



**WORK SESSION MEETING
AGENDA
CITY OF CREVE COEUR
CITY COUNCIL
300 NORTH NEW BALLAS RD
MARCH 26, 2018
6:00 PM**

CALL TO ORDER

ROLL CALL

DISCUSSION ITEMS

- 1. Work Session Minutes Dated March 12, 2018**
- 2. Recommendations for the FY2019 Roadway Maintenance Program**
Summary: City staff has evaluated the conditions of the City's streets and has prepared a recommendation for concrete pavement repairs, sidewalk improvements, asphalt resurfacing, microsurfacing, and roadway rehabilitation for the 2019 fiscal year. Staff will also provide projections for these programs into FY2020 and FY2021.
- 3. CIP Equipment Replacement Program Report**
Summary: Presentation of the FY 2019-2023 CIP Fleet Replacement Program - Recommended 5-Year Replacement Schedule

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 03/22/2018
Deborah Ryan, MPCC
City Clerk



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

SCHEDULED

Meeting: 03/26/18 06:00 PM
Department: Legislative /City Clerk
Category: Report
Prepared By: Debbie Ryan
Initiator: Debbie Ryan
Sponsors:

DRAFT MINUTES (ID # 2952)

DOC ID: 2952

Work Session Minutes Dated March 12, 2018



**WORK SESSION MEETING
MINUTES
CITY OF CREVE COEUR
CITY COUNCIL
300 NORTH NEW BALLAS RD
MARCH 12, 2018
6:00 PM**

Present: Mayor Glantz, Council Members Faron, Travers, Lawrence, Ruzicka, D'Alfonso, Hoffman, Baseley and Saunders.

Staff Present: City Administrator Mark Perkins, City Attorney Carl Lumley, Chief Glenn Eidman, Community Development Director Jason Jaggi, Finance Director Lori Obermoeller, Public Works Director Jim Heines, Recreation Director Jason Valvero, Public Information Officer and Management Analyst Melissa Orscheln, and Assistant City Administrator/Acting City Clerk Sharon Stott.

The meeting was called to order at 6:00 p.m.

1. Work Session Minutes dated February 26, 2018

Council Member Hoffman moved, seconded by Council Member Baseley to approve work session minutes dated February 26, 2018.

Approved by unanimous vote.

2. Resident Survey 2018

Mark Perkins provided previous questions to 2014 Resident Survey and a list of potential topics and issues for consideration for the 2018 survey.

Mr. Perkins stated survey topics and length is limited to seven pages as recommended by the contractor ETC Institute to ensure the best response rate. In 2014, ETC Institute mailed 3,000 surveys to Creve Coeur residents and received 600 responses.

Council Member D'Alfonso suggested questions should be asked in such a way as to provide direction for City Council to take action.

City Council discussed some topics would be better suited as articles for the newsletter such as stormwater and annexation.

Council Member Lawrence stated question 7 in the potential topics singled out one sports activity instead of expenses to operate other activity-related amenities such as tennis and playgrounds.

City Council suggested a general question to rate the level of importance of recreational activities.



**MINUTES
CITY OF CREVE COEUR
CITY COUNCIL
300 NORTH NEW BALLAS RD
MARCH 12, 2018
7:00 PM**

City Council discussed a parks and stormwater sales tax. Mr. Perkins stated a parks and stormwater sales tax is generally used on capital and public information would include how the City plans on using funds.

City Council suggested listing the names and locations of the historical buildings in question 11 under Parks and Recreation.

City Council suggested listing City services in question 12 under Finance and rating from most important to least important.

Mr. Perkins stated more research would be necessary to determine whether recycling services could be provided to apartment complexes referenced in question 13.

City Council suggested removing question 15 related to discounts on building permit fees.

Mr. Perkins stated a draft of survey questions would be submitted to City Council in a couple weeks.

3. Capital Improvement Plan FY2019-2023

Mr. Perkins provided an overview of the Capital Improvement Plan (CIP) for Fiscal Years 2019-2023. (Exhibit A)

Mr. Perkins stated the primary source of revenue for the CIP is the half-cent tax with no increases projected for the next five years. Revenues and expenses will increase as staff are successful in receiving grants.

Building projects include \$50,000 for design of accessibility and security improvements for the Government Center. There is approximately \$500,000 reserved in the Building Fund to make some of these improvements.

