. The grant match includes 100% of the cost of design in FY18 and 30% of the construction cost (FY19-FY21).

Fernview Drive Resurfacing Design and Grant Match (\$12,000/FY20) – The project represents a grant match for planning, design and engineering for asphalt pavement resurfacing along Fernview Drive from Gallagher Road to Olive Boulevard. Future CIP years include grant match estimated at \$60,000.

9516 Capital Equipment

Proposed funding for capital equipment ranges from \$254,003 to \$387,758 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 (\$202,000/FY16) – All capital equipment approved in FY16 was purchased under budget (\$49,905). Costs and equipment purchases vary and are described in-depth in the 5-year Fleet Replacement Report FY17-21.

Telephone/Voice Recording System (\$65,762/FY16) – The city installed a new citywide automated phone and voice recording system.

Ice Resurfacing Vehicle Replacement (\$95,000/FY18) – Cost to replace ice resurfacing vehicle at end of its useful life for the Ice Arena.

Police Emergency Command Vehicle Replacement (\$28,000/FY17) – Cost to replace 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 anticipates the City will receive approximately \$10,000 trade-in value for the existing vehicle.

Fairway Mower Replacement (\$35,000/FY17) – Cost to purchase a used fairway mower to replace the 13-year old Jacobsen fairway mower for the Creve Coeur Golf Course.

Police LiveScan Biometric Fingerprint Scanner (\$38,000/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.

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.

Project Descriptions

Detailed project description sheets for CIP FY17-FY21 and description sheets for Future Projects, as well as the information included herewithin, are available on the City's website www.creve-coeur.org/cip.

Schedule

The CIP FY17-FY21 Schedule follows.

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 FY17-FY21 Spreadsheet
 Exhibit B – CIP FY17-FY21 & Future Project Descriptions
 Exhibit C – CIP FY17-FY21 Citizen Recommendations
 Exhibit D – CIP FY17-FY21 Stormwater Committee Recommendations
 Exhibit E – CIP FY12-FY21 Overview Spreadsheet
 Exhibit F – Future Project List

**Capital Improvement Program
FY 2017-2021 Schedule for Annual Update**

December 1, 2015 – January 15, 2016	Solicit input from citizens, City committees, and City staff
January-February 2016	Staff research, analysis and compilation
February 22, 2016	Proposed CIP submitted to City Council, P&Z and Finance City Council Work Session
March 8, 2016	Finance Committee review
March 21, 2016	Planning & Zoning Commission Review
March 22, 2016	Finance Committee review
March 28, 2016	City Council Work Session
April 11, 2016	Public Hearing before City Council Possible City Council Approval

Exhibit A

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM FY2017-FY2021	FY2015 BUDGETED	FY2015 ACTUAL	FY2016 BUDGETED	FY2016 PROJECTED	FY2017 PROJECTED	FY2018 PROJECTED	FY2019 PROJECTED	FY2020 PROJECTED	FY2021 PROJECTED
9501 BUILDING & IMPROVEMENT PROJECTS									
02 Accessibility Improvements (CDBG)	20,000	45,543	20,000	28,800	20,000	20,000	20,000	20,000	20,000
13 Public Art - Danforth Plant Science Center Bus Shelter	75,000	4,616	55,500	17,740	49,000	-	-	-	-
15 Police & Government Center Facilities	200,000	43,538	55,000	45,000	200,000	-	-	-	-
18 Public Art - CVS Bus Shelter	-	6,205	30,765	38,101	-	-	-	-	-
20 Public Works Salt Storage	30,000	31,221	-	-	-	-	-	-	-
21 Public Works Auxiliary Salt Storage Roof					60,000	-	-	-	-
22 Government Center Electrical Switchgear Replacement					-	-	250,000	-	-
Subtotal	325,000	131,123	161,265	129,641	329,000	20,000	270,000	20,000	20,000
% of Total Capital Outlay	8%	5%	5%	5%	8%	1%	9%	1%	1%
9506 PARK DEVELOPMENT PROJECTS									
01 Misc. Park Improvements (Grant Match)	-	20,219	-	14,525	-	-	-	-	-
06 Golf Course Needs Assessment	-	-	-	7,570	-	-	-	-	-
07 Tappmeyer House Exterior Renovation	60,000	40,978	125,000	52,687	-	-	-	-	-
10 Golf Course Cart Path Replacement (Grant Match)	50,000	-	-	-	21,000	-	-	-	-
11 Certified Nature Explorer Classroom	-	-	-	-	-	-	-	25,000	-
13 Dielmann Recreation Complex Renovations - Phase 1	351,550	9,501	-	472,588	-	-	-	-	-
14 Ice Arena Refrigerant Switch Over (Grant Match)	-	-	-	-	-	-	75,000	-	-
15 Playground Safety Surface Replacement	-	-	-	-	75,000	-	-	-	75,000
16 Golf Course Irrigation Replacement (Grant Match)	-	-	-	-	-	-	-	-	24,600
17 Park Bridge Replacement	-	-	-	-	75,000	200,000	-	-	-
18 Park and Dielmann Recreation Complex Parking Lot Repairs	-	-	-	-	25,000	-	-	-	-
Subtotal	461,550	70,698	125,000	547,370	196,000	200,000	75,000	25,000	99,600
% of Total Capital Outlay	11%	3%	4%	20%	5%	7%	2%	1%	4%
9509 STORMWATER PROJECTS									
01 Stormwater Improvements Per Master Plan	-	-	-	-	-	-	-	150,000	150,000
04 Middlebrook Drive Stormwater Improvements	-	-	-	5,000	5,000	250,000	-	-	-
10 Golf Course Dam Stabilization, Pond Siltation Removal & Control (Phase I & II)	440,000	17,313	500,000	15,000	225,000	70,000	450,000	-	-
11 Alden Lane Culvert Improvements	-	-	-	20,000	210,000	-	-	-	-
12 Emerson Road Culvert and Headwall Improvements	-	-	-	-	20,000	50,000	-	-	-
Subtotal	440,000	17,313	500,000	40,000	460,000	370,000	450,000	150,000	150,000
% of Total Capital Outlay	11%	1%	16%	1%	11%	13%	15%	6%	6%

Exhibit A

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM FY2017-FY2021	FY2015 BUDGETED	FY2015 ACTUAL	FY2016 BUDGETED	FY2016 PROJECTED	FY2017 PROJECTED	FY2018 PROJECTED	FY2019 PROJECTED	FY2020 PROJECTED	FY2021 PROJECTED
9510 STREET & SIDEWALK IMPROVEMENTS									
01 Street and Sidewalk Maintenance Program	1,000,000	912,904	1,100,000	1,183,000	1,133,000	1,166,990	1,202,000	1,238,060	1,275,200
02 Street Reconstruction Program	400,000	445,507	350,000	400,000	350,000	300,000	300,000	300,000	300,000
15 Graeser Road Resurfacing	600,000	562,984	-	12,304	-	-	-	-	-
17 Mosley Road Engineering	30,000	25,469	-	7,545	-	-	-	-	-
20 Coeur De Ville Drive Improvements	500,000	37,778	655,000	10,852	675,000	-	-	-	-
21 Warson Road Improvement Project	-	-	55,000	40,000	258,194	250,000	-	-	-
23 Mason Rd Sidewalk Infill/Conway to Olive (Design & Grant Match)	-	-	-	10,000	-	-	20,000	70,000	-
24 Lindbergh Streetscape Enhancement Project - Phase I	-	-	-	-	-	-	175,000	-	-
25 Emerson Sidewalk Improvement Project (Grant 80% of Construction)	-	12,595	20,178	38,999	292,000	-	-	-	-
26 Emerson Road Improvement Project (Design & Grant Match)	-	-	-	-	-	65,000	-	150,000	-
27 Mosley Road Improvement Project - (Design & Grant Match)	-	-	-	-	-	150,000	50,000	365,000	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)	-	-	-	-	-	-	-	12,000	-
Subtotal	2,530,000	1,997,237	2,180,178	1,702,700	2,708,194	1,931,990	1,997,000	2,160,060	2,139,200
% of Total Capital Outlay	63%	84%	68%	63%	67%	66%	65%	83%	80%

New Projects in Bold

9516 CAPITAL EQUIPMENT									
01 Public Works Capital Equipment	252,000	171,385	251,905	202,000	273,955	294,866	278,355	257,703	251,769
02 Telephone/Voice Recording System	36,000	-	-	65,762	-	-	-	-	-
03 Ice Resurfacing Vehicle Replacement	-	-	-	-	-	95,000	-	-	-
04 Police Emergency Command Vehicle Replacement	-	-	-	-	28,000	-	-	-	-
06 Fairway Mower	-	-	-	-	35,000	-	-	-	-
07 Police LiveScan Fingerprint Scanner	-	-	-	-	38,000	-	-	-	-
Subtotal	288,000	171,385	251,905	267,762	374,955	389,866	278,355	257,703	251,769
% of Total Capital Outlay	7%	7%	8%	10%	9%	13%	9%	10%	9%
TOTAL CAPITAL OUTLAY	4,044,550	2,387,756	3,218,348	2,687,473	4,068,149	2,911,856	3,070,355	2,612,763	2,660,569

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)	4,044,550	2,387,756	3,218,348	2,687,473	4,068,149	2,911,856	3,070,355	2,612,763	2,660,569
---	------------------	------------------	------------------	------------------	------------------	------------------	------------------	------------------	------------------

