

# **2017-2021** Capital Improvement Plan





The Crossroads Of

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# Introduction

### To the Mayor and Board of Aldermen:

I am pleased to transmit to you the proposed 2017-2021 Capital Improvement Plan (CIP).

This proposed plan is not a wish list of unfunded desires. Rather, it is a well thought out planning document that balances planned capital expenditures with projected revenues. The staff views this document, after review, modification and adoption by the Board, as "authorization" for a project to move forward for planning purposes. Funds would still need to be "appropriated" through the annual budget process. Nearly all of the items submitted in the CIP were included in the Fund Planners reviewed at the Strategic Planning Meetings.

While there are some changes in this plan from previously submitted CIP documents, the changes are not dramatic. We have been trying to instill in the organization a planning discipline for capital improvements. Theoretically, any new projects should only appear in the fifth year of the plan. You will find that this is the case with the vast majority of items included in the binder.

Over the last year, the Board of Aldermen has given staff clear direction on a number of key themes. The CIP addresses your strategic direction and priorities. In addition to meeting the capital needs of the City for the next five years, the plan accomplishes the following:

- Continues the slab replacement program
- Completes the construction of a new City Hall
- Continues the commitment to Downtown
- Develops a strategy to acquire land for future parks and other facilities
- Leverages funds from other entities
- Funds the continued maintenance and enhancement of aging infrastructure

The proposed plan calls for the expenditure of \$126,473,693 over a five-year time frame and includes funding mechanisms for each item.

Please accept this Capital Improvement Plan for adoption. The Plan has been carefully developed, and involved the participation and insightful thinking of all departments. The plan allows the City to proactively anticipate its future needs while giving it the flexibility to make changes.

Sincerely,

David Gipson City Administrator

# CAPITAL IMPROVEMENT PLAN 2017-2021

#### **Capital Plan**

A Five-Year Capital Improvement Plan allows the City to proactively plan its future capital needs well in advance, yet allow flexibility for changing needs. The first year reflects the capital projects included in the 2017 fiscal year budget. The remaining four years represent a schedule and estimate of future capital projects that may be funded based on revenue projections. Capital expenditures are listed by year and have been moved or adjusted to remain in balance. There will be further adjustments as the plan is updated with current information annually.

The **Fund** identifies the particular fund that will be used to pay for each project and the **Department** identifies responsibility. **Outside Funding Sources** identifies expected or estimated funds from grants or bonds. **Project Description and Project Justification** provides a description of each project (location, scope of work, etc.) and explains why the project is needed. Justifications generally involve an effort to conserve funds now or in the future, enhance efficiency, provide a superior and high-quality public service, ensure greater employee or public safety, and/or replace, improve or expand public infrastructure.

#### **Capital Improvements**

Capital improvements are physical improvements to public infrastructure in and throughout the City, and include the construction of streets, stormwater systems, bridges, parks, recreational facilities, structural renovations, and other projects that involve physical improvements in and throughout the community.

#### Financing Methods

As stated, the means of funding for each project is specified herein; the Governmental Fund to be used to complete the physical improvement. Within this Five-Year Capital Improvement Plan, a total of \$126,473,693 is recommended for capital spending. A breakdown of this \$126 million by department indicates that the Transportation Fund will bear the largest burden of this Five-Year Capital Plan, followed by design and construction of the Reclamation Center expansion and reserve drawdowns in the General and Capital Fund for the new City Hall. Of the total \$126 million in total five-year capital spending, \$41 million (or 33%) is estimated to be reimbursed by grant funding. The City will continue to pursue grant funding to finance (or defray) significant capital costs.

#### **Annual Expenditure Trend**

Approximately \$126 million in capital projects are anticipated over the five-year period 2017-2021. For this five-year period, the largest single year of capital outlay will be fiscal year 2017, which includes Phase 2A (North Outer Road) and Phase 2B (Interchange) of David Hoekel Parkway, Peine/P/Highway 61 Interchange, Wentzville Parkway Turn Lane Phase II, West Meyer Road Phase III, and Village Center Renovation. The fiscal year 2017 includes about \$9.4 million to complete the construction for the new City Hall and another \$4.7 million for a two-million gallon spheroid water tower. The fiscal year 2021 includes \$11.6 million to design and construct the expansion of the Reclamation Center. Beginning in 2017 and going forward, the City plans to reserve \$400,000 a year for general land acquisition and \$100,000 a year for stormwater projects. The other variances year-to-year are due to Water Fund projects and a number of large Transportation projects. The City has significant street reconstruction and signal projects planned for a number of major streets in this community including: Highway N/Perry Cate Boulevard signal, Wentzville Parkway South Phase I, May Road, and street and sidewalk maintenance Citywide.

# **REVENUE SOURCES**

#### **General Fund**

General Fund capital expenditures are all funded from the Capital Improvements Fund. The General Fund Reserve was drawn down by \$3,000,000 in 2015, \$4,000,000 in 2016 and \$1,000,000 in 2017 to fund the new City Hall. This will eliminate the need to finance through a bond issuance, saving interest costs.

#### **Transportation Fund**

Transportation Fund revenues are largely sales tax driven. The annual growth rate is consistent with current trends, yet grant funding was added in where appropriate. The variable nature of grant funding renders any visual trend of Transportation Fund revenues difficult to perceive. Transportation equipment is also funded by the Capital Improvements Fund allowing more Transportation funds to be allocated for major road projects. The Transportation Fund will be closely monitored in the out years as construction starts on David Hoekel Parkway, as this will be the largest road project ever taken on by the City.

#### **Capital Improvements Fund**

Capital Improvements Fund revenues are used to make lease payments for bond issues and to purchase capital equipment. These are revenues transferred to other funds and budgeted accordingly. The Capital Fund purchases all the capital equipment used in the General, Transportation, Parks and Recreation, Water and Wastewater funds providing a consistent approach. The Capital Fund will be drawn down by \$5,400,000 in 2017 to help fund the costs for the new City Hall, eliminating the need of a bond issuance.

#### Water and Wastewater Enterprise Funds

Water and Wastewater Fund revenues were estimated upon community growth rates, as these revenues are largely driven by commercial and residential utility billings. Given that the City tracks its building permits (a proxy for new accounts), this revenue generally mirrors projected growth.

#### **Parks and Recreation Funds**

Park Fund equipment purchases are funded by the Capital Fund. This change provides a consistent approach to the funding of capital equipment in the General Fund and Special Revenue Fund.

#### **Debt Financing**

Fund debt financing is for projects that cannot be funded without a new revenue source. Possible funding sources for these projects will include General Obligation Bonds for large projects. Revenue Bonds such as the State Revolving Fund could be used for utility projects. Leasehold Revenue Bonds can be used for park development since there is now a Parks sales tax, which will provide a means to repay these types of bonds.

## CITYWIDE CAPITAL IMPROVEMENT PLAN SUMMARY

PROJECT										
Department	2017	2018	2019	2020	2021	Five Year Total				
Information Technology	-	-	-	-	-	-				
Community Development	-	-	-	-	-	-				
Law Enforcement	-	50,000	30,000	15,353	10,000	105,353				
Parks	1,039,263	96,863	199,875	272,575	146,250	1,754,826				
Public Works	37,269,655	21,747,340	15,082,500	4,390,000	5,570,000	84,059,495				
Water	6,760,000	810,000	3,370,000	870,000	270,000	12,080,000				
Wastewater	1,153,000	3,741,000	1,930,000	995,000	11,724,000	19,543,000				
TOTAL	46,221,918	26,445,203	20,612,375	6,542,928	17,720,250	117,542,674				

EQUIPMENT										
Department	2017	2018	2019	2020	2021	Five Year Total				
Information Technology	78,200	-	-	100,000	-	178,200				
Community Development	23,200	29,800	24,800	26,000	79,700	183,500				
Law Enforcement	592,741	1,011,030	486,680	530,680	492,680	3,113,811				
Parks	156,675	64,233	112,400	223,300	178,300	734,908				
Public Works	587,000	323,000	959,000	419,000	794,000	3,082,000				
Water	121,700	63,000	227,200	85,200	30,000	527,100				
Wastewater	318,500	122,000	98,000	246,000	327,000	1,111,500				
TOTAL	1,878,016	1,613,063	1,908,080	1,630,180	1,901,680	8,931,019				

## **CITYWIDE CAPITAL IMPROVEMENT PLAN SUMMARY**

TOTAL PROJECTS AND EQUIPMENT									
2017 2018 2019 2020 2021 Total									
TOTAL	48,099,934	28,058,266	22,520,455	8,173,108	19,621,930	126,473,693			

	FUNDING	SUMMARY				
Source	2017	2018	2019	2020	2021	Five Year Total
General Fund Reserves	1,000,000	-	-	-	-	1,000,000
Capital Fund	5,513,016	2,463,063	2,528,080	2,267,208	3,036,680	15,808,047
Capital Fund Reserves	5,400,000	-	-	-	-	5,400,000
Park Fund	514,263	96,863	174,875	170,900	121,250	1,078,151
Park Fundraising	500,000	-	-	-	-	500,000
Transportation Fund	6,695,005	6,371,446	4,757,500	3,454,000	3,024,000	24,301,951
St. Charles County Cost Share	14,042,700	6,388,894	8,630,000	-	250,000	29,311,594
MoDOT Cost Share	-	8,000,000	-	-	-	8,000,000
STP Funding	545,950	187,000	1,130,000	-	160,000	2,022,950
East-West Gateway TAP Funding	206,500	-	-	416,000	536,000	1,158,500
CMAQ through EQGCOCG	180,000	-	-	-	500,000	680,000
Private Developer	514,500	-	-	-	-	514,500
MoDOT Loan	5,000,000	-	-	-	-	5,000,000
Water Fund	6,835,000	810,000	3,370,000	870,000	270,000	12,155,000
Wastewater Fund	1,153,000	3,741,000	1,930,000	995,000	4,724,000	12,543,000
State Revolving Fund Loan			-	-	7,000,000	7,000,000
TOTAL	48,099,934	28,058,266	22,520,455	8,173,108	19,621,930	126,473,693

# **Information Technology**

# **INFORMATION TECHNOLOGY**

	EQUIPMENT										
Department	Description	2017	2018	2019	2020	2021	Five Year Total				
Information Technology	Blade Server Recap	30,000	-	-	-	-	30,000				
Community Development	Plotter/Scanner/Printer	10,000	-	-	-	-	10,000				
Law Enforcement	Security Access/Door at LEC	38,200	-	-	-	-	38,200				
Human Resources	Learning Management System	-	-	-	25,000	-	25,000				
Information Technology	Virtual Desktop Environment	-	-	-	75,000	-	75,000				
	TOTAL	78,200	-	-	100,000	-	178,200				

FUNDING SOURCE									
2017 2018 2019 2020 2021 Five Yea									
Capital Fund	78,200	-	-	100,000	-	178,200			
TOTAL	78,200	-	-	100,000	-	178,200			

## **BLADE SERVER RECAP**

#### Fund: Capital Department: Information Technology

Project Cost: \$60,000 | Outside Funding: \$-0- | City Cost: \$60,000

**Description:** Replacement of Intel blade server chasis and blades.

**Justification:** The City's current blade servers (three) were purchased in 2010, the same year IBM ended the life of the model. In order to migrate to Microsoft Server 2012, the City needs to replace the chasis and upgrade the blades. The recap will continue to shift toward the latest IT trends and a virtual environment.

FUNDING SCHEDULE									
Total	PRIOR	2017	2018	2019	2020	2021			
\$60,000	\$30,000	\$30,000	-	-	-	-			

## **PLOTTER/SCANNER/PRINTER**

Fund: Capital Department: Information Technology – Community Development

### Project Cost: \$10,000 | Outside Funding: \$-0- | City Cost: \$10,000

**Description:** This equipment is an inkjet plotter/scanner combination to replace the existing 2008 plotter/scanner equipment. This machine supports all staff departments in the organization. The age and likely service of the aging machine makes this equipment for the future of the City department use a priority. This purchase will also supplement/negate the purchase of future KIP independent scanner machine which is in use, but is also aging and has maintenance history. This scanner will be able to handle paper size up to 42 inches and is a primary tool of the GIS staff for all City mapping and greatly supports all Parks' special functions. Engineering staff will also utilize the machine for printing/plotting of documents, designed in house.

**Justification:** Professional quality mapping accomplished for the City via mapping documents, used and purchased by customers of the City, and special project mapping which supports all departments in the City.

FUNDING SCHEDULE									
Total	2017	2018	2019	2020	2021				
\$10,000	\$10,000	-	-	-	-				

# **SECURITY ACCESS/DOOR AT LEC**

#### Fund: Capital Department: Information Technology – Law Enforcement

Project Cost: \$38,200 | Outside Funding: \$-0- | City Cost: \$38,200

**Description:** Upgrade the Law Enforcement Center current security and door access system.

**Justification:** The current system is outdated and no longer able to be repaired unless old parts can be located. The system often goes down and needs to be repaired.

FUNDING SCHEDULE									
Total	2017	2018	2019	2020	2021				
\$38,200	\$38,200	-	-	-	-				

# **LEARNING MANAGEMENT SYSTEM**

#### Fund: Capital Department: Information Technology – Human Resources

### Project Cost: \$25,000 | Outside Funding: \$-0- | City Cost: \$25,000

**Description:** Purchase of an online learning management tool.

**Justification:** The City has nearly 300 year-round employees and 150 seasonal employees. The City needs a solution to accommodate training needs across the City while eliminating paper trails. The City is too large for the paper process with each new policy change, administrative directive, etc. In addition, sending videos through interoffice or requiring employees to attend live training is extremely inefficient.

FUNDING SCHEDULE									
Total	2017	2018	2019	2020	2021				
\$25,000	-	-	-	\$25,000	-				

# VIRTUAL DESKTOP ENVIRONMENT

#### Fund: Capital Department: Information Technology

### Project Cost: \$75,000 | Outside Funding: \$-0- | City Cost: \$75,000

**Description:** Transition from a physical desktop environment to a virtual desktop environment.

**Justification:** In 2019, more than 60 work stations/laptops will be due to recapitalization (roughly costing \$60,000). The return on investment on not only the physical hardware, but energy costs would pay for itself over the next 36 months. It would be more cost effective to move to a virtual desktop environment solution, while also creating a more versatile environment for remote capabilities.

FUNDING SCHEDULE								
Total 2017 2018 2019 2020 2021								
\$75,000	-	-	-	\$75,000	-			

# **Community Development**

# **COMMUNITY DEVELOPMENT**

	EQUIPMENT									
Department	Description	2017	2018	2019	2020	2021	Five Year Total			
<b>Building Inspection</b>	Compact Sedan	23,200	-	24,800	-	26,400	74,400			
Planning	Compact 4x4 SUV	-	29,800	-	-	-	29,800			
<b>Building Inspection</b>	Compact SUV	-	-	-	26,000	28,000	54,000			
<b>Building Inspection</b>	½-Ton 4x4 Pickup Truck	-	-	-	-	25,300	25,300			
	TOTAL	23,200	29,800	24,800	26,000	79,700	183,500			

FUNDING SOURCE							
2017 2018 2019 2020 2021 Five Year							
Capital Fund	23,200	29,800	24,800	26,000	79,700	183,500	
TOTAL	23,200	29,800	24,800	26,000	79,700	183,500	

### VEHICLES

**Fund:** Capital **Department:** Community Development – Building Inspection, Planning **Location:** Building Inspection and Planning Divisions

**Description:** Purchase of replacement vehicles.

**Justification:** Replacement of vehicles due to age, mileage and ongoing maintenance costs. Replacement will improve reliability and safety, and will reduce the likelihood of repairs exceeding the vehicles' value.

Anticipated Benefit: The replacement vehicles are capable of carrying out all necessary duties, but at a reduced initial purchase price and will lower annual operating costs.

COMPACT SEDAN (Building Inspection)								
FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$74,400 \$23,200 - \$24,800 - \$26,400								

COMPACT 4x4 SUV (Planning)								
FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$29,800	-	\$29,800	-	-	-			

COMPACT SUV (Building Inspection)								
FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$54,000 \$26,000 \$28,00								

<sup>1</sup> /2-TON 4x4 PICKUP TRUCK (Building Inspection)								
FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$25,300	-	-	-	-	\$25,300			

# Law Enforcement

# LAW ENFORCEMENT

	PROJECT									
Department	Description	2017	2018	2019	2020	2021	Five Year Total			
Law Enforcement	Remodel – Architect/Construction	-	50,000	-	-	-	50,000			
Law Enforcement	Flooring/Carpeting	-	-	30,000	-	-	30,000			
Law Enforcement	HVAC Software Upgrade	-	-	-	15,353	-	15,353			
Law Enforcement	Fencing/Gates	-	-	-	-	10,000	10,000			
	TOTAL	-	50,000	30,000	15,353	10,000	105,353			

	EQU	JIPMENT					
Department	Description	2017	2018	2019	2020	2021	Five Year Total
Law Enforcement	Accident Reconstruction Equipment	15,000	-	-	-	-	15,000
Law Enforcement	Mobile Shelving	8,000	-	-	-	-	8,000
Law Enforcement	CAD/RMS System	-	400,000	-	-	-	400,000
Law Enforcement	AVL/GPS System	-	45,350	35,000	35,000	35,000	150,350
Law Enforcement	License Plate Readers (2)	-	-	18,000	-	-	18,000
Law Enforcement	Strategic Response Vehicle and Equipment	-	-	-	50,000	-	50,000
Law Enforcement	911 Maintenance	63,259	63,259	63,259	63,259	63,259	316,295
Law Enforcement	Taser Tap 2 Program	9,225	9,225	9,225	9,225	9,225	46,125
Law Enforcement	Taser Axon Flex Upgrade	50,257	44,196	44,196	44,196	44,196	227,041
Law Enforcement	Emergency Warning Siren	43,000	43,000	43,000	43,000	43,000	215,000
Law Enforcement	Patrol Vehicles and Equipment/Set-up	384,000	384,000	250,000	260,000	270,000	1,548,000
Law Enforcement	Motorcycle and Equipment/Set-Up (less trade-in)	20,000	22,000	24,000	26,000	28,000	120,000
	TOTAL	592,741	1,011,030	486,680	530,680	492,680	3,113,811

### LAW ENFORCEMENT

TOTAL PROJECTS AND EQUIPMENT						
	2017	2018	2019	2020	2021	Five Year Total
TOTAL	592,741	1,061,030	516,680	546,033	502,680	3,219,164

FUNDING SOURCE							
2017 2018 2019 2020 2021 Total							
Capital Fund	592,741	1,061,030	516,680	546,033	502,680	3,219,164	
TOTAL	592,741	1,061,030	516,680	546,033	502,680	3,219,164	

### REMODEL

Fund: Capital Department: Law Enforcement Location: 1019 Schroeder Creek Boulevard

Project Cost: \$50,000 I Outside Funding: \$-0- I City Cost: \$50,000

**Description:** The Police Department, due to growth of the agency, wants to remodel the current facility to include a training/emergency management center, enlarge the armory, make a larger break room, and upgrade the building generator and battery backup for computer circuits.