Park projects include several grant matches. The Ice Arena Refrigerant Switch-Over has been postponed to FY21 to provide more time to determine the best option for the City. The Golf Course Irrigation System Replacement is a good candidate for a St. Louis Municipal Park Grant.

Mr. Perkins stated there are more stormwater projects outlined in the Stormwater Master Plan than what can be budgeted for as a result of lack of funding and limited grant opportunities for these projects.



**MINUTES
CITY OF CREVE COEUR
CITY COUNCIL
300 NORTH NEW BALLAS RD
MARCH 12, 2018
7:00 PM**

Mr. Perkins stated street projects utilize most of the funding for the CIP. Staff will be pursuing federal grants for Mosley and New Ballas roads.

Mr. Perkins stated capital equipment will be discussed in detail at the next City Council Work Session.

Mr. Perkins stated a new Administration line item was added for salary and benefits for one full-time position to manage CIP projects. The position was previously budgeted in the General Fund.

Mr. Perkins stated the Planning and Zoning Commission had requested expenses related to the Dielmann Recreation Complex be highlighted. Those expenses represent approximately 1% of the total CIP for the next five years.

Mr. Perkins stated a couple projects have been moved to the future list due to lack of funding including the Golf Course Stormwater System Improvements and Malcom Terrace Park Bridge and Stream Rehabilitation.

Adjourned at 6:47 p.m.

Submitted by,

Sharon Stott
Assistant City Administrator



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

SCHEDULED

Meeting: 03/26/18 06:00 PM
Department: Public Works Department
Category: Report
Prepared By: Matt Wohlberg
Department Head: Jim Heines

STAFF REPORT

Recommendations for the FY2019 Roadway Maintenance Program

City staff has evaluated the conditions of the City's streets and has prepared a recommendation for concrete pavement repairs, sidewalk improvements, asphalt resurfacing, microsurfacing, and roadway rehabilitation for the 2019 fiscal year. Staff will also provide projections for these programs into FY2020 and FY2021.



DEPARTMENT OF PUBLIC WORKS STAFF MEMORANDUM

DATE: March 21, 2018

TO: Mark Perkins, City Administrator

CC: Jim Heines, Director of Public Works

FROM: Matt Wohlberg, P.E., City Engineer

SUBJECT: Repair Location Recommendations
FY2019 Roadway Maintenance Program

The Department of Public Works proposes the roadway maintenance program outlined below for the 2019 fiscal year. This program is divided into five different projects, each of which have their own account in the capital improvement plan: concrete pavement improvements, sidewalk improvements, asphalt pavement improvements, microsurfacing, and roadway reconstruction/rehabilitation.

Staff plans to release bids for this work in April and May of 2018, so that the work can begin by July and be completed before November. Some work may extend into the spring of 2019, if necessary. The goal for most programs will be to finish by the end of the 2018 construction season.

Pavement Condition Definitions

The City hired a consultant in 2016 to measure the pavement conditions and the smoothness of the ride for every City-maintained street. Since then, City staff has reviewed and updated the conditions of the pavement in Wards 3 and 4. City staff updates the condition information for approximately one quarter of the City's pavement network each year to keep this information relevant. The smoothness information, however, will eventually need to be updated by a similar consultant, because this was measured using specialized equipment.

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

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

Roadway Selection

The City invests a significant portion of its annual budget into street and sidewalk maintenance and improvements. As is typical for most communities, the cost to make all needed and wanted repairs exceeds the City's annual budget, so the City's investment must be prioritized and

coordinated in order to make it as effective as possible. To this end, staff makes its repair recommendations based upon two goals:

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

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

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

Concrete Pavement Replacement

Work involved in this program will include the removal and replacement of failed concrete pavement slabs on concrete roadways and curb and gutter replacement along roads involved with the asphalt resurfacing and microsurfacing programs.

A pavement slab is the typically rectangular section of concrete pavement that extends across one lane of traffic. For most residential roadways in Creve Coeur, a pavement slab is 15-20 feet long and 10-13 feet wide. This program will replace approximately 250 concrete slabs, which represents about 1% of the over 21,000 total concrete slabs that make up the City’s concrete streets. Approximately 2,000 pavement slabs were identified this spring as having a level of distress that would warrant replacement, meaning that this program will replace about 12.5% of the slabs identified as replacement candidates. Most of the distressed slabs must remain to be re-prioritized for next year.

The City’s Public Works crews are able to supplement the annual slab replacement with an additional 20-25 slabs per summer. Their work helps to expand the repairs to streets with a few high-priority repairs that would not have otherwise fit into the program that is contracted out.