Exhibit A

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM FY2017-FY2021	FY2015 BUDGETED	FY2015 ACTUAL	FY2016 BUDGETED	FY2016 PROJECTED	FY2017 PROJECTED	FY2018 PROJECTED	FY2019 PROJECTED	FY2020 PROJECTED	FY2021 PROJECTED
FUND REVENUES									
Beginning Fund Balance (estimated Cash Basis as of July 1)	750,202	720,228	1,256,152	1,256,152	1,677,657	930,397	751,856	251,341	235,017
Estimated Capital Improvement Sales Tax Revenue (1/2 Cent)	1,918,688	2,026,656	2,051,989	2,050,000	2,075,625	2,101,570	2,127,840	2,154,438	2,181,368
Estimated Interest Revenue	2,000	1,326	4,000	1,200	1,500	1,500	2,000	2,000	2,001
Est. Addtl Revenue (Outside agencies, grants, reimbursement & other)	1,110,046	465,735	912,533	633,778	823,764	210,245	20,000	20,000	20,000
Proceeds from Equipment Sales	32,000	29,963	24,000	24,000	20,000	20,000	20,000	20,000	20,000
General Fund Transfers	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000
Total Revenues & General Fund Transfers In	3,462,734	2,923,680	3,392,522	3,108,978	3,320,889	2,733,315	2,569,840	2,596,438	2,623,369
Total Anticipated Year End Expenditures	4,044,550	2,387,756	3,218,348	2,687,473	4,068,149	2,911,856	3,070,355	2,612,763	2,660,569
Ending Fund Balance (Cash Basis)	168,386	1,256,152	1,430,326	1,677,657	930,397	751,856	251,341	235,017	197,817
ESTIMATED ADDITIONAL REVENUE (FUNDING SOURCES)									
Community Development Block Grants for ADA Improvements	20,000	45,543	20,000	28,000	20,000	20,000	20,000	20,000	20,000
STL County Muni Parks Grant / Dielmann Recreation Complex Renovations	270,000	-	475,000	435,456	-	-	-	-	-
STL County Muni Parks Grant / Golf Course Needs Assessment	-	-	6,000	6,000	-	-	-	-	-
Graeser Rd Overlay - STPS Grant	420,046	389,970	-	10,000	-	-	-	-	-
Public Art Bus Shelter - Developer Contribution	-	-	-	26,000	-	-	-	-	-
Coeur de Ville Dr Resurface STP-S Grant	400,000	30,222	367,533	12,888	363,609	-	-	-	-
Warson Road Improvement Project STP-S Grant	-	-	44,000	32,000	206,555	190,245	-	-	-
Emerson Sidewalk Improvement Project TAP Grant	-	-	-	-	233,600	-	-	-	-
Credit Missouri American Water Reimbursement			-	83,434	-	-	-	-	-
Subtotal	1,110,046	465,735	912,533	633,778	823,764	210,245	20,000	20,000	20,000

New projects in bold

CITY OF CREVE COEUR

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2017-2021



EXECUTIVE SUMMARY

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2017-2021



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 2002 Comprehensive Plan

Text from the 2002 Comprehensive Plan: *"Within the Comprehensive Plan, 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. The Comprehensive Plan does not specifically identify or outline every project for the next 20 years, and it does not preclude other projects or infrastructure ideas/needs from coming to the forefront, as long as they do not contradict the goals and recommendations of the Comprehensive Plan."*

At this writing, the Comprehensive Plan is in the process of being updated and is anticipated to be complete by late spring/early summer 2016.

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.

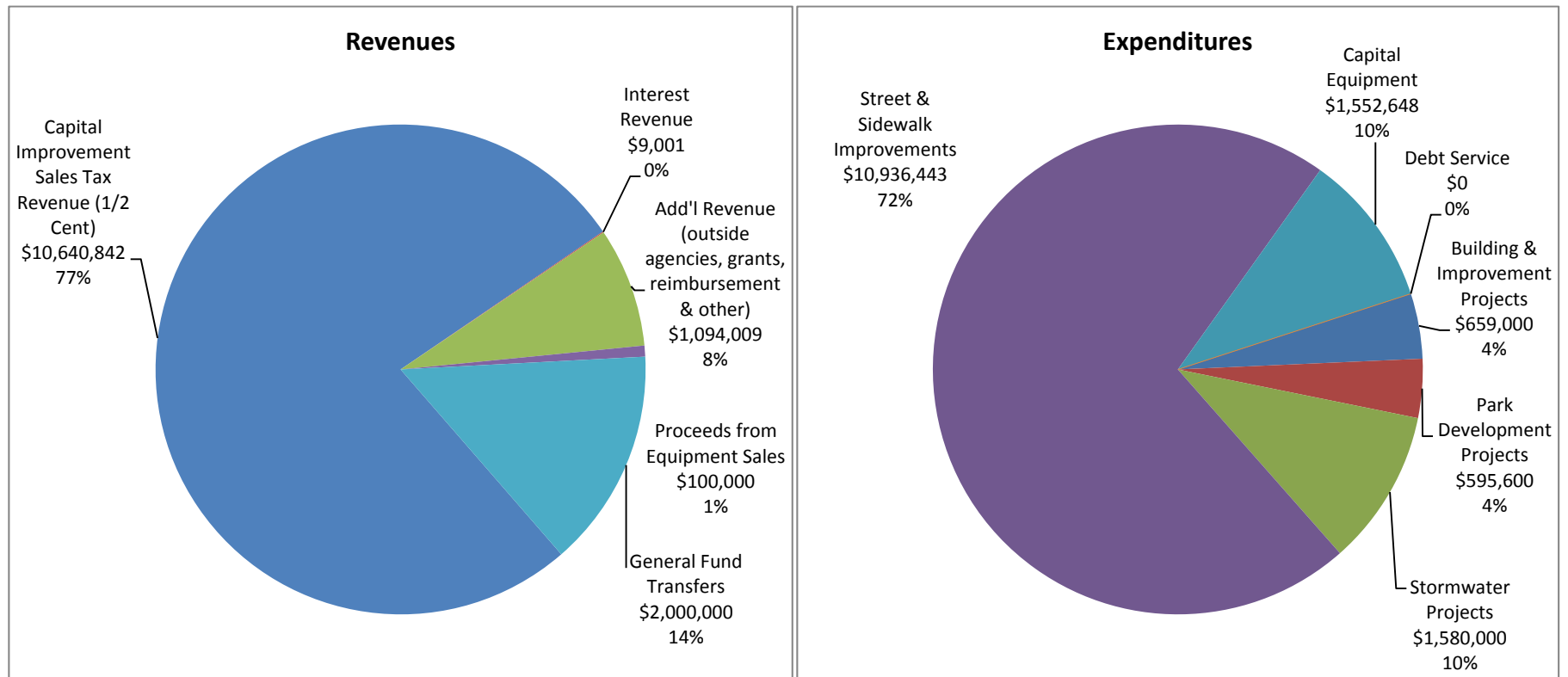
Prior to submittal to the City Council, public input is obtained through the City newsletter, website and City boards, committees and commissions. Prior to the City Council adoption and as required by City charter, the plan is submitted to the Finance Committee for recommendations and comments. The Planning & Zoning Commission also reviews the plan emphasizing the location, extent, and character of the proposed projects prior to City Council 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, justification, cost estimate, operating and maintenance impact, and funding.

2017-2021 CIP Overview

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 major 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 \$15.3 million.

Estimated Total Revenues and Total Expenses by Category for FY2017 - FY2021



For more information about the CIP, contact Sharon Stott, Assistant to the City Administrator at sstott@ci.creve-coeur.mo.us or (314) 872-2516.

9501 – BUILDING & IMPROVEMENT PROJECTS

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2017-2021



9501 BUILDING & IMPROVEMENT PROJECTS - 02

ACCESSIBILITY IMPROVEMENTS (CDBG)

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$20,000	\$20,000	\$0	\$28,800	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	

Project Description:

In FY2017, 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 Old Ballas Road, and Olive Boulevard at Tempo Drive. These improvements follow separate requests from blind residents who frequently use these intersections. Future improvement project locations will be determined on an annual basis and will involve accessibility improvements to the City's facilities or at intersections.

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 Town & Four Parkway and Town & Four Drive. \$8,000 in remaining funds from the FY2014 grant were used to supplement the cost of this project, bringing the City's share to be \$800 of the \$28,800 total.

Expenditure Type:

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

PUBLIC ART – DANFORTH PLANT SCIENCE CENTER BUS SHELTER

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$71,356	\$0	\$71,356	\$22,356	\$49,000	\$0	\$0	\$0	\$0	\$0

Project Description:

This project includes the installation of an artist-designed transit shelter named “Convex Country” on Olive Boulevard just west of the new entrance to the Donald Danforth Plant Science Center. The project will involve three phases: preliminary design and final design are scheduled for FY2016 and construction is scheduled for FY2017.

Existing Condition:

None.

Justification: *Beautification*

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:

The bus shelter will use reclaimed farming equipment and materials for its main components and it will be incorporated into the surrounding prairie grass area from the Danforth Center. Ongoing maintenance of the shelter may be required, but cost is anticipated to be minimal. Additionally, the Arts Committee has requested the artist explore using solar powered LED lights to use little to no electricity to keep annual costs negligible.

Comments:

In FY2015, the City spent \$4,616 to commission three artist-designed concepts to help the City understand and evaluate the bus shelter options. The project’s budget was increased by \$14,540 to for lighting of the shelter. The contract amount for construction in FY2017 (\$49,000) is a not-to-exceed estimate that is based upon a variety of factors that will be evaluated during the design phase.

Expenditure Type:

Planning, Design & Engineering	\$	22,356
Land Acquisition	\$	
Construction	\$	49,000
Equipment	\$	
Other	\$	
Total	\$	71,356

9501 BUILDING & IMPROVEMENT PROJECTS - 15

POLICE AND GOVERNMENT CENTER FACILITIES

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$306,112	\$0	\$306,112	\$106,112	\$200,000	\$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. In fall of 2016, the City will seek approval from the residents for a bond measure to construct a new Police Department building and to renovate the existing Government Center building. If this bond measure is successful, the funding specified for FY2017 can be used to begin the design phase. If this bond measure fails, then the funding specified for FY2017 will be used to begin needed improvements to the Government Center.