**Justification:** The Police Department is at capacity. Offices are being shared by multiple employees, the armory is full, and vendors refuse to place vending machines in the break room due to the small size.

**Anticipated Benefit:** Improvement of work flow; better response to disasters, major weather events, etc.; opportunity for improved training environment; more secure storage of weapons and ammunition.

FUNDING SCHEDULE									
Total	2017	2018	2019	2020	2021				
\$50,000 \$50,000									

## **FLOORING/CARPETING**

Fund: Capital Department: Law Enforcement

Project Cost: \$30,000	- E	<b>Outside Funding: \$-0-</b>	- I.	City Cost: \$30,000
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**Description:** Remove the existing flooring/carpet and replace with new in high traffic areas.

**Justification:** Flooring/carpeting in the LEC has exceeded its life expectancy and is showing extreme wear. The building was completed in 2001, and a carpet or flooring upgrade has not occurred since.

Anticipated Benefit: Aesthetics.

FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$30,000	-	-	\$30,000	-	-		

### **HVAC SOFTWARE UPGRADE**

#### Fund: Capital Department: Law Enforcement

Project Cost: \$15,353	1	<b>Outside Funding: \$-0-</b>	1	City Cost: \$15,353
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**Description:** Upgrade software to Tracer Summit HVAC system

*Justification:* Upgrade will help building HVAC operate more efficiently, while reducing maintenance costs incurred from the current system.

FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$15,353	-	-	-	\$15,353	-		

### **FENCING/GATES**

Fund: Capital Department: Law Enforcement Location: 1019 Schroeder Creek Blvd.

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Project Cost: $10,000 I Outside Funding: $-0- I City Cost: $10,000
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**Description and Justification:** Fencing and two additional gates for added security at the Law Enforcement Center.

Anticipated Benefit: Added security for the Law Enforcement Center, employees and equipment.

FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$10,000	-	-	-	-	\$10,000		

## **ACCIDENT RECONSTRUCTION EQUIPMENT**

Fund: Capital Department: Law Enforcement

Project Cost: \$15,000 I Outside Funding: \$-0- I City Cost: \$15,000

**Description:** Topcon HiPer V Rover GD Digital Griner & Schmitz UHF II 440-470 with internal CDMA. Topcon OAF, L1+L2 Griner & Schmitz and other associated equipment.

**Justification:** With the City's growth, the community has suffered a number of fatality crashes that have required the assistance of other agencies to investigate. The Police Department has trained officers to complete reconstruction investigations and now needs the equipment for use.

Anticipated Benefit: Better services provided to the residents and the ability to produce timely, accurate traffic investigative reports on serious crash scenes.



FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$15,000	\$15,000	-	-	-	-		

### **MOBILE SHELVING UNIT**

Fund: Capital Department: Law Enforcement

Project Cost: \$8,000 I Outside Funding: \$-0- I City Cost: \$8,000

**Description and Justification:** Purchase and installation of a mobile shelving unit in the Records department.

**Anticipated Benefit:** Unit will provide greater storage capacity. The new design would use existing shelving and would expand the filing capacity by 47%, allowing for current and future filing.



FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$8,000	\$8,000	-	-	-	-		

### CAD/RMS SYSTEM

Fund: Capital Department: Law Enforcement Location: 1019 Schroeder Creek Blvd.

Project Cost: \$400,000 I Outside Funding: \$-0- I City Cost: \$400,000

**Description:** Replace CAD/RMS System

**Justification:** The original request submitted for the 2014 – 2019 CIP was scheduled for 2017. However, the current vendor, ITI, is preparing to launch a new web-based version of the City's current CAD/RMS system. The launch of the system is slated for 2016. The Police Department is requesting to push this project to 2018 in order to explore the functionality of the upgrade being offered by ITI.

Anticipated Benefit: More accurate reporting.



FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$400,000	-	\$400,000	-	-	-		

### **AVL/GPS SYSTEM**

Fund: Capital Department: Law Enforcement

Project Cost: \$150,350 I Outside Funding: \$-0- I City Cost: \$150,350

**Description:** The AVL or Automated Vehicle Locator is a GPS based system that tracks police vehicles. This system displays real time locations of police vehicles on a screen in the dispatch center and interfaces with the computer aided dispatch program. With the pending launch of an upgrade to the CAD/RMS system, which includes mapping software, Police is requesting to delay this project until 2018 so that the new CAD/RMS program can be evaluated. The concern being that if this module was purchased and it was later determined to seek a new CAD/RMS vendor, the monies spent on this module would have been wasted. It is worth noting that if this module is purchased today, an unexpected cost of purchasing 4G service for each computer that would have the module loaded on it would be necessary. Based on the above the purchase of this system has been pushed back to 2018.

**Justification:** The AVL/GPS system increases officer safety and enhances the dispatcher's ability to send the closest unit to an in-progress call for service.

Anticipated Benefit: Faster response to citizens of the community.

FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$150,350	-	\$45,350	\$35,000	\$35,000	\$35,000		

### LICENSE PLATE READERS

Fund: Capital Department: Law Enforcement

Project Cost: \$18,000 I Outside Funding: \$-0- I City Cost: \$18,000

**Description and Justification:** Purchase of two license plate readers to replace existing cameras due to life expectancy of the equipment coming to term.

FUNDING SCHEDULE								
Total	2017	2018	2019 (2)	2020	2021			
\$18,000	-	-	\$18,000	-	-			

### **STRATEGIC RESPONSE VEHICLE**

#### Fund: Capital Department: Law Enforcement

Project Cost: \$50,000 I Outside Funding: \$-0- I City Cost: \$50,000

**Description:** Box style vehicle to house and deliver on scene emergency services equipment (i.e. barricades, accident reconstruction equipment, etc.) in a timely manner.

**Justification:** There are frequent instances where equipment is needed to make an incident scene safe. Resources from other City departments are often unavailable. This vehicle would allow for the timely response of that type of equipment when it is critically needed.

**Anticipated Benefit:** Provides the opportunity to resolve critical incidents in a timely and safe manner.

FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$50,000	-	-	-	\$50,000	-		

### **911 MAINTENANCE**

Fund: Capital Department: Law Enforcement

Project Cost: \$316,295 I Outside Funding: \$-0- I City Cost: \$316,295

**Description:** Annual maintenance contract for the Next Generation Enhanced 911 system.

**Justification:** Annual maintenance for the seven-year contract agreement of the Next Generation Enhanced 911 system.

Anticipated Benefit: Greater ability for 911 services to the citizens of our community. This includes GPS mapping, texting and photo submission to the 911 centers.

FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$316,295	\$63,259	\$63,259	\$63,259	\$63,259	\$63,259		

### **TASER TAP 2 PROGRAM**

Fund: Capital Department: Law Enforcement Location: 1019 Schroeder Creek Blvd.

Project Cost: \$46,125 I Outside Funding: \$-0- I City Cost: \$46,125

**Description:** Taser assurance/replacement program.

**Justification:** The program continues to replace equipment that is out of warranty, as replacement parts are unavailable. This project provides an additional 15 units in 2015 and will be duplicated in 2016, which will complete the full deployment for the agency.

Anticipated Benefit: Health and safety.



FUNDING SCHEDULE										
Total	2017	2018	2019	2020	2021					
\$46,125	\$9,225	\$9,225	\$9,225	\$9,225	\$9,225					

### TASER AXON FLEX UPGRADE

Fund: Capital Department: Law Enforcement Location: 1019 Schroeder Creek Blvd.

### Project Cost: \$227,041 I Outside Funding: \$-0- I City Cost: \$227,041

**Description and Justification:** The purchase of a TAP program for the Taser Axon Flex camera system including the cost of evidence.com to store and manage the recordings from the cameras as well as the cameras and associated hardware. The TAP program ensures availability of hardware and software updates at no additional costs during the contract period.

**Anticipated Benefit:** The TAP program allows the Police Department to keep current with the rapidly changing advances in technology associated with this equipment to minimizes the impacts on the budget should this system require unexpected purchases.

FUNDING SCHEDULE										
Total	2017	2018	2019	2020	2021					
\$227,041	\$50,257	\$44,196	\$44,196	\$44,196	\$44,196					

### **EMERGENCY WARNING SIRENS**

Fund: Capital Department: Law Enforcement Location: 1019 Schroeder Creek Blvd.

Project Cost: \$215,000 | Outside Funding: \$-0- | City Cost: \$215,000

**Description:** The City will purchase and install emergency weather warning sirens to serve an expanding geographic population, as well as replacing those due to age.

Justification: City expansion and/or aging sirens.

Anticipated Benefit: Safety and liability.



FUNDING SCHEDULE										
Total	2017	2018	2019	2020	2021					
\$215,000	\$43,000	\$43,000	\$43,000	\$43,000	\$43,000					

### **PATROL VEHICLES AND EQUIPMENT/SET-UP**

Fund: Capital Department: Law Enforcement Location: 1019 Schroeder Creek Blvd.

**Description:** Purchase of vehicles including turnkey outfitting and installation of police vehicle equipment.

**Justification:** Continue the police rotation program and an effort to address the issues that are prevalent with the existing fleet. This provides for faster deployment of vehicles to patrol duties and quicker turnover of worn-out vehicles.

Anticipated Benefit: Reduced liability, less maintenance and repair costs and safety of officers and residents.

PURSUIT RATED SUV (6) AND NON-PURSUIT RATED SEDAN (4)										
FUNDING SCHEDULE										
Total	2017	2018	2019	2020	2021					
\$1,548,000	\$384,000	\$384,000	\$250,000	\$260,000	\$270,000					

MOTORCYCLE (2)										
FUNDING SCHEDULE										
Total	2017	2018	2019	2020	2021					
\$120,000	\$20,000	\$22,000	\$24,000	\$26,000	\$28,000					





# **Parks and Recreation**

## **PARKS & RECREATION**

	PROJECT											
Department	Description	2017	2018	2019	2020	2021	Five Year Total					
Recreation	Universally Accessible Playground	912,000	-	-	-	-	912,000					
Recreation	Surface on Elevated Track	33,075	-	-	-	-	33,075					
Maintenance	ADA Sidewalk Replacement	25,000	-	25,000	-	25,000	75,000					
Splash Station	Shade Structure	-	43,050	-	-	-	43,050					
Maintenance	Asphalt Parking Lot Around Structures	-	-	123,625	-	-	123,625					
Maintenance	RTU for Locker Rooms	-	-	-	75,900	-	75,900					
Maintenance	Baseball Field Improvements	-	-	-	43,750	-	43,750					
Maintenance	ADA Vestibule	-	-	-	101,675	-	101,675					
Maintenance	Public Park Facility Improvements	69,188	53,813	51,250	51,250	51,250	276,751					
Maintenance	Irrigation and Backstops at Peruque Valley Park	-	-	-	-	70,000	70,000					
	τοτ	AL 1,039,263	96,863	199,875	272,575	146,250	1,754,826					

## **PARKS & RECREATION**

	EQ	JIPMENT					
Department	Description	2017	2018	2019	2020	2021	Five Year Total
Maintenance	Z-Trac Midmount Mower	18,500	-	-	-	-	18,500
Horticulture & For	3/4-Ton 4x4 with Utility Bed, Pipe Rack and Crew Cab	35,150	-	-	-	-	35,150
Maintenance	Enclosed 20' Cargo Trailer	11,650	-	-	-	-	11,650
Maintenance	3/4-Ton Utility Truck – New Personnel	60,000	-	-	-	-	60,000
Maintenance	Turbine Blower	13,000	-	-	-	-	13,000
Admin	Compact SUV	-	27,150	-	-	-	27,150
Maintenance	John Boat w/Motor and Trailer	-	25,445	-	-	-	25,445
Maintenance	Quik Trak 61" Chariot Mower	-	-	13,000	-	-	13,000
Maintenance	1-Ton Truck w/Snow Plow Package	-	-	49,150	-	-	49,150
Horticulture & For	3/4-Ton 4x4 Truck w/Landscape Bed and Hoist	-	-	38,000	-	-	38,000
Recreation	8-Passenger Van	-	-	-	33,150	-	33,150
Horticulture & For	6x4 Turf Gator	-	-	-	13,000	-	13,000
Maintenance	Compact Utility Tractor	-	-	-	15,000	-	15,000
Horticulture & For	Boom Truck (used)	-	-	-	75,650	-	75,650
Horticulture & For	1-Ton 4x4 Pickup Truck	-	-	-	30,000	-	30,000
Horticulture & For	1-Ton 4x4 Crew Cab Pickup Truck	-	-	-	43,000	-	43,000
Recreation	Holiday Lights Display	18,375	11,638	12,250	13,500	14,000	69,763
Horticulture & For	1-Ton Truck w/Snow Plow Package (2)	-	-	-	-	84,300	84,300
Maintenance	14' Dual Pivot Hook-All Hooklift Attachment	-	-	-	-	55,000	55,000
Maintenance	Utility Vehicle	-	-	-	-	25,000	25,000
	TOTAL	156,675	64,233	112,400	223,300	178,300	734,908

### **PARKS & RECREATION**

TOTAL PROJECTS AND EQUIPMENT								
	2017	2018	2019	2020	2021	Five Year Total		
TOTAL	1,195,938	161,096	312,275	495,875	324,550	2,489,734		

FUNDING SOURCE											
	2017	2018	2019	2020	2021	Five Year Total					
Capital Fund	181,675	64,233	137,400	324,975	203,300	911,583					
Park Fund	514,263	96,863	174,875	170,900	121,250	1,078,151					
Fundraiser	500,000	-	-	-	-	500,000					
TOTAL	1,195,938	161,096	312,275	495,875	324,550	2,489,734					

## UNIVERSALLY ACCESSIBLE PLAYGROUND

Fund: Parks & Recreation Department: Recreation Location: Heartland Park

#### Project Cost: \$1,000,000 | Outside Funding: \$500,000 | City Cost: \$500,00 Design - \$88,000 Construction - \$912,000 Fundraiser - \$500,000 Reserve Drawn Down - \$400,000

**Description:** Funds used to design, purchase and install a new fully accessible playground at Heartland Park.

*Justification:* Heartland Park was established in 2014 and was originally designed to have two smaller age-appropriate playgrounds on either side of the restroom/concession/storage building south of the main parking lot. The City was approached by a group of residents interested pursuing a partnership with the City to install a totally accessible playground in the park. A universally accessible playground exceeds the minimum requirements needed to meet ADA standards and, in fact, allows able bodied children and any physically challenged individual (adult or youth) to be able to get to any and all features of the playground. The group of residents interested in partnering with the City is committed to participating in the funding of that project, perhaps, up to 50% of the project cost.



FUNDING SCHEDULE											
Total	PRIOR	2017	2018	2019	2020	2021					
\$1,000,000	\$88,000	\$912,000	-								
Outside Funding		\$500,000	-	-	-						

# SURFACE ON ELEVATED TRACK

Fund: Parks & Recreation Department: Recreation Location: Progress Park Recreation Center

Project Cost: \$33,075 | Outside Funding: \$-0- | City Cost: \$33,075

**Description:** Funds used to replace the existing floor surfacing on the elevated track at the Progress Park Recreation Center.

**Justification:** The mondo-type floor surfacing is reaching the point where it is need of being completely replaced. This material was installed when the building was erected in 1987. The Department has made previous requests to consider this replacement and it is believed that the product had a lifecycle of 15-18 years and, in 2015, we are at 28 years. The material has begun, delaminating or spalding, which is why there are areas of discoloration (3,675SF - \$10 SF install/Materials + \$4 SF demo).

FUNDING SCHEDULE									
Total	2017	2018	2019	2020	2021				
\$33,075	\$33,075	-	-	-	-				

# ADA SIDEWALK REPLACEMENT/IMPROVEMENTS

#### Fund: Capital Department: Maintenance

#### Project Cost: \$75,000 | Outside Funding: \$-0- | City Cost: \$75,000 Capital Fund - \$75,000

**Description:** Replace cracked, heaved or otherwise damaged sidewalks within the park system or around public facilities. Occasionally, funds are used to install new ADA ramps or new sections of sidewalk on public rights of way to make connections to either the trail system or in heavily traveled areas.

**Justification:** Funding source for replacing sidewalks that are not ADA-compliant or to add new sidewalks in areas that we need to in order to be compliant with those standards.



FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$75,000	\$25,000	-	\$25,000	-	\$25,000		

### SHADE STRUCTURE

Fund: Parks & Recreation Department: Splash Station Location: Splash Station

#### Project Cost: \$43,050 | Outside Funding: \$-0- | City Cost: \$43,050

**Description:** Funds utilized to design, purchase, install or construct an additional shade structure at Splash Station.

**Justification:** Some shade structures were removed from the scope of the original project and this is one of the top two comments that we receive from users of the facility. Staff is suggesting a two-phase approach to adding additional shade structures to the facility. This is Phase I and will include incorporating a shade structure along the south side (nearest the school) of the leisure pool which has the zero-entry beach and lap lanes. This area was prioritized as the top priority because this is an area where mothers tend to gather to watch the small children utilizing this pool. Phase II will incorporate some additional shade structures along the east side of the facilities by the slide.



FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$43,050	-	\$43,050	-	-	-			

### ASPHALT PARKING LOT AROUND STRUCTURES

Fund: Parks & Recreation Department: Maintenance Location: Rotary Park

#### Project Cost: \$123,625 | Outside Funding: \$-0- | City Cost: \$123,625

**Description:** Funds used to design, purchase and install additional dust-free parking in the areas around the Kolb Exhibition Center at Rotary Park.

**Justification:** Rotary Park was established in 1981 and many of the structures were added in the years since. The Kolb Exhibition Center was dedicated June 14, 1992, and there is very little dust-free parking around the building. As such, the water runs the path of least resistance causing erosion in the bleacher area along the edges of the roadways, in/across the roadways. Staff is proposing to install hard-surface parking with curb/gutter and eliminate the erosion issues and provide better parking for users of the facility during non-fair times. It is hopeful that this might be a collaborative project with the St. Charles County Fair Board

The Kolb Exhibition Center is used several days per year for large groups, but could be used a lot more if the issue related to parking and lack of restrooms were addressed. Staff estimates that, conservatively, we could double the number of rentals in that facility. In addition to creating a more aesthetically pleasing appearance around the buildings, it also provides an opportunity for increased revenue by making the area more visually appealing.

