



# Capital Improvement Program 2016 – 2026



February 15, 2016

Mr. Paul Welch, Chairperson  
Members of the Planning Commission  
7900 South Westnedge Avenue  
Portage, MI 49002

Dear Chairman Welch and Planning Commissioners:

RE: FY2016-2026 Capital Improvement Program (CIP)

The FY2016-2026 Capital Improvement Program (CIP) has been prepared for Planning Commission review and recommendation, and subsequent City Council approval. The 10-year program is conveyed to City Council annually in April, concurrent with the FY2016-2017 CIP Budget.

In preparing the FY2016-2026 CIP, the City Administration considered a number of factors, using citizen input garnered through extensive public outreach, including Portager articles, a CIP web page, an on-line citizen survey and a CIP Open House hosted in September 2015. In addition to citizen input, the City Administration considered goals and strategies identified at the October 2015 Portage 2025 Renewal Event, the 2014 Comprehensive Plan, and various other planning efforts. The City Administration also reviewed the financial health of the city and efforts to reduce debt service within the CIP. The 2016-2026 CIP proposes \$15.94 million in expenditures in 2016-17 and \$137.65 million in expenditures over the 10-year CIP. The expenditures over the 10-year period are \$7.02 million higher in comparison to the 2015-2025 CIP. However, debt service over the 10-year period has been reduced (\$43.14 million compared to \$46.21 million) due in part to increased revenues anticipated from Act 51 for streets and reimbursement from the State of Michigan for personal property tax losses.

The FY2016-2026 CIP incorporates several established principles:

- **Street Improvements:** Significant and increased resources are planned for major and local street improvements over the 10-year period. “Complete street” components will be incorporated where practical, as an effort to further support active lifestyles and alternative modes of transportation. In addition, local street projects will include enhancements such as pavement widening for narrow uncurbed streets, drainage improvements, street lighting, street trees and restoration of the public right-of-way. These additional investments are intended to improve local streets while enhancing neighborhood quality of life.
- **Sidewalks and Bikeways:** Consistent with the “*Natural Place to Move*” initiative, the adopted Complete Streets policy and the 2014 Comprehensive Plan, further investments in existing sidewalks, multi-use trails and enhancing pedestrian networks are proposed.
- **Sanitary Sewer and Water Improvements:** Continued investments in sanitary sewer and public water are an important component of the CIP. The vast majority of the city is now served by municipal sewer and water and proposed capital investments are focused on system-related improvements and extending municipal service where appropriate. With regard to sanitary sewer

projects, a “tiered” prioritization for projects was developed in FY2013-2014 and is again proposed for implementation in the FY2016-2026 CIP.

- **Public Safety:** Increased investments in public safety are proposed within the FY 2016-2026 CIP. Continued investment in public safety vehicles, fire apparatus and the use of new technology are among capital investments proposed in the CIP. In addition to public safety equipment, investments in all three Fire Stations are proposed to meet the operational needs of the Fire Division and to preserve the utility of these important facilities.
- **Public Facilities:** Continued investments in the Senior Center, Parks, Recreation and Public Services facility and City Hall are planned. Capital investments include an emphasis on building security, technology and an evaluation of alternative energy options for public facilities.
- **Parks and Recreation:** The FY2016-2026 CIP incorporates continued development of the Eliason Nature Reserve as a major addition to the city park and recreation system, and includes ongoing investments in the existing park system.

The following summarizes recommended improvements in FY2016-2017 and over the 10-year CIP. Revenue estimates and planned expenditures for the first-year and 10-year program are provided. Graphs, tables and specific project profiles also detail the recommended CIP projects and program financing. Finally, maps are included that show the location of CIP projects.

### ***STREETS / SIDEWALKS and BIKEWAYS***

For FY2016-2017, \$4.36 million in expenditures are planned for streets, sidewalks and bikeways. Over the 10-year CIP period, \$48.02 million in improvements (35% of the capital budget) is proposed. Project highlights include:

- ❖ **Local Street Reconstruction Program:** Expenditures for local streets have been increased over the 10-year period from \$9.2 million to \$12.8 million, which is consistent with an increased focus on improving the condition of local streets. Increased revenue anticipated from the State of Michigan via Act 51 funding will assist in this effort. The project profiles and overview map shows the location of major and local streets to be completed in FY2016-2017.
- ❖ **West Centre Avenue/Cooley Drive Improvements:** As a result of development activity in the vicinity, the traffic signal and related improvements to the intersection of West Centre Avenue and Cooley Drive have been moved up in the CIP schedule, and include necessary improvements to the street intersection right-of-way and boulevard.
- ❖ **Portage Road Sidewalk, Mandigo Avenue to 1,700 feet north:** A new sidewalk on the east side of Portage Road, from Mandigo Avenue north to the existing sidewalk, is proposed concurrent with the street reconstruction project in 2017-2018. This project is consistent with the Complete Streets policy.
- ❖ **West Centre Avenue Sidewalk, Oakland Drive to 500 feet west:** A new sidewalk on the south side of West Centre Avenue, from Oakland Drive west to the property line of the Oakland Hills @ Centre Planned Development is proposed to fill the existing gap in sidewalk. This project is consistent with the Complete Streets policy.

## ***WATER / SEWER UTILITIES***

For FY2016-2017, \$3.77 million in expenditures are planned for public water and sewer utilities. Over the 10-year CIP period, \$27.37 million in improvements (20% of the capital budget) is proposed. Project highlights include:

- ❖ Chopin Avenue Water Main and Mozart Street Water Main projects: The installation of a water main on these unserved public streets is recommended in response to a citizen petition on Chopin Avenue and a positive citizen survey on Mozart Street.
- ❖ Cliffwood/Archwood Drive Water and Sewer Main projects: The installation of water and sewer main on these unserved public streets has been moved up to 2016-2017 based on a citizen survey and other input.
- ❖ Consolidated Drain Rehabilitation Project: This project will involve soil and water quality testing, cleaning and rehabilitation of the Consolidated Drain facility consistent with the Storm Water Master Plan and Well Head protection plan.
- ❖ Norfolk Circle Sanitary Sewer Replacement: This project is proposed to address deficiencies in the sanitary sewer collection system in the vicinity of Norfolk Circle and South 12<sup>th</sup> Street.
- ❖ Trunk Sewer Condition Assessment: This new project will evaluate the structural condition of the city sanitary sewer trunk system and identify needs for rehabilitation and replacement.
- ❖ Pump Station Mechanical Upgrade: This new project will allocate funds for sanitary sewer pump station renovations to avoid costs and unanticipated repairs with minimal inconvenience to customers.

## ***POLICE / FIRE***

For FY2016-2017, \$1.95 million in expenditures is planned for police and fire vehicles, apparatus, and facilities. Over the 10-year CIP period, \$12.80 million in capital investments (9% of the capital budget) is proposed. Project highlights include:

- ❖ Radio Infrastructure Equipment Replacement: Funding to replace and upgrade the radio communication systems at five tower sites is proposed, as the equipment is beyond its useful life and there is potential for critical failure.
- ❖ Crash/Crime/Fire Scene Illustrator: This project will replace old software with new technology that documents traffic accidents, fire and/or crime scenes with laser technology and 3D imaging.
- ❖ Replace 2001 Sutphen Aerial Tower: Due to ongoing problems with the aerial tower on the existing 2001 Sutphen, replacement of this fire apparatus is now proposed in 2016-2017, but at a lower cost due to the use of a single-axle vs. double-axle apparatus. Due to the expedited replacement of the 2001 Sutphen, replacement of the 1998 Aerial Apparatus has been moved back from 2017-18 to 2020-21.
- ❖ Fire Station No. 2 Facility Improvements: Due to the age and size of the existing Fire Station No. 2, a feasibility study was conducted in 2015 to determine future needs for the station and whether an expansion and renovation, or new fire station was appropriate. Based on the results of the feasibility study, it is proposed that Fire Station No. 2 be enlarged to approximately twice its current size. The project proposes interim improvements including an emergency generator, architecture and engineering, and construction of a new station over the next three years.
- ❖ Training Officer Vehicle: A vehicle is proposed for the new Training Officer position within the Fire Division.
- ❖ Replace 2002 Fire Pumper: Replacement of the 2002 fire pumper is recommended in 2019-2020. Since one of the 2004 pumpers was taken out of service due to a crash in July 2015, the 2002 Fire

Pumper has experienced increased use and is now recommended for replacement in the 10-year CIP. Accordingly, replacement of the 2004 Fire Pumper has been moved back to 2021-2022.

### ***PUBLIC FACILITIES / PARKS and RECREATION***

For FY2016-2017, \$1.24 million in expenditures is planned for public facilities, parks and recreation. Over the 10-year CIP period, \$6.33 million in capital investments (5% of the capital budget) is proposed. Project highlights include:

- ❖ Election Equipment: The State Bureau of Elections is requiring replacement of election equipment in advance of the May 2017 election. This project will replace 25 voting tabulators.
- ❖ Senior Center Improvements: This project includes a building and property study in 2016-2017 to determine program and partner expansion options and future facility planning needs.
- ❖ Parks, Recreation and Public Services Facility Improvements: This project includes replacement of the outdated, poorly placed igloo salt storage building and construction of a new cold storage building in 2020-2021.
- ❖ BS&A Replacement: This project plans for replacement of the BS&A integrated software system in 2025-2026.
- ❖ Parks and Recreation: The CIP incorporates continued development of the Eliason Nature Reserve and includes ongoing investments in the existing park system.