New accessible pedestrian curb ramps will also be installed as needed near street repair locations. More detail regarding sidewalk improvements is included in the next section.

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

Pavement Slab Replacement

<u>Street Name</u>	<u>Current PCI</u>	<u>Roughness Index (2016)</u>
Ambleside Lane	60	38
Cannes Drive (West).....	52 *	46 *
Deauville Court (Phase 1).....	46	45
Falling Leaves Court (Phase 2).....	68	54
Ferngate Lane.....	63 *	51 *
Ferntrails Lane (Phase 1)	46	39
Fernway Lane.....	69 *	58 *
Ladue Lake Court	71	46
Lesparre Drive	51 *	43 *
Mason Manor Drive.....	61	64
Nimes Drive	64 *	42 *
North New Ballas Extension.....	77	57
Nyack Drive	72	45
Runnymede Drive (Phase 2)	75	40
Tarrytown Drive.....	72	49

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

“Phase 1” listed for a street indicates that the current repair will be for a section of the street, with further repairs in future years. A different phase listed will mean that work has been completed on that street in recent years.

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

Pavement Conditions. City staff reviews the concrete pavement network at the end of each winter to prioritize the repair needs for concrete pavement and curbing. This past winter was particularly harsh on the City’s concrete pavement, resulting in more failures and joint damage than has been found in recent years. Failed and potentially hazardous pavement and curbing failures have been given the highest priority for replacement, and all of the pavement identified as hazardous is included in the proposed program.

Several factors that should be considered with respect to the PCI for concrete roadways:

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

The FY2019 program will address failed and potentially hazardous slabs on several streets, among which are North New Ballas Road Extension, Cannes Drive, and Ambleside Court. The proposed program expands beyond the few hazardous slabs on these streets to address other priority replacement needs, which is expected to significantly improve the condition of these streets and is expected to reduce the need for further repairs in the foreseeable future.

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

Deteriorated joints are what drivers tend to feel most when driving on a concrete street, prompting several to claim that streets with deteriorated joints are "the worst in the City." Such a sentiment would not be reflected in the street's PCI.

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

Deauville Court and Ferntails Lane are good examples of streets that are recommended for repairs due, in part, to generally poor concrete joints. Slab failures on each of these streets also helped to distinguish each street as priorities to address this year. The extent of the repairs needed for these two streets has caused these repairs to be phased over at least two years.

- **Roughness Index.** The 2016 investigation into the roughness of the City's streets offers an insight into the level of joint deterioration on concrete streets. A low (poor) roughness index on a street with a good PCI could indicate that the street has significant joint deterioration. Several streets in the proposed program reflect this situation in varying degrees. The repair recommendations for these streets in particular aim to make the street smoother, not just structurally sound.

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

The proposed program will complete improvements in the Westchester Estates subdivision with repairs to the final two concrete streets in the subdivision (Nyack Drive and Tarrytown Drive). This work will mark the end of roadway rehabilitation and concrete replacement in this subdivision that began in FY2016.

The FY2019 program proposes to continue the multi-year repairs to the Ladue Lake subdivision with slab replacement along Falling Leaves Court and Ladue Lake Court. Work in this subdivision is expected to be completed in FY2020.

The FY2019 program will also continue the concentrated slab replacement on Runnymede Drive. Work will extend through Templar Drive through this program and should wrap up in the FY2021 program.

Support for Other Projects and Future Planning. It is common that more than one type of project or approach is required or recommended to address the needs of a street or sidewalk. This tends to occur with sidewalk projects that require street work (or vice versa) and with composite streets (i.e. concrete streets with an asphalt overlay). The proposed FY2019 concrete program will involve concrete curb and gutter replacement to support the asphalt resurfacing and microsurfacing programs.

Sidewalk Improvements

The City is obligated to continue improve the accessibility of its sidewalks in order to meet the requirements of the Americans with Disabilities Act (ADA). Accessibility improvements are typically made in conjunction with adjacent roadway projects, but the City undertakes stand-alone sidewalk improvements, as well. The proposed FY2019 sidewalk program includes localized sidewalk replacement alongside roadway repairs, approximately 28 new accessible curb ramps, and sidewalk improvements along North New Ballas Road. Specifically, these improvements are focused in the following locations:

North New Ballas Road. The sidewalk and curbing along North New Ballas Road are failing in several locations and need to be replaced. The proposed program begins a multi-year process to systematically improve the sidewalks along North New Ballas Road. This first phase will focus on the sidewalk and curb along the east side of North New Ballas Road, from Ladue Road to Carlyle Lake Drive.