The proposed project calls for approximately 455LF of curb/guttering and 23,300SF of asphalt. C&G was figured at \$15/LF and asphalt at \$4/SF installed.



FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$123,625		-	\$123,625	-1	-			

# **ROOF TOP UNIT FOR LOCKER ROOMS**

Fund: Parks & Recreation Department: Progress Pool

#### Project Cost: \$75,900 | Outside Funding: \$-0- | City Cost: \$75,900

**Description:** Funds will be used to purchase two new roof top units for providing air conditioning to the locker rooms at the Progress Park Recreation Center. The RTU funding will also include funding to screen the new units to be in compliance with building codes.

**Justification:** The Recreation Center currently uses only outside air and a series of fans to cool the air. Heating is provided by a separate system and is ducted from a significant distance away. This inefficient system has resulted in numerous complaints about the temperature in the lobby and locker rooms when the outside temperatures are high. Staff has worked with engineers to design a much more compact and efficient system for heating and cooling the air in that space. The system is comprised of two new roof top units that will work independently and control each of the locker areas.

Anticipated Benefit: The City can expect to see some long-term benefits associated with customer satisfaction when using the facility.



FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$75,900	-	-	-	\$75,900	-			

# **BASEBALL FIELD IMPROVEMENTS**

Fund: Parks & Recreation Department: Progress Park

Project Cost: \$43,750 | Outside Funding: \$-0- | City Cost: \$43,750

**Description:** Funds will be used to address drainage and backstop/fence issues at Progress Park Baseball Diamond including:

- 1. Add soil amendments and laser grade the baseball infield (\$10,000)
- 2. Repair backstop and install new fence on dugouts (\$15,000)
- 3. Correct drainage issue caused by water sheet flowing from sidewalks (\$4,000)

**Justification:** Progress Park field needs to be raised and laser graded, so that we can decrease rainouts and reduce the amount of time that is spent preparing the field after a rain event. This field is used by the City for various youth baseball and adult softball programs. The field has had a significant amount of deferred maintenance and it has reached point where this lack of attention is adversely impacting staff's ability to complete routine tasks in a timely fashion. The longer this work is deferred the more costly the repairs will be in the future.



FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$43,750	-	-	-	\$43,750	-			

### **ADA VESTIBULE**

Fund: Capital Department: Maintenance Location: Progress Park Hall Banquet Center

#### Project Cost: \$101,675 I Outside Funding: \$-0- I City Cost: \$101,675 Capital Fund - \$101,675

**Description:** Purchase and install a new ADA vestibule at the Progress Park Banquet Center.

**Justification:** The building currently has a single set of doors between the interior and exterior of the building. This creates heating and cooling inefficiencies due to the direct exchange of air. While this occurs every time the doors are open and closed, it is most noticeable during the summer and winter seasons each year. The need is further emphasized by the fact that the area immediately inside the door is work out space for fitness classes or seating space for banquet guests utilizing the center. The solution is to install a second set of doors and create a vestibule that allows for a small area to pre-heat/cool the air thus minimizing the amount of temperature change inside the building. Typically, this is done by simply using aluminum storefront and installing a small heating cooling system to control the temperature in that space.



FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$101,675	-	-	-	\$101,675	-		

# PUBLIC PARK FACILITY IMPROVEMENT

Fund: Parks & Recreation Department: Maintenance Location: Citywide

#### Project Cost: \$276,751 | Outside Funding: \$-0- | City Cost: \$276,751

**Description:** Funds used to:

- 1. Repair or replace unscheduled mechanical failures such as air conditioners, furnaces, boilers, etc.
- 2. Repair or replace unanticipated infrastructure deficiencies or structural failures such as roof leaks, electrical, storm/sanitary sewer, plumbing, etc.
- 3. Perform needed construction/renovation projects in a timely fashion.
- 4. Improve overall efficiency of an operation or facility.
- 5. Replace equipment that has been lost to theft or unexpected malfunction and replacement/repair.

Identified projects include:

**2017**: Replace fitness equipment (3 of 3) at the Rec Center (\$10,000); Replace a treadmill at the Rec Center (\$7,500); Remodel office space at the Rec Center to install fitness areas (\$25,000); replace A/C unit at Rec Center (\$25,000)

**2018**: Replace a treadmill at the Rec Center (\$7,500); Replace A/C unit at Banquet Hall (\$25,000); New fitness equipment for expanded space at the Rec Center (\$10,000); Outdoor Camp Office Renovation at the Rec Center (\$10,000)

*Justification:* There are a number of smaller projects that get submitted every year that if completed when the issue begins rather than wait until the problem reaches a critical stage will result in future cost savings. The problem is that these types of projects are always dropped during the budget process to focus resources on issues that have already reached the critical phase and we never have an opportunity to catch up. It is proposed that a system be developed to address these issues while they are still in their "infancy." Feedback received from residents during the last Park Master Planning Process indicated that 60 percent (highest number for this category) of the respondents were "Very Supportive" and another 30 percent were "Somewhat Supportive" of Maintaining/Repairing our existing Parks, Shelters, Facilities, etc. Only 3 percent were "Not Supportive" and 8 percent "Don't Know." When asked what "Actions the Respondents would be most willing to support with their tax dollars," 34 percent of the respondents placed Maintenance of Existing Park, Shelters, and Facilities as their 1st, 2nd or 3<sup>rd</sup> choice – again, the highest total in this category.

FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$276,751	\$69,188	\$53,813	\$51,250	\$51,250	\$51,250		

# **IRRIGATION AND BACKSTOPS**

Fund: Parks & Recreation Department: Peruque Valley Park

Project Cost: \$70,000 | Outside Funding: \$-0- | City Cost: \$70,000

**Description:** Funds will be used to erect the three remaining baseball/softball fields at Peruque Valley Park. Parks would like to develop the three additional baseball fields that were not included in the first phase. This project is a material only cost as Park staff will provide the labor to install all of the backstops and irrigation for these fields. Irrigation supplies are projected to cost roughly \$35,000 for all three fields and the backstop materials will run around \$10,000 each (\$30,000 total).

Anticipated Benefit to the City: Staff feels that by building the three additional fields, they can accommodate larger tournaments that will attract more tournament business. It is anticipated that hotel, retail and restaurant will see an influx of patrons during these tournaments. Having seven fields of various sizes will better accommodate all ages at this complex. It is becoming more common that tournament directors sell the fact that teams play on age-appropriate fields and teams who travel expect that. On average, a complex like this can average 30 plus teams per weekend and can exceed 50 teams. This type of complex can accommodate approximately 20 tournaments a year with proper staffing.

FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$70,000	-	-	-	-	\$70,000			

### **Z-TRAC MIDMOUNT MOWER**

#### Fund: Capital Department: Maintenance

Project Cost: \$18,500 | Outside Funding: \$-0- | City Cost: \$18,500

**Description:** Funds use to replace a 2009, 72" mower that has exceeded its expected useful life and is in need of replacement to avoid escalating maintenance costs.

**Justification:** This zero turn unit has a six-foot wide mid-mount mowing deck, which is ideal for park-related mowing and is used daily during the mowing season to mow parks and public areas in the park system. This unit is expected to have a lifecycle of five to seven years or 1,800 hours.

FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$18,500	\$18,500	-	-	-	-			

# 3/4-TON 4X4 WITH UTILITY BED, PIPE RACK & CREW CAB

Fund: Capital Department: Horticulture & Forestry

Project Cost: \$35,150 | Outside Funding: \$-0- | City Cost: \$35,150

**Description:** Funds will be used to purchase a pickup truck with specialized box to store pole saws, shovels and tools used by the Horticulturist.

**Justification:** As the community continues to grow and develop so will the amount of maintenance requests and need to address resident concerns. The horticulture and forestry division will be tasked with keep ahead of these issues. In the past two years our landscaping has doubled in size and, with that increase, has come the push to keep beautifying, developing, and renovating older parts of town while maintaining new park facilities. The life cycle of this type of vehicle is expected to be 10 years or 100,000 miles.

FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$35,150	\$35,150	-	-	-	-			

# **ENCLOSED 20' CARGO TRAILER**

#### Fund: Capital Department: Maintenance

#### Project Cost: \$11,650 | Outside Funding: \$-0- | City Cost: \$11,650

**Description:** Funds to purchase a 20' bumper towed enclosed cargo trailer with drop down ramp and side door.

**Justification:** This type of trailer is used extensively for hauling equipment and storing items for short-term periods. Parks currently has one that is 20-foot long and it has proven to be invaluable for us. It is used to transport a tractor/ ball drag for ball field set up and other departments borrow it as well. We also use it for special events such as hauling utility vehicles and supplies to remote sites.

FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$11,650	\$11,650	-	-	-	-			

# 3/4-TON UTILITY TRUCK - NEW PERSONNEL

Fund: Capital Department: Maintenance

Project Cost: \$60,000 | Outside Funding: \$-0- | City Cost: \$60,000

**Description:** Funds will be used to purchase a pickup truck used by the Maintenance staff.

**Justification:** This vehicle is used in daily Park Maintenance operations for hauling materials and/or equipment and pulling trailers and/or equipment to and from job sites. The work unit routinely hauls various power and hand tools, ladders, generators, compressors, and other construction related equipment. There are often times when the demand of the job site requires additional or different equipment and it may require additional trips to the shop. These vehicles have exceeded the expected useful life and are in need of replacement to avoid escalating maintenance costs.

FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$60,000	\$60,000	-	-	-	-		

### **TURBINE BLOWER**

Fund: Capital Department: Maintenance

#### Project Cost: \$13,000 | Outside Funding: \$-0- | City Cost: \$13,000

**Description:** Funds used to purchase a towed turbine blower that has a high output air flow designed to assist in cleaning facilities, parking lots and drying ball fields.

**Justification:** This unit would be used to assist in cleaning trails and parking lots to reduce the amount of loose material and leaves that create unsafe surfaces. The unit would also assist in ball field preparations at Heartland Park and Peruque Valley Park.



FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$13,000	\$13,000	-	-	-	-			

### **COMPACT SUV**

Fund: Capital Department: Administration

Project Cost: \$27,150 | Outside Funding: \$-0- | City Cost: \$27,150

**Description:** This unit is used by the Parks and Recreation Director for daily transportation to various meetings and transporting visiting professionals around to different job sites.

**Justification:** The Director is often on construction jobsites and is part of the City's emergency response team. An AWD vehicle is necessary for meeting those job responsibilities. The current vehicle has a bigger payload, seats up to five passengers, and gets 14/20 mpg. The new vehicle would have less payload space, seat up to five passengers, and get 22/32 mpg. There is a real need for having another vehicle in the Department for the Recreation Division to use to transport staff and/or equipment to and from remote work locations. Currently, the Director utilizes their personal vehicle almost as much time as they do the City's vehicle because the recreation staff does not have the proper number of vehicles to perform the functions they need to.

FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$27,150	-	\$27,150	-	-	-			

### JOHN BOAT WITH MOTOR AND TRAILER

Fund: Capital Department: Maintenance

Project Cost: \$25,445 | Outside Funding: \$-0- | City Cost: \$25,445

**Description:** Funds will be used to replace a 12' John Boat with no motor as part of a scheduled replacement program. Staff is proposing to purchase a slightly larger and more functional 18' flat bottom John Boat to include an outboard gas 10 HP motor and dedicated boat trailer.

**Justification:** This boat is used to perform maintenance functions at Rotary Park and Heartland Park. This includes taking water chemistry samples, removing logs and debris from the overflow structures, algae removal and maintenance/removing the floating fountains (300lbs). During the winter months, it is used to transport large bundles of Christmas trees and anchor materials for submerging fish habitat in the lakes. The current boat is somewhat unsafe because of the limited room place material/supplies and to maneuver within the boat when placing fish habitat. Furthermore, the current boat does not have a load platform. The current boat does not have motor, which limits load size and functionality of the unit when placing lake chemicals.

FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$25,445	-	\$25,445	-	-	-		

### QUIK TRAK 61" CHARIOT MOWER

#### Fund: Capital Department: Maintenance

Project Cost: \$13,000 | Outside Funding: \$-0- | City Cost: \$13,000

**Description:** Funds will be used to purchase a replacement John Deere John Deere 661R Quik Trak Chariot 61" Mower for the Park Division.

**Justification:** This chariot-style, zero-turn unit has a 61" wide mowing deck, which is ideal for park related mowing in small areas and is used daily during the mowing season to mow parks and public areas in the park system. This unit will have passed its expected useful life and is in need of replacement to avoid escalating maintenance costs. The anticipated life cycle for a mower like this in park setting is expected to be around eight years or 1,800 hours. Substantial productivity gains can also be expected because of quicker loading and unloading between job sites, shorter interruptions for debris collection while mowing, and reduced operator fatigue.

FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$13,000	-	-	\$13,000	-	-			

# 1-TON 4X4 TRUCK WITH SNOW-PLOW PACKAGE

Fund: Capital Department: Maintenance

Project Cost: \$49,150 | Outside Funding: \$-0- | City Cost: \$49,150

**Description:** 1-ton 4x4 truck with flat bed and snow-plow package.

**Justification:** This vehicle is used daily by staff for hauling materials/equipment and pulling trailers/equipment to and from jobsites. By incorporating a utility bed, much of the standard tools and equipment can be kept on the truck, which will increase productivity.

FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$49,150		-	\$49,150	-	-		

### 3/4-TON 4X4 WITH LANDSCAPE BED & HOIST

Fund: Capital Department: Horticulture & Forrestry

Project Cost: \$38,000 | Outside Funding: \$-0- | City Cost: \$38,000

**Description:** Funds will be used to purchase a 3/4-ton Pickup truck with landscape bed and hoist for Parks Division.

**Justification:** The Horticulture and Forestry work unit is responsible for everything from turf maintenance and planting plants, and to caring for trees in City parks and other areas. This work unit has grown with the addition of the Splash Station Aquatic Center, Heartland Park and Peruque Valley Park. It has also been tasked with caring for the trees/bed on Church Street and the gateway entrance signs. When the Horticulturist was approved for the 2015 budget the vehicle was unexpectedly dropped in the process and we have had to reassign several trucks that were scheduled to be replaced from the Public Works fleet to make do. The life cycle of vehicle will be 10 years or 100,000 miles.

FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$38,000	-	-	\$38,000	-	-		

### 8-PASSENGER VAN

Fund: Capital Department: Recreation

Project Cost: \$33,150 | Outside Funding: \$-0- | City Cost: \$33,150

**Description:** Funds will be used to replace an eight-passenger van used by the staff of the Recreation Division.

**Justification:** This vehicle is used in daily Recreation Division for hauling materials, supplies and equipment to and from job sites. During the summer months the vehicle is used to transport groups of children to various sports camps and occasionally to field trips. The anticipated life cycle of the new unit is expected to be 10 years or 100,000 miles. This vehicle will have passed its expected useful life and is in need of replacement to avoid escalating maintenance costs.

FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$33,150	-	-	-	\$33,150	-			

### **6X4 TURF GATOR**

Fund: Capital Department: Horticulture & Forrestry

Project Cost: \$13,000 | Outside Funding: \$-0- | City Cost: \$13,000

**Description:** Funds will be used to purchase a John Deere 6X4 utility vehicle as part of a scheduled replacement program.

**Justification:** Because of its light-duty construction, the current utility vehicle has very limited use beyond transporting personnel and minor equipment to/from job sites. Staff is proposing to replace this unit with a more functional heavy duty utility vehicle with a payload capable of handling bulk materials. The John Deere 6X4 Turf Gator has one of the bigger payload capacities (1,500 lbs.) on the market and has a proven track record for the type of use being proposed. Public Works has expressed interest in this unit for conducting their slab condition survey. The life cycle expected of this type of equipment is six years or 2,800 hours.

FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$13,000	-	-	-	\$13,000	-			

### **COMPACT UTILITY TRACTOR**

Fund: Capital Department: Maintenance

Project Cost: \$15,000 | Outside Funding: \$-0- | City Cost: \$15,000

**Description:** Funds will be used to purchase a replacement 23 HP tractor with turf tires for Park Facility Maintenance staff.

**Justification:** This unit is used by Horticulture & Parks staff in the execution of the turf - maintenance program. It pulls seeders, fertilizing attachments, aerators, top dressers and turf-vac equipment. The anticipated life cycle of the new unit is expected to be 20 years or 5,000 hours. This unit will have passed its expected useful life and is in need of replacement to avoid escalating maintenance costs and parts are increasingly hard to obtain due to the age of the unit.

FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$15,000	-	-	-	\$15,000	-		

### **BOOM TRUCK**

Fund: Capital Department: Horticulture & Forestry

Project Cost: \$75,650 | Outside Funding: \$-0- | City Cost: \$75,650

**Description:** Funds will be used to purchase a used 45' boom truck be used by the Parks crews to trim trees, change field lights and hang Christmas lights.

**Justification:** There is no vehicle in the City that can safely lift staff to those heights. The City should consider purchasing a fleet truck from a utility company.

FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$75,650	-	-	-	\$75,650	-		

### **1-TON 4X4 TRUCKS**

#### Fund: Capital Department: Horticulture & Forrestry

**Description:** Funds will be used to purchase a replacement 4x4 standard cab/bed pickup truck for the Park Facility Maintenance staff.

*Justification:* This vehicle is used in daily Park Maintenance operations for hauling materials/equipment and pulling trailers/equipment to and from job sites. The work unit routinely hauls various power and hand tools, ladders, generators, compressors, and other construction related equipment. Often, there are times when the demands of the job site require additional/different equipment and it may require additional trips to the shop.

1-TON 4X4 PICKUP TRUCK								
FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$30,000	-	-	-	\$30,000	-			

1-TON 4X4 CREW CAB PICKUP TRUCK									
FUNDING SCHEDULE									
Total	2017	2018	2019	2020	2021				
\$43,000	-	-	-	\$43,000	-				

### HOLIDAY LIGHTS DISPLAY

Fund: Capital Department: Recreation Location: Rotary Park

#### Project Cost: \$69,763 | Outside Funding: \$-0- | City Cost: \$69,763

**Description:** Funds used to purchase new animated displays for the holiday lights special event at Rotary Park.

**Justification:** Staff is looking to rejuvenate the Holiday Night Lights display event by starting to add a new component/display each year. The event has stagnated and has been exactly the same for a number of years and people have not been willing to revisit it year after year. By changing the layout and adding a new component each year it should be possible to make this an annual event that families visit each year.



FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$69,763	\$18,375	\$11,638	\$12,250	\$13,500	\$14,000			

### 1-TON PICKUP TRUCK WITH SNOW PLOW HOOKUPS

#### Fund: Capital

**Department:** Horticulture & Forrestry

Project Cost: \$84,300 | Outside Funding: \$-0- | City Cost: \$84,300

**Description:** Funds will be used to purchase two 4x4 crew cab pickup truck with a standard bed for the Park Maintenance staff. These trucks will replace trucks #803 and #807.