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 is designed to evaluate the condition of the existing facility. Public safety and operating efficiency are also a focus of the consultant's work. The project will improve accessibility by enhancing audio/visual equipment and constructing an ADA ramp in the Council Chamber. Council Chamber safety will be enhanced by installing a ballistic wall in the dais and providing an additional point of egress. The Government Center will be analyzed for better use of space, improved functionality, ergonomics, use of technology, and modernized and improved aesthetic appeal.

Operating Budget Impact:

This project is for a study and design which will have no impact on the operating budget. However, when that actual construction takes place, the improvements will include energy efficiency elements as well as helping to reduce day to day maintenance costs.

Comments:

To date (FY2014-FY2016), the City has completed the Space Analysis, Needs Assessment, and Preliminary Designs based on those studies.

Expenditure Type:

Planning, Design & Engineering	\$ 306,112
Land Acquisition	\$
Construction	\$
Equipment	\$
Other	\$
Total (through FY2017)	\$ 306,112

PUBLIC WORKS – AUXILIARY SALT STORAGE ROOF

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$60,000	\$0	\$60,000	\$	\$60,000	\$0	\$0	\$0	\$0	\$0

Project Description:

This project includes the design, fabrication, and installation of a roof to cover the recently constructed auxiliary salt storage bin. The new roof would be made of a metal truss system that is covered with a thick fabric material.

Existing Condition:

The existing auxiliary salt storage area has an open top. Salt stored in this area is covered by a tarp, which has been found to be dangerous to move during a snow event.

Justification: *Condition of Existing Facility; Operating Efficiency*

Salt and other materials that could pollute stormwater are required to be covered or otherwise protected from the elements. Direct access to and use of the salt in this bin would also allow staff to use this salt during a winter storm and would eliminate the need to move the salt from the auxiliary bin to the salt dome between storms and serve as equipment storage as well.

Operating Budget Impact:

The new roof should require little or no maintenance for the foreseeable future.

Comments:

None.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	
Equipment	\$	60,000
Other	\$	
Total	\$	60,000

GOVERNMENT CENTER ELECTRICAL SWITCHGEAR REPLACEMENT

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$250,000	\$0	\$250,000	\$0	\$0	\$0	\$250,000	\$0	\$0	\$0

Project Description:

To replace the incoming electrical service switchgear boxes for the Creve Coeur Government Center.

Existing Condition:

The City currently has Federal Pacific switchgear main breaker panels controlling the main electrical feed from Ameren U.E to the Creve Coeur Government Center. Federal Pacific has been out of business for a number of years, and replacement parts are no longer available. Although the current panel is functioning well, the City's insurance provider is recommending that the City replace the panel.

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

Many of the City's principal functions operate out of the Creve Coeur Government Center, including the police, administrative, courts, planning, building, finance, and public works departments. These departments rely upon working electricity at the Government Center to operate efficiently.

Operating Budget Impact:

There will be no effect on the operating budget. Energy efficiency will not improve as a result of having a new panel and since the existing panel is functioning correctly, the City has not experienced any repair bills directly related to the panel at the time of this writing.

Comments:

Failure of this panel could cause the Government Center to shut down for several days while a temporary system is installed.

Expenditure Type:

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

9506 – PARK DEVELOPMENT PROJECTS

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2017-2021



9506 PARK DEVELOPMENT PROJECTS - 01

PARK IMPROVEMENTS (GRANT MATCH)

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	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 miscellaneous park grant applications, for which the scope and cost are yet to be determined. The CIP includes specific project descriptions for FY2017, FY2019 and FY2021 for which the City will pursue parks grants. It is anticipated that FY2017 will be for Golf Course Cart Path improvements, FY2019 will be for Ice Arena Refrigerant Switch Over, and FY2021 will be for updating the Golf Course Irrigation System per the Golf Course Needs Assessment in FY2015. See specific project specific sheets for more information.

Existing Condition:

None.

Justification: *Beautification; Condition of Existing Facility; Operation Efficiency; Protection & Conservation; Availability of Outside Funding*

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. The City plans to provide a 6% grant match for its projects, which would make the maximum grant match \$28,500 per project.

Expenditure Type:

Planning, Design & Engineering	\$
Land Acquisition	\$
Construction	\$
Equipment	\$
Other	\$
Total	\$ 0

9506 PARK DEVELOPMENT PROJECTS - 01

GOLF COURSE CART PATH REPLACEMENT (GRANT MATCH)

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$21,000	TBD	\$21,000	\$0	\$0	\$21,000	\$0	\$0	\$0	\$0

Project Description:

This project is a grant match to replace 11,400 linear feet of asphalt cart path at the Creve Coeur Municipal Golf Course. The city share represents a 6% grant match for the anticipated total project cost of \$350,000. 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:

Currently the asphalt cart paths are deteriorating including low and high spots, broken asphalt sections and potholes.

Justification: *Beautification; Condition of Existing Facility; Operation Efficiency; Protection & Conservation; Citizen Demand, Availability of Outside Funding, Coordination*

The entire path through the course is old and deteriorated and needs to be replaced. This project will improve public safety as well as the condition of the existing cart paths. Finally, the project is supported by the Parks Master Plan and/or the needs assessments of the Dielmann Recreation Complex (FY2014) and Golf Course (FY2015).

Operating Budget Impact:

Once the paths are reconstructed, the cost of upkeep will be minimal for the next 20 years. The only routine item would be crack repair and then asphalt sealing every 5 to 7 years.

Comments:

The grant will be applied for in FY2017 and if approved, construction to take place in FY2018. The grant is through the St. Louis Municipal Parks Grant Commission, has a max dollar amount of \$475,000 per project and this project will require the City to match 6% of the project total.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	21,000
Equipment	\$	
Other	\$	
Total	\$	21,000

9506 PARK DEVELOPMENT PROJECTS - 11

CERTIFIED NATURE EXPLORER CLASSROOM

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$25,000	\$0	\$25,000	\$0	\$0	\$0	\$0	\$25,000	\$0	\$0

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

9506 PARK DEVELOPMENT PROJECTS - 14

ICE ARENA REFRIGERANT SWITCH-OVER (GRANT MATCH)

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$75,000	TBD	\$75,000	\$0	\$0	\$0	\$75,000	\$0	\$0	\$0

Project Description:

The current system that cools the ice operates using R-22, 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 maximum amount that the City can request from a Municipal Parks Grant would be \$475,000. 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:

Equipment is currently operational. Even small repairs to the systems sometimes 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 public safety issue. Under the US Clean Air Act & the Montreal Protocol on Substances that Deplete the Ozone Layer, use of R-22 refrigerant (or "Freon") is being phased out of use because of the damage these types of substances can cause to the ozone layer and, thus lowering the risk of skin cancer by exposure to UV radiation. 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, the City would likely be unable to recharge the system to maintain cooling.

Operating Budget Impact:

TBD

Comments:

The grant will be applied for in FY2018 and if approved, construction to take place in FY2019.

Expenditure Type:

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

9506 PARK DEVELOPMENT PROJECTS - 15

PLAYGROUND SAFETY SURFACE REPLACEMENT

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$150,000	TBD	\$150,000	\$0	\$75,000	\$0	\$0	\$0	\$75,000	\$0

Project Description:

This project involves the replacement of damaged areas and rejuvenation of the rubberized safety surface beneath the City's playgrounds. The original playground at Millennium Park has the most urgent need, but 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 against injury if a child were to fall off of the playground or swing set. The first playground surface at Millennium Park was installed in 2002 and has areas where kids' feet have worn inches of depth away from the surface. It is slated for surfacing in FY2017. The second playground surface at Millennium Park was installed in 2006, and it appears that it will need replacement 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. This surface was tested at Millennium Park in 2015 and failed to meet the safety standard.

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	\$	150,000
Equipment	\$	
Other	\$	
Total (FY17 & FY21)	\$	150,000

GOLF COURSE IRRIGATION SYSTEM REPLACEMENT (GRANT MATCH)

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$24,600	TBD	\$24,600	\$0	\$0	\$0	\$0	\$0	\$24,600	\$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 amount represents a 6% grant match for the anticipated total project cost of \$410,000. 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 40 years old. Required repairs have been increasing annually. The current set up 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. System downtime endangers turf health and could result in additional watering, chemical and labor costs to bring that area back to health.

Justification: *Condition of Existing Facility; Public Safety; Operating Efficiency; Conservation; Availability of 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 FY2020 and if approved, construction to take place in FY2021. The grant is through the St. Louis Municipal Parks Grant Commission, has a max dollar amount of \$475,000 per project and requires the City to match 6% of the project total.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	24,600
Equipment	\$	
Other	\$	
Total	\$	24,600

9506 PARK DEVELOPMENT PROJECTS - 17

PARK BRIDGE REPLACEMENT

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$275,000	\$0	\$275,000	\$0	\$75,000	\$200,000	\$0	\$0	\$0	\$0

Project Description:

This project would involve the review of replacement or rehabilitation options for two existing vehicular bridges: one at Malcolm Terrace Park and one at the Creve Coeur Golf Course.

Existing Condition:

Both bridges 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*

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 known.

Expenditure Type:

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

9506 PARK DEVELOPMENT PROJECTS - 18

PARK AND DIELMANN RECREATION COMPLEX PARKING LOT REPAIRS

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$25,000	TBD	\$25,000	\$0	\$25,000	\$0	\$0	\$0	\$0	\$0

Project Description:

This project involves patching, crack sealing, sealing, and painting new lines for the parking lots at the Dielmann Recreation Complex and Beirne Park.

Existing Condition:

The parking lots at the Dielmann Recreation Complex and at Beirne Park are asphalt parking lots that are in fair condition, but these parking lots have faded with time, and the parking lot lines are difficult to distinguish.

Justification: *Public Safety; Condition of Existing Facility*

Minor repairs and sealant would be recommended to preserve the pavement and to make the parking lots more attractive and more clear to users.

Operating Budget Impact:

None.

Comments:

None.