### **CONCLUSION**

The 10-year program and capital improvement budget focuses on essential local government functions. The conservative financial strategy that was initiated several years ago continues with a focus on debt management over the 10-year program. To supplement the monies raised via the mills levied to support the CIP and to avoid further debt obligations, direct support from the General Fund is again proposed. Over time, the level of debt is projected to be slightly reduced over the course of the 10-year program in comparison to the FY2015-2025 CIP.

In summary, the recommended FY2016-2017 CIP Budget and 10-year program will provide for the continued delivery of municipal services in a manner that is consistent with the long-term needs of the community. The Planning Commission is requested to consider this recommended capital program. It is further requested, when the review is complete, that the Planning Commission recommend to City Council adoption of the FY2016-2017 CIP, with the remaining portion of the FY2016-2026 CIP accepted in principle to guide long-term capital investments within the community.

Sincerely,



Laurence Shaffer  
City Manager

cc: Honorable Mayor and City Council

CITY OF PORTAGE, MICHIGAN

CAPITAL IMPROVEMENT PROGRAM

FOR 2016-2026

**PETER J. STRAZDAS**

Mayor

**NASIM ANSARI**

Mayor Pro Tem

**JAMES PEARSON**

Councilperson

**RICHARD FORD**

Councilperson

**PATRICIA RANDALL**

Councilperson

**CLAUDETTE REID**

Councilperson

**TERRY URBAN**

Councilperson

**LAURENCE SHAFFER**

City Manager

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**Debt Service and Administration**

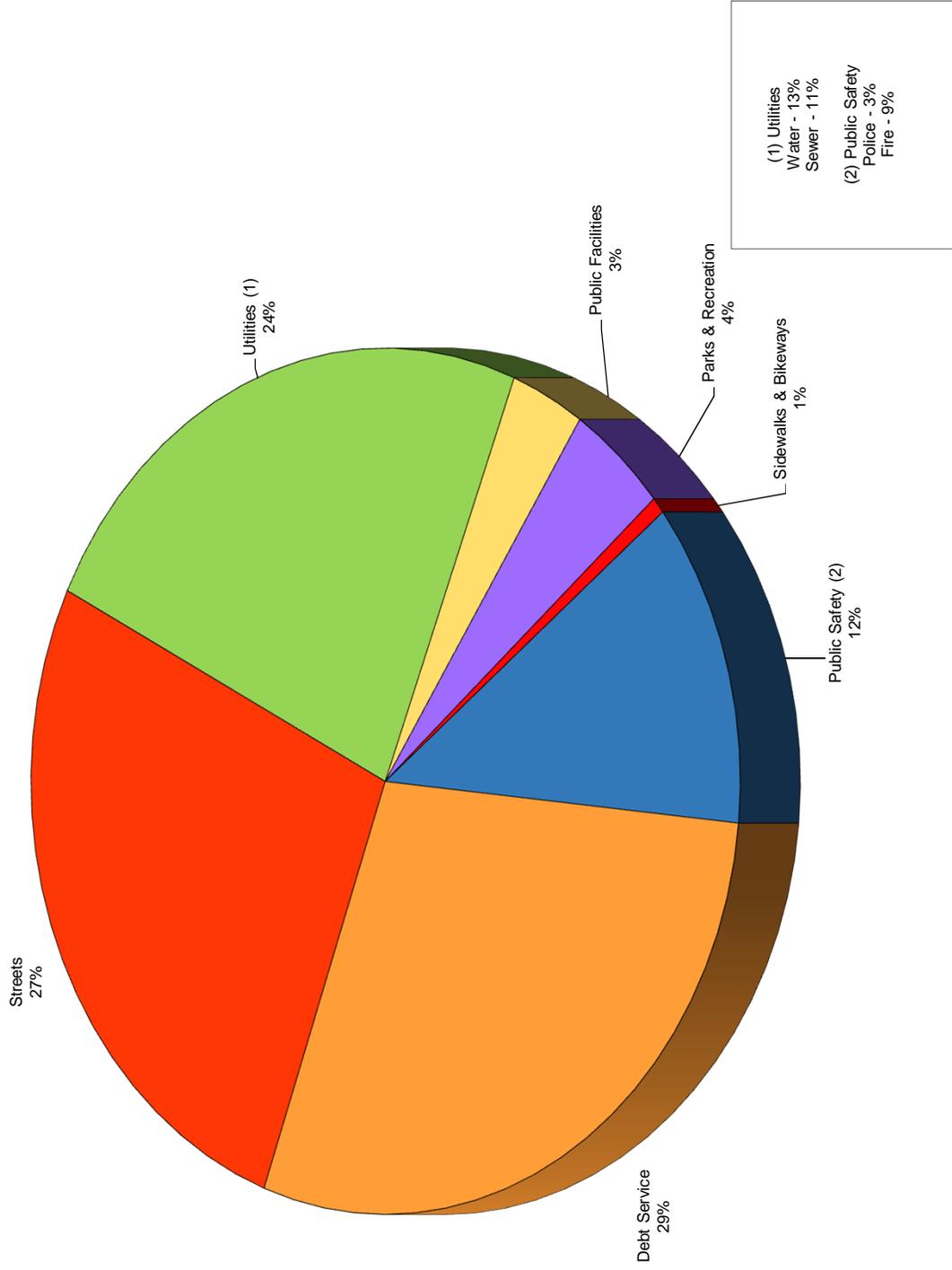
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CAPITAL IMPROVEMENT PROGRAM SUMMARY

Revenues and Expenditures (000)

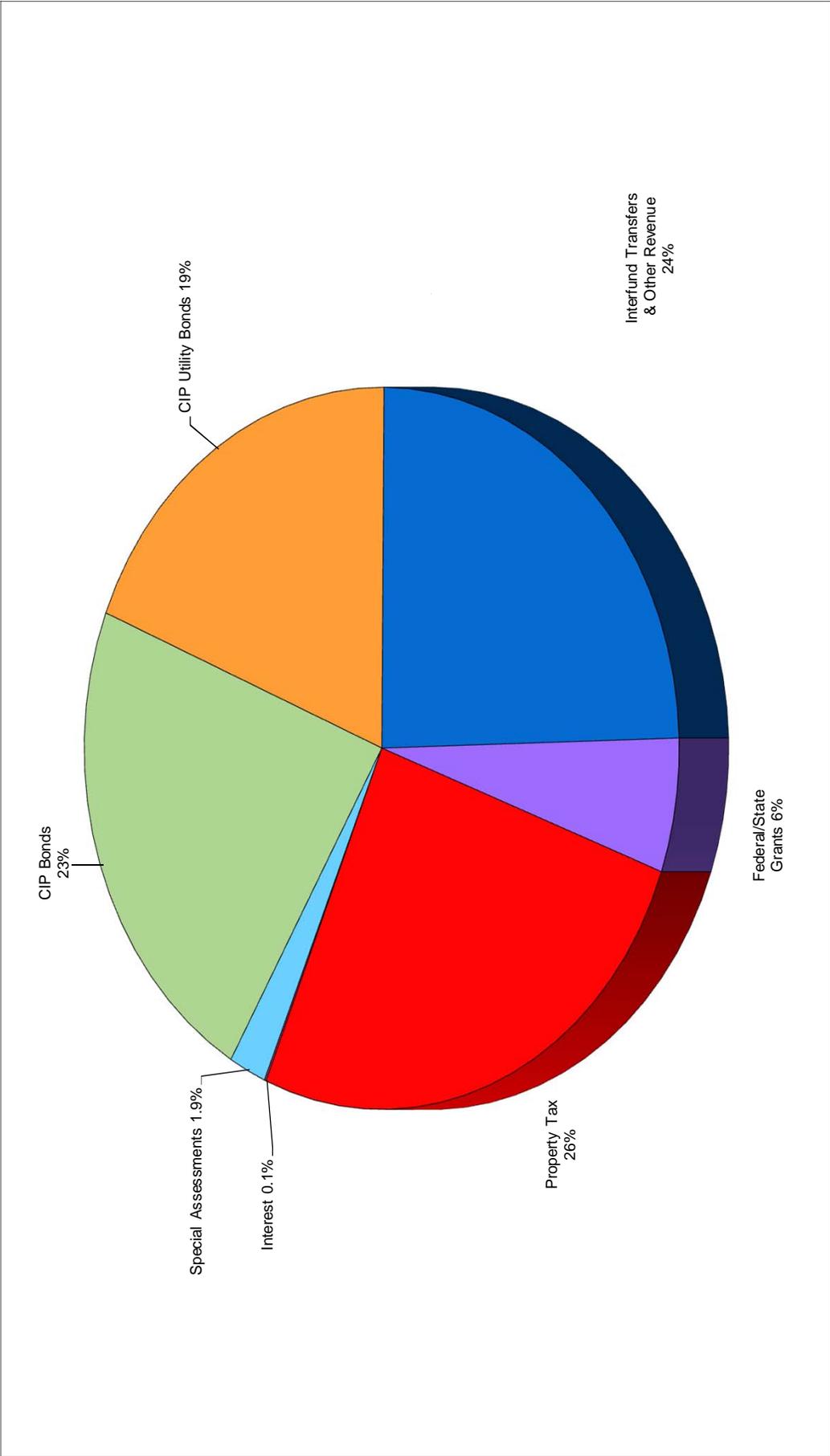
	Fiscal Year												Total
	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26			
<b>REVENUES AND OTHER SOURCES</b>													
Property tax	3,995	4,035	4,075	4,116	4,157	4,199	4,241	4,283	4,326	4,369	41,796		
Personal Property Tax Reimbursement	118	118	118	118	118	118	118	118	118	118	1,180		
Interest	15	15	15	15	40	50	50	60	60	60	380		
Proceeds from Capital Improvement bonds - general	3,609	3,168	4,826	2,317	5,478	2,692	970	524		2,618	26,202		
Proceeds from Capital Improvement bonds - utility	3,030	665	2,560	1,625	3,205	1,100	5,400	1,860			19,445		
Major Street Fund	1,200	1,500	1,400	1,500	1,700	1,400	1,400	1,400	1,400	1,400	14,300		
Municipal Street Fund	1,523	1,526	1,540	1,533	1,547	1,529	1,543	1,524	955	924	14,144		
Sanitary Sewer Fund	80	80	80	80	80	80	80	80	80	80	800		
Water Fund	275	210	4,130	100	360	100	885	220	50	210	6,540		
General Fund - for debt service	463	919				34		128			1,544		
Total city revenues and sources	14,308	11,317	19,663	11,404	16,685	11,302	14,687	10,069	7,117	9,779	126,331		
MAP - 21 Funding	956	800	800	925	800	1,000	1,000	1,000	1,000	1,000	9,281		
Local Development Finance Authority funds		1,000									1,000		
Other Revenue	355		0	40	100	40	0	0	0	0	535		
Special Assessments/Bonds-Water and Sewer only	320	80	30	0	75	0	0	0	0	0	505		
<b>Total Revenues and Sources</b>	<b>15,939</b>	<b>13,197</b>	<b>20,493</b>	<b>12,369</b>	<b>17,660</b>	<b>12,342</b>	<b>15,687</b>	<b>11,069</b>	<b>8,117</b>	<b>10,779</b>	<b>137,652</b>		
<b>EXPENDITURES</b>													
Streets	4,258	4,756	4,066	4,103	6,506	4,295	4,125	4,164	3,946	5,621	45,840		
Sidewalks and Bikeways	100	839	200	340	90	93	100	80	170	163	2,175		
Water	2,060	460	7,405	1,675	2,060	700	5,835	1,370		160	21,725		
Sanitary Sewer	1,710	525	295	203	1,605	450	400	660			5,645		
Police	485	228	217	203	667	170	220	470	170	179	3,009		
Fire	1,463	321	3,033	994	1,675	948	418	366	118	452	9,788		
Public Facilities	530	688	304	159	279	85	113	82	96	609	2,945		
Parks and Recreation	707	486	130	248	260	720	262	262	135	169	3,389		
Debt Service	4,626	4,894	4,843	4,647	4,518	4,881	4,204	3,615	3,482	3,426	43,136		
<b>Total Expenditures</b>	<b>15,939</b>	<b>13,197</b>	<b>20,493</b>	<b>12,369</b>	<b>17,660</b>	<b>12,342</b>	<b>15,687</b>	<b>11,069</b>	<b>8,117</b>	<b>10,779</b>	<b>137,652</b>		