**Justification:** This vehicle is used in daily Park Maintenance operations for hauling materials and/or equipment and pulling trailers and/or equipment to and from job sites. The work unit routinely hauls various power and hand tools, ladders, generators, compressors, and other construction related equipment. There are often times when the demand of the job site requires additional or different equipment and it may require additional trips to the shop. These vehicles have exceeded the expected useful life and are in need of replacement to avoid escalating maintenance costs.

FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021 (2)			
\$84,300	-	-	-	-	\$84,300			

### 14' DUAL PIVOT HOOK-ALL HOOKLIFT ATTACHMENT

Fund: Capital Department: Maintenance

Project Cost: \$55,000 | Outside Funding: \$-0- | City Cost: \$55,000

**Description:** Funds will be used to purchase a 14' dual pivot Hook-All hooklift attachment for Truck 813.

**Justification:** Hook-All hooklifts are an easy way to increase utilization of a single-axle truck chassis. Hook-All hooklifts incorporate quick change bodies that convert a single truck into a container, dump or flatbed. Bodies can be quickly switched or left at a jobsite and can be dumped at more than 50". Bodies include a roll off body, a dump body and a chipper body. This attachment allows for greater versatility of the current fleet and could reduce the number of vehicles in the fleet.

FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$55,000	-	-	-	-	\$55,000			

### **UTILITY VEHICLE**

#### Fund: Capital Department: Maintenance

Project Cost: \$25,000 | Outside Funding: \$-0- | City Cost: \$25,000

**Description:** Funds will be used to purchase a John Deere ProGator 2020A utility vehicle as part of a scheduled replacement program.

**Justification:** The ProGator is a heavy duty utility cart that is used on a daily basis by maintenance personnel for transportation and heavy duty hauling of sod, gravel and needed tools to perform daily tasks as well as pulling various attachments for sweeping, topdressing, spraying, etc. This unit a heavy-duty utility vehicle that is used on a daily basis by Horticulture and Forestry staff for hauling and dispensing materials and spraying in areas that a full-size truck is unable to. This utility vehicle will replace a machine that has exceeded its expected useful life that is in need of replacement to avoid escalating maintenance costs and parts that are increasingly hard to obtain due to the age of the unit.

FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$25,000	-	-	-	-	\$25,000			

# **Public Works**

### **PUBLIC WORKS**

		PRO	DJECT					
Department	Description	PRIOR	2017	2018	2019	2020	2021	Five Year Total
	City Hall	4,000,000	9,400,000	-	-	-	-	9,400,000
PW - Stormwater	Spotted Fawn and Jagged Rock Intersection Flood Relief	-	100,000	300,000	-	-	-	400,000
PW – Admin	Railroad Fencing Along Main Street	-	85,000	-	-	-	-	85,000
PW - Stormwater	Utility Stabilization - 4610 Darkwoods Dr.	-	-	-	65,000	-	-	65,000
PW – Admin	Church Street Hwy Z Roundabout Landscaping	-	-	-	-	20,000	-	20,000
PW – Admin	Public Works Facility – Design	-	-	-	-	-	600,000	600,000
PW	General Land Acquisition	400,000	400,000	400,000	400,000	400,000	400,000	2,000,000
PW – Stormwater	Stormwater Reserve	-	100,000	100,000	100,000	100,000	100,000	500,000
Transp. – Admin	Interstate Drive Trail	30,000	295,000	-	-	-	-	295,000
Transp. — Admin	Hwy 61 Outer Road Design and Ph I Construction	740,000	1,570,000	-	-	-	-	1,570,000
Transp. — Admin	Flashing Yellow Arrows	45,000	225,000	-	-	-	-	225,000
Transp. — Admin	ADA Traffic Signals Project - Pedestrian Enhancement and Battery Backup	30,000	270,000	-	-	-	-	270,000
Transp. — Admin	Peine/P/Hwy 61 Interchange Cost Share	773,495	526,505	14,820,000	-	-	-	15,346,505
Transp. — Admin	Downtown Revitalization Preliminary Design	-	500,000	-	-	-	-	500,000
Transp. — Admin	Highway N/Perry Cate Blvd. Signal	-	461,000	-	-	-	-	461,000
Transp. — Admin	Wentzville Parkway Turn Lane - Phase II	-	206,000	375,000	2,260,000	-	-	2,841,000
Transp. — Admin	David Hoekel Parkway Phase II	2,058,475	19,193,500	2,102,340	4,650,000	-	-	25,945,840
Transp. — Admin	Village Center Renovation - South Linn Avenue Revitalization Project	510,500	802,450	750,000	-	750,000	-	2,302,450
Transp. — Admin	West Meyer Road – Phase III	-	535,200	300,000	5,007,500	-	-	5,842,700
Transp. — Admin	West Pearce Blvd. Pavement Rehabilitation	-	-	-	-	520,000	670,000	1,190,000
Transp. — Admin	Wentzville Parkway South - Phase I Final Design	_	-	-	-	-	1,000,000	1,000,000
Transp. — Admin	May Road Pavement Rehabilitation	-	-	-	-	-	200,000	200,000
Transp. – Streets	Contracted Street and Sidewalk Maintenance - Asphalt and Concrete Replacement	-	2,600,000	2,600,000	2,600,000	2,600,000	2,600,000	13,000,000
	TOTAL	8,587,470	37,269,655	21,747,340	15,082,500	4,390,000	5,570,000	84,059,495

### **PUBLIC WORKS**

		EG	UIPMENT					
Department	Description		2017	2018	2019	2020	2021	Five Year Total
PW – Street Sign.	Zero-Turn ROW Mower		14,000	-	-	-	-	14,000
PW – Street Sign.	One-Ton Flat Bed Truck w/Plow and Spreader		81,000	-	-	-	-	81,000
PW – Street Sign.	6 ft. x 10 ft. Equipment Trailer		-	5,000	-	-	-	5,000
PW – Street Sign.	One-Ton Dump Truck w/Plow and Spreader		-	86,000	90,000	92,000	94,000	362,000
PW – Facility Op.	Drop Spreader for Compact Utility Tractor		-	-	-	6,500	-	6,500
PW – Facility Op.	Pickup Salt V Spreader		-	-	-	8,500	-	8,500
PW – Facility Op.	Scissor Lift		-	-	-	-	25,000	25,000
PW	Colorado Crew Cab 4x4		29,000	-	-	-	34,000	63,000
PW – Engineering	1/2-Ton 4X4 Pickup Truck		32,000	32,000	32,000	33,000	70,000	199,000
PW – Stormwater	1-Ton Dump w/Bed, Plow and Spreader – New Personnel		79,000	-	-	-	-	79,000
PW – Street Sign.	3/4-Ton 4x4 Pickup Truck – New Personnel		31,000	-	-	-	-	31,000
PW	3/4-Ton 4x4 Pickup Truck		66,000	68,000	-	37,000	-	171,000
PW – Fleet	3/4-Ton 4x4 Service Truck		-	-	-	47,000	-	47,000
Transp. – Streets	Mini-Excavator		65,000	-	-	-	-	65,000
Transp. – Streets	Changeable Message Board		30,000	16,000	17,000	35,000	18,000	116,000
Transp. – Streets	Tandem Axle Dump Truck w/Plow and Spreader		160,000	-	-	-	180,000	340,000
Transp. – Streets	Crack-Sealer Machine		-	60,000	-	-	-	60,000
Transp. – Streets	Skid-Steer Loader		-	56,000	-	-	63,000	119,000
Transp. – Streets	Sweeper		-	-	312,000	-	-	312,000
Transp. – Streets	Salt Storage Facility		-	-	170,000	-		170,000
Transp. – Streets	Vibratory Roller		-	-	45,000	-	-	45,000
Transp. – Streets	Single-Axle Dump Truck w/Plow and Spreader		-	-	153,000	160,000	165,000	478,000
Transp. – Streets	Tractor with ROW Mowing Arm		-	-	140,000	-	145,000	285,000
	TOTAL		587,000	323,000	959,000	419,000	794,000	3,082,000

### **PUBLIC WORKS**

TOTAL PROJECTS AND EQUIPMENT							
	PRIOR	2017	2018	2019	2020	2021	Five Year Total
TOTAL	8,587,470	37,856,655	22,070,340	16,041,500	4,809,000	6,364,000	87,141,495

	FUNDIN						
Source	PRIOR	2017	2018	2019	2020	2021	Total
General Fund Reserves	4,000,000	1,000,000	-	-	-	-	1,000,000
Capital Fund	400,000	4,272,000	1,123,000	1,524,000	939,000	1,894,000	9,752,000
Capital Fund Reserves	-	5,400,000	-	-	-	-	5,400,000
Transportation Fund	2,705,895	6,695,005	6,371,446	4,757,500	3,454,000	3,024,000	24,301,951
St. Charles County Cost Share	1,389,575	14,042,700	6,388,894	8,630,000	-	250,000	29,311,594
MoDOT Cost Share	-	-	8,000,000	-	-	-	8,000,000
STP Funding	-	545,950	187,000	1,130,000	-	160,000	2,022,950
East-West Gateway TAP Funding	21,000	206,500	-	-	416,000	536,000	1,158,500
CMAQ through EWGCOCG	36,000	180,000	-	-	-	500,000	680,000
Private Developer	35,000	514,500	-	-	-	-	514,500
MoDOT Loan	-	5,000,000	-	-	-	-	5,000,000
TOTAL	8,587,470	37,856,655	22,070,340	16,041,500	4,809,000	6,364,000	87,141,495

### **NEW CITY HALL**

Fund: Capital Department: Public Works Location: Schroeder Creek Boulevard

Project Cost: \$13,400,000 I Outside Funding: \$-0- I City Cost: \$13,400,000 Planning and Engineering - \$1,040,000 Construction and FF&E - \$11,995,000 Construction Management - \$365,000 General Fund Reserves - \$3,000,000 in 2015, \$4,000,000 in 2016, \$1,000,000 in 2017 Capital Fund Reserves - \$5,400,000 in 2017

**Description:** Construction of a new City Hall.

**Justification:** Construction of a new City Hall to facilitate the consolidation of numerous public facilities to improve safety, efficiency, customer service and provide a facility to meet the needs of a growing City of more than 30,000.



FUNDING SCHEDULE									
Total	PRIOR	2017	2018	2019	2020	2021			
\$13,400,000	\$4,000,000	\$9,400,000	-	-	-	-			

### SPOTTED FAWN & JAGGED ROCK INTERSECTION FLOOD RELIEF

Fund: Capital Department: Stormwater Location: Spotted Fawn and Jagged Rock to Cripple Creek Court

Project Cost: \$400,000 | Outside Funding: \$-0- | City Cost: \$400,000

**Description:** Replacing existing pipe (12", 15" and 18") with 18" and 36" pipe. To be modeled to determine extent of repair and maintenance and designed in-house.

*Justification:* Correcting storm pipe deficiencies to accommodate 100-year flood capacity at an intersection prone to flooding during normal rains (no flood relief swale).

Anticipated Benefit: Increases street intersection resilience to flooding during normal weather events.



FUNDING SCHEDULE									
Total	2017	2018	2019	2020	2021				
\$400,000	\$100,000	\$300,000	-	-	-				

### RAILROAD FENCING ALONG MAIN STREET

Fund: Capital Department: PW – Administration Location: Main Street East and West of Linn Ave.

Project Cost: \$85,000 | Outside Funding: \$-0- | City Cost: \$85,000

**Description and Justification:** This project will install fencing along Main Street to provide separation to pedestrians crossing railroad right of way. Black picket fencing similar to that used on previous City projects will be utilized to continue with the Village Center concept. This request has been made of the City by Norfolk Southern Railroad.

Anticipated Benefit: Enhanced safety and reduced need to temporary fencing to be installed during downtown events.



FENCING EXAMPLE

FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$85,000	\$85,000	-	-	-	-			

### UTILITY STABILIZATION – 4610 DARKWOODS DR.

Fund: Capital Department: Stormwater Location: 4610 Darkwoods Dr.

Project Cost: \$65,000 | Outside Funding: \$-0- | City Cost: \$65,000

**Description:** Stabilize 18" HDPE storm line in meandering stream with 6' high composite revetment and bio-stabilization and property easement restoration.

Justification: Address function and stabilization of stormwater infrastructure.

Anticipated Benefit: Prevent/address public infrastructure and property damage.



FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$65,000	-	-	-	\$65,000	-			

### CHURCH STREET HIGHWAY Z ROUNDABOUT LANDSCAPING

Fund: Capital Department: PW – Admin/Parks Location: Center of MoDOT Roundabout at Church/I70/Hwy Z

Project Cost: \$20,000 | Outside Funding: \$-0- | City Cost: \$20,000

**Description:** Through maintenance agreement with MoDOT provide enhanced landscaping in the center island of newly constructed roundabout.

**Justification:** Provide aesthetic enhancement for those entering the City and the Village center.

Anticipated Benefit: Improved appearance when entering the City, which promotes a positive environment and an atmosphere for growth and development.



FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$20,000	-	-	-	\$20,000	-			

# PUBLIC WORKS FACILITY – DESIGN

Fund: Capital Department: Public Works Location: TBD

Project Cost: \$600,000 | Outside Funding: \$-0- | City Cost: \$600,000

**Description and Justification:** This design cost is for the future, new Public Works facility, which would house the Street, Fleet, Facility Operations and Utility departments.

Anticipated Benefit: The current facility is an older aging facility in a residential neighborhood. Due to future repair and upkeep costs as well as growing staff requirements, a new facility should be considered in a commercial area.

FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$600,000	-	-	-	-	\$600,000			

# **GENERAL LAND ACQUISITION**

Fund: Capital Department: Citywide Location: TBD

Project Cost: \$2,000,000 | Outside Funding: \$-0- | City Cost: \$2,000,000

**Description and Justification:** These funds will be earmarked to allow for future land acquisitions for parks, City facilities, development or any other public purpose.

**Anticipated Benefit:** This funding would be used to reserve funds for any future acquisition of land for public purpose when the opportunity arises. Reserving these funds for future use allows the City to proactively pursue lands that have been identified and to respond to unexpected opportunities that may arise.

FUNDING SCHEDULE								
Total	PRIOR	2017	2018	2019	2020	2021		
\$2,000,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000		

# **STORMWATER RESERVE**

Fund: Capital Department: Stormwater Location: TBD

#### Project Cost: \$500,000 | Outside Funding: \$-0- | City Cost: \$500,000

**Description and Justification:** Unlike many municipal counterparts, the City does not currently have a dedicated revenue source to meet the needs of operating, maintaining and improving a stormwater system. Without dedicated revenue, the scope or scale of work undertaken on the stormwater system has primarily been limited to small reactive projects rather than proactive maintenance. With an aging infrastructure system, the approach will need to transition more to that of other City utilities such as water, wastewater and streets to ensure that an effective system is in place now and for the future. The stormwater reserve would establish a dedicated revenue source that could be utilized for long range planning, repair of aging infrastructure, large scale inspection and maintenance, utility related stream bank stabilization as well as other identified stormwater projects. The funding would be used in a phased approach to first clean and assess the condition of the City's system and then evaluate and prioritize capital needs.

**Anticipated Benefit:** Compliance with federal regulations, preservation of the existing system, reduction in emergency repairs, long term stability and sustainability of the system, and ability to address capital project needs.

FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$500,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000			

### **INTERSTATE DRIVE TRAIL**

Fund: Transportation Department: Administration Location: Interstate Drive (Wilmer Road to Highway Z)

Project Cost:\$325,000 I Outside Funding: \$227,500 I City Cost: \$97,500 Planning and Engineering (2016) - \$30,000 Project Management - \$30,000 Construction - \$265,000 East-West Gateway Transportation Alternatives Program Funding - \$227,500

**Description:** This project will consist of constructing a 10-foot wide multi-use asphalt trail along the south side of Interstate Drive from the intersection at Wilmer Road to the intersection with Highway Z to the west. The trail will be located entirely on existing Right of Way for Interstate Drive. The trail will extend the 10-foot wide trail, which already exists from Hepperman Road to Wilmer Road, and connect to the future 10-foot trail extending from Highway Z to Quail Ridge Parkway, which St. Charles County is currently constructing. The project will include ADA accessibility at Wilmer Road and Highway Z, and at the Cimarron Valley Trail and Cimarron Ridge Crossing.

**Justification:** This section of trail will provide a missing link for the multi-use trail, which will eventually stretch from South Point Prairie Road in the west to Quail Ridge Park in the west, for a total of 3.59 miles. This will give Wentzville residents to the south of Interstate 70 a trail to bike or walk, as well as non-vehicular access to Quail Ridge Park. The trail will also allow pedestrian and cyclist access to the Wentzville Bluffs development, which contains food and entertainment venues.

Anticipated Benefit: This project will provide City residents a multi-use trail on which to bike, run or walk. It will also provide pedestrian access to Quail Ridge Park for resident recreation.



FUNDING SCHEDULE									
Total	PRIOR	2017	2018	2019	2020	2021			
\$325,000	\$30,000	\$295,000	-	-	-	-			
Outside Funding	\$21,000	\$206,500	-	-	-	-			

### HIGHWAY 61 OUTER ROAD DESIGN AND PHASE I CONSTRUCTION

#### Fund: Transportation

#### **Department:** Administration

Location: West side of Highway 61 from Wentzville Parkway to Timber Trace

**Project Cost:** \$2,310,000 I **Outside Funding:** \$2,005,000 I **City Cost:** \$305,000 Cost Share with St. Charles County and Private Developer (63/24/13) - \$1,455,500/\$549,500

**Description:** Utilize existing MoDOT roadway and right of way to Design 61 Outer Road from Peine Road to Wentzville Parkway. Construct section of outer road from Peine Road to proposed Lexington subdivision with private developer participation.

**Justification:** Safety improvement to provide access for residents and businesses back to Wentzville Parkway without using Hwy 61. Project will also open up areas for both residential and commercial growth. This follows the City's Thoroughfare Plan to proactively address access with planned Hwy 61 Safety Improvements. A construction-ready plan will also aid in acquiring federal and state funding for the project.

**Anticipated Benefit:** Safety improvements for residents, as well as improved access back to Wentzville for shopping and recreation; this will also open up additional areas for commercial and residential growth.