Expenditure Type:

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

9509 – STORMWATER PROJECTS

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2017-2021



9509 STORMWATER PROJECTS - 01

STORMWATER IMPROVEMENTS PER MASTER PLAN

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$0	\$0	\$0	\$92,836	\$0	\$0	\$0	\$150,000	\$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 CIP, 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:

Prior years' funding includes \$92,836 that was allocated in FY2014 toward the design of the dam replacement project.

*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 Middlebrook Culvert Improvements (FY2017), the Emerson Culvert and Headwall Replacement (FY2017), the Middlebrook Culvert Replacement Project (FY2018), and the Golf Course Siltation Control and Removal (FY2019).

Expenditure Type:

Planning, Design & Engineering	\$ 50,000
Land Acquisition	\$
Construction	\$ 100,000
Equipment	\$
Other	\$
Annual Total (FY20 - FY21)*:	\$ 150,000

MIDDLEBROOK DRIVE STORMWATER IMPROVEMENTS

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$291,075	\$0	\$291,075	\$36,075	\$5,000	\$250,000	\$0	\$0	\$0	\$0

Project Description:

This project involves replacing a deteriorated and 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, 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 (MSD) is planning a sanitary sewer replacement for this area in 2016. The City's project will be scheduled for 2017 (FY2018) to allow adequate time for MSD to complete its project. This project will replace 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

GOLF COURSE DAM STABILIZATION & POND SILTATION REMOVAL/CONTROL (PHASE 1 & 2)

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs (Phases 1, 2 and Future)						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$765,874	\$0	\$765,874	\$20,874	\$225,000	\$70,000	\$450,000	\$0	\$0	\$1,200,000

Phase 1 Project Description:

Phase 1 involves the construction of an earthen dam along the face of the existing dam to stop current leaks and stabilize the situation on the pond. A stabilization repair is recommended because it will remove the emergency and give the City time to plan the future stormwater improvements at the golf course. The project will also remove the built-up silt in the lake adjacent to the dam and will introduce a bubbler system into the lake to promote a healthier lake system.

Existing Condition:

A hole in the dam became evident in June 2013. This hole has been temporarily stabilized, but the dam continues to leak, and new leaks have formed along the west side of the channel. The water level in the southern lake (adjacent to the dam) has been lowered to reduce the exposure of the patched area to the lake. Prior to being drained, the southern lake had accumulated too much silt for the fountain to function properly.

Justification: *Condition of Existing Facility; Beautification, Citizen Demand, Coordination*

The proposed repair has a high likelihood of stopping the leaks in the dam, which have multiplied since 2013. By stopping the leaks and the resulting erosion, this repair will also greatly reduce the risk of dam failure. This project was listed as a high priority of the Stormwater Committee.

Operating Budget Impact:

Improvements to the dam will reduce costs associated with ongoing temporary repairs and with removing algae from the southern pond.

Comments:

\$92,836 was allocated from the FY2014 and FY2015 Stormwater Master Plan Projects fund for design plans for the replacement of the dam and for removing the silt from the lake. This design will serve as the basis for the stabilization repair. An additional amount of \$5,874 was spent in FY2015 to evaluate ways to stabilize the dam, another \$15,000 will be spent in FY2016 to prepare plans for the construction of this project in the fall of 2016, and \$10,000 is anticipated for inspection of the dam construction. ***Continued – Phase 2 next page...***

Phase 1 Expenditure Type:

Planning & Design (FY15-17)	\$ 30,874
Land Acquisition	\$
Construction (FY2017)	\$ 215,000
Equipment	\$
Other	\$
Total Phase 1 (FY2015-2017)	\$ 245,874

GOLF COURSE DAM STABILIZATION & POND SILTATION REMOVAL/CONTROL (PHASES 1 & 2) *CONTINUED...*

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs (Phases 1, 2 and Future)						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$765,874	\$0	\$765,874	\$20,874	\$225,000	\$70,000	\$450,000	\$0	\$0	\$1,200,000

Continued from previous page...

Phase 2 Project Description:

Phase 2 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 forebay, 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 \$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:

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).

Phase 2 Expenditure Type:

Planning & Design (FY2018)	\$ 70,000
Land Acquisition	\$
Construction (FY2019)	\$ 450,000
Equipment	\$
Other	\$
Total Phase 2 (FY2018-2019)	\$ 520,000

ALDEN LANE CULVERT IMPROVEMENTS

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$230,000	TBD	\$230,000	\$20,000	\$210,000	\$0	\$0	\$0	\$0	\$0

Project Description:

This project involves the design and construction of an extension to an existing drainage culvert that carries Alden Lane over a creek.

Existing Condition:

This one-lane culvert crossing is the sole point of access for four homes on Alden Lane. One of the wingwalls of the existing culvert has begun to fall into the creek. The City has been advised against an attempt to push the wall back into place, as the fear is that the wall will break in the attempt. The guard rails along this culvert are also inadequate, and the City has placed temporary concrete barriers at one end of the culvert to protect motorists.

Justification: *Condition of Existing facility; Public Safety*

The wingwall has failed, but this is one of several issues at this creek crossing, including inadequate guard rail, one-lane access, and poor pavement conditions. The Stormwater Committee reviewed this site and recommended immediate repairs and improvements.

Operating Budget Impact:

City staff will install a temporary brace for the wall to stabilize the situation. Aside from this work, the future culvert should require little significant maintenance.

Comments:

None.

Expenditure Type:

Planning, Design & Engineering	\$ 28,000
Land Acquisition	\$
Construction	\$ 202,000
Equipment	\$
Other	\$
Total	\$ 230,000

EMERSON ROAD CULVERT AND HEADWALL IMPROVEMENTS

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$70,000	TBD	\$70,000	\$0	\$20,000	\$50,000	\$0	\$0	\$0	\$0

Project Description:

The 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.

Existing Condition:

The headwall supports Emerson Road. The stacked stone of the headwall is falling out, which has left about a 6" gap beneath the pavement of Emerson Road. The adjacent roadway continues to sink into this area and to need to be patched as a result. No guardrail exists along the edge of Emerson Road.

Justification: *Condition of Existing Facility; Public Safety*

Pavement patches to smooth out the depression in Emerson Road are temporary, as the pavement continues to sink into the void. Replacement of the headwall will fortify this area and will provide the street the structure it needs for support. The Stormwater Committee reviewed this site and determined that improvements to this site should be one of the City's top stormwater-related priorities.

Operating Budget Impact:

The City currently places asphalt patch material on the pavement depression on a regular basis. No significant maintenance costs are anticipated to be created by this project.

Comments:

Replacement of this headwall was one of the primary elements of the Emerson Road concept plan that was developed in 2011-2012, and this improvement has been part of multiple applications for federal grant assistance for roadway improvements along Emerson Road.

Expenditure Type:

Planning, Design & Engineering	\$	20,000
Land Acquisition	\$	
Construction	\$	50,000
Equipment	\$	
Other	\$	
Total	\$	70,000

9510 – STREET & SIDEWALK IMPROVEMENTS

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2017-2021



9510 STREET & SIDEWALK IMPROVEMENTS - 01

STREET AND SIDEWALK MAINTENANCE PROGRAM

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$1,133,000	\$0	\$1,133,000	\$1,183,000	\$1,133,000	\$1,166,990	\$1,202,000	\$1,238,060	\$1,275,200	\$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:

In FY2016, the City executed an agreement with Missouri American Water whereby Missouri American Water paid the City \$83,434 for the City to include restoration from the water main replacement project along Williamsburg Road into the City's roadway resurfacing project.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	1,133,000
Equipment	\$	
Other	\$	
Total	\$	1,133,000

9510 STREET & SIDEWALK IMPROVEMENTS - 02

STREET RECONSTRUCTION

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$350,000	\$0	\$350,000	\$400,000	\$350,000	\$350,000	\$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. The reconstruction projects in FY2016 and FY2017 are focused upon replacing the principal street in the Westchester Estates subdivision (i.e., Lakeshore Drive, New London Drive, and New Salem Drive – one continuous street with three names).

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	\$	350,000
Equipment	\$	
Other	\$	
Total (FY2017)	\$	350,000

Street Reconstruction Candidate Examples (in Alphabetical Order)

Street Name	Pavement Condition Index (0 – 100)
Conway Garden Court	89
Ladue Estates Drive	79
Ladue Estates Drive East	84
Ladue Estates Drive South	85
Ladue Estates Drive West	88
Lakeshore Drive	74
New London Drive	79
New Salem Drive	78
Sherwyn Drive	70
Sona Lane	76
Winrock Drive	72

9510 STREET & SIDEWALK IMPROVEMENTS - 20

COEUR DE VILLE DRIVE IMPROVEMENTS

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$751,641	\$419,533	\$332,108	\$76,641	\$675,000	\$0	\$0	\$0	\$0	\$0

Project Description:

The project will involve 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. Additional plantings will be installed between Coeur de Ville Drive and Interstate 270 to expand the visual barrier between the neighborhoods along Coeur de Ville and the highway. 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.

Existing Condition:

The City owns and maintains the portion of Coeur de Ville Drive from the entrance to Parc Provence to Royal Valley Drive. The existing roadway and sidewalk in this section are in poor condition, and much of it needs to be replaced. The City's portion of Coeur de Ville Drive was found to have a pavement condition index (PCI) of 66 in 2012, which indicates the pavement can no longer be repaired but must be replaced.

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

The pavement rehabilitation will provide a new driving surface, improve drainage, and slightly improve the alignment of the street. Sidewalk replacement will provide adequate sidewalk drainage and an accessible pedestrian route along Coeur de Ville Drive. Adding to the visual barrier between Coeur de Ville and Interstate 270 is an often-requested enhancement for this area.

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. The cost of this project has increased due to a scope increase to replace all of the curbing along the street. This project will also require stormwater mitigation.