# 2016-2017 Capital Improvement Program Expenditures by Category



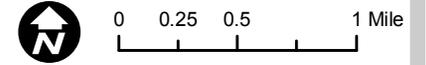
Total Expenditures - \$15,939,000

# 2016-2017 Capital Improvement Program Revenues by Category



Total Revenues - \$15,939,000

## 2016-2017 CAPITAL IMPROVEMENT PROGRAM PROJECTS

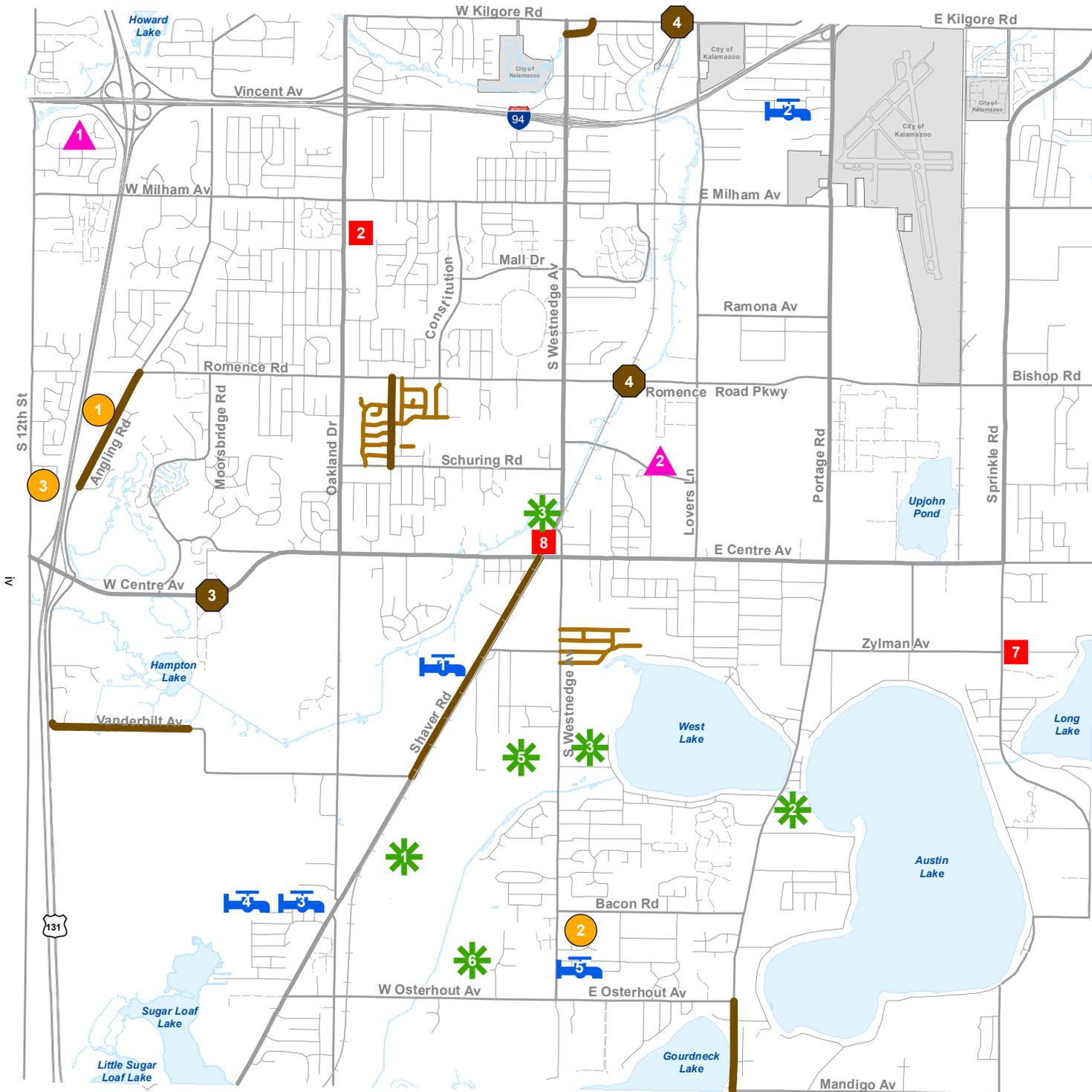


- Streets
- Sidewalks and Bikeways
- Water
- Sanitary Sewer
- Police
- Fire
- Public Facilities
- Parks and Recreation
- Major Street Reconstruction
- Local Street Reconstruction

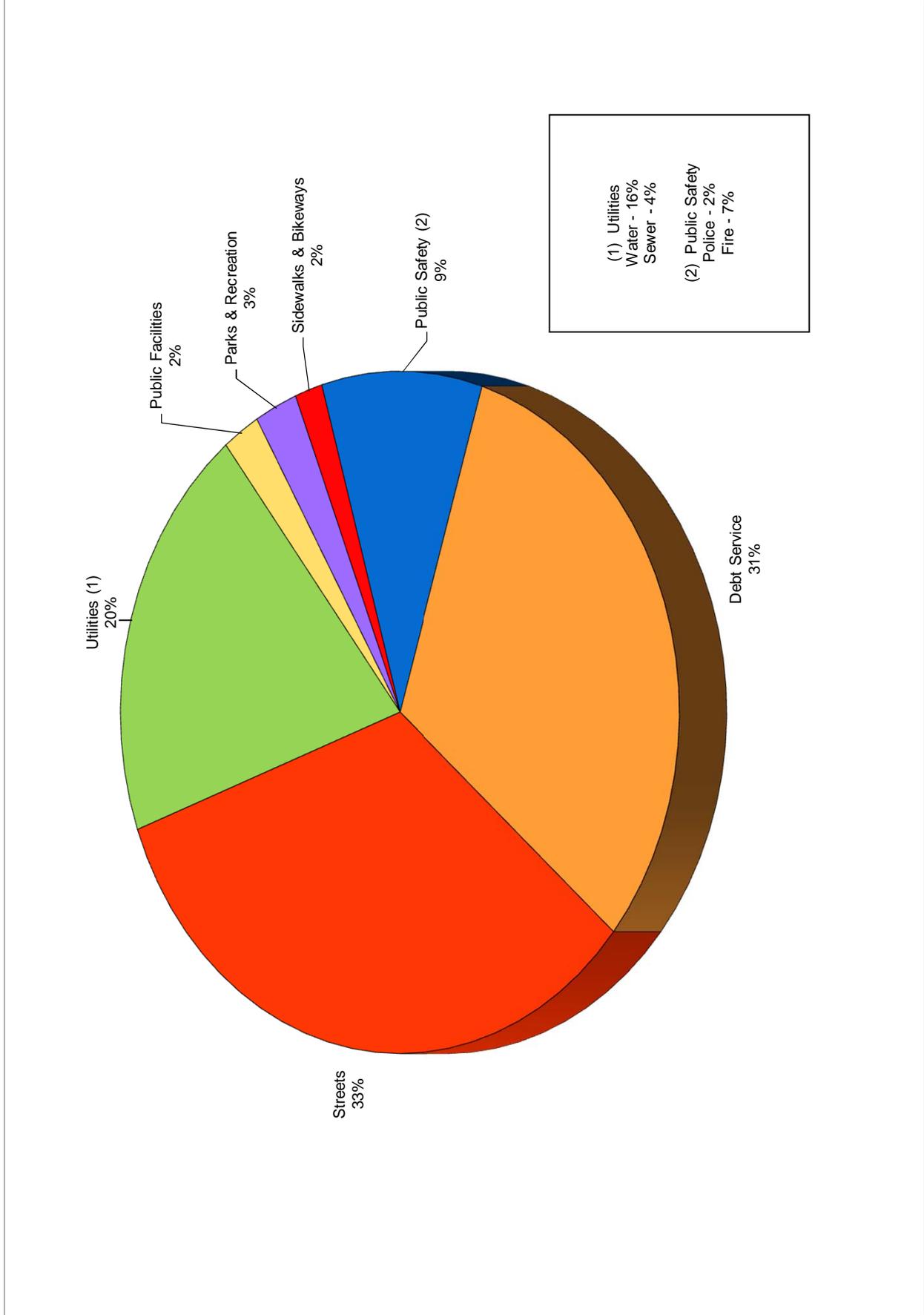
Projects listed below are not location specific:

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Number shown within symbol denotes project number



# 2016-2026 Capital Improvement Program Expenditures by Category

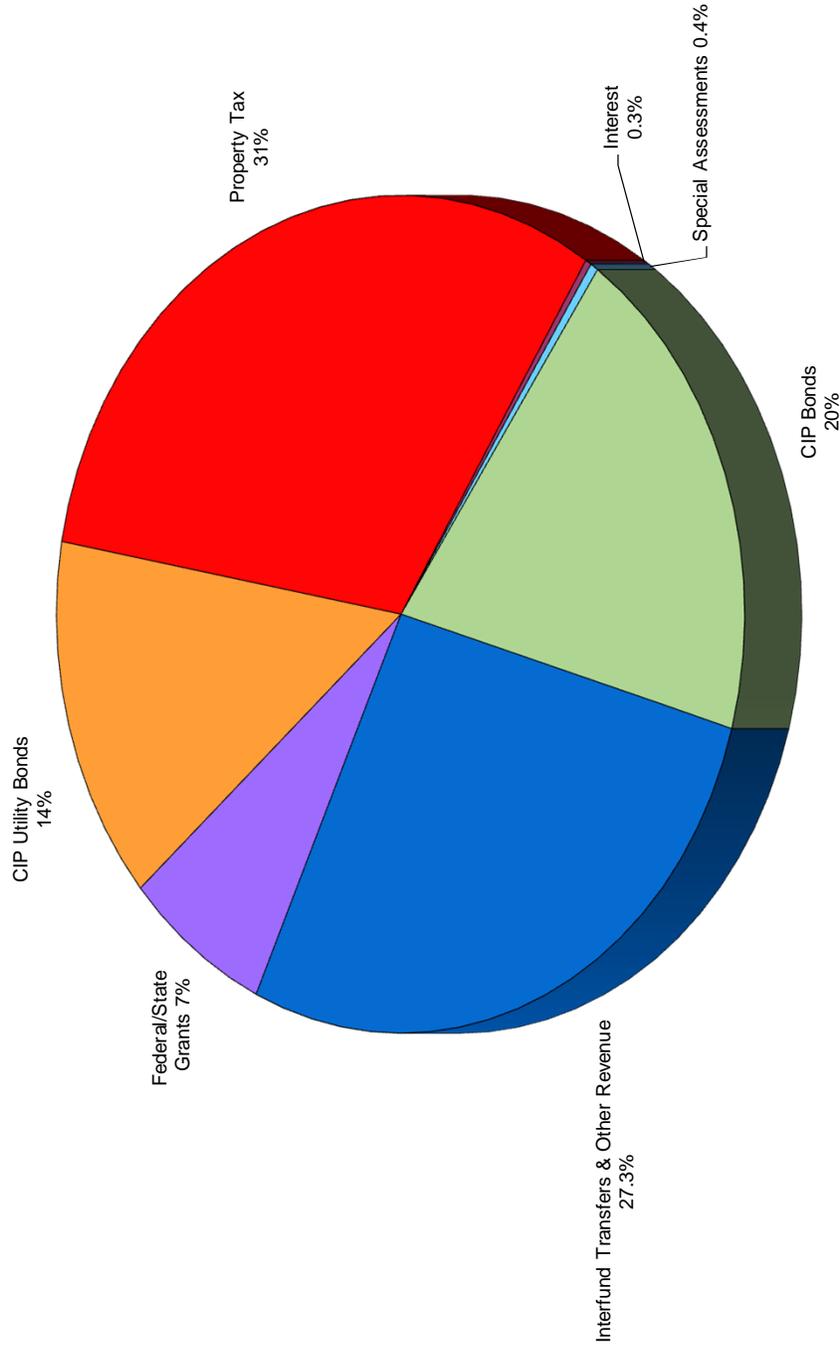


(1) Utilities  
 Water - 16%  
 Sewer - 4%

(2) Public Safety  
 Police - 2%  
 Fire - 7%

Total Expenditures - \$137,652,000

# 2016-2026 Capital Improvement Program Revenues by Category



Total Revenues - \$137,652,000

CAPITAL IMPROVEMENT PROJECT SUMMARY

STREETS

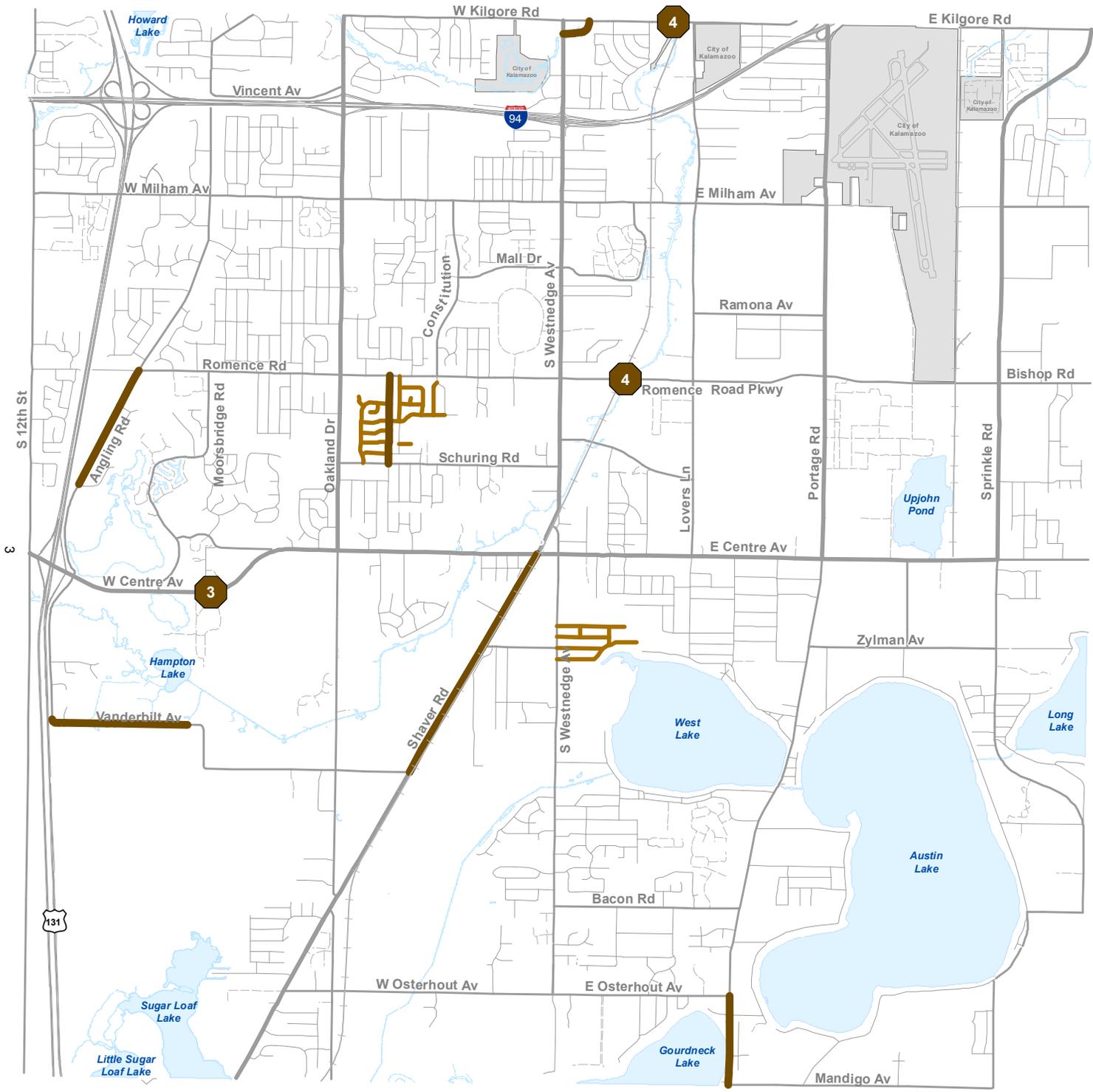
Project Expenditures (\$000)