	FUNDING SCHEDULE								
Total	PRIOR	2017	2018	2019	2020	2021			
\$2,310,000	\$740,000	\$1,570,000		-	-	-			
County	\$647,000	\$808,500	-	-	-	-			
Private Developer	\$35,000	\$514,500	-	-	-	-			

### **FLASHING YELLOW ARROWS**

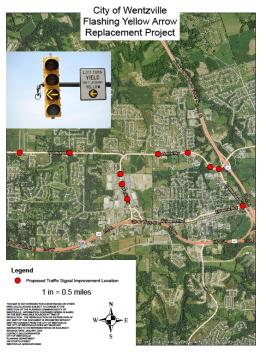
#### Fund: Transportation Department: Engineering Location: Wentzville Parkway and Luetkenhaus Boulevard

Project Cost: \$270,000 | Outside Funding: \$216,000 | City Cost: \$54,000 Planning/Engineering (2016) - \$45,000 Construction - \$225,000 Congestion Mitigation Air Quality (CMAQ) funding administered through EWGCOCG - \$216,000

**Description:** Project will install flashing left turn arrows at 10 intersections along Wentzville Parkway and Luetkenhaus Boulevard.

**Justification:** Project will improve traffic signal operation efficiency and safety by expanding the number of phases that permit left-turn movements. This reduction is anticipated to reduce travel delay system-wide by 5 percent or 54,020 travel hours per year.

Anticipated Benefit: Reduction in congestion as well as updating all signals to current MUTCD standards.



FUNDING SCHEDULE									
Total	PRIOR	2017	2018	2019	2020	2021			
\$270,000	\$45,000	\$225,000	-	-	-	-			
Outside Funding	\$36,000	\$180,000	-	-	-	-			

### ADA TRAFFIC SIGNALS PROJECT – PEDESTRIAN ENHANCEMENT AND BATTERY BACKUP

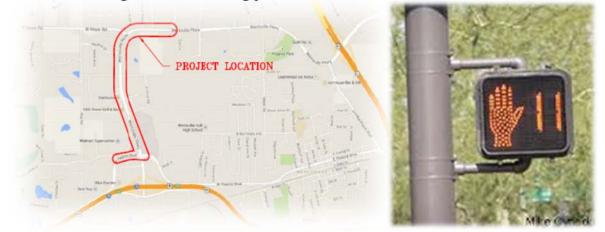
Fund: Transportation Department: Administration Location: Wentzville Parkway and Pearce Boulevad

> Project Cost: \$300,000 | Outside Funding: - | City Cost: \$300,000 Planning and Engineering (2016) - \$30,000 Construction - \$270,000

**Description:** This project will upgrade the pedestrian crossings along Wentzville Parkway and Pearce Boulevard. These upgrades include upgrading curb ramps and pedestrian signal heads to include a countdown display to meet ADA requirements. Project will also incorporate battery backup system to keep signals functioning during a power outage.

**Justification:** Current facilities do not meet all ADA requirements. Recently, residents have indicated concerns for having ADA-compliant facilities. Additionally, the Wentzville School District and Kiwanis Club have sent letters of recommendation for this project. Signals currently experience down time as a result of lightning strikes or other power losses.

Anticipated Benefit: By bringing the signalized intersections into ADA compliance, the City can provide safe travel for pedestrians who walk along Wentzville Parkway to the local businesses, schools and other public facilities. Battery backup will improve safety along corridor and avoid loss of signal function during power losses.



FUNDING SCHEDULE								
Total	PRIOR	2017	2018	2019	2020	2021		
\$300,000	\$30,000	\$270,000	-	-	-	-		

# PEINE/P/HWY 61 INTERCHANGE COST SHARE

#### Fund: Transportation Department: Administration Location: Highway 61 Corridor from Wentzville Parkway to Peine Road

#### Project Cost: \$16,120,000 I Outside Funding: \$12,447,890 I City Cost: \$3,672,110 Cost Share Agreeemnt with MoDOT 50%, St. Charles County 28%, City 22% Aesthetic Enhancement (100% City) - \$120,000

**Description:** Construct interchange at Peine/P/61 to eliminate at-grade crossings as well as address additional at-grade crossings along the corridor.

\*Initial \$1,300,000 budgeted amount is shown below to be fully expended in 2017 with balance of \$2,372,110 in 2018 when construction is anticipated to begin.

**Justification:** Safety improvement to reduce fatalities along the 61 corridor as well as other accidents associated with the at-grade intersections. Interchange will also improve access along Peine Road and promote additional development and growth while also improving access to Splash Station.

Anticipated Benefit: Reduction in fatal accidents and overall improved safety, improved access for residents and Splash Station, and facilitates growth.



FUNDING SCHEDULE									
Total	PRIOR	2017	2018	2019	2020	2021			
\$16,120,000	\$773,495	\$526,505*	\$14,820,000	-	-	-			
MoDOT			\$8,000,000						
County			\$4,447,890						

### DOWNTOWN REVITALIZATION PRELIMINARY DESIGN

Fund: Transportation

**Department:** Administration

Location: Meyer Road/Pearce Boulevard Intersection and other Downtown Locations

#### Project Cost: \$500,000 | Outside Funding: \$400,000 | City Cost: \$100,000 St. Charles County - \$400,000

**Description: and Justitifcation:** These improvements will focus on traffic management, safety and improved access for vehicles as well as pedestrians downtown. Currently, the locations of concentration within the study are the intersection of Pearce Boulevard and Meyer Road, the intersection of Pittman Avenue and Luetkenhaus Boulevard, the extension of Main Street, and the addition of a second at-grade crossing of the Norfolk Southern railroad tracks.

**Anticipated Benefit:** This project will work to continue the vision of a revitalized downtown through an in depth review and feasibility analysis of transportation system improvements originally proposed in the 2008 study.



FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$500,000	\$500,000	-	-	-	-			
Outside Funding	\$400,000	-	-	-	-			

# HIGHWAY N/PERRY CATE BLVD. SIGNAL

#### Fund: Transportation Department: Administration Location: Highway N at Perry Cate Blvd.

#### Project Cost: \$461,000 | Outside Funding: \$230,500 | City Cost: \$230,500 St. Charles County (50%) - \$230,500

**Description: and Justitifcation:** This project will install a new traffic signal at the intersection of Missouri State Route N and Perry Cate Boulevard. This intersection experiences heavy congestion during peak periods due to the close proximity to three Wentzville Schools and a soon to be fourth. With approximately 14,000 vehicles traveling along Highway N each day the intersection meets volume warrant for a signal per a recent MoDOT study. This project will improve safety at the intersection while reducing congestion.

Anticipated Benefit: Improve motorist safety, reduce travel time and congestion.



	FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021				
\$461,000	\$461,000	-	-	-	-				
County	\$230,500	-	-	-	-				

# WENTZVILLE PARKWAY TURN LANE – PHASE II

#### Fund: Transportation Department: Administration Location: Wentzville Parkway from Schroeder Creek Boulevard to Will Ron Drive

Project Cost: \$2,841,000 I Outside Funding: \$2,556,000 I City Cost: \$285,000 Planning and Engineering - \$206,000 Pre-Construction - \$375,000 Construction - \$2,260,000 Federal STP (50/50) - \$1,420,000 and Road Board (80/20) - \$1,136,000

**Description:** Construct pavement widening to allow for a center left turn lane similar to Phase I from William Dierberg Drive to Schroeder Creek Boulevard Project; will also include enhanced pedestrian facilities such as ADA ramps and a 10-foot wide, multi-use trail.

**Justification:** Project to correct existing safety and congestion issues as cars must currently stop in the through drive lane to yield to oncoming traffic before making a left turn. In a three-year period, 58 accidents occurred in this section of the Parkway. This project will meet the current need and will allow for future utilization of commercial property along the Parkway. The continued trail will also provide connectivity between Heartland and Progress parks.

Anticipated Benefit: Improved safety, reduced congestion, and improved travel time, while also providing capacity for future growth and pedestrian accessibility.



FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$2,841,000	\$206,000	\$375,000	\$2,260,000	-	-			
Federal STP	\$103,000	\$187,000	\$1,130,000	-	-			
County	\$82,400	\$149,600	\$904,000	-	-			

# DAVID HOEKEL PARKWAY – PHASE II

Fund: Transportation Department: Administration Location: I-70 west of Point Prairie from West Meyer Road to Interstate Drive

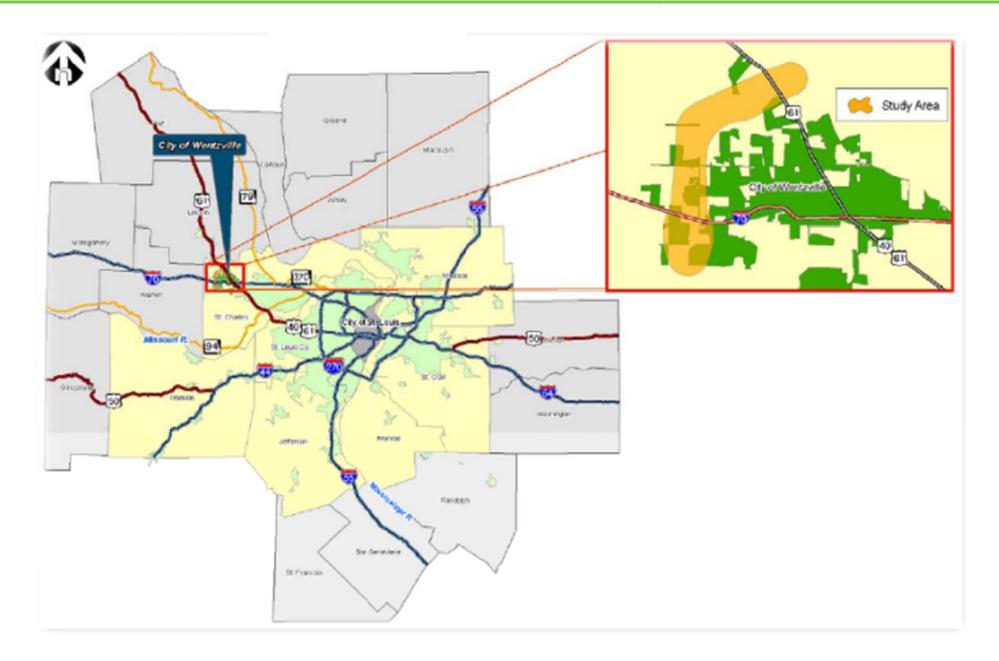
Project Cost: \$28,004,315 | Outside Funding: \$18,107,079 | City Cost: \$9,897,236 Planning and Engineering (2016 and 2018) - \$2,523475 Construction - \$25,480,840 Cost Share with St. Charles County (80/20) (60/40 on MoDOT ROW) - \$18,107,079 MoDOT Loan - \$5,000,000

**Description and Justification:** Construction of an interchange at I-70 as well as a new roadway to connect from Interstate Drive to West Meyer Road. All available improvements have been completed to the Parkway exit. This project will provide a second access point to alleviate congestion on the Parkway and improve commute time and safety by reducing traffic backups onto I-70. This project will also open up a new corridor for commercial growth and development while providing access to existing and future residential developments. The project is broken into the following phases: 2A – North Outer Road, 2B – interchange, 2C – connection to Interstate Drive, 2D – two lanes from Goodfellow to West Meyer Road. The construction of only a partial two lane cross section is included in the five-year plan.

Anticipated Benefit: Improve safety for drivers as well as add an additional platform for commercial growth and development.

	FUNDING SCHEDULE									
		DHP 2A and DHP 2B	DHP 2B, DHP 2C and DHP 2D	DHP 2D						
Total	PRIOR	2017	2018	2019	2020	2021				
\$28,004,315	\$2,058,475	\$19,193,500	\$2,102,340	\$4,650,000	-	-				
County	\$742,575	\$12,093,100	\$1,551,404	\$3,720,000	-	-				
MoDOT Loan	-	\$5,000,000	-	-	-	-				
Full build out of all la MoDOT.	ines of Phase 2A	, 2B, 2C and 2D	) will require Co	unty participatic	on as well as a lo	oan from				
DHP 2A – North Oute DHP 2B – Full Interch DHP 2C – Interchang DHP 2D – Two Lanes	ange + Four Rar e to Interstate D	rive								

### **DAVID HOEKEL PARKWAY – PHASE II**



### VILLAGE CENTER RENOVATION – SOUTH LINN AVE REVITALIZATION PROJECT

Fund: Transportation Department: Administration Location: Downtown Linn Avenue from Main Street to West Fourth Street

Project Cost: \$2,302,450 | Outside Funding: \$442,950 | City Cost: \$1,859,500 Federal STP Funding - \$442,950 Ongoing Renovations (2018 and 2020): \$1,500,000

**Description:** Reconstruct downtown streets and sidewalks consistent with the Village Center Study.

**Justification:** Improve both vehicular and pedestrian traffic downtown while improving the aesthetic streetscape and promoting economic growth.

Anticipated Benefit: Improved travel, pedestrian accessibility, and promote redevelopment and growth.



	FUNDING SCHEDULE									
Total	PRIOR	2017	2018	2019	2020	2021				
\$2,302,450	\$510,500	\$802,450	\$750,000		\$750,000	-				
Outside Funding		\$442,950	-	-	-	-				

# WEST MEYER ROAD – PHASE III

Fund: Transportation

Department: Administration

Location: West Meyer Road from North Point Prairie Road to City Bridge West of Rotary Park

Project Cost: \$5,842,700 I Outside Funding: \$4,674,200 I City Cost: \$1,168,500 Planning and Engineering - \$535,200 Pre-Construction - \$300,000 Construction - \$5,007,500 Cost Share with St. Charles County (80/20) - \$4,674,200

**Description:** Complete reconstruction of West Meyer Road from North Point Prairie Road to City constructed bridge west of Rotary Park. Application for additional Federal funding assistance will be completed in spring of 2017 to reduce the overall fiscal impact to both the City and County. The participation percentage will be evaluated to provide the most competitive project possible.

**Justification:** Largest section has a PCI of 39 and there are currently no pedestrian facilities located along the road. This project would construct roadway with a PCI of 100 and a life expectancy of 30 to 40 years. The project would increase capacity for residential growth as well as large events at Rotary Park such as the County Fair. The project will also include sidewalks and a 10-foot wide pedestrian trail to provide connectivity from existing trail to Rotary Park.

Anticipated Benefit: Complete reconstruction of roadway will meet current needs, and add capacity for utilization of Rotary Park and to encourage both residential and commercial growth along the corridor. This project will lay the ground work for the David Hoekel Parkway project by creating an adequate east-west system to distribute traffic from the new I-70 Interchange.



	FUNDING SCHEDULE									
Total	2017	2018	2019	2020	2021					
\$5,842,700	\$535,200	\$300,000	\$5,007,500	-	-					
County	\$428,200	\$240,000	\$4,006,000	-	-					

# WEST PEARCE BOULEVARD PAVEMENT REHABILITATION

Fund: Transportation Department: Streets Location: West Pearce Boulevard

Project 1 – Schroeder Creek to Luetkenhause Blvd.

Two inch mill and overlay of existing roadway approximately 7,800 feet long and 40-feet wide that coincides with future improvements to Pearce Boulevard such as roundabouts.

Project Cost: \$520,000 | Outside Funding: \$416,000 | City Cost: \$104,000 East West Gateway - \$416,000

#### Project 2 - May Road to Goodfellow

Two inch mill and overlay of existing roadway approximately 8,000 feet long and 25 feet wide that coincides with upgrading conditions with completion of David Hoekel Parkway/I-70 Interchange.

Project Cost: \$670,000 | Outside Funding: \$536,000 | City Cost: \$134,000 East West Gateway - \$536,000

*Justification:* Roadway is in need of normal maintenance; mill and overlay would improve condition of road and extend the serviceable life.

**Anticipated Benefit:** Improved ride quality and reduced annual maintenance costs while considerably extending the serviceable life of the roadway.

PROJECT 1 – SCHROEDER CREEK TO LUETKENHAUSE BLVD.										
FUNDING SCHEDULE										
Total	2017	2018	2019	2020	2021					
\$520,000	-	-	-	\$520,000	-					
Outside Funding	-	-	-	\$416 <b>,</b> 000	-					

PROJECT 2 – MAY ROAD TO GOODFELLOW									
FUNDING SCHEDULE									
Total	2017	2018	2019	2020	2021				
\$670,000	-	-	-	-	\$670,000				
Outside Funding	-	-	-	-	\$536,000				

# WENTZVILLE PARKWAY SOUTH – PHASE I FINAL DESIGN

#### Fund: Transportation Department: Administration Location: Veterans Memorial Parkway to Interstate Drive

Project Cost: \$1,000,000 I Outside Funding: \$750,000 I City Cost: \$250,000 Planning and Engineering - \$1,000,000 Cost Share with St. Charles County - \$250,000 Congestion Mitigation Air Quality (CMAQ) funding administered through EWGCOCG - \$500,000

**Description:** Construct an extension of Wentzville Parkway south from the current terminus at Veterans Memorial Parkway to Interstate Drive.

*Justification:* Will provide a major north-south arterial for traffic flow, and will provide additional opportunities for commercial development.

Anticipated Benefit: Improved access and economic development.



FUNDING SCHEDULE									
Total	2017	2018	2019	2020	2021				
\$1,000,000	-	-	-	-	\$1,000,000				
County	-	-	-	-	\$250,000				
CMAQ	-	-	-	-	\$500,000				

# MAY ROAD PAVEMENT REHABILITATION

#### Fund: Transportation Department: Administration Location: West Pearce Boulevard to West Meyer Road

#### Project Cost: \$2,000,000 | Outside Funding: \$1,600,000 | City Cost: \$400,000 Planning and Engineering - \$200,000 Construction (2022) - \$1,800,000 Federal STP Funding (80/20) - \$1,600,000

**Description and Justification:** The original two-lane asphalt roadway is deteriorated and with new development is experiencing increased utilization. This project will address the condition of the roadway which may include culvert replacement, widening and asphalt resurfacing.

Anticipated Benefit: Improved access and safety of roadway as well as a reduction in annual maintenance costs.



FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$200,000	-	-	-	-	\$200,000			
Outside Funding	-	-	-	-	\$160,000			

# CONTRACTED STREET AND SIDEWALK MAINTENANCE – ASPHALT AND CONCRETE REPLACEMENT

Fund: Transportation Department: Streets Location: Citywide

Project Cost: \$13,000,000 | Outside Funding: \$-0- | City Cost: \$13,000,000

**Description:** Ongoing street and sidewalk maintenance based on PCI condition, as well as factors such as ADT and safety.