Expenditure Type:

Planning, Design & Engineering	\$ 76,641
Land Acquisition	\$
Construction	\$ 675,000
Equipment	\$
Other	\$
Total	\$ 751,641

WARSON ROAD IMPROVEMENT PROJECT

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$548,194	\$428,800	\$119,394	\$40,000	\$258,194	\$250,000	\$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 78% of the estimated total cost of \$548,194. The City's share is estimated to be \$119,394 of these costs.

Existing Condition:

The existing roadway pavement has deteriorated and is in need of resurfacing. The sidewalks along Warson Road are typically in good condition, but repairs and accessibility improvements are needed. Warson Road was found to have a pavement condition index (PCI) of 74 in 2014, 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 but will continue into FY2017. Construction for the project could begin near the end of FY2017 and continue into FY2018. The amounts shown above are estimates of the progress that will be made in each fiscal year.

Expenditure Type:

Planning, Design & Engineering	\$ 77,194
Land Acquisition	\$
Construction	\$ 471,000
Equipment	\$
Other	\$
Total	\$ 548,194

MASON ROAD SIDEWALK INFILL – CONWAY TO OLIVE (GRANT MATCH)

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$100,000	TBD	\$100,000	\$10,000	\$0	\$0	\$20,000	\$70,000	\$0	\$0

Project Description:

The project involves survey, design, and construction of sidewalk to create a continuous pedestrian route along Mason Road between Conway Road and Olive Boulevard. The amount of \$100,000 represents a 20% grant match for the anticipated total project cost of \$450,000, plus \$10,000 for the City's anticipated share of the cost to develop a concept plan for the sidewalk. The full project cost will be programmed into the appropriate fiscal years if the City is successful in obtaining a federal grant for 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 is working with the City of Town and Country and St. Louis County to develop a conceptual design plan for a continuous pedestrian route along Mason Road from Clayton Road to Olive Boulevard. This project may become one or more phases of this larger Mason Road pedestrian plan. 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	\$	30,000
Land Acquisition	\$	
Construction	\$	70,000
Equipment	\$	
Other	\$	
Total (Grant Match)	\$	100,000

LINDBERGH STREETScape ENHANCEMENT PROJECT – PHASE 1

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$175,000	\$0	\$175,000	\$0	\$0	\$0	\$175,000	\$0	\$0	\$0

Project Description:

The project purpose is to improve the appearance of the corridor. This proposed project is a reduced scope of the Lindbergh Streetscape Enhancement Project identified on the Future Projects list. This project includes painting the traffic signal mast arms black and installing illuminated street name signs at the three signalized intersections.

Existing Condition:

Lindbergh Boulevard is typically a four-lane state highway 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*

The purpose of the project would be to improve the aesthetics of the Lindbergh Boulevard corridor in an effort to improve the character of this commercial and residential mixed area. These improvements would make some progress toward the beautification of Lindbergh envisioned in the Lindbergh Boulevard Streetscape Master Plan.

Operating Budget Impact:

City staff plans to use drought-tolerant native plants for the proposed landscape areas at the Olive/Lindbergh interchange. These plans will require little maintenance, so minimal impact to the operating budget is expected.

Comments:

Lindbergh Boulevard is owned and maintained by the Missouri Department of Transportation. City staff learned the proposed enhancements to Lindbergh Boulevard would not qualify for a federal Transportation Alternatives Program grant.

Expenditure Type:

Planning, Design & Engineering	\$	50,000
Land Acquisition	\$	
Construction	\$	125,000
Equipment	\$	
Other	\$	
Total	\$	175,000

EMERSON SIDEWALK IMPROVEMENT PROJECT

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$343,594	\$233,600	\$109,994	\$51,594	\$292,000	\$292,000	\$0	\$0	\$0	\$0

Project Description:

The project involves 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% 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 (estimated at \$15,000), and 100% of the design cost (\$36,594).

Existing Condition:

No continuous pedestrian facility exists along Emerson Road connects Ladue Road to Old Ballas Road, and Emerson Road does not have a consistent shoulder to accommodate pedestrians. DeSmet Jesuit High School recently constructed a sidewalk along their frontage of Emerson Road, but this sidewalk does not connect to either residential area immediately north or south of the school.

Justification: *Public Safety; Availability of Outside Funding; Citizen Demand*

This project will complete an accessible pedestrian route to connect two neighborhoods and a high school where no continuous pedestrian facilities exist. Addition of this sidewalk is identified as a "third priority" sidewalk in the Creve Coeur Pedestrian Plan.

Operating Budget Impact:

None.

Comments:

The Emerson Sidewalk Improvement Project follows a concept plan that was developed for Emerson Road in 2011. City staff continues to pursue a federal grant to assist with the design and construction costs for a portion of the roadway improvements that were part of this concept plan. The Missouri Department of Transportation owns Emerson Road south of DeSmet Jesuit High School.

Expenditure Type:

Planning, Design & Engineering	\$	36,594
Land Acquisition	\$	15,000
Construction	\$	292,000
Equipment	\$	
Other	\$	
Total	\$	343,594

EMERSON ROAD IMPROVEMENT PROJECT (DESIGN AND GRANT MATCH)

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$215,000	TBD	\$215,000	\$0	\$0	\$65,000	\$0	\$150,000	\$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. The amount of \$150,000 represents a grant match of approximately 25% of the construction phase of this \$625,000 project. The full project cost will be included in the appropriate fiscal years if the City is successful in obtaining a federal grant for the work. The City applied for grant assistance for this project in 2013, 2014, 2015, and 2016. The applications in 2013-2015 were not successful.

Existing Condition:

The existing roadway pavement is in satisfactory condition, but 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 80 in 2015, which indicates that the pavement is a good candidate for resurfacing.

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:

None.

Comments:

The Emerson Road Improvement Project follows a concept plan that was developed for Emerson Road in 2011. The sidewalk improvements that were part of this concept plan will be completed through the Emerson Road Sidewalk Improvement Project in 2016, 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	\$ 150,000
Equipment	\$
Other	\$
Total (City Share)	\$ 215,000

MOSLEY ROAD IMPROVEMENT PROJECT (DESIGN AND GRANT MATCH)

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$799,000	TBD	\$799,000	\$0	\$0	\$150,000	\$50,000	\$365,000	\$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 has been notified that Mosley Road has been reclassified as a minor collector roadway. This designation qualifies improvements to Mosley Road for federal grant assistance. The City share shown reflects a grant match of about 38% of the anticipated \$1,625,000 cost for construction and easements, plus 100% of the design cost.

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 78 in 2015, 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 2015 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 near annual basis. Completing this project would eliminate this need and expense.

Comments:

A conceptual design for Mosley Road was completed for \$85,352 in FY2014-FY2015. Staff applied for a federal grant in early 2016 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 a grant.

Expenditure Type:

Planning, Design & Engineering	\$	175,000
Land Acquisition	\$	50,000
Construction	\$	574,000
Equipment	\$	
Other	\$	
Total (Grant Match + Design)	\$	799,000

NEW BALLAS ROAD IMPROVEMENT PROJECT – PHASES 1, 2 & 3 (DESIGN AND GRANT MATCH)

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs (Phases 1, 2, 3 & Future)						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	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 2015, 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 91 in 2015, which indicates that the pavement is 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 (FY2019)	\$	250,000
Land Acquisition	\$	
Construction (FY2021)	\$	300,000
Equipment	\$	
Other	\$	
Phase 1 Total FY2019 & FY2021 (Grant Match)	\$	550,000

NEW BALLAS ROAD IMPROVEMENT PROJECT – PHASES 1, 2 & 3 (DESIGN & GRANT MATCH) *CONTINUED...*

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs (Phases 1, 2, 3 & Future)						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	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 2018. 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 94 in 2015, which indicates that the pavement is in very good condition and that is a good candidate for pavement preservation, such as a 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:

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 2019. ***Continued – Phase 3 next page...***

Phase 2 Expenditure Type:

Planning & Design (FY2020)	\$ 25,000
Land Acquisition	\$
Construction (Future - FY2022)	\$ 330,000
Equipment	\$
Other	\$
Phase 2 Total FY2020 & FY2022 (Grant Match)	\$ 355,000

NEW BALLAS ROAD IMPROVEMENT PROJECT – PHASES 1, 2 & 3 (DESIGN AND GRANT MATCH) *CONTINUED...*

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs (Phases 1, 2, 3 & Future)						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	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 2020. 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 permitting 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 94 in 2015, indicating the pavement is 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:

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 (FY2021)	\$ 30,000
Land Acquisition	\$
Construction (FY2023)	\$ 365,000
Equipment	\$
Other	\$
Phase 3 Total FY2021 & FY2023 (Grant Match)	\$ 395,000

9510 STREET & SIDEWALK IMPROVEMENTS - 31

FERNVIEW DRIVE RESURFACING (DESIGN AND GRANT MATCH)

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$72,000	TBD	\$72,000	\$0	\$0	\$0	\$0	\$12,000	\$0	\$60,000

Project Description:

This project involves asphalt pavement resurfacing along Fernview Drive from Gallagher Road to Olive Boulevard. The City share represents 20% of the design and construction phases.

Existing Condition:

Fernview Drive consists of an asphalt street with concrete curbs and gutters between Gallagher Road and Olive Boulevard. Fernview Drive is currently in good condition with an average pavement condition index of 90. This condition suggests that the pavement should be resurfaced within the next five to ten years.

Justification: *Public Safety; Availability of Outside Funding; Citizen Demand*

The roadway resurfacing will eventually be necessary to maintain the pavement along Fernview Drive.