Project Number/Title	Fiscal Year										Total
	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26	
1 Major Street Reconstruction Program	2,733	3,101	2,746	2,783	3,866	2,280	2,805	2,844	2,626	2,631	28,415
2 Local Street Reconstruction Program	920	1,320	1,320	1,320	1,320	1,320	1,320	1,320	1,320	1,320	12,800
3 West Centre Avenue/Cooley Drive Improvements	450				530						980
4 Railroad Crossings Upgrades	115				95						210
5 Accessible Pedestrian Signal Installation	40										40
6 Portage Road/Lakeview Drive Intersection Improvements		310									310
7 Local Street Calming Program		25									25
8 South Westmedge Avenue Traffic Signal System Upgrade					695						695
9 I-94 Improvements, east city limits to Portage Road						695					695
10 Vincent Drive/Oakland Drive Intersection Improvements									1,670		1,670
<b>TOTALS</b>	4,258	4,756	4,066	4,103	6,506	4,295	4,125	4,164	3,946	5,621	45,840
Other Revenues	255										255
Federal Transportation Funds	956	800	800	800	800	1,000	1,000	1,000	1,000	1,000	9,156
Municipal Street Fund	1,328	1,446	1,510	1,533	1,472	1,529	1,543	1,524	1,505	1,486	14,877
Capital Improvement Bonds	1,104	1,760	1,056	1,020	3,384	1,066	882	940	741	2,435	14,387
City Share Cash	615	750	700	750	850	700	700	700	700	700	7,165

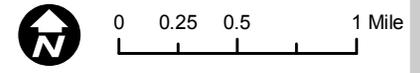
CAPITAL IMPROVEMENT PROJECT SUMMARY

Funding Sources (\$000)

Project Number/Title	Funding Sources (\$000)										Total
	Federal Transportation	Other Revenues	Other Financing	Municipal Str. Fund	Build. Auth. Bonds	CIP Bonds	Util Cap Imp Bonds (Water)	CIP Fund			
1 Major Street Reconstruction Program	9,156			2,077		10,137		7,045			28,415
2 Local Street Reconstruction Program				12,800							12,800
3 West Centre Avenue/Cooley Drive Improvements		215				765					980
4 Railroad Crossings Upgrades						115		95			210
5 Accessible Pedestrian Signal Installation		40									40
6 Portage Road/Lakeview Drive Intersection Improvements						310					310
7 Local Street Calming Program								25			25
8 South Westledge Avenue Traffic Signal System Upgrade						695					695
9 I-94 Improvements, east city limits to Portage Road						695					695
10 Vincent Drive/Oakland Drive Intersection Improvements						1,670					1,670
<b>TOTALS</b>	<b>9,156</b>	<b>255</b>		<b>14,877</b>		<b>14,387</b>		<b>7,165</b>			<b>45,840</b>



## 2016-2017 CAPITAL IMPROVEMENT PROGRAM PROJECTS



- Streets
- Major Street Reconstruction
- Local Street Reconstruction

Projects listed below are not location specific:



Number shown within symbol denotes project number

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Streets

**PROJECT NUMBER:** 1

**PROJECT TITLE:**

Major Street Reconstruction Program

**PROJECT DESCRIPTION:**

Reconstruction of major streets that were previously strip paved, or where heavy maintenance activities have been applied, that are anticipated to require a greater level of sub-base and pavement rehabilitation to ensure long-term serviceability. Improvements will also include localized storm drainage improvements, necessary curb and gutter or paved shoulder replacement/repair, repair of necessary drive approaches and lawn restoration as appropriate. This project involves reconstructing the following street sections in FY 2016-2017:

- Rockford Street, Romence Road to Schuring Road
- Shaver Road, Vanderbilt Avenue to West Centre Avenue
- Angling Road, Squire Heath Lane to Romence Road
- Old Kilgore Road, South Westnedge Avenue to West Kilgore Road
- Portage Road, East Osterhout Avenue to Mandigo Avenue
- Vanderbilt Avenue, Angling Road to Hampton Creek

These projects will be designed to include “complete street” enhancements such as crosswalk improvements and widened bike lanes where appropriate, and are part of the “Natural Place to Move” initiative.

These roadway projects will be constructed during the 2017 construction season.

**PROJECT JUSTIFICATION/NEED:**

Major streets will be annually programmed based on maintenance needs, costs, safety and rideability. The surface asphalt removal and overlay rehabilitation activities will extend the useful life of major streets, which carry significant traffic volumes and greater levels of trucks/heavy vehicles through the community.

**PROJECT BENEFIT/IMPACT:**

The project will maintain primary streets and decrease pavement maintenance costs, ensure a long lasting pavement with a smooth riding surface, decrease user costs, and enhance traffic safety.

**OPERATING FUND IMPACT:**

Decrease in maintenance cost.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Streets

**PROJECT NUMBER:** 2

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**PROJECT TITLE:**

Local Street Reconstruction Program

**PROJECT DESCRIPTION:**

Reconstruction of local streets previously strip paved, or that require a greater level of sub-base pavement rehabilitation. Projects will include localized storm drainage improvements, curb, gutter and paved shoulder replacement/repair, pavement widening for narrow streets, sidewalk repairs and gap construction, including installation of specified handicap ramps, and necessary drive approaches and lawn restoration.

FY 2016–2017: Local streets to be reconstructed include:

- Bittersweet Street, Marigold Avenue, East Melody Avenue, Barberry Avenue, Larkspur Avenue, Tumbleweed Street
- Kelve Avenue, Snowberry Court, Marfield Street, Woodland Drive, Birchton Avenue, Carlsbrook Lane, Colchester Avenue, Green Forest Drive, Kaylin Court, Leslie Street, Redstock Avenue, Sherry Drive, Starbrook Street, Tamfield Avenue

These projects include “complete street” and neighborhood enhancements such as improved crosswalk signage, pavement markings, street lighting and similar pedestrian safety improvements, which are part of the “Natural Place to Move” initiative.

**PROJECT JUSTIFICATION/NEED:**

Streets were last reconstructed following sanitary sewer installation in the late 1970s. Streets have received major maintenance and are reaching the end of serviceable life and need reconstruction. Reconstruction will restore structural integrity, ride quality, reduce maintenance costs and enhance safety.

**PROJECT BENEFIT/IMPACT:**

Decreased maintenance costs, improved ride quality, enhanced safety for motoring and pedestrian traffic.

**OPERATING FUND IMPACT:**

Reduction in ongoing street maintenance cost.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Streets

**PROJECT NUMBER:** 3

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<b>PROJECT TITLE:</b>	<u>West Centre Avenue/Cooley Drive Improvements</u>
<b>PROJECT DESCRIPTION:</b>	Project to include three elements: installation of a traffic signal and related roadway improvements at Cooley Drive and West Centre Avenue; reconstruction of Cooley Drive and sidewalks on both sides of the street; realigning Cooley Drive at Old Centre Avenue.
<b>PROJECT JUSTIFICATION/NEED:</b>	<p>Development has been increasing in recent years within the Woodbridge Hills Planned Development, Greenspire Apartments and the Greenspire retail center. Traffic has continued to increase in the vicinity of this intersection and upgrades to Cooley Drive and West Centre Avenue will facilitate existing and planned development. Traffic warrants have been met for the installation of a traffic signal at West Centre Avenue/Cooley Drive intersection which will improve traffic flow and improve side street access.</p> <ul style="list-style-type: none"><li>• FY 2016 – 2017: Install new traffic signal and related improvements at the West Centre Avenue intersection of Cooley Drive.</li><li>• FY 2020 – 2021: Improve, widen and realign Cooley Drive at Old Centre Avenue.</li></ul>
<b>PROJECT BENEFIT/IMPACT:</b>	Traffic signal installation will provide protected traffic movements for vehicle turning movements and pedestrians. Reconstruction of Cooley Drive will improve the function of the roadway and facilitate further redevelopment activities involving property along Cooley Drive and West Centre Avenue.
<b>OPERATING FUND IMPACT:</b>	\$600 annual increase in maintenance and energy costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Streets

**PROJECT NUMBER:** 4

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**PROJECT TITLE:** Railroad Crossing Upgrades

**PROJECT DESCRIPTION:** Improve the safety and rideability of existing street crossings of the Grand Elk Railroad (formerly Norfolk Southern) tracks at the following locations:

- Romence Road Parkway - existing railroad crossing would be replaced with new asphalt crossing during the 2016 construction year.
- East Milham Avenue - existing railroad crossing would be replaced with new asphalt crossing during the 2020 construction year.

**PROJECT JUSTIFICATION/NEED:** Deteriorated railroad crossing slows traffic, increases vehicle damages and reduces non-motorized safety. Replacement of the existing crossings will improve the safe use of the crossing for both drivers and pedestrians and reduce maintenance costs.

**PROJECT BENEFIT/IMPACT:** The improvement of these railroad crossings will benefit drivers, pedestrians use of crossings and eliminate deficiencies in the city transportation system.