Asphalt Resurfacing. Sidewalk improvements will be made to Tempo Drive and Cross Creek Drive to support the asphalt resurfacing proposed for sections of these two street. This work will be continued in the next few years to complete the extensive amount of sidewalk improvements needed along both Tempo Drive and Cross Creek Drive to bring these sidewalks closer to ADA compliance.

Microsurfacing Program. Few, if any, sidewalk improvements are required to support the proposed microsurfacing program for FY2019.

Asphalt Resurfacing

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

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

The asphalt resurfacing program proposed for FY2019 includes the following asphalt roadways:

<u>Street Name</u>	<u>Current PCI</u>	<u>Roughness Index (2016)</u>
Cross Creek Drive.....	56.....	54
Research Boulevard (Phase 2)	41 *	69 *
Sackston Woods Lane.....	44 *	50 *
Tempo Drive	48.....	55

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

Notable elements of the proposed asphalt resurfacing program include:

- A portion of the Sackston Woods subdivision consists of composite pavement. Otherwise, no composite roadway are included in this year's resurfacing program.

- Resurfacing of Sackston Woods will address one of the City's lowest-rated residential subdivisions.
- The work proposed for Research Boulevard involves the portion of Research north of Gateway Boulevard. This project will complete the resurfacing of Research Boulevard and will be the second of what is anticipated to be a four-year process to resurface Research Boulevard, Andes Boulevard, and Ambassador Boulevard in the City's light-industrial area.

Microsurfacing

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

The goal of this program is to create a schedule that will return the program to a microsurfacing candidate roadway within the expected 8-10 year lifespan of the microsurfacing application.

The roadways proposed for this program are:

Streets along North Spoede Road

<u>Street Name</u>	<u>Current PCI</u>	<u>2016 Roughness Index</u>
Alden Lane.....	60	37
Spoede Lane.....	54	63

Streets along South Spoede Road

<u>Street Name</u>	<u>Current PCI</u>	<u>2016 Roughness Index</u>
Chaminade Drive	71 *	72 *
Notre Dame Drive	87	69
Oak Park Drive	53 *	53 *
Spoede Acres Street	60	52
Spoede View Court	61	41

Streets and Subdivisions along the East Side of Lindbergh Boulevard

<u>Street Name</u>	<u>Current PCI</u>	<u>2016 Roughness Index</u>
Beaver Drive	60 *	55 *
Haven View Drive	64	58
Tealwood Subdivision	48 *	50 *

Streets and Subdivisions along the West Side of Warson Road

<u>Street Name</u>	<u>Current PCI</u>	<u>2016 Roughness Index</u>
Countryshire Place	71	56
Suffield Place	60	60
Sundown Square	53	44
Warington Square	72	50
Warson Downs.....	88	69

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

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

Most of the streets in the proposed program are in relatively good condition and will probably be candidates for another microsurfacing application when the program cycles back to them in 8-10 years. However, for streets like Oak Park Drive, the current pavement conditions likely mean that the proposed microsurfacing may be the last before asphalt resurfacing or base rehabilitation will be necessary.

The FY2019 microsurfacing program will immediately follow the completion of the Warson Road Improvement Project and will complete asphalt microsurfacing along the Warson and Lindbergh corridors. Future microsurfacing projects are planned to focus on the Spoede and Graeser corridors.

Roadway Reconstruction/Rehabilitation

The proposed reconstruction/rehabilitation program for FY2019 is the first year of an anticipated three-year project to address the pavement of the Ladue Estates Subdivision. The pavement in this subdivision consists of a concrete pavement base with an asphalt overlay as a driving surface (a composite roadway). This pavement has generally aged beyond its useful life and can no longer be acceptably preserved through routine maintenance.

The proposed repairs involve the removal of the concrete curbing and the replacement of the curbing with new concrete curb and gutter. The curb work would be followed by the replacement of failed concrete base pavement and asphalt pavement resurfacing. This work will result in a significant improvement to these streets.

Work in the Ladue Estates subdivision will begin in FY2018 with the rehabilitation of Ladue Estates Drive (East). Several failures along this section of the subdivision and the presence of a new water main along it promote making this section the first to be completed. Work may extend into Ladue Estates Drive (South), if the budget allows.