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. 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	\$	12,000
Land Acquisition	\$	
Construction	\$	60,000
Equipment	\$	
Other	\$	
Total (Grant Match)	\$	72,000

9516 – CAPITAL EQUIPMENT

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2017-2021



9516 CAPITAL EQUIPMENT - 01

PUBLIC WORKS CAPITAL EQUIPMENT

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$273,955	\$0	\$273,955	\$0	\$273,955	\$294,866	\$278,355	\$257,703	\$251,769	\$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 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 FY2017 as replacements for older equipment:

• Two-ton Dump with Plow and Spreader.....	\$ 125,753
• One-ton Dump with Plow and Spreader.....	\$ 65,202
• 1/2-ton 4x4 Pickup Truck	\$ 35,000
• Leaf Vacuum (Diesel Powered)	\$ 48,000
	\$ 273,955

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	\$	273,955
Other	\$	
Total	\$	273,955

9516 CAPITAL EQUIPMENT - 03

ICE RESURFACING VEHICLE REPLACEMENT

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$95,000	\$0	\$95,000	\$0	\$0	\$95,000	\$0	\$0	\$0	\$0

Project Description:

Purchase a new ice resurfacing vehicle to replace the current 2003 Olympia Ice Resurfacer.

Existing Condition:

Current Olympia vehicle is aging and replacement should occur in FY18. Actual usage if figured in hours with each hour equating to about 35 miles. The current machine has 5,273 hours with an average of approximately 450 hours per year. The life of the machine is 12 to 14 years.

Justification: *Condition of Existing Facility; Operating Efficiency*

Operational efficiency would be improved through use of new technologies such as laser levelers that will both improve skater experience and assist in keeping ice depth more consistent with less weekly maintenance. Additionally, there are a variety of options to purchase a machine that is electric (\$145,000) rather than using propane (\$95,000) and, therefore, leads to improved air quality and a healthier environment for those visiting the facility.

Operating Budget Impact:

Maintenance and repair costs are approximately \$3,000/annually; however, as unit ages cost of maintenance can substantially increase. While battery replacement and recharging costs will be several thousand dollars annually with the purchase of an electric machine, this cost will be offset through no longer needing to purchase propane (annual cost of approximately \$5,000).

Comments:

Without a properly functioning ice resurfacer, operations at the ice arena would have to be suspended, this is especially critical since the ice is used daily throughout the entire year, and there is little to no time available for extensive repairs. On average, the Olympia runs about 450 hours per year. There is currently a back-up Olympia for use in emergencies; however, it is not dependable for extended periods of time.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	
Equipment	\$	95,000
Other	\$	
Total	\$	95,000

9516 CAPITAL EQUIPMENT - 04

POLICE EMERGENCY COMMAND VEHICLE REPLACEMENT

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$28,000	\$0	\$28,000	\$0	\$28,000		\$0	\$0	\$0	\$0

Project Description:

The replacement of an existing Chevrolet Tahoe used for the purpose of emergency management and public safety, as well as the daily operations of the Police Department (PD). The PD would purchase a 2016 Ford Interceptor that would serve as a replacement for the 2010 Chevrolet Tahoe. The Ford Interceptor could be purchased on a contract price, whereas a new Chevrolet Tahoe would be considerably more expensive. Because of the cost increase, staff recommends the purchase of a 2016 Ford Interceptor Utility AWD Vehicle to replace the Chevrolet Tahoe.

Existing Condition:

Current Chevrolet Tahoe is 5+ years old (2010) and has 81,500 miles. The annual maintenance cost averages \$1,100. While the cosmetic and mechanical conditions of the vehicle are "good", its reliability moving forward is uncertain.

Justification: Public Safety, Coordination

The current vehicle is used in three ways: 1) as an emergency management response vehicle that is stocked with necessary equipment to effectively and efficiently manage critical incidents; 2) as a patrol vehicle capable of navigating roadways in inclement weather; and 3) as a general patrol vehicle when needed. Currently, the PD has seven 4-wheel drive vehicles that can be used by patrol in inclement weather. Based on the age and mileage of the existing vehicle, a replacement is requested to ensure the continued reliability of its use.

Operating Budget Impact:

Currently \$1,100 a year in maintenance costs, upon purchase of a new vehicle, the anticipated maintenance costs would be \$500. PD anticipates approximately \$10,000 trade-in value for the existing 2010 Chevrolet Tahoe.

Comments:

The 4-wheel drive option will allow the vehicle to be used for patrol activities in inclement weather and to ensure its availability during a critical incident in inclement weather. State Contract: 2016 Ford Police Interceptor Utility AWD Vehicle.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	
Equipment	\$	28,000
Other	\$	
Total	\$	28,000

9516 CAPITAL EQUIPMENT - 05

FAIRWAY MOWER REPLACEMENT

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Future
\$35,000	\$0	\$35,000	\$0	\$0	\$35,000	\$0	\$0	\$0	\$0

Project Description:

Purchase a used fairway mower to replace the current 2003 Jacobsen fairway mower at the Creve Coeur Golf Course.

Existing Condition:

Current fairway mower is aging and replacement should occur in FY17. The current machine is 13 years old and has 2,992 hours with an average of approximately 230 hours per year. The life of the machine is 12 to 14 years.

Justification: *Condition of Existing Facility; Operating Efficiency*

The current mower has passed its useful life and is becoming costly and time consuming to maintain. The operating efficiency of the course would increase by use of newer mower technologies such as speed and turn control, as well as reduced emissions.

Operating Budget Impact:

Maintenance and repair costs are approximately \$1,200 annually; however, as unit ages cost of maintenance can substantially increase. Anticipated annual maintenance costs for a newer unit for the first 5 years is less than \$400 per year.

Comments:

The City only has one fairway mower and downtime caused by maintenance repairs can impact mowing intervals which can negatively impact course conditions for the golfers. Fairways are mowed two to three times per week during peak season from late spring to fall. A used mower is preferred to a new one due to high costs of new mowers-upwards of \$50,000. The Jacobsen mower would be traded-in or auctioned to offset the cost.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	
Equipment	\$	35,000
Other	\$	
Total	\$	35,000

9516 CAPITAL EQUIPMENT - 06

POLICE LIVESCAN BIOMETRIC FINGERPRINT SCANNER

Total Project Cost	Outside Funding Source	City Share	Estimated Total Capital Costs						
			Prior Years	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Future
\$38,000	\$0	\$38,000	\$0	\$38,000		\$0	\$0	\$0	\$0

Project Description:

The replacement of the existing 15-year-old biometric fingerprint scanner. The existing LiveScan Biometric Fingerprint device does not meet the new REJIS/CJIS requirements, nor can it be updated. The PD averages 1300 arrests per year, with the majority of those arrestees needing to be fingerprinted and submitted to St. Louis County, Missouri Highway Patrol and the FBI. The State of Missouri will have a contractual price of \$38,000 for all law enforcement agencies this year.

Existing Condition:

The existing LiveScan Fingerprint scanner is outdated and needs to be replaced. REJIS/CEJIS standards mandate the machine's capabilities and requirements.

Justification: *Public Safety, Coordination, Condition of Existing Facility*

The current machine electronically scans and automatically forwards the fingerprints to the St. Louis County Police Department's fingerprint section, the Missouri State Highway Patrol, and the FBI. Current requirements and updates are no longer available for the existing device.

Operating Budget Impact:

The City pays \$3,350 per year for LiveScan maintenance and connectivity fees.

Comments:

The PD has submitted a grant request for the purchase of a new LiveScan Fingerprint Scanner; however the State of Missouri has only purchased 10 machines for the entire state. Thus the probability of obtaining a LiveScan fingerprinting scanner on the state grant is limited.

Expenditure Type:

Planning, Design & Engineering	\$	
Land Acquisition	\$	
Construction	\$	
Equipment	\$	38,000
Other	\$	
Total	\$	38,000

FUTURE PROJECTS

CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS UNKNOWN



FUTURE PROJECT LIST

FUTURE PROJECT: DIELMANN RECREATION COMPLEX RENOVATIONS - PHASE 2

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 Parks Grant Commission construction grant awarded in 2015. Phase I renovations included updates to the lobby, creation of a centralized check-in desk for the building, and updated and expanded meeting room space as well as energy efficiency upgrades. Future phases could include additional energy efficiency upgrades such as interior and exterior lighting, parking lot modifications for better traffic flow, updates to the East Meeting Room such as addition of a catering kitchen and 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 FY2017-FY2021.

Operating Budget Impact:

TBD

Comments:

CIP grant matches for FY2017-FY2021 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

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

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 as the only 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.

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

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

GOLF COURSE STORMWATER SYSTEM IMPROVEMENTS

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 the FY2017-FY2021 CIP, including a stabilization repair for the dam, silt removal from the southern-most and northern-most lakes, forebay 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

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

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 INFRASTRUCTURE

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

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.

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 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: NEW BALLAS ROAD/OLIVE BOULEVARD INTERSECTION IMPROVEMENTS

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 account for 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

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.

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

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 \$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

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 WORKS EQUIPMENT STORAGE BUILDING

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

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 ENHANCEMENTS PHASE II (MASON ROAD TO FERNVIEW DRIVE)

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 ROAD TO WEST CITY LIMIT)

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 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.

**Capital Improvement Program FY17-FY21
Citizen Recommendations**

Randy Bomkamp, 13104 Gascogne Court (received 11/30/2015)

- Repair the pad of concrete at the intersection Cannes and Gascogne Drive. Repairs have been passed up several times and area in poor repair.
 - **Staff Comments (responded 12/1/2015):** City staff will check to see if this pavement has failed recently. Last year's review found numerous broken sections of concrete on Cannes and Gascogne, but none were considered hazardous or high-priority repairs. City staff review the conditions of the City's entire concrete pavement network at the end of each winter to prioritize repairs throughout the city for the following summer. Staff will have a better idea of the concrete repair locations in March and April.
 - **Update as of 12/3/15:** Holes should be patched by tomorrow evening. The long term solution is to include this slab on the emergency replacement list. The replacement should take place in the spring or early summer. In the meanwhile, staff will continue to watch this area for further spalling and deterioration.