**OPERATING FUND IMPACT:** Minimal impact on the operating fund.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation & Utilities

**PROJECT CATEGORY:**  
Streets

**PROJECT NUMBER: 5**

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**PROJECT TITLE:** Accessible Pedestrian Signal Installation

**PROJECT DESCRIPTION:** Installation of enhanced pedestrian signal actuators and indicators at signalized and unsignalized intersections as warranted by citizen requests and pedestrian traffic analysis.

**PROJECT JUSTIFICATION/NEED:** Accessible pedestrian signals are a component of the Americans With Disabilities Act (ADA) of 1990 along with sidewalk ramps and detectable warning devices. Accessible pedestrian signals will allow all pedestrians increased safety in crossing signalized intersections.

**PROJECT BENEFIT/IMPACT:** Installing accessible pedestrian signals will assist all pedestrians, especially visually impaired pedestrians, and maintain compliance with federal requirements.

**OPERATING FUND IMPACT:** Nominal impact on operating costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation & Utilities

**PROJECT CATEGORY:**  
Streets

**PROJECT NUMBER: 6**

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**PROJECT TITLE:** Portage Road/Lakeview Drive Intersection Improvements

**PROJECT DESCRIPTION:** Reconstruction of the Portage Road/Lakeview Drive intersection to improve safety, operation and functionality of the intersection.

**PROJECT JUSTIFICATION/NEED:** Portage Road is a major arterial street which serves as a connection between residential, industrial and commercial areas. Lakeview Drive is a local street which terminates at Portage Road with a skew intersection. Geometric and physical restrictions at the Lakeview Drive intersection make turning movements difficult during peak traffic times. Design of the Portage Road/Lakeview Drive intersection will include analyzing the operation and functionality and safety of both relocating the existing intersection to the south and also construction of a modern roundabout. The engineering analyst will determine the pros and cons of each design and recommend a design for construction. A safety evaluation of both options is part of the preliminary engineering effort required.

**PROJECT BENEFIT/IMPACT:** Realignment and reconstruction of the Portage Road/Lakeview Drive intersection will result in an improvement to the function of the intersection, improve safety for Portage Road and Lakeview Drive, and provide opportunities to facilitate traffic calming measures in the Portage Road corridor.

**OPERATING FUND IMPACT:** Nominal increases in landscaping and street maintenance costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation & Utilities

**PROJECT CATEGORY:**  
Streets

**PROJECT NUMBER:** 7

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**PROJECT TITLE:** Local Street Traffic Calming Program

**PROJECT DESCRIPTION:** Installation of traffic calming features and measures to promote speed limit compliance for vehicle speeds on local streets.

**PROJECT JUSTIFICATION/NEED:** A major concern of residents is neighborhood vehicle speed and stop sign violations. Current traffic engineering principles promote the appropriate use of traffic calming features such as speed humps, speed tables, mini-roundabouts and curb bump outs to mitigate vehicle speeds. The city has established guidelines and standards for proper implementation of traffic calming features. Public interaction and education are important continuing elements of an established program.

**PROJECT BENEFIT/IMPACT:** Implementation of appropriate traffic calming features in conjunction with neighborhood notification and input will improve speed limit compliance will improve pedestrian/school safety and reduce resident requests for police surveillance.

**OPERATING FUND IMPACT:** None.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Streets

**PROJECT NUMBER:** 8

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**PROJECT TITLE:** South Westnedge Avenue Traffic Signal System Upgrade

**PROJECT DESCRIPTION:** Traffic signals on South Westnedge Avenue are interconnected with fiber optic cable from West Kilgore Road to West Centre Avenue. The traffic responsive system coordinates signal timings for traffic signals on South Westnedge Avenue utilizing a state-of-the-art transportation management system which will also allow future integration of existing coordinated systems on Milham Avenue, Mall Drive, Romence Road, Oakland Drive, Centre Avenue, Portage Road, Constitution Boulevard and Lovers Lane. The project also includes replacement of selected mast arm assemblies.

FY 2020-21: Upgrade of pedestrian signals and traffic signal mast arms at Idaho/Dawnlee and Mall Drive.

**PROJECT JUSTIFICATION/NEED:** Traffic and pedestrian flow on South Westnedge Avenue continues to be a concern. With limited ability to widen the existing roadway system, future traffic flow improvements will be dependent on system operation improvements and optimization. The existing traffic operations center was assembled in 2004 and upgraded in 2013 to keep up with increased traffic flow and technology improvements. The pedestrian signals must also be upgraded and standardized to meet current standards. Several intersections with signal mast arms are approaching their design life and will require replacement.

**PROJECT BENEFIT/IMPACT:** Improved traffic operations and capacity, reduced delays, enhanced traffic and pedestrian safety, reduced signal maintenance costs, improved system performance and reliability.

**OPERATING FUND IMPACT:** Approximately \$5,000 per year for system maintenance.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Streets

**PROJECT NUMBER:** 9

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**PROJECT TITLE:** I-94 Improvements, east city limits to Portage Road

**PROJECT DESCRIPTION:** FY 2021-22: \$695,000 – City share of construction and engineering cost for widening of I-94 from east of Lovers Lane to the east city limits. This project is part of the ongoing project to widen I-94 to six lanes within the city limits. Project includes the city share cost of work required to widen the roadway and bridges from Portage Road to the east city limits. Improvements will be done by the Michigan Department of Transportation with the City of Portage paying a local share of cost.

**PROJECT JUSTIFICATION/NEED:** Expansion of I-94 is a priority project in Kalamazoo County. Traffic safety, flow and economic development are concerns. Expansion will enable capacity and safety improvements along major city streets to occur.

**PROJECT BENEFIT/IMPACT:** Significant economic development benefits, improved traffic flow and safety on I-94 and connecting major streets.

**OPERATING FUND IMPACT:** Minimal impact upon operating fund.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation & Utilities

**PROJECT CATEGORY:**  
Streets

**PROJECT NUMBER:** 10

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**PROJECT TITLE:** Vincent Drive/Oakland Drive Intersection Improvements

**PROJECT DESCRIPTION:** Relocate the Vincent Drive/Oakland Drive intersection approximately 500 feet north, relocate the existing Preserve Boulevard/Oakland Drive traffic signal, and widen Oakland Drive and Vincent Drive to accommodate high volumes of turning traffic.

**PROJECT JUSTIFICATION/NEED:** Vincent Drive is a collector street which serves a large neighborhood, elementary school and church facility. Vacant land in the vicinity of the intersection is available for development and realignment of the intersection in conjunction with private sector investment will improve traffic flow and safety in the vicinity. Existing traffic volumes and the close proximity of the intersection to the I-94/Oakland Drive interchange ramps make improvements to the existing intersection problematic. Relocating the Preserve Boulevard/Oakland Drive traffic signal to the Oakland Drive/Vincent Drive intersection will improve traffic flow and safety at this intersection and decrease congestion at the I-94/Oakland Drive ramps.

**PROJECT BENEFIT/IMPACT:** Realignment of the Vincent Drive/Oakland Drive intersection will result in an improvement to the function of the intersection, decrease congestion on the I-94/Oakland Drive interchange, and facilitate further development activities along Vincent Drive.