FUNDING SCHEDULE									
Total	2017	2018	2019	2020	2021				
\$13,000,000	\$2,600,000	\$2,600,000	\$2,600,000	\$2,600,000	\$2,600,000				

# **ZERO-TURN ROW MOWER**

Fund: Capital Department: Public Works – Streets and Signals Location: Street Division

Project Cost: \$14,000 | Outside Funding: \$-0- | City Cost: \$14,000

**Description:** Purchase of a zero-turn ROW mower.

**Justification:** This mower truck will replace an outdated 2002 model of similar nature that has been in service for many years, exhibits considerable wear and tear, and is accompanied by high maintenance costs due to age/use. The service use of this mower is bi-monthly with heavy use.

Anticipated Benefit: Reliability, and reduction in repair and maintenance costs.

FUNDING SCHEDULE									
Total	2017	2018	2019	2020	2021				
\$11,000	\$14,000	-	-	-	-				

# ONE-TON FLAT BED TRUCK WITH PLOW AND SPREADER

Fund: Capital Department: Public Works – Street and Signals Location: Street Division

Project Cost: \$81,000 | Outside Funding: \$-0- | City Cost: \$81,000

**Description:** Purchase of a one-ton flatbed truck with plow and spreader.

**Justification:** Replacement truck (#311) for outdated model with high maintenance costs due to age and use.

**Anticipated Benefit:** Increase reliability, reduce repair and maintenance costs, and improve fuel economy.

FUNDING SCHEDULE									
Total	2017	2018	2019	2020	2021				
\$81,000	\$81,000	-	-	-	-				

# 6 FT. X 10 FT. EQUIPMENT TRAILER

Fund: Capital Department: Public Works – Streets and Signals Location: Street Division

Project Cost: \$5,000 | Outside Funding: \$-0- | City Cost: \$5,000

**Description:** Purchase of a 6-foot x 10-foot equipment trailer.

**Justification:** This 6-foot x 10-foot equipment trailer will replace an outdated 1997 model of similar nature that has been in service for many years, exhibits considerable wear and tear, and heavy use.

Anticipated Benefit: Increase reliability and reduce repair and maintenance costs.

FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$5,000	-	\$5,000	-	-	-			

# ONE-TON DUMP TRUCK WITH PLOW AND SPREADER

Fund: Capital Department: Public Works – Stormwater and Streets and Signals Location: Street Division

Project Cost: \$362,000 | Outside Funding: \$-0- | City Cost: \$362,000

**Description:** Purchase of a one-ton dump truck with plow and spreader.

**Justification:** Replacement trucks (#308, #316 and #317) for outdated models with high maintenance costs due to age and use. Addition of new one ton outfitted with plow and spreader for proposed Stormwater personnel in 2020.

Anticipated Benefit: Increase reliability, reduce repair and maintenance costs, and improve fuel economy.

FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$362,000	-	\$86,000	\$90,000	\$92,000	\$94,000		

# DROP SPREADER FOR COMPACT UTILITY TRACTOR

#### Fund: Capital

**Department:** Public Works – Facility Operations

#### Project Cost: \$6,500 | Outside Funding: \$-0- | City Cost: \$6,500

**Description:** Drop spreader attachment for the compact utility tractor.

**Justification:** Drop spreader will help facilitate the removal of snow and ice from sidewalks and walkways during winter events. Mountable unit will improve efficiency and overall effectiveness.

Anticipated Benefit: Drop spreader will more effectively use salt reducing usage as well as damage to vegetation near walkways resulting from use of broadcast spreaders.



FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$6,500	-	-	-	\$6,500	-		

# **PICKUP SALT V SPREADER**

Fund: Capital Department: Public Works – Facility Operations

Project Cost: \$8,500 | Outside Funding: \$-0- | City Cost: \$8,500

**Description:** Stainless Steel Pickup Mounted Salt V Spreader.

**Justification:** Stainless Steel V Pickup V spreader will replace small tailgate mounted spreader currently in use allowing for use of less-expensive rock salt versus bag salt, as well as increased capacity to improve efficiency when clearing snow and ice from parking lots in winter events. Spreader will also provide flexibility that the fully outfitted truck could be used for street snow removal if conditions demanded.

Anticipated Benefit: More efficient snow removal with reduction in time from additional salt capacity and reduced material cost by using rock salt rather than bag salt.



FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$8,500	-	-	-	\$8,500	-		

# **SCISSOR LIFT**

Fund: Capital Department: Public Works – Facility Operations

Project Cost: \$25,000 | Outside Funding: \$-0- | City Cost: \$25,000

**Description and Justification:** This lift will be utilized in the new City Hall and Law Enforcement Center for ceiling, lighting and window work performed by Facility Operations.

Anticipated Benefit: The City does not currently own a scissor lift and Facility Operations must rent or lease the equipment on a frequent basis as lighting and other high ceiling work becomes necessary.



FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$25,000	-	-	-	-	\$25,000			

### VEHICLES

#### Fund: Capital

**Department:** Public Works – Stormwater, Engineering, Streets and Signals, Fleet, Facility Operations **Location:** Public Works – Stormwater, Engineering, Streets and Signals, Fleet, Facility Operations

**Description:** Purchase of replacement vehicles.

**Justification:** Replacement of vehicles due to age, mileage and ongoing maintenance costs. Replacement will improve reliability, safety and reduce the likelihood of repairs exceeding the vehicles' value.

Anticipated Benefit: Reliability, reduction in repair and maintenance costs, and improved fuel economy.

COLORADO CREW CAB 4x4 (Stormwater and Engineering)									
FUNDING SCHEDULE									
Total	2017	2018	2019	2020	2021				
\$63,000	\$29,000	-	-	-	\$34,000				

<sup>1</sup> /2-TON 4x4 PICKUP TRUCK (Engineering)								
FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021(2)			
\$199,000	\$32,000	\$32,000	\$32,000	\$33,000	\$70,000			

<sup>3</sup> / <sub>4</sub> -TON 4x4 PICKUP TRUCK (Streets and Signals, Fleet, Facility Operations)									
FUNDING SCHEDULE									
Total	2017 (3)	2018 (2)	2019	2020	2021				
\$202,000	\$66,000	\$68,000	-	\$37,000	-				
New Personnel	\$31,000								

3/4-TON 4x4 SERVICE TRUCK (Fleet)									
FUNDING SCHEDULE									
Total	2017	2018	2019	2020	2021				
\$47,000	-	-	-	\$47,000	-				

1-TON DUMP TRUCK – NEW PERSONNEL (Stormwater)									
FUNDING SCHEDULE									
Total	2017	2018	2019	2020	2021				
\$79,000	\$79,000	-	-	-	-				

### **MINI-EXCAVATOR**

#### Fund: Capital

**Department:** Transportation – Streets

Project Cost: \$65,000 | Outside Funding: \$-0- | City Cost: \$65,000

**Description:** Purchase of a mini-excavator.

**Justification:** Replace 2008 model which has been in service weekly for many years and exhibits considerable wear and tear. Transfer of this existing mini-excavator to Wastewater Department is recommended to permit a few more years of lower use service so they no longer have to borrow a machine from the Streets or Water departments. This will permit greater flexibility in the performance of manhole adjustments and minor repairs.

**Anticipated Benefit:** The City has placed all equipment on a regular replacement schedule to maintain reliability. Occasionally, some equipment remains in good enough condition to be retained for a few additional years which is the case for this mini-excavator. In general, the City adheres to the fixed-replacement schedule to minimize long-term maintenance costs.

FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$65,000	\$65,000	-	-	-	-		

# **CHANGEABLE MESSAGE BOARD**

Fund: Capital Department: Transportation – Streets

Project Cost: \$116,000 | Outside Funding: \$-0- | City Cost: \$116,000

**Description:** Purchase of changeable message boards.

**Justification:** These changeable message boards will replace two, out-dated 2007 models of like kind.

**Anticipated Benefit:** The anticipated benefit for the replacement of this equipment is greater safety measures for road projects, efficiency and flexibility. In addition these units are used City wide by other departments to advertise City events.

FUNDING SCHEDULE							
Total	2017 (2)	2018	2019	2020 (2)	2021		
\$116,000	\$30,000	\$16,000	\$17,000	\$35,000	\$18,000		

### TANDEM-AXLE DUMP TRUCK WITH PLOW AND SPREADER

#### Fund: Capital Department: Transportation – Streets

#### Project Cost: \$340,000 | Outside Funding: \$-0- | City Cost: \$340,000

**Description:** Tandem-axle dump truck with plow and spreader. This dump truck will replace an outdated 2007 model that exhibits considerable wear and tear, and is accompanied by high maintenance costs due to age and use.

**Justification:** Dump truck is a material hauler and snow plow vehicle, which is considered heavy duty.

**Anticipated Benefit:** All equipment is placed on a regular replacement schedule where it is replaced after a fixed number of years to maintain fleet reliability during emergency operations and to minimize out of service time and repair costs associated with heavy use of aged equipment. Tandem trucks are critical pieces of the street pavement repair and snow removal operations and must be replaced every 10 years to ensure availability during critical and emergency-response events.

FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$340,000	\$160,000	-	-	-	\$180,000			

### **CRACK-SEALER MACHINE**

Fund: Capital Department: Transportation – Streets

Project Cost: \$60,000 | Outside Funding: \$-0- | City Cost: \$60,000

**Description:** Purchase of a crack-sealer machine.

*Justification:* Machine will replace an outdated 2002 model of similar nature that has been in service for many years, exhibits considerable wear and tear, and is accompanied by high maintenance costs due to age and use.

**Anticipated Benefit:** The purchase of a new machine will increase reliability, reduce down time and maintenance cost as well as raise the efficiency of the crack seal operation throughout the City.

	FUND	ING SCHEDU	LE		
Total	2017	2018	2019	2020	2021
\$60,000	-	\$60,000	-	-	-

# **SKID-STEER LOADER**

#### Fund: Capital

**Department:** Transportation – Streets

#### Project Cost: \$119,000 | Outside Funding: \$-0- | City Cost: \$119,000

**Description:** Purchase of a skid-steer loader to replace the current machine.

**Justification:** Replace an outdated 2014 model of similar nature that has been in service for many years, exhibits considerable wear and tear, and is accompanied by maintenance costs due to age and use.

**Anticipated Benefit:** This skid-steer loader is on a three year replacement cycle as it is the work horse of small equipment. In addition to standard loading, dumping and material moving, this equipment attaches to, and runs numerous attachments used for different situation of street work, such as fork-lift forks for moving pallets and materials, Concrete and Asphalt Breaker HB 980, Finish Grinder 24" high flow Planer for the removal of asphalt and concrete, and a new attachment which is the Rock Saw (included in this bid). These attachments exert enormous pressures/vibrations on the loader.

FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$119,000	-	\$56,000	-	-	\$63,000		

### **SWEEPER**

#### Fund: Capital

**Department:** Streets and Stormwater

Project Cost: \$312,000 | Outside Funding: \$-0- | City Cost: \$312,000

**Description:** Purchase of a sweeper.

**Justification:** This sweeper vehicle is considered severe duty. This sweeper will replace an outdated 2009 model of similar nature that exhibits considerable wear and tear, and is accompanied by high maintenance costs due to age and use.

Anticipated Benefit: The City has placed all equipment on a regular replacement schedule. Equipment will be replaced after a fixed number of years, before it has the opportunity to become a financial drain. Street sweeping is an integral part of compliance with the City's MS4 stormwater permit.

	FUND	DING SCHEDU	LE		
Total	2017	2018	2019	2020	2021
\$312,000	-	-	\$312,000	-	-

# SALT STORAGE FACILITY

Fund: Capital Department: Transportation – Streets Location: Street Division

#### Project Cost: \$170,000 | Outside Funding: \$-0- | City Cost: \$170,000

**Description:** Add additional salt storage capacity through construction of standalone structure. Utilize MoDOT Bid for modular block construction and fabric roof.

**Justification:** Add additional salt storage capacity of approximately 650 tons to current 1,100 tons. This covered storage would comply with state and federal regulations and allow the flexibility to order and have salt delivered during summer months when demand is low. The use of appropriate storage facility will also reduce waste as a result of exposure to the elements. Our long-range goal is to have enough onsite storage to make it through winter without supplementary deliveries.

Anticipated Benefit: Cost savings by allowing salt to be purchased and delivered during the off-season. Reduce risk of running out of salt during winter event, thereby improving motorist safety and accessibility.



	FUND	DING SCHEDU	LE		
Total	2017	2018	2019	2020	2021
\$170,000	-	-	\$170,000	-	-

### **VIBRATORY ROLLER**

Fund: Capital Department: Transportation – Streets

Project Cost: \$45,000 | Outside Funding: \$-0- | City Cost: \$45,000

**Description:** Purchase of a vibratory roller.

**Justification:** Replacement of an outdated 2002 model of similar nature that has been in service for many years, exhibits considerable wear and tear, and is accompanied by high-maintenance costs due to age and use.

**Anticipated Benefit:** A new vibratory roller machine will increase reliability, reduce down time and maintenance cost, and raise the efficiency of operations throughout the City.

	FUND	ING SCHEDU	LE		
Total	2017	2018	2019	2020	2021
\$45,000	-	-	\$45,000	-	-

# SINGLE-AXLE DUMP TRUCK WITH PLOW AND SPREADER

Fund: Capital Department: Transportation – Streets

Project Cost: \$478,000 | Outside Funding: \$-0- | City Cost: \$478,000

**Description:** Purchase of a single-axle dump truck with plow and spreader.

**Justification:** This dump truck will be added to the fleet.

**Anticipated Benefit:** The addition of this vehicle allows for a more efficient snow removal operation. Trucks of this size are better equipped to handle large snow fall of more than 3 to 4 inches.

FUNDING SCHEDULE						
Total	2017	2018	2019	2020	2021	
\$478,000	-	-	\$153,000	\$160,000	\$165,000	

## TRACTOR WITH ROW MOWING ARM

#### Fund: Capital

**Department:** Transportation – Streets

Project Cost: \$285,000 | Outside Funding: \$-0- | City Cost: \$285,000

**Description:** Purchase of a tractor with ROW mowing arm.

**Justification:** Replace outdated 1997 model of similar nature that has been in service for many years, exhibits considerable wear and tear, and is accompanied by high maintenance costs due to age and use.

**Anticipated Benefit:** The City has placed equipment on a regular replacement schedule. Equipment will be replaced after a fixed number of years, before it has the opportunity to become a financial drain. Naturally, vehicles wearing out before expected will be replaced prior to their schedule, and those remaining in good condition when replacement is otherwise scheduled will be retained for additional years. The City intends to adhere to the schedule in order to minimize long-term maintenance costs.

FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$285,000	-	-	\$140,000	-	\$145,000		



### WATER

	PR	OJECT					
Department	Description	2017	2018	2019	2020	2021	Five Year Total
Water	2-Million Gallon Spheroid Tower	4,700,000	-	-	-	-	4,700,000
Water	1-MGD Water Well	550,000	200,000	-	-	-	750,000
Water	Coating Interior of 2 MG GM Ground Storage Tank	-	-	270,000	-	-	270,000
Water	Demo Tower #4, Vault Removal and Land Improvement	-	-	220,000	-	-	220,000
Water	Coating Interior/Exterior Tower #1 Extend Fill Line to Top	-	-	550,000	-	-	550,000
Water	Rebuild East Booster Pump Above Ground	-	-	2,000,000	-	-	2,000,000
Water	Waterline Extensions and Replacement	1,510,000	610,000	330,000	870,000	270,000	3,590,000
	TOTAL	6,760,000	810,000	3,370,000	870,000	270,000	12,080,000

		EQUIPMENT					
Department	Description	2017	2018	2019	2020	2021	Five Year Total
Water	20HP Street Saw	7,000	-	-	-	-	7,000
Water	Vac-tron Trailer	75,000	-	-	-	-	75,000
Water	1/2-Ton 4x4 Pickup Truck	-	27,000	-	-	-	27,000
Water	3/4-Ton 4x4 Pickup Truck	34,500	36,000	76,000	80,000	-	226,500
Water	Metrotech vLoc/9800 Locator	5,200	-	5,200	5,200	-	15,600
Water	Mulching Head Skid Loader Attachment	-	-	38,000	-	-	38,000
Water	Orion Meter Reading System	-	-	18,000	-	-	18,000
Water	Skid Loader	-	-	90,000	-	-	90,000
Water	Hydraulic Hammer	-	-	-	-	15,000	15,000
Water	78" Rotary Cutter	-	-	-	-	15,000	15,000
	ΤΟ	AL 121,700	63,000	227,200	85,200	30,000	527,100

### WATER

TOTAL PROJECTS AND EQUIPMENT							
	2017	2018	2019	2020	2021	Five Year Total	
TOTAL	6,881,700	873,000	3,597,200	955,200	390,000	12,607,100	

FUNDING SOURCE								
	2017	2018	2019	2020	2021	Five Year Total		
Capital Fund	46,700	63,000	227,200	85,200	30,000	452,100		
Water Fund	6,835,000	810,000	3,370,000	870,000	270,000	12,155,000		
TOTAL	6,881,700	873,000	3,597,200	955,200	300,000	12,607,100		

## **TWO-MILLION GALLON SPHEROID TOWER**

Fund: Water Department: Water Location: Schroeder Creek Blvd.

> Project Cost: \$5,430,000 | Outside Funding: \$-0- | City Cost: \$5,430,000 Land Acquisition (2015) - \$330,000 Design (2016) - \$400,000 Construction (2017) - \$4,700,000

**Description:** Construction of a two-million gallon water spheroid tower.

**Justification:** This tower is needed to meet the water storage needs and fire protection requirements for existing demand and anticipated future City growth. Current peak season demand is six to eight MDG and the City has 5.3 million gallons of storage. The new water tower will provide an additional 1.5 million gallons of elevated system storage, plus covers the loss of store volume after demolition of tower #4. The new tower will allow us to take other towers out of service for maintenance while still being able to provide adequate water pressure.

**Anticipated Benefit:** Maintains the City's ability to provide adequate water supply and pressure for both drinking water and fire protection and to keep up with growth demands.



FUNDING SCHEDULE							
Total	PRIOR	2017	2018	2019	2020	2021	
\$5,430,000	\$730,000	\$4,700,000	-	-	-	-	

# **1-MGD WATER WELL**

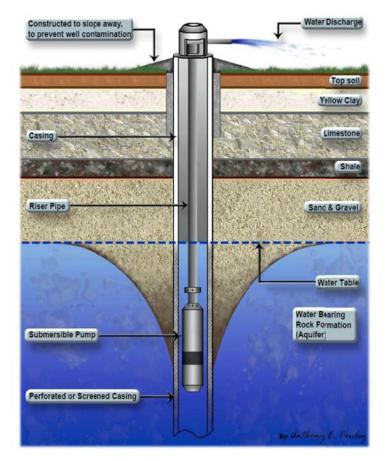
Fund: Water Department: Water Location: Schroeder Creek Blvd.