Jack Trout, 11955 Randy Dr. (received 12/2/2015)

- Repair work on Emerson Road, just north of DeSmet. It could use some temporary work until a comprehensive plan is adopted for it. There are many pot holes and bad asphalt along the area and is not up to Creve Coeur standards.
 - **Staff Comments (responded 12/2/2015):** Staff stated they can and will patch the potholes. There is one area, just above a failing drainage culvert (see below) where patching will not solve the problem, but staff will patch it until the culvert is fixed. Otherwise, there are a few things going on along Emerson Road:
 - Pavement. The City has applied for three federal grants to repave this section of Emerson Road because of its poor condition, and all were unsuccessful. Most likely it will have to be repaved the city's annual asphalt program. That repaving should wait for the projects below to be complete.
 - Drainage culvert. There is a drain that crossed beneath Emerson that is failing. City staff has requested an estimate for the design of a new culvert, and this project will be brought up in the CIP process. The road is failing along with the culvert, so the city engineer will recommend that the City move forward with this project soon.
 - Sidewalks. As of 12/1/2015, the City is entering into the right-of-way phase for a project to install a new sidewalk along the east side of Emerson Road, from Ladue Road to Old Ballas Road. This construction should begin in fall 2016 or spring 2017.
 - **Update as of 12/3/15:** City staff has inspected the pothole complaint location and city crew has already placed cold patch in the holes.

Fran Cantor, 11700 Tarrytown (received 12/3/2015)

- Large landscape projects are expensive and requiring Installing. Plants are an important part of storm water remediation and our parks are in need of plants other than turf. CIP project definition should include the installation of new plantings.
 - **Staff Comments (responded in HEB meeting 12/8/2015):** Based on current capital improvement program goals, CIP projects must have a useful life of at least five years and a minimum cost of \$20,000. Generally, the CIP focused on placement or repair of deteriorating infrastructure, improvement to operational or functional aspects of

existing infrastructure, new facilities or replacement of major equipment. Items not considered for the CIP could be included in the operational budget of the city. However, the recommendation to consider large landscape projects in the CIP was provided to the Director of Finance and City Administrator for consideration on 12/8/2015.

Horticulture, Ecology and Beautification Committee (received 12/8/2015)

- Committee recommend the removal of honeysuckle, and installation of a bioswale with native plants in Millennium Park adjacent to the storm sewer drain located by park playground for the purpose of public beautification and stormwater remediation for an amount not to exceed \$50,000.
 - **Staff Comments (responded in HEB meeting 12/8/2015 – see previous comment)**
 - In 2015, city staff installed an inlet north of the walking path and piped it under the path and to the stream located in the woods at Millennium Park south of the pavilion and playground. This was the location where erosion and path washout occurred. It appears the area HEB is focusing on installing a bioswale is located in an area migrating through the open area south of the playground and pavilion. This open, fairly level area is where pavilion renters use to put up volleyball nets, bounce houses, tents, and hold other open space activities. Staff is unsure there is enough space to accommodate both a bioswale and the previously mentioned activities.

Robert Mooney, 12390 Montsouris (received 12/3/2015)

- Unevenness in subdivision sidewalk; inhibits older residents from walking in evening due to potential trip/fall hazards. Resident has inquired before and was told it was a subdivision matter. Resident believes it would not be a large financial cost to the city to improve sidewalks in the subdivision.
 - **Staff Comments (responded 12/15/2015):** The Lac du Bois subdivision is privately maintained. The subdivision's trustees inquired about having the City take over the maintenance of its streets in 2012, but the subdivision decided that the cost to improve the streets and sidewalks was too costly to pursue City maintenance further. City staff recognizes that there are wide-spread sidewalk concerns in the Lac du Bois neighborhood, but these sidewalks are not the City's to maintain. City staff encourages the residents of this subdivision to discuss the matter with the subdivision's trustees.

June Jeffries, 10327 N. Sunswept (received 12/6/2015)

- Prioritize placing new sidewalks along streets leading to parks such as Country View Drive, which leads to the well-used Beirne Park. Walkers must use the street and are forced to dodge considerable vehicle traffic to and from the park.
- Improve existing sidewalks by off-setting existing (and new) sidewalks from the streets, especially high traffic through-streets such as N. Spode Road. The sidewalks directly abut the street, exposing walkers to injury from moving vehicles.
 - **Staff Comments (responded 12/15/2015):** The City continuously improves its existing sidewalks and adds sidewalks when the opportunity and need arise. Approximately \$100,000 is invested in sidewalk maintenance each year as part of the City's annual capital improvement budget. Beyond this annual investment, significant sidewalk work is completed each year as part of roadway projects (such as the Graeser Road project in 2015) and sidewalk projects (such as for Emerson Road in 2016). Further, the City pursues opportunities for grants and partnerships to make improvements to the

sidewalks in the City. Sidewalks are prioritized through the City's Pedestrian Plan. This document is available on the City's website. It lists a new sidewalk along Country View Drive as a "second priority" sidewalk. At this point, however, the City does not have a plan to install this sidewalk. Where feasible, the City would install a sidewalk with a tree lawn to separate it from the edge of the roadway. The City can investigate moving existing sidewalks away from the street when the street is repaved. However, such a project would likely be quite expensive and difficult to implement. The City would also consider widening the sidewalk to provide more space and make the pedestrians more comfortable walking along it.

Mark Bremerkamp, Ladue Lake Estates (received 12/21/2015)

- The storm water lake in our subdivision has become quite shallow due to run off and erosion. As the lake receives a large volume of storm water it is a benefit to the surrounding areas. The subdivision would appreciate it if the City would consider dredging / shore erosion control.
 - **Staff Comments (responded 12/21/2015):** This would not qualify as a CIP project because maintenance of subdivision detention facilities is the responsibility of the subdivision/property owners of the subdivision.

Matthew Hull, 457 Marford Drive (received 12/21/2015)

- Both Magna Carta and Runnymede are in need of replacement or, at a minimum, resurfacing although it appears that patching has been done several times over the years which have all failed now. Potholes and large cracks with chunks missing are the norm on these streets and create a hazard for cars and walkers. City is asked to consider replacement or resurfacing of one or both of the streets - Magna Carta and Runnymede - as part of 2016's capital improvement efforts.
 - **Staff Comments (responded 12/22/2015):** Runnymede and Magna Carta are on the City's 5-year pavement program. Runnymede is scheduled for major concrete slab replacement over the next two years (FY17 & FY 18). Magna Carta is scheduled for extensive work in FY18. If the Pavement Maintenance budget increases or the City is able to get extremely favorable prices on asphalt and concrete bids thus creating a surplus of funding, it could be invested into Magna Carta before FY18. In the meantime, staff will repair potholes on Magna Carta to help hold the street over until funding is available for slab replacements and an asphalt overlay.

David Hoffmann, 12483 Meadow Green Pl. (received 1/12/2015)

- Install a sidewalk in all, or at least significant portions of, the Country Forest Subdivision in Ward 3 to provide increased safety for children and walkers of all ages.
 - **Staff Comments (responded 1/13/2016)** Approximately three months ago, the City proposed a change to the pavement striping along Falaise Drive in response to a similar CIP request last year to have a marked open shoulder for a bike path from the subdivision's trustees. This proposal met with significant opposition from residents, with a common comment being that the residents in the subdivision were not notified of the proposal. Given the aforementioned, adding a sidewalk through a residential neighborhood could be seen as a benefit by some and as a problem by others. It will also most likely require an easement from several of your neighbors. Accordingly, a new sidewalk project will require strong support from the subdivision for it to be

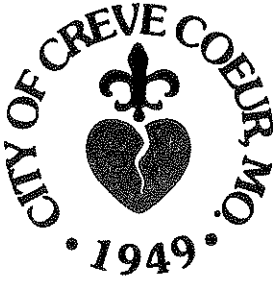
successful. The resident is suggested to contact the subdivision trustees and have this proposal vetted through your subdivision's meetings.

David McCoy, 831 Montmartre Ct. (received 1/12/2015)

- In Millennium Park: 1) Build an observation tower in Millennium Park to enjoy the view at the middle of the retention pond to afford a view of park and West County; 2) Install raised decking (approx. 1 foot above ground) to allow you to wander through the retention pond to encourage visitors to explore new areas of the park; 3) Remove honeysuckle and Kudzu, clear brush between path and creek alongside creek.; 4) Add native perennials (30-40) and shrubs (15 1-gallon size) around the retention pond.
 - **Staff Comments (responded 1/13/2016):** The goals of the City's CIP include replacement, repair or installation of infrastructure, new facilities or replacement of major equipment. CIP items are valued at \$20,000 or more with a life-span of 5 or more years. At this writing, CIP projects do not include the cost of purchasing or removing plants. Items such as these would be included in the general operating budget; however, I will share your recommendations with the Public Works Department – responsible for the maintenance of park property.

Jeffrey Shifrin, Ridgecorde Place (received 2/4/16)

- Ridgecorde Place and Ridgecorde Lane are concrete roads in terrible condition. There are at least 100 spots in need of patching; asphalt crack fill is gone, rideability for children bicycles is impossible.
 - **Staff Comments (responded on 2/4/16 & 2/5/16):** Staff is aware that there are several broken concrete slabs and deteriorated joints along Ridgecorde and is currently reviewing which streets will be repaired as part of this summer's annual maintenance programs, and staff will evaluate Ridgecorde along with the needs along other streets in the City. While staff does not yet know whether Ridgecorde will see any concrete replacement this summer, staff will have our pothole crew visit the street to see if any temporary improvements can be made.



city
of

CREVE COEUR

300 North New Ballas Road • Creve Coeur, Missouri 63141
(314) 432-6000 • Fax (314) 872-2539 • Relay MO 1-800-735-2966
www.creve-coeur.org

January 14, 2016

Honorable Mayor Barry Glantz
City of Creve Coeur
300 North New Ballas Road
Creve Coeur, MO 63141

Re: Stormwater Committee Capital Improvement Project Recommendations

Dear Mayor Glantz:

The Stormwater Committee reviewed and discussed the City's request for recommendations and ideas for the capital improvement program at our meeting on December 9, 2015.