**OPERATING FUND IMPACT:** Nominal increases in energy and street maintenance costs.

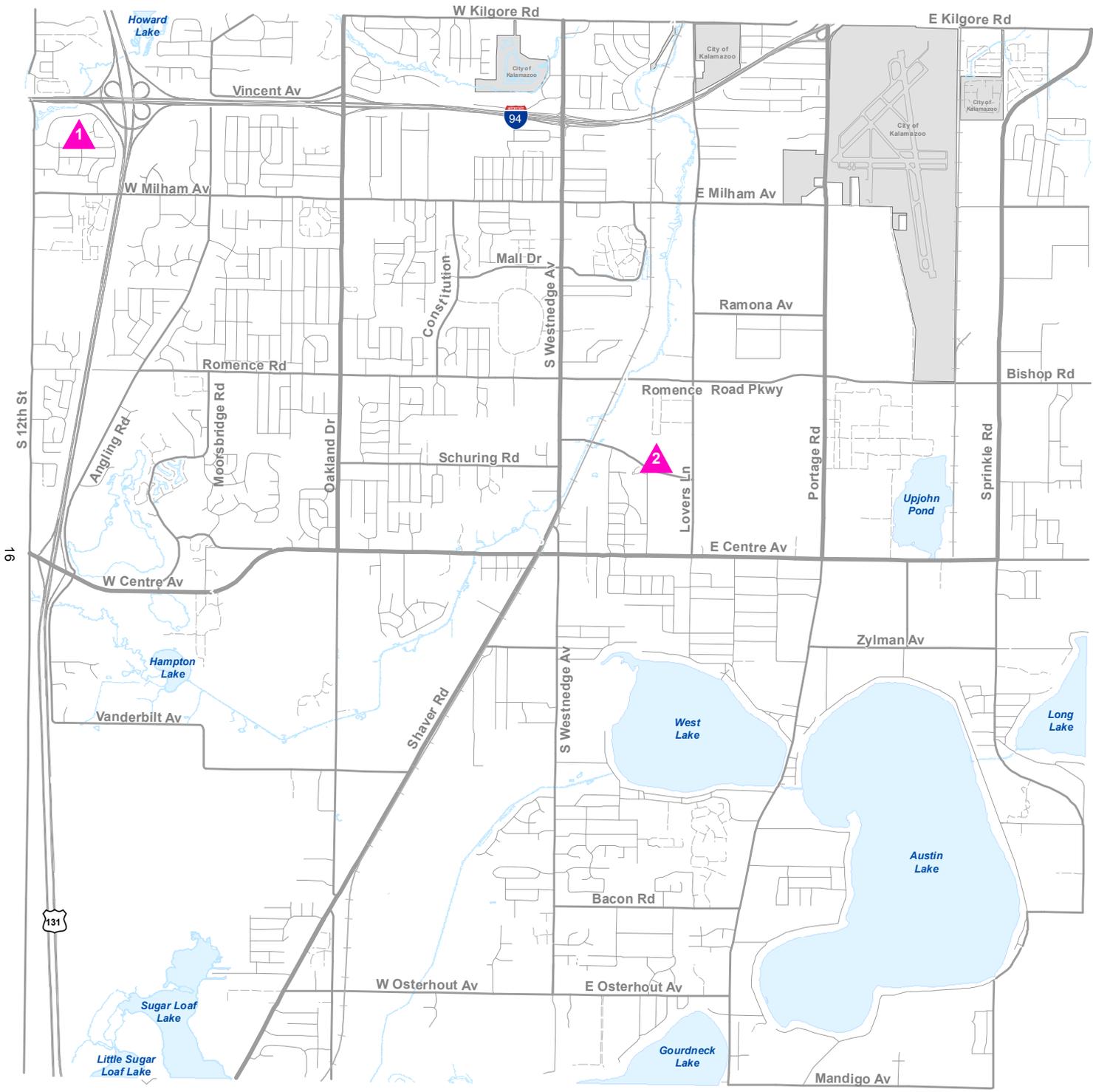
CAPITAL IMPROVEMENT PROJECT SUMMARY SIDEWALKS AND BIKEWAYS

Project Number/Title	Project Expenditures (\$000)											Total	
	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26			
1 Sidewalk Improvements	50	50	50	50	50	50	50	50	50	50	50	250	
2 Portage Bikeway Trail System Improvements	50	44	60	50	40	53	50	40	120	123	40	630	
3 Bikeway Improvements		40	40	40	40	40	40	40	40	40	40	200	
4 South 12th Street Sidewalk, Norfolk Circle to West Milham Avenue		380										380	
5 Portage Road Sidewalk, Mandigo Avenue to 1,700 feet north		375	90									375	
6 West Centre Avenue Sidewalk, Oakland Drive 500 feet west												90	
7 East Central Trailway				250								250	
TOTALS	100	839	200	340	90	93	100	80	170	163		2,175	
MAP - 21 Funding				125								125	
Federal/State Grants													
Capital Improvement Bonds	100	380	200	175	50	53	100	80	170	123		1,351	
City Share Cash		459		40	40	40				40		699	

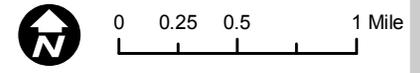
**CAPITAL IMPROVEMENT PROJECT SUMMARY** **SIDEWALKS AND BIKEWAYS**

Funding Sources (\$000)

Project Number/Title	SAFE/TEA- LU Funding	Fed/State Grants	Other Revenues	S/A's & S/A Bonds	Building Authority	CIP Bonds	Other Financing	CIP Fund	Total
1 Sidewalk Improvements						250			250
2 Portage Bikeway Trail System Improvements						506		124	630
3 Bikeway Improvements								200	200
4 South 12th Street Sidewalk, Norfolk Circle to West Milham Avenue						380			380
5 Portage Road Sidewalk, Mandigo Avenue to 1,700 feet north						90		375	375
6 West Centre Avenue Sidewalk, Oakland Drive 500 feet west		125				125			90
7 East Central Trailway									250
<b>TOTALS</b>		125				1,351		699	2,175



## 2016-2017 CAPITAL IMPROVEMENT PROGRAM PROJECTS



 Sidewalks and Bikeways

Projects listed below are not location specific:

Number shown within symbol denotes project number

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Services

**PROJECT CATEGORY:**  
Sidewalks and Bikeways

**PROJECT NUMBER: 1**

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**PROJECT TITLE:** Sidewalk Improvements

**PROJECT DESCRIPTION:** FY 2016-17: Public sidewalk reconstruction and repairs to deteriorating sidewalks, within the neighborhood north of Westfield Park. Funding in FY 2016-17 is provided through the Community Development Block Grant Program and sidewalk repairs will be completed within qualified Neighborhood Strategy Areas.

FY 2018-19, FY 2020-2021, FY 2022-23, and FY 2024-2025: Continued work on sidewalk reconstruction or repairs as needed, and construction of new sidewalks to fill gaps in existing system. These projects are part of the “Natural Place to Move” initiative.

**PROJECT JUSTIFICATION/NEED:** Continued development and maintenance of a safe walkway system for pedestrian and non-motorized traffic.

**PROJECT BENEFIT/IMPACT:** Provision of safe pedestrian travel within the city.

**OPERATING FUND IMPACT:** Potential reduction in claims to Risk Management.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Services

**PROJECT CATEGORY:**  
Sidewalks and Bikeways

**PROJECT NUMBER: 2**

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**PROJECT TITLE:**

Portage Bikeway Trail System Improvements

**PROJECT DESCRIPTION:**

Comprehensive asphalt overlay program to enhance off road bikeway trail segments.

- FY 2016-17: Garden Lane Bikeway (Lovers Lane to 7451 Garden Lane)
- FY 2017-18: Romence Road Bikeway (South Westnedge Avenue to Lovers Lane)
- FY 2018-19: Romence Road Bikeway (Lovers Lane to Portage Road)
- FY 2019-20: Romence Road Parkway (Portage Road to 3101 Romence Road East) and Garden Lane (7335 Garden Lane to South Westnedge Avenue)
- FY 2020-21: South Westnedge Avenue (East Centre Avenue to Melody Avenue) and Portage Creek Bicentennial Park Trail (Brown Avenue: South Westnedge Avenue to Currier Drive)
- FY 2021-22: Portage Creek Bicentennial Park Trail (Brown Avenue to Portage District Library, and Veteran's Memorial to Currier Drive, and Portage District Library to Garden Lane)
- FY 2022-23: Portage Creek Bicentennial Park Trail (Garden Lane to Romence Road East)
- FY 2023-24: Portage Creek Bicentennial Park Trail (Romence Road East to East Milham Avenue)
- FY 2024-25: Portage Creek Bicentennial Park Trail (East Milham Avenue to East Kilgore Road)
- FY 2025-26: Shaver Road (West Centre Avenue to South Westnedge Park)

**PROJECT JUSTIFICATION/NEED:** When the bikeway surface gets beyond preventative maintenance it requires removal followed by the addition of a new layer of asphalt.

**PROJECT BENEFIT/IMPACT:** Maintaining the integrity and safety of the system will continue the viability of this resource.

**OPERATING FUND IMPACT:** None.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Services

**PROJECT CATEGORY:**  
Sidewalks and Bikeways

**PROJECT NUMBER:** 3

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**PROJECT TITLE:** Bikeway Improvements

**PROJECT DESCRIPTION:** FY 2016-17: Paved shoulder bikeway overlays, upgrade signs and ongoing maintenance to existing off road trails.

FY 2017-18, FY 2019-20, FY 2021-22, FY 2023-24, FY 2025-26: Continued work on paved shoulder bikeways to include overlays, strip patching, sealing and striping. These projects are part of the “Natural Place to Move” initiative.

**PROJECT JUSTIFICATION/NEED:** Several areas along the bikeway system require upgrades due to seasonal conditions, use, and construction projects. A coordinated preventative maintenance program is necessary in order to increase the usable life of bikeway facilities.

**PROJECT BENEFIT/IMPACT:** The Portage bikeway system is heavily used for non-motorized transportation and recreational opportunities. Maintaining the integrity of the system will continue the viability of this resource.

**OPERATING FUND IMPACT:** None.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Sidewalks and Bikeways

**PROJECT NUMBER:** 4

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**PROJECT TITLE:** South 12<sup>th</sup> Street Sidewalk, Norfolk Circle to West Milham Avenue

**PROJECT DESCRIPTION:** Construction of a five-foot wide sidewalk on the east side of South 12<sup>th</sup> Street from Norfolk Circle to West Milham Avenue. This project is part of the “Natural Place to Move” initiative.

**PROJECT JUSTIFICATION/NEED:** South 12<sup>th</sup> Street is a minor arterial roadway and located in a residential area without a pedestrian walkway. In addition, a new elementary school was constructed in 2009 and a significant portion of the proposed sidewalk segment is located within the school walk zone for elementary students.

**PROJECT BENEFIT/IMPACT:** Provision of safe pedestrian travel within the city.

**OPERATING FUND IMPACT:** Potential reduction in claims to Risk Management.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Sidewalks and Bikeways

**PROJECT NUMBER:** 5

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<b>PROJECT TITLE:</b>	<u>Portage Road Sidewalk, Mandigo to 1,700 Feet North</u>
<b>PROJECT DESCRIPTION:</b>	Installation of sidewalk along the east side of Portage Road from Mandigo Avenue north 1,700 feet to connect with existing sidewalk.
<b>PROJECT JUSTIFICATION/NEED:</b>	<p>Portage Road is a major arterial street and services significant residential areas in the Lake Center area. The east side of Portage Road, south of West Osterhout Avenue has inconsistent sidewalk. The proposed sidewalk will provide for pedestrian access along the entire Portage Road corridor in the Lake Center area.</p> <p>This section of Portage Road does not have continuous sidewalk and has minimal shoulder width. A separate sidewalk will provide access to pedestrian users in accordance with the adopted “Complete Streets” policy.</p>
<b>PROJECT BENEFIT/IMPACT:</b>	This sidewalk will provide safe pedestrian access along a major street and meet “Complete Streets” criteria.
<b>OPERATING FUND IMPACT:</b>	None.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Sidewalks and Bikeways

**PROJECT NUMBER:** 6

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**PROJECT TITLE:** West Centre Avenue Sidewalk, Oakland Drive to 500 feet west

**PROJECT DESCRIPTION:** Installation of sidewalk on the south side of West Centre Avenue from Oakland Drive to approximately 500 feet west.