#### Project Cost: \$750,000 | Outside Funding: \$-0- | City Cost: \$750,000

**Description:** Construct a new emergency drinking water well.

**Justification:** The construction of an emergency operation well will provide the City a backup water source in the event the City loses the current source or if the City needs to supplement the primary source during periods of peak demands.

**Anticipated Benefit:** Increases the City's ability to provide adequate water supply for both drinking water and fire protection and to keep up with growth demands.



FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$750,000	\$550,000	\$200,000	-	-	-		

# COATING INTERIOR OF TWO-MILLION GAL GM GROUND STORAGE TANK

Fund: Water Department: Water Location: East Booster Station (Edinger Road)

Project Cost: \$270,000 | Outside Funding: \$-0- | City Cost: \$270,000

**Description:** Take the two-million gallon ground storage tank out of service and prep and paint; the interior floor, roof and walls of the tank.

**Justification:** Water tanks need to be re-coated inside and out on a regular as needed basis to protect the tower from corrosion and failure. At this time, only the interior needs to be coated.

Anticipated Benefit: Making the investment to coat water tanks on a regular as needed basis greatly extends the life of the City's tank infrastructure.



FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$270,000	-	-	\$270,000	-	-		

# DEMO TOWER #4, VAULT REMOVAL, AND LAND

Fund: Water Department: Water Location: 802 East Pearce Boulevard

Project Cost: \$220,000 | Outside Funding: \$-0- | City Cost: \$220,000

**Description:** Demo of Tower #4 located at 802 East Pearce Blvd. to include control valve vault removal and land improvement upon completion.

**Justification:** The 300,000 gallon tower is failing primarily due to coating issues. Re-coating this tower would cost more than demolition due to it previously being coated with lead paint. In 2017, a new tower will be constructed as replacement.

Anticipated Benefit: Demo of this tower would remove a high maintenance tower from service, improving storage capacities and providing a more stable pressure and fire flow capabilities.



	FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021			
\$220,000	-	-	\$220,000	-	-			

# COATING INTERIOR AND EXTERIOR OF TOWER #1 AND EXTEND FILL LINE TO TOP OF TANK

Fund: Water Department: Water Location: Medical Drive

Project Cost: \$550,000 | Outside Funding: \$-0- | City Cost: \$550,000

**Description:** Take water tower #1 out of service to extend fill line to the top of the tank and then prepare the interior and exterior of the tower for coating.

**Justification:** The fill line to the tower needs to be extended to the top of the bowl both to allow Chlorine contact time should we ever run an emergency well to the this tower and to keep water fresh without needing large turn over in the tank. Water towers need to be coated inside and out on a regular as needed basis to protect the tower from corrosion and failure.

Anticipated Benefit: Making the investment to coat water towers on a regular as needed basis greatly extends the life of the City's tower infrastructure.



FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$550,000		-	\$550,000	-	-			

# REBUILD EAST BOOSTER PUMP ABOVE GROUND

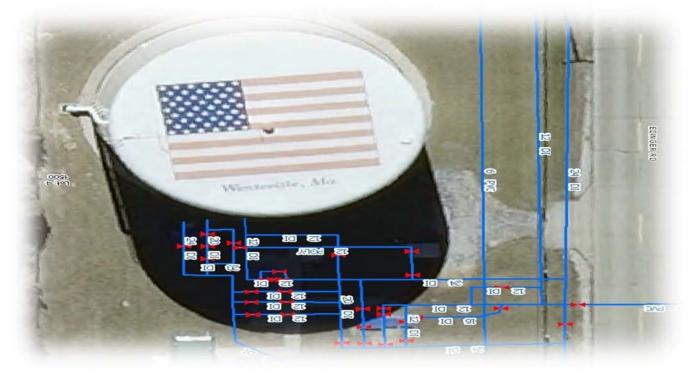
Fund: Water Department: Water Location: Edinger Road Booster Station

Project Cost: \$2,000,000 | Outside Funding: \$-0- | City Cost: \$2,000,000

**Description:** Demo the underground booster pump station and piping installed in 1980 at Edinger Road and install a new above-ground booster pump station and piping.

**Justification:** The integrity of the booster pump station and piping is steadily declining due to the entire infrastructure being installed underground and being susceptible to corrosion and ground water.

**Anticipated Benefit:** A new above-ground booster pump station would be more reliable and far easier to maintain than the current set up. Maintenance cost and down time would reduce considerably.



	FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021			
\$2,000,000	-	Ξ.	\$2,000,000	-	-			

#### Fund: Water Department: Water Location: City Wide

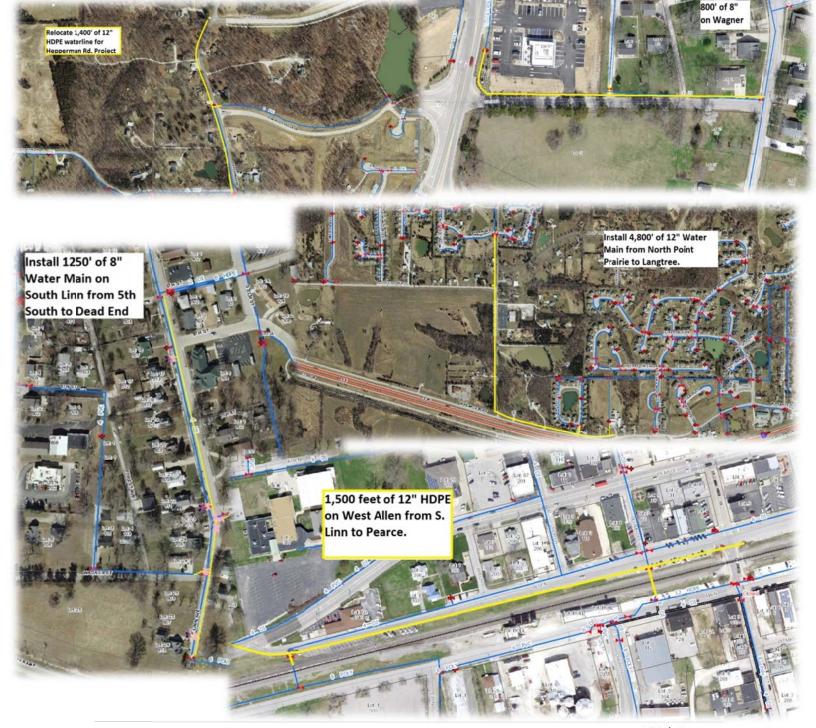
Project Cost: \$3,590,000 | Outside Funding: \$-0- | City Cost: \$3,590,000

	PROJECT DESCRIPTION							
YEAR	LOCATION	SIZE (IN)	LENTH (FT)	IN HOUSE WORK (Y/N)	COST (\$)			
2017	Hepperman from Peruque View to Interstate	12	1,300	N	330,000			
2017	St. Linn from 5 <sup>th</sup> St. and South	8	1,250	Y	120,000			
2017	Wagner St.	8	800	Y	80,000			
2017	North Point Prairie to Langtree	12	4,800	Partial	780,000			
2017	W. Allen St.	12	1,500	Y	200,000			
2018	Interstate Dr. from QRP to U-Gas	12	3,500	Y	210,000			
2018	Interstate Dr. from Wilmer to Hepperman	12	6,000	Y	400,000			
2019	Parr St.	8	800	Y	130,000			
2019	E. Allen from Tower to Linn	12	1,600	Y	200,000			
2020	Wall St.	8	1,900	Y	190,000			
2020	E. Northview	8	750	Y	80,000			
2020	Main upsize cost for NPP to Albany	16	8,000	N	600,000			
2021	East Academy	8	600	Y	70,000			
2021	Ball St.	8	800	Y	100,000			
2021	Wilson St.	8	800	Y	100,000			

**Justification:** Projects include replacement and upsizing of deteriorated water main sections and completing transmission main system loops to dramatically increase pressure and fire flow capability while reducing maintenance cost and system repair downtime. By utilizing City staff to complete a majority of these projects, waterlines can be installed at half of the cost of hiring a contractor. Factoring in the cost of the additional staff and equipment needed to complete these projects, savings may exceed \$900,000 in the next five years.

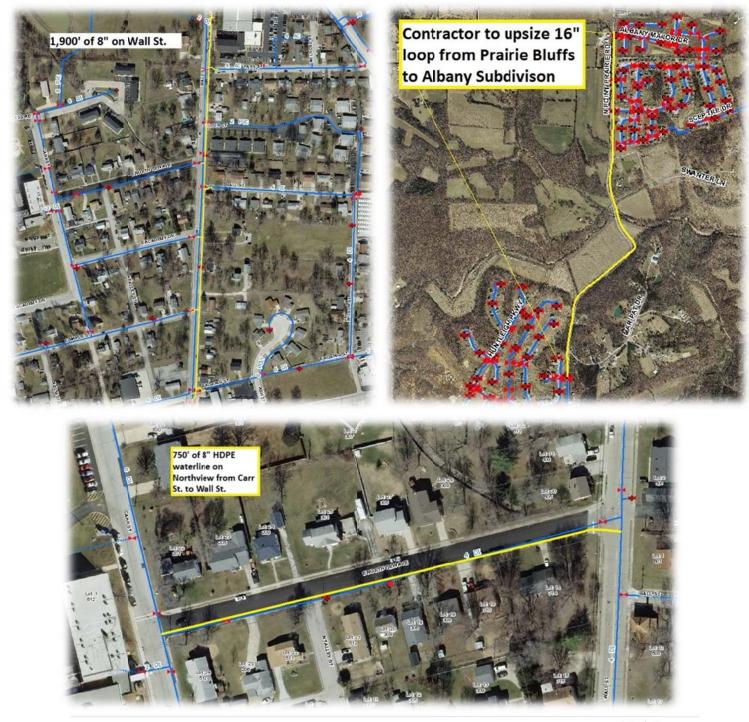
Anticipated Benefit: Water line projects will reduce maintenance cost, water outages, precautionary boil advisories while greatly increasing pressures and fire flow capabilities.

FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$3,590,000	\$1,510,000	\$610,000	\$330,000	\$870,000	\$270,000		









#### WATERLINE EXTENSIONS AND REPLACEMENTS MAPS

#### 2021



### **20HP STREET SAW**

Fund: Capital Department: Water Location: Citywide

#### Project Cost: \$7,000 | Outside Funding: \$-0- | City Cost: \$7,000

**Description:** Replacement of 20HP Street Saw purchased in 2006 due to its age and reliability.

**Justification:** Saw is used by the Water Department to cut concrete and asphalt in advance of water main repairs, so that the Street Department can then repave the road to a clean joint.

Anticipated Benefit: A reliable saw allows us to make quick accurate cuts to the street and turn the repair over quickly.



FUNDING SCHEDULE									
Total	2017	2018	2019	2020	2021				
\$7,000	\$7,000	-	-	-	-				

### **VAC-TRON TRAILER**

Fund: Water Department: Water Location: Citywide

#### Project Cost: \$75,000 | Outside Funding: \$-0- | City Cost: \$75,000

**Description:** Purchase of a vac-tron hydro-excavation trailer

**Justification:** This piece of equipment will allow a locator to pothole to locate utilities without tracer wire to prevent damage. Maintenance crews will be able to make repairs or replacement of meter, valve boxes can be straightened and cleaned out for the exercise program, and be used to for pressure washing fire hydrants for the hydrant maintenance program.

Anticipated Benefit: Pothole for utilities to prevent utility damage repair, clean and straighten valves for valve exercise program, meter pit replacement and construction projects saving man hours and repair cost.



FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$75,000	\$75,000	-	-	-	-			

### **4X4 PICKUP TRUCK**

Fund: Capital Department: Water Location: Citywide

#### Project Cost: \$226,500 | Outside Funding: \$-0- | City Cost: \$226,500

**Description:** 1/2-ton 4x4 pickup used for Locator, Meter Reader, Service positions. 3/4-ton 4x4 pickup Truck used to conduct heavy duty field operations.

- 2017: 3/4-ton 4x4 pickup truck with utility bed (1)
- 2018: 1/2-ton 4x4 pickup truck (1) and 3/4-ton 4x4 pickup truck (1)
- 2019: 3/4-ton 4x4 pickup trucks (2)
- 2020: 3/4-ton 4x4 pickup trucks (4)

**Justification:** 3/4 ton trucks will be used to conduct field and emergency heavy-duty operations and will need to have electric brake controller, HD class V hitch, and emergency LED lights added to the truck for a cost of \$930 each. Half-ton trucks were introduced in 2015 to reduce fleet costs while serving the light-duty needs of the division such as the meter reader and locator. These trucks will double as runner trucks during field operations or emergency repairs. Half-ton trucks need to have LED emergency lights added for a cost of \$350 each.

Anticipated Benefit: Water is in need of additional vehicles due to recent addition of positions, so we are extending our vehicle replacement cycle from 10-year average age to 12-year average age, in an effort to reduce cost of increasing our fleet size while maintaining a reliable fleet to keep Water Operations running smoothly.



FUNDING SCHEDULE										
2017 2018 2019 2020 202										
<sup>1</sup> ⁄ <sub>2</sub> -Ton 4x4 Pickup	-	\$27,000	-	-	-					
<sup>3</sup> ⁄ <sub>4</sub> -Ton 4x4 Pickup	\$34,500	\$36,000	\$76,000	\$80,000	-					
TOTAL	\$34,500	\$63,000	\$76,000	\$80,000	-					

### **METROTECH VLOC/9800 LOCATOR**

Fund: Capital Department: Water Location: Citywide

#### Project Cost: \$15,600 | Outside Funding: \$-0- | City Cost: \$15,600

**Description:** Metrotech v/Loc 9800 locator used for locating water and sewer mains for Missouri One Call.

Justification: Locators are on a five-year replacement plan.

Anticipated Benefit: Cycling out locators at five years keeps the City up to date on the utilitylocating technology to protect the water and sewer mains from damage.



FUNDING SCHEDULE									
Total	2017	2018	2019	2020	2021				
\$15,600	\$5,200	-	\$5,200	\$5,200	-				

### MULCHING HEAD SKID LOADER ATTACHMENT

Fund: Capital Department: Water Location: Citywide

#### Project Cost: \$38,000 | Outside Funding: \$-0- | City Cost: \$38,000

**Description:** 60" mulching head attachment for skid loader to be used for clearing off-site utility easements.

**Justification:** There are many miles of water and wastewater mains that travel through densely wooded areas. With the purchase of this attachment, it would allow us to reclaim our easements and return them to a state where they can be brush hogged annually. This attachment can push through and mulch up to 12" diameter trees allowing us to clear our easements leaving only finely chopped mulch behind us.

Anticipated Benefit: Current method for this type of work requires men on the ground with chainsaws and heavy equipment hauling trees out of the woods to dump trucks, and then making a final pass with a brush-hog attachment. It is far safer and more efficient for one man in a machine to complete this entire operation in a single pass with one attachment and not have to haul any debris off-site. All off-site utility easements must be maintained properly through good vegetation control to allow access of vehicles and repair equipment in the event of an emergency.



FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$38,000	-	-	\$38,000	-	-			

### **ORION METER READING SYSTEM**

Fund: Capital Department: Water Location: Citywide

#### Project Cost: \$18,000 | Outside Funding: \$-0- | City Cost: \$18,000

**Description:** Orion meter reading system is used for reading meters monthly for water /sewer utilities.

Justification: Orion meter reading system is on a five-year replacement program.

Anticipated Benefit: Cycling the reading system out will assure the computer and software stays current and up to date on technology.



FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$18,000	-	-	\$18,000	-	-			

### **SKID LOADER**

Fund: Capital Department: Water Location: Citywide

#### Project Cost: \$90,000 | Outside Funding: \$-0- | City Cost: \$90,000

**Description:** Replacement of worn CT332 Skid Loader.

**Justification:** This piece of equipment was purchased by the City in 2009. This machine has had power issues for the type of work we use it for. It is recommended that it be upsized when replaced. It is important to keep reliable equipment in order to minimize the risk of failures during emergencies.

Anticipated Benefit: Allows us to maintain the highest level of service to our residents when having a new, reliable piece of equipment on a water repair.



FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$90,000	-	-	\$90,000	-	-			

### **HYDRAULIC HAMMER**

Fund: Capital Department: Water Location: Citywide

#### Project Cost: \$15,000 | Outside Funding: \$-0- | City Cost: \$15,000

**Description:** Replacement of hydraulic hammer attachment with adapter plates.

**Justification:** Hammer attachment is used to break pavement to make emergency and routine repairs located in the street, driveway or sidewalk.

Anticipated Benefit: Allows the Water Department to maintain reliable construction equipment to reduce the time and cost during emergency repairs and waterline construction projects.



FUNDING SCHEDULE									
Total	2017	2018	2019	2020	2021				
\$15,000	-	-	-	-	\$15,000				

### **78" ROTARY CUTTER**

Fund: Capital Department: Water Location: Citywide

#### Project Cost: \$15,000 | Outside Funding: \$-0- | City Cost: \$15,000

**Description:** Replacement of 78" rotary cutter attachment for the skid loader.

**Justification:** This attachment is used to cut brush on utility easements. It is important to perform regular easement maintenance to ensure the Water Department can gain access during emergency repairs to water and wastewater systems.

**Anticipated Benefit:** Allows the Water Department to maintain reliable easement maintenance equipment to reduce the time and cost during emergency repairs and waterline construction projects that require vegetation clearing.