Our unanimous opinion is that there are several high-priority stormwater concerns along the City's streets and within the City's properties that must be considered for the five-year capital plan. Each of the four projects listed below present serious safety issues with regard to private property and/or life. These projects are (in order of priority):

1. Alden Lane Culvert Rehabilitation

Priority: Urgent

One of the wing walls for this culvert has begun to fall into the creek. It helps support a one-lane street that is about 12 feet above the creek, and it must be replaced. In addition, the existing wooden guard rail has rotted and no longer appears to be able to stop a vehicle. The City has installed concrete barriers to protect the site and is currently working on a plan to brace the wall so that it does not fall further, but these are only temporary measures.

2. Emerson Road Culvert Rehabilitation

Priority: High

The stone headwall that supports the street is leaning and crumbling, with stones from the wall falling into the drainage channel. Emerson Road above it is sinking into the space left from the wall, leaving a depression that draws motorists toward an unprotected drop-off at the edge of the street.

3. Middlebrook Lane Culvert Replacement

Priority: High

The City has a plan in place for the replacement of this culvert and is in the process of renewing the permits for the project. This area was temporarily stabilized after a pavement collapse in 2015, but it remains a concern that further failure of the culvert and

street could cut off several residents. The Committee recommends pursuit of this project as soon as MSD's nearby project no longer interferes with its progress.

4. Golf Course Dam and Channel Rehabilitation

Priority: High

The dam at the golf course has continued to deteriorate throughout 2015, with new leaks forming along the channel. The Committee's recommendation from last year stands: replace the dam or complete a stabilizing repair as soon as possible.

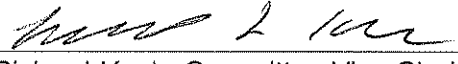
The Committee understands that these are costly projects, but we must stress the potential liability to both property and life in not addressing these issues. Additionally the three issues that threaten the use of streets and access to homes are of particular concern, especially the apparent failure-in-progress on Alden Lane.

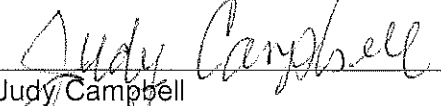
We appreciate the opportunity to share our opinion with you and the City Council.

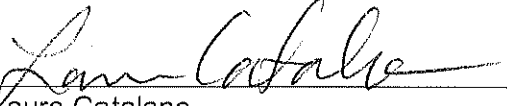
Sincerely,

Members of the Stormwater Committee

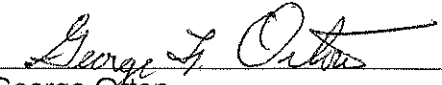

 Martin Jaffe, Committee Chairman


 Richard Koch, Committee Vice Chairman


 Judy Campbell


 Laura Catalano


 Tom D'Alfonso


 George Orton

cc: Members of the City Council
 Mark Perkins, City Administrator

Exhibit B
TEN-YEAR CAPITAL IMPROVEMENT PROGRAM
REVENUE AND EXPENDITURES SUMMARY FY2012-FY2021

REVENUES	Actual 2012	Actual 2013	Actual 2014	Actual 2015	Projected 2016	Projected 2017	Projected 2018	Projected 2019	Projected 2020	Projected 2021
Beginning Fund Balance (est. Cash Basis as of July 1)	2,200,221	1,580,402	1,250,169	720,228	1,256,152	1,430,326	1,677,657	930,397	751,856	251,341
City Sales Tax	1,895,865	1,898,578	1,984,134	2,026,656	2,050,000	2,075,625	2,101,570	2,127,840	2,154,438	2,181,368
Interest on Investments	36,993	38,836	95,664	1,326	1,200	1,500	1,500	2,000	2,000	2,001
Other Agency Funding	839,049	571,725	826,191	465,735	633,778	823,764	210,245	20,000	20,000	20,000
Other Revenues	26,402	0	36,279	29,963	24,000	20,000	20,000	20,000	20,000	20,000
Transfers from Other Funds	400,000	400,000	3,150,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000
TOTAL REVENUES	3,198,309	2,909,139	6,092,268	2,923,680	3,108,978	3,320,889	2,733,315	2,569,840	2,596,438	2,623,369

EXPENDITURES	Actual 2012	Actual 2013	Actual 2014	Actual 2015	Projected 2016	Projected 2017	Projected 2018	Projected 2019	Projected 2020	Projected 2021
Buildings & Improvements	213,794	69,432	37,573	131,123	129,641	329,000	20,000	270,000	20,000	20,000
Park Development Projects	209,381	3,732	42,118	70,698	547,370	196,000	200,000	75,000	25,000	99,600
Stormwater Projects	64,546	70,308	223,496	17,313	40,000	460,000	370,000	450,000	150,000	150,000
Street Overlay/Repair	1,991,628	1,850,047	1,698,043	1,997,237	1,702,700	2,708,194	1,931,990	1,997,000	2,160,060	2,139,200
Capital Equipment	342,736	252,284	238,843	171,385	267,762	374,955	389,866	278,355	257,703	251,769
Debt Service	996,043	993,569	4,250,897	-	-	-	-	-	-	-
TOTAL CAPITAL EXPENDITURES	3,818,128	3,239,372	6,490,970	2,387,756	2,687,473	4,068,149	2,911,856	3,070,355	2,612,763	2,660,569

ENDING FUND BALANCE (CASH BASIS)	1,580,402	1,250,169	851,467	1,256,152	1,677,657	930,397	751,856	251,341	235,017	197,817
---	------------------	------------------	----------------	------------------	------------------	----------------	----------------	----------------	----------------	----------------

FUTURE PROJECT LIST (in alphabetical order)	NOTES
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 FY20-22
Fernview at Olive Intersection Improvements (est. \$850,000)	
Golf Course Stormwater Improvements (est. \$1.2 million)	Phase 1 and Phase 2 Improvements in FY2017-2019 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 - included in CIP FY2019
Mason Road Sidewalk Infill - Conway to Olive	Preliminary engineering in CIP FY16; Grant match in CIP FY19 & FY20
New Ballas & Olive Intersection Improvements (est. \$1.75 million)	
New Ballas Rd. - Phase II Sidewalk - Rocky Dr. to Ladue Rd. (\$250,000)	Easements required
Office Park Roadway and Sidewalk Improvements (est. \$1,250,000)	Grant application in 2015 unsuccessful
Park Playground Safety Surface Repairs (est. \$75,000 each)	Included in CIP FY17 & FY21; additional surfaces need repair in future
Public Works Equipment Storage Building (est. \$270,000)	Moved 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)	

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 projects in bold**



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

SCHEDULED

Meeting: 03/14/16 06:00 PM
Department: Public Works Department
Category: Presentation
Prepared By: Jim Heines
Department Head: Jim Heines

STAFF REPORT

Fleet Replacement Report

This report is an overview of the fleet replacement process. We will also cover the projected 5-year replacement plan.



DEPARTMENT OF PUBLIC WORKS OFFICE MEMO

DATE: March 8, 2016

TO: Mark Perkins, City Administrator

FROM: Jim Heines, Director of Public Works

SUBJECT: Fleet Replacement Report FY 2017-FY 2021

Most of the following information may seem familiar because the report is very similar to the report submitted for the 2016-2020 CIP Fund discussions during March of 2015. The report has been updated and reflects the projections for the 2017-2021 CIP Program.

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
 <u>Point Ranges</u>		
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. Over the past 5 years, 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.

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. Over the past eight years we have been transitioning to diesel trucks with heavy duty drivelines and air breaks. 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

Over the past 7 years, 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 two 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 2017-2021 Public Works Proposed Fleet Replacement

FY 2017 Public Works Fleet Replacement Schedule

<u>Item</u>	<u>Cost</u>	<u>Trade/Auction</u>
Two-ton Dump Truck with Plow and Spreader	\$ 125,753.00	2008 Two-ton Dump Truck
One-ton dump Truck with Plow and Spreader	\$ 65,202.00	2004 One-ton Dump Truck
1/2 ton 4x4 puickup (Operation Superintendent)	\$ 35,000.00	2009 1/2-ton Ext. Cab Pickup Truck
Leaf Vacuum (Diesel Powered)	<u>\$ 48,000.00</u>	2006 Leaf Vacuum (Gas Powered)
	\$ 273,955.00	

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	\$ 128,268.00	2008 Two-ton Dump Truck
One-ton dump Truck with Plow and Spreader	\$ 67,158.00	2005 One-ton Dump Truck
Leaf Vacuum (Diesel Powered)	\$ 49,440.00	2007 Leaf Vacuum (Gas Powered)
Skid Steer	<u>\$ 50,000.00</u>	2008 Bobcat Skid Steer
	\$ 294,866.00	

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	\$ 132,116.00	2009 Two-ton Dump Truck
3/4 ton Pickup with Plow	\$ 40,315.00	2005 3/4-ton Pickup with Plow
Leaf Vacuum (Diesel Powered)	\$ 50,924.00	2008 Leaf Vacuum (Diesel Powered)
Limb Chipper	<u>\$ 55,000.00</u>	2005 Vermeer (Self Feed)
	\$ 278,355.00	

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	\$ 136,079.00	2009 Two-ton Dump Truck
One-ton dump Truck with Plow and Spreader	\$ 69,172.00	2007 One-ton Dump Truck
Leaf Vacuum (Diesel Powered)	<u>\$ 52,452.00</u>	2009 Leaf Vacuum (Diesel Powered)
	\$ 257,703.00	

FY 2021 Public Works Fleet Replacement Schedule

<u>Item</u>	<u>Cost</u>	<u>Trade/Auction</u>
3/4-ton Pickup Truck with Plow	\$ 39,393.00	2011 3/4-ton Pickup
Bucket Truck (Used)	\$ 100,000.00	1996 Bucket Truck
Leaf Vacuum (Diesel Powered)	\$ 54,026.00	2011 Leaf Vacuum (Diesel Powered)
Limb Chipper	<u>\$ 58,350.00</u>	2007 Limb Chipper
	\$ 251,769.00	