City staff is coordinating with Missouri American Water to determine when the water lines along Ladue Estates Drive (Center) and Ladue Estates Drive (West) will be completed. Missouri American Water is tentatively planning this work for FY2019. The City's project would follow as closely behind the water line replacement as possible.

The current conditions of the Ladue Estates subdivision are as follows:

<u>Street Name</u>	<u>Current PCI</u>	<u>2016 Roughness Index</u>
Ladue Estates Drive (West)	63	51
Ladue Estates Drive (Center).....	40	56
Ladue Estates Drive (East).....	56	57
Ladue Estates Drive (South)	45 *	46 *

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

Program Costs

City staff estimates that completion of the proposed FY2019 Roadway Maintenance Program will cost approximately \$ 1,550,000, broken down as follows:

Concrete Pavement Replacement	\$ 490,000
Sidewalk Replacement.....	\$ 100,000
Asphalt Resurfacing.....	\$ 400,000
Microsurfacing.....	\$ 230,000
Reconstruction	\$ 300,000
City Work (Concrete Pavement and Sidewalk).....	\$ 30,000
Total	\$ 1,550,000



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

SCHEDULED

Meeting: 03/26/18 06:00 PM
Department: Public Works Department
Category: Presentation
Prepared By: Jim Heines
Department Head: Jim Heines

STAFF REPORT

CIP Equipment Replacement Program Report

Presentation of the FY 2019-2023 CIP Fleet Replacement Program - Recommended 5-Year Replacement Schedule



DEPARTMENT OF PUBLIC WORKS OFFICE MEMO

DATE: March 19, 2018

TO: Mark Perkins, City Administrator

FROM: Jim Heines, Director of Public Works

SUBJECT: Fleet Replacement Report FY 2019-FY 2023

Program History

Each year Public Works staff evaluates our fleet of vehicle and equipment as a component to the annual Capital Improvement Plan update. Staff updates the list of vehicles/equipment, model, make, age, mileage, etc. Typically for the long-term fleet replacement plan a rotation of equipment based on age is used. As we get closer to the actual replacement year, there may be multiple trucks or equipment that are likely candidates for replacement in a given year. If this is the case, 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

The attached 5-year CIP Proposed Fleet Replacement spread sheet provides a projected schedule for replacement of our fleet based on age rotation. Below is a table identifying the size of our fleet, uses and projected service life based on the APWA national standards as well as past experiences. Please note that these are projections and all equipment is evaluated annually to determine which pieces of equipment should be replaced.

<u>Fleet Inventory</u>	<u>No. of units</u>	<u>Primary Use</u>	<u>Service Life</u>
Two-ton trucks	9	Leaf Collection /Snow Plow/Hauling	12 Yrs.
Chipper trucks	2	Limb Chipping	12 Yrs.
Bucket truck	1	Trimming/ Decorative Lighting/Banners	25 Yrs.
One-ton trucks	9	Daily Work Trucks/Service Body/Water Tank	10-12 Yrs.
Pickup trucks	5	Supervisor/Engineering Trucks	10-12 Yrs.
Chippers	3	Limb Chipping Services	15 Yrs.
Leaf Vacuums	9	Leaf Collection Services	10 Yrs.
Skid Steer	2	Rotomill/ Sweeping/ Excavating	10 Yrs.
Backhoe	1	Excavation/Trenching/Loading	20 Yrs.
Front end Loader	1	Loading Materials, Pushing Leaves & Chips	20 Yrs.

Vehicle/Equipment Purchases

Each year after the new fiscal year begins, Public Works staff begins a final evaluation of the fleet replacement needs. Staff evaluates the current condition of the equipment listed in the approved CIP Capital Equipment Plan as well as the rest of the fleet. Since we started switching our fleet over to diesel powered heavy duty trucks/equipment in 2008, we are still determining the life cycle of specific vehicles/equipment. Therefore, the actual recommended purchases items may be different than what was recommended 6-months earlier during the development of the CIP Budget.

As you may recall in the past several years Public Works staff has opted to reduce fleet size due to better performance and reliability of the upgraded equipment purchases. In addition, through purchasing better vehicles/equipment and implementing a strong preventative maintenance program we are experiencing an extended life expectancy of vehicles and equipment. In just the past few years, Public Works staff has forgone the purchase of fully equipped two-ton and one-ton trucks thus saving as much as \$100,000 annually in the CIP Equipment budget.