FUNDING SCHEDULE									
Total	2017	2018	2019	2020	2021				
\$15,000	-	-	-	-	\$15,000				

## Wastewater

#### WASTEWATER

	PR	OJECT					
Department	Description	2017	2018	2019	2020	2021	Five Year Total
Wastewater	Heppermann Road Force Main Relocation	600,000	-	-	-	-	600,000
Wastewater	Bio-Solids Storage Building Walls	45,000	-	-	-	-	45,000
Wastewater	US 61 Sewer Extension Design and Construction	275,000	2,750,000	-	-	-	3,025,000
Wastewater	MSP Lift Station Replacement	121,000	810,000	-	-	-	931,000
Wastewater	Highway P Lift Station Sluice Gate	-	73,000	-	-	-	73,000
Wastewater	Bubbling Springs II Utility/Storm/Creek Bank Stabilization	-	-	1 <i>5</i> 0,000	-	-	150,000
Wastewater	Equipment Storage Building	-	-	55,000	-	-	55,000
Wastewater	St. Lukes Lift Station	-	-	300,000	-	-	300,000
Wastewater	East Lift Station Replacement	-	-	113,000	750,000	-	863,000
Wastewater	Reclamation Center Expansion Design and Construction	-	-	1,200,000	-	11,600,000	12,800,000
Wastewater	GM Force Main Inspect/Repair	-	-	-	-	20,000	20,000
Wastewater	Lift Station Spare Pumps, VFDs and Replacement	112,000	108,000	112,000	245,000	104,000	681,000
	TOTAL	1,153,000	3,741,000	1,930,000	995,000	11,724,000	19,543,000

#### WASTEWATER

	EQ	UIPMENT					
Department	Description	2017	2018	2019	2020	2021	Five Year Total
Wastewater	Portable Video Inspection System	15,000	-	-	-	-	15,000
Wastewater	Tandem Trailer	15,000	-	-	-	-	15,000
Wastewater	Bio-Solids Land Application Tanker Truck	185,000	-	-	-	-	185,000
Wastewater	Lift Flow Meters	9,000	12,000	-	-	-	21,000
Wastewater	Trailer	-	14,000	-	-	-	14,000
Wastewater	Crane Truck	-	-	-	86,000	-	86,000
Wastewater	Skid Loader	-	-	-	60,000	-	60,000
Wastewater	Portable Generator	-	-	-	-	225,000	225,000
Wastewater	<sup>3</sup> ⁄4-Ton 4x4 Pickup Truck	34,500	36,000	38,000	40,000	42,000	190,500
Wastewater	Portable Generator Transfer Switches	60,000	60,000	60,000	60,000	60,000	300,000
	TOTAL	318,500	122,000	98,000	246,000	327,000	1,111,500

TOTAL PROJECTS AND EQUIPMENT							
	2017	2018	2019	2020	2021	Five Year Total	
TOTAL	1,471,500	3,863,000	2,028,000	1,241,000	12,051,000	20,654,500	

FUNDING SOURCE										
	2017	2018	2019	2020	2021	Five Year Total				
Capital Fund	318,500	122,000	98,000	246,000	327,000	1,111,500				
Wastewater Fund	1,153,000	3,741,000	1,930,000	995,000	4,724,000	12,543,000				
Bond Issuance – State Revolving Fund	-	-	-	-	7,000,000	7,000,000				
TOTAL	1,471,500	3,863,000	2,028,000	1,241,000	12,051,000	20,654,500				

### HEPPERMANN ROAD FORCE MAIN RELOCATION

Fund: Wastewater Department: Wastewater Location: Heppermann Road

Project Cost: \$600,000 | Outside Funding: \$-0- | City Cost: \$600,000

**Description:** Heppermann Road 12" force main relocation.

Justification: St. Charles County - Heppermann Road & Bridge Realignment.

Anticipated Benefit: Force main relocation and retention chamber addition.



FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$600,000	\$600,000	-	-	-	-			

### **BIO-SOLIDS STORAGE BUILDING** WALLS

Fund: Wastewater Department: Wastewater Location: Wastewater – Water Reclamation Center

#### Project Cost: \$45,000 | Outside Funding: \$-0- | City Cost: \$45,000

**Description:** Raise the three concrete walls on the bio-solids storage building by four feet.

**Justification:** With the changes in the plants discharge permit on liquid applying bio-solids on frozen ground, there will be a need to operate the filter press more in the winter. Raising the walls will gain storage capacity. Expansion of the bio-solids storage facility will occur in accordance with the Wastewater Master Plan.

Anticipated Benefit: Gain the needed storage capacity to comply with EPA and DNR guidelines.



FUNDING SCHEDULE									
Total	2017	2018	2019	2020	2021				
\$45,000	\$45,000	-	-	-	-				

## US 61 SEWER EXTENSION DESIGN AND CONSTRUCTION

Fund: Wastewater Department: Wastewater Location: Edinger Road to Highway A

Project Cost: \$3,025,000 | Outside Funding: \$-0- | City Cost: \$3,025,000

**Description and Justification:** Gravity sewer main construction that will eliminate the need for three wastewater lift stations (Norfolk and Southern, Builder's Resource, and Legion lifts) as well as shortening the East lift force main.

**Impact on Operating Budget:** Elimination of operating and maintenance costs associated with the three existing life stations as well as reducing force main maintenance and H2S odor control costs related to the East lift force main.

Anticipated Benefit: Improve efficiency, safety and reliability of the collection system.

FUNDING SCHEDULE									
Total	2017	2018	2019	2020	2021				
\$3,025,000	\$275,000	\$2,750,000	-	-	-				

### **MSP LIFT STATION REPLACEMENT**

Fund: Wastewater Department: Wastewater Location: 2355 Mette Rd.

#### Project Cost: \$931,000 | Outside Funding: \$-0- | City Cost: \$931,000

**Description:** MSP lift station is 36 years old. With more flow and repair and operating costs, the lift station has exceeded its useful life and is undersized for future flows.

**Justification:** As identified in the Wastewater Collection System Master Plan, the lift station has exceeded its useful life and a new station is needed to provide capacity for future flows as well as to improve operator safety and add redundancy.

Anticipated Benefit: More efficient system for pumping system, increased reliability versus a 40-year old deteriorating panel.



FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$931,000	\$121,000	\$810,000	-	-	-			

### HIGHWAY P LIFT STATION SLUICE GATE

Fund: Wastewater Department: Wastewater Location: Highway P Lift Station

#### Project Cost: \$73,000 | Outside Funding: \$-0- | City Cost: \$73,000

**Description:** Install sluice gate to control high flow events and direct flows as needed between the MSP and Highway P Lift Stations.

**Justification:** Sluice gate is needed to control and divert high flows during wet weather events at the main pump station and Highway P Lift.

Anticipated Benefit: Currently entering a confined space to set sand bags for high flow events. New sluice gate will improve ability to control flows and safety of operators by eliminating the need to perform and entry to adjust levels.



FUNDING SCHEDULE									
Total	2017	2018	2019	2020	2021				
\$73,000	-	\$73,000	-	-	-				

### BUBBLING SPRINGS II UTILITY/STORM/CREEK BANK STABILIZATION

Fund: Wastewater Department: Wastewater Location: Spring Meadows

Project Cost: \$150,000 | Outside Funding: \$-0- | City Cost: \$150,000

**Description:** Sanitary and storm utilities re-grading, composite revetment and bio-stabilization, boulder grade controls, sanitary sewer concrete cap, and property-easement restoration.

*Justification:* To provide grade and stream bank control in order to stabilize storm and sanitary infrastructure and prevent damage, which could contaminate the creek with pollutants.

Anticipated Benefit: Protect public health and prevent compliance and liability issues. Avoid DNR and EPA fines.



FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$150,000	-	-	\$150,000	-	-			

### **EQUIPMENT STORAGE BUILDING**

Fund: Wastewater Department: Wastewater Location: 2355 Mette Rd.

#### Project Cost: \$55,000 | Outside Funding: \$-0- | City Cost: \$55,000

**Description:** Building for housing equipment and large pumps. This would be a 24' x 50' metal building.

**Justification:** The building houses a tractor and disc for land application, tractor, brush hog and large pumps for lift stations.

Anticipated Benefit: The building will provide heated protection and storage of essential equipment that fails in freezing temperatures such as block heaters, water tanks, pumps, etc.



FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$55,000	-	-	\$55,000	-	-			

### **ST. LUKES LIFT STATION**

Fund: Wastewater Department: Wastewater Location: St. Luke's Lift Station

#### Project Cost: \$300,000 | Outside Funding: \$-0- | City Cost: \$300,000

**Description:** Replace Smith and Loveless Lift Station (34 years old in 2019). Lift station frame (can unit) has deteriorated to the point replacement is required. Note: Station was constructed in 1985. Station will be replaced with a new wet well and valve vault and removal of existing Smith and Loveless station, while incorporating the existing 10-year old control panel, transfer switch, and generator to minimize costs.

**Justification:** Replacement of the current station is needed due to age (34 years) of this type of station. Current condition of station makes extensive rehabilitation unfeasible.

Anticipated Benefit: New station will provide increased safety and reliability as well as increased pumping efficiency. Station will be re-engineered to conform to new service area and to better address the flow requirements of new subdivisions and the Quail Ridge Park Lift Station. New station will be constructed to conform to existing submersible station City specifications.



	FUNDING SCHEDULE									
Total	2017	2018	2019	2020	2021					
\$300,000	-	-	\$300,000		-					

### EAST LIFT STATION REPLACEMENT

Fund: Wastewater Department: Wastewater Location: 1520 E. Pitman Avenue

> Project Cost: \$863,000 | Outside Funding: \$-0- | City Cost: \$863,000 Planning/Engineering - \$113,000 Construction - \$750,000

**Description:** This is a replacement of a 1977 lift station that runs inefficiently and has safety issues. Project will replace 37-year-old, dry-well lift station with submersible pumps and controls and reroute that station's force main to discharge a manhole on Edinger Road. The concrete wet well at this station is showing high deterioration from the hydrogen sulfide (H2S). The Engineering Division recommends replacement with the addition of an eight-hour retention tank.

**Justification:** The lift station will be replaced with the City Design Standard submersible pump lift station. This type of lift station is proposed for safety, uniformity, ease of maintenance and lift-cycle costs. The force main will be re-routed to tie into a manhole at Edinger Road to reduce maintenance H2S concerns and minimize the length of the main.

**Anticipated Benefit:** Reducing the length of force main will reduce maintenance costs and H2S concerns related to the flows in this main. It will also reduce the size of pumps needed and improve hydraulic and electrical efficiencies as a result.





FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$863,000	-	-	\$113,000	\$750,000	-			

### **RECLAMATION CENTER EXPANSION DESIGN AND CONSTRUCTION**

Fund: Wastewater Department: Wastewater Location: 2455 Mette Rd.

#### Project Cost: \$12,800,000 | Outside Funding: \$-0- | City Cost: \$12,800,000 Planning/Engineering - \$1,200,000 Construction (2021) - \$11,600,000 State Revolving Fund Loan - \$7,000,000

**Description:** Treatment Plant Expansion Phase Three Addition of needed additional; treatment unit(s), clarifier(s), bio-solids storage and processing equipment, and an all-weather bridge access across McCoy Creek.

*Justification:* Expansion will be needed in this timeframe to address continued rapid residential and commercial growth throughout the City.

Anticipated Benefit: City will maintain compliance with current NPDES permit and reclamation center will be sized appropriately to accept future growth and development.



FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$12,800,000	-	-	\$1,200,000	-	\$11,600,000			
State Revolving Fund Loan	-	-	-	-	\$7,000,000			

### **GM LIFT FORCE MAIN INSPECT/REPAIR**

Fund: Wastewater Department: Wastewater Location: GM Lift Station

#### Project Cost: \$20,000 | Outside Funding: \$-0- | City Cost: \$20,000

**Description:** Inspect the General Motors lift station with thickness testing at five areas of interest as identified in the Wastewater Master Plan study.

**Justification:** The 35-year-old force main was recently evaluated using smart ball technology to look for wall stress and leaks. No leaks were detected during the force main investigation. However, there were five areas of interest where it was recommended that wall thickness tests be performed.

Anticipated Benefit: Performing the investigation will assist in verifying pipe condition in areas identified in the Wastewater Master Plan with the overall goal of providing uninterrupted wastewater service at the GM Assembly Center.



FUNDING SCHEDULE								
Total	2017	2018	2019	2020	2021			
\$20,000	-	-	-	-	\$20,000			

# LIFT STATION SPARE PUMPS, VFDs & REPLACEMENT

Fund: Capital Department: Wastewater Location: Lift Stations Citywide

Project Cost: \$681,000 | Outside Funding: \$-0- | City Cost: \$681,000

**Description:** Replacement pumps, variable frequency drives and related equipment for several Lift Stations Citywide as needed.

**Justification:** These pumps and VFDs are being budgeted to replace due to age or lack of a spare pump, increased flows, repair, and rebuild history, new pump designs that increase electrical and hydraulic efficiency, and the ability of pumps to pump solids and debris commonly removed from the existing pumps.

Anticipated Benefit: Replacement of these pumps will increase efficiency, flow rate and reliability of the related stations for the City and reduce maintenance and repair costs associated with older pumps.



FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$681,000	\$112,000	108,000	\$112,000	\$245,000	\$104,000		

### **PORTABLE VIDEO INSPECTION SYSTEM**

Fund: Capital Department: Wastewater Location: Wastewater – Reclaimation Center

Project Cost: \$15,000 | Outside Funding: \$-0- | City Cost: \$15,000

**Description and Justification:** Replacement and upgrade for existing portable push camera that is in need of repairs.

Anticipated Benefit: Purchase will eliminate contracting services to investigate sewer lateral concerns and areas un-reachable by the camera trailer.



FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$15,000	\$15,000	-	-	-	-		

#### TANDEM TRAILER

Fund: Capital Department: Wastewater Location: Wastewater – Reclaimation Center

#### Project Cost: \$15,000 | Outside Funding: \$-0- | City Cost: \$15,000

**Description and Justification:** Purchased to transport the mini-excavator that is anticipated to be transferred from the Street Department in 2017 when the Street Department purchases a replacement.

Anticipated Benefit: Increase productivity and equipment redundancy for urgent and emergency repair response.

FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$15,000	\$15,000	-	-	-	-		

### **BIO-SOLIDS LAND APPLICATION** TANKER TRUCK

Fund: Capital Department: Wastewater Location: Wastewater – Reclaimation Center

Project Cost: \$185,000 | Outside Funding: \$-0- | City Cost: \$185,000

**Description:** Bio-solids land application floater truck, which is 29 years old and is used to land - apply bio-solids to local properties. This is a major component to the wastewater treatment plant's land-application program.

**Justification:** Current truck is 29 years old and used to land-apply bio-solids to local properties. This is a major component to the wastewater treatment plant's land-application program. The engine was rebuilt in 2005 and lacks power.

Anticipated Benefit: The new applicator truck will have a 4,000 gallon tank and will decrease travel time and increase reliability and productivity with a 33 percent larger tank.



FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$185,000	\$185,000	-	-	-	-		

### LIFT FLOW METERS

Fund: Capital Department: Wastewater Location: Stone Meadows Lift (6057 Blake Thomas Dr.) and Golf Club West Lift Station

#### Project Cost: \$21,000 | Outside Funding: \$-0- | City Cost: \$21,000

**Description:** Flow meter installation and programming at all large flow stations to remotely monitor flows and potential inflow and infiltration from the receiving sewers upstream of the lift station.

**Justification:** Remote real-time monitoring of flows via meter and SCADA system at several large stations Citywide will enable Collections Division staff to more effectively monitor storm-related flows and daily normal flows and address concerns, as well as help to monitor and troubleshoot potential issues.

Anticipated Benefit: These meters will allow personnel to address flow concerns and help to monitor and troubleshoot potential issues with pumps and controls, in an effort to reduce inflow and infiltration, improve efficiency and reduce related electrical and maintenance expenses.



FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$21,000	\$9,000	\$12,000	-	-	-		

### TRAILER

Fund: Capital Department: Wastewater Location: Wastewater – Reclamation Center

Project Cost: \$14,000 | Outside Funding: \$-0- | City Cost: \$14,000

**Description:** Replace, update and outfit old sewer camera trailer with confined space entry equipment, safety equipment and tools and supplies needed to more quickly respond to various Wastewater emergencies Citywide.

**Justification:** Replacement trailer will be needed due to age of existing trailer in 5-7 years on 15-year replacement cycle.

**Anticipated Benefit:** Benefits to the City include reducing response times for emergency repairs, and reducing time required to load and unload vehicles with a variety of supplies, tools and materials for each emergency. In addition, the trailer will be equipped with a 5-10 kW generator to facilitate emergency repairs.



FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$14,000	-	\$14,000	-	-	-		

### **CRANE TRUCK 4X4**

Fund: Capital Department: Wastewater Location: Water Reclamation Center

#### Project Cost: \$86,000 | Outside Funding: \$-0- | City Cost: \$86,000

**Description:** Crane truck replacement

**Justification:** The truck will be used to conduct field and emergency heavy-duty operations. It is required that the truck have electric brake controller, HD class V hitch, and emergency LED light added to the truck. Replacing 2009 year old crane truck at the Wastewater Plant.

Anticipated Benefit: Rotating out 10-year-old trucks in 2020 will reduce repair cost and improve reliability for emergency service.



FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$86,000	-	-	-	\$86,000	-		

### **SKID LOADER**

Fund: Capital Department: Wastewater Location: Wastewater Reclamation Center

#### Project Cost: \$60,000 | Outside Funding: \$-0- | City Cost: \$60,000

**Description:** Skid Loader for Wastewater Division

*Justification:* Skid loader will be used by the Wastewater Collection mainly for pushing in rock, and dirt after manhole and sewer-line repairs and for clearing right-of-ways and easement maintenance.

Anticipated Benefit: A skid loader in the Wastewater Collections Division will save on time when trying to schedule with other departments to use their equipment.



FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$60,000	-	-	-	\$60,000	-		

### **PORTABLE GENERATOR**

Fund: Capital Department: Wastewater Location: Wastewater Reclamation Center

#### Project Cost: \$225,000 | Outside Funding: \$-0- | City Cost: \$225,000

**Description:** 150 KW and 200 KW portable generators to supply emergency stand-by power to Public Works, up to 18 lift stations and various locations Citywide as needed.

*Justification:* The trailer-mounted generator will provide power redundancy and enable emergency operations to continue in the event of a prolonged outage at a lift station and the City's Public Work facility.

**Anticipated Benefit:** The generator will provide a reliable power alternative while increasing the ability of the City to provide support or emergency services during a prolonged outage.

FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$225,000	-	-	-	-	\$225,000		

### 3/4-TON 4X4 PICKUP

Fund: Capital Department: Wastewater

Project Cost: \$190,500 | Outside Funding: \$-0- | City Cost: \$190,500

**Description:** Replacement of existing 3/4-ton trucks.

*Justification:* 3/4-ton trucks will be used to conduct field and emergency heavy-duty operations and will include an electric brake controller, HD class V hitch, and emergency LED lights.

Anticipated Benefit: Rotating out 14 to 15-year-old trucks will help to cut back on repair cost.

FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$190,500	\$34,500	\$36,000	\$38,000	\$40,000	\$42,000		

### PORTABLE GENERATOR TRANSFER SWITCHES

Fund: Capital Department: Wastewater Location: Wastewater Collections

Project Cost: \$300,000 | Outside Funding: \$-0- | City Cost: \$300,000

**Description:** Outfitting lift stations for emergency generator applications by installing two to three manual transfer switches per year for portable emergency generator service to provide additional protection during extended outages.

Justification: Provides emergency power supply to lift stations during power loss.

**Anticipated Benefit:** Improve reliability and reduce downtime during a major power failure at pump stations or other city sites to protect public health and prevent compliance and liability issues. Avoid DNR and EPA fines.



FUNDING SCHEDULE							
Total	2017	2018	2019	2020	2021		
\$300,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000		



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