When purchases are the final recommendation, staff compares lease pricing with open market pricing and MoDOT Cooperative Purchase Agreement pricing. Each year we find that the MoDOT Cooperative Purchase Agreement pricing is the best option for the city. Typically, we experience a 37% price reduction through the Cooperative Purchase Agreement.

Sale of Surplus Vehicles/Equipment

As equipment is replaced through purchases, we have a group of surplus equipment which the city either uses as a trade-in or will send to a public auction. In the past we have used the St. Louis County Public Works equipment auctions to dispose of surplus equipment.

Recently we have started using Govdeals.com auction website and are finding that we are receiving a much better return on surplus equipment sales. This auction site specializes in government equipment auctions and has a nationwide user base of 8 million individuals. The table below identifies the most recent 5 years of surplus equipment revenues.

<u>Fiscal Year</u>	<u>Auction Used</u>	<u>Auction Proceeds</u>
FY 2014	SLCPW	\$27,500
FY 2015	SLCPW	\$29,963
FY 2016	SLCPW	\$15,440
FY 2017	SLCPW	\$30,180
FY 2018	Govdeals.com	\$23,311*

*Auction proceeds to date. Staff plans to auction a two-ton, a one-ton, and a ¾ ton pickup truck as soon as the new replacements are delivered. We anticipate that the current total may as much as double for FY 2018.

In conclusion, Public Works staff goes through several evaluations each year to identify only the equipment that needs to be replaced. In addition, we conduct market research to find the lowest cost for each individual item to be replaced. As a final effort to reduce equipment costs, staff auctions the surplus equipment at a highly regarded and well used government auction site to get the best return on our used equipment.

FY 2019-2023 Public Works Proposed Fleet Replacement

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	\$129,574.00	2008 Two-ton Dump Truck
One-ton Dump Truck with Plow and Spreader	\$86,358.00	2005 One-ton Dump Truck
Leaf Vacuum (Diesel Powered)	\$56,440.00	2009 Leaf Vacuum (Diesel Powered)
3/4-ton Pickup Truck with Plow	\$40,000.00	2011 3/4-ton Pickup
	<u>\$312,372.00</u>	

FY 2020 Public Works Fleet Replacement Schedule		
<u>Item</u>	<u>Cost</u>	<u>Trade/Auction</u>
Two-ton Dump Truck with Plow and Spreader	\$133,462.00	2009 Two-ton Dump Truck
One-ton dump Truck with Plow and Spreader	\$88,948.00	2007 One-ton Dump Truck
Leaf Vacuum (Diesel Powered)	\$58,134.00	2010 Leaf Vacuum (Diesel Powered)
	<u>\$280,544.00</u>	

FY 2021 Public Works Fleet Replacement Schedule		
<u>Item</u>	<u>Cost</u>	<u>Trade/Auction</u>
Two-ton Dump Truck with Plow and Spreader	\$137,466.00	2009 Two-ton Dump Truck
Bucket Truck (Used)	\$100,000.00	1996 Bucket Truck
Leaf Vacuum (Diesel Powered)	\$59,879.00	2011 Leaf Vacuum (Diesel Powered)
Limb Chipper	\$61,903.00	2007 Limb Chipper
	<u>\$359,248.00</u>	

FY 2022 Public Works Fleet Replacement Schedule		
<u>Item</u>	<u>Cost</u>	<u>Trade/Auction</u>
Two-ton Dump Truck with Plow and Spreader	\$141,590.00	2010 Two-ton Dump Truck
Skid Steer	\$72,960.00	2012 Skid Steer
Leaf Vacuum (Diesel Powered)	\$61,676.00	2012 Leaf Vacuum (Diesel Powered)
	<u>\$276,226.00</u>	

FY 2023 Public Works Fleet Replacement Schedule		
<u>Item</u>	<u>Cost</u>	<u>Trade/Auction</u>
Two-ton Dump Truck with Plow and Spreader	\$145,838.00	2011 Two-ton Dump Truck
One-ton Dump Truck with Plow and Spreader	\$97,196.00	2013 One-ton Dump Truck
3/4-ton Pickup Truck (Asphalt flat bed)	\$55,021.00	2013 3/4-ton Pickup Truck
Leaf Vacuum (Diesel Powered)	\$63,527.00	2013 Leaf Vacuum (Diesel Powered)
	<u>\$361,582.00</u>	