**PROJECT JUSTIFICATION/NEED:** West Centre Avenue is a major arterial street and services significant residential areas and commercial areas in the central city area. The south side of West Centre Avenue, west of Oakland Drive, has inconsistent sidewalk. The proposed sidewalk will provide for pedestrian access from developing residential areas to established commercial destinations.

A separate sidewalk will provide access to pedestrian users in accordance with the adopted Complete Streets policy.

**PROJECT BENEFIT/IMPACT:** This sidewalk will provide safe pedestrian access along a major street and meet Complete Streets criteria.

**OPERATING FUND IMPACT:** None.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**

Parks, Recreation and Senior Citizen Services

**PROJECT CATEGORY:**

Sidewalks and Bikeways

**PROJECT NUMBER: 7**

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**PROJECT TITLE:**

East Central Trailway

**PROJECT DESCRIPTION:**

FY 2019-20: Development of a one mile long, 10-foot wide, multi-use trail from the Lovers Lane and Garden Lane intersection east to Portage Road using the Consumers Energy property.

**PROJECT JUSTIFICATION/NEED:**

This linkage is identified in the city future bikeway plan. The trail will connect the Garden Lane trail to the East Centre Avenue trail, providing a safe route for bicyclists. This improvement was identified in the 2014 Comprehensive Plan and Lake Center subarea plan.

**PROJECT BENEFIT/IMPACT:**

Project will link trails and add to overall city bikeway trail system. It will enhance non-motorized access to businesses and restaurants along the Portage Road corridor in the Lake Center District.

**OPERATING FUND IMPACT:**

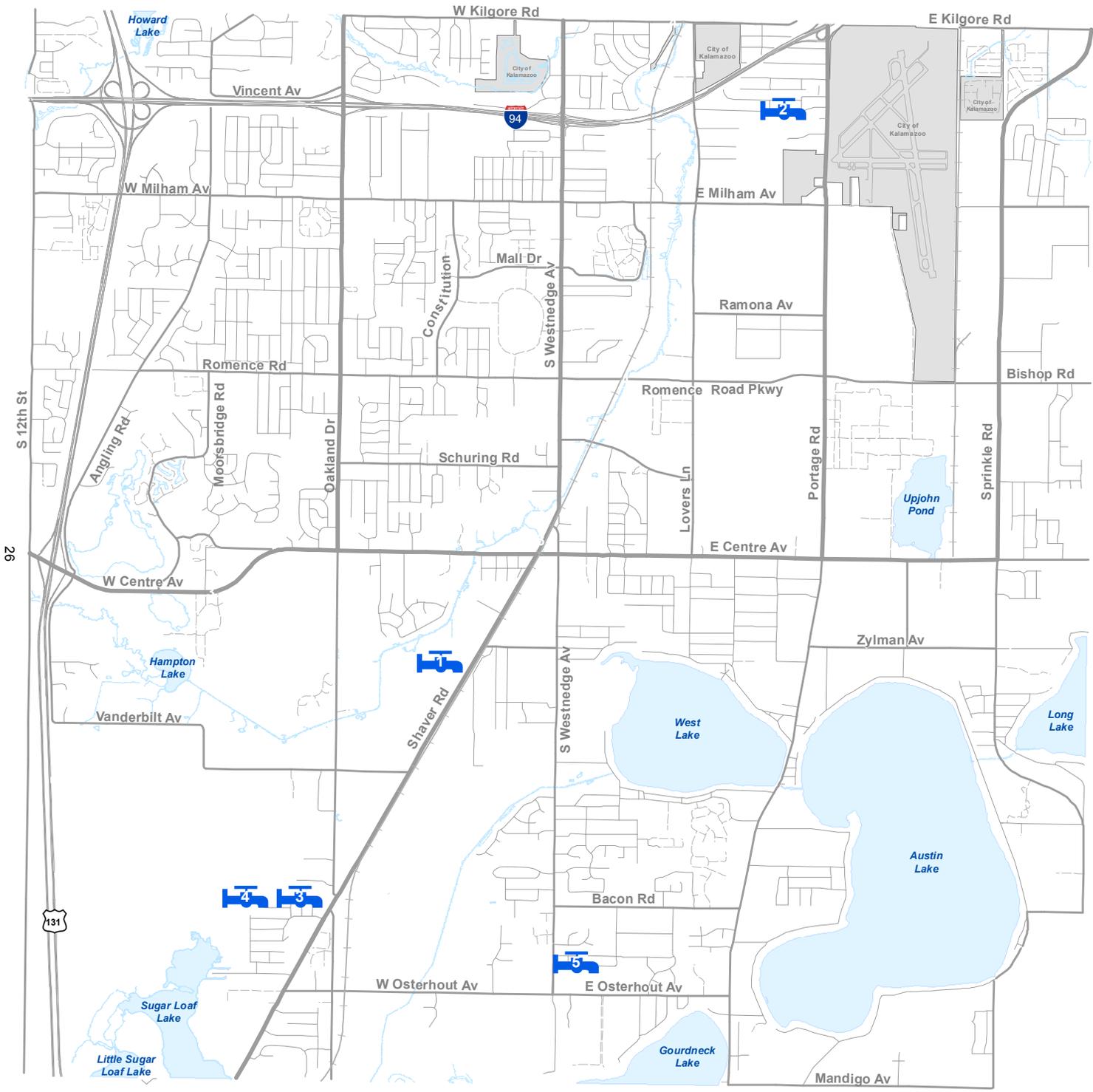
\$1,000 per year of litter pickup and snow removal

CAPITAL IMPROVEMENT PROJECT SUMMARY												WATER	
Project Expenditures (\$000)													
Project Number/Title	Fiscal Year											Total	
	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26			
1	Shaver Road Water Main Replacement	1,350		250	1,000								2,600
2	Storm Drainage Improvements Program	100	100	50	50								300
3	Chopin Avenue Water Main Extension	320											320
4	Mozart Street Water Main Extension	140											140
5	Cliffwood Avenue/Archwood Drive Water Main	150											150
6	Winter Forest Drainage Improvements		300										300
7	Oakland Drive/Rosewood Ave Watermain Replacement		60										60
8	Northwest Water Storage Facility		6,000										6,000
9	Idaho Avenue Water Main Replacement		500										500
10	Romence Road Water Main Replacement		450										450
11	Lake Connection Elimination Program		275										275
12	South Westmedge Avenue Relief Storm Sewer		75	675									750
13	Water System Reliability Study Update		55				55						110
14	Portage Road Water Main Extension, Helen Avenue to Byrd Drive			350									350
15	Pine View Water Storage Facility Renovation			350									350
16	Consolidated Drain Rehabilitation			400									400
17	Ramona Park Plat Water Main			350									350
18	East Milham Avenue Water Main Replacement			250									250
19	SCADA System Upgrade			60									60
20	Shuman Wellfield Iron Removal Facility				650	5,000							5,650
21	Lovers Lane Water Main Abandonment				50								50
22	Schuring Road Water Main Replacement					525							525
23	East Shore Drive Water Main Replacement					310							310
24	Northeast Quadrant Well Field Development						1,200						1,200
25	Woodland Elementary School Water Main						115						115
26	East Milham Avenue Water Main Abandonment											160	160
TOTALS		2,060	460	7,405	1,675	2,060	700	5,835	1,370	160			21,725
Special Assessments		125											125
Capital Improvement Bonds		1,710	300	2,325	1,625	1,750	650	5,000	1,200	0	0	0	14,560
Other Financing (LDFA bonds for water tower)				1,000									1,000
City Share Cash		225	160	4,080	50	310	50	835	170	0	0	160	6,040

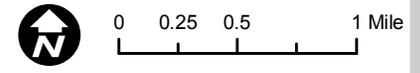
CAPITAL IMPROVEMENT PROJECT SUMMARY

Funding Sources (\$000)

Project Number/Title	BANs	Fed/State Grants	Other Revenues	S/A's & S/A Bonds	Building Authority	CIP Bonds	Other Financing	Water Fund	Total
1 Shaver Road Water Main Replacement						2,600			2,600
2 Storm Drainage Improvements Program								300	300
3 Chopin Avenue Water Main Extension				65		190		65	320
4 Mozart Street Water Main Extension				20		100		20	140
5 Cliffwood Avenue/Archwood Drive Water Main				40		70		40	150
6 Winter Forest Drainage Improvements						300			300
7 Oakland Drive/Rosewood Ave Watermain Replacement								60	60
8 Northwest Water Storage Facility						1,100	1,000	3,900	6,000
9 Idaho Avenue Water Main Replacement						500			500
10 Romence Road Water Main Replacement						450			450
11 Lake Connection Elimination Program						275			275
12 South Westnedge Avenue Relief Storm Sewer						675		75	750
13 Water System Reliability Study Update								110	110
14 Portage Road Water Main Extension, Helen Avenue to Byrd Drive						350			350
15 Pine View Water Storage Facility Renovation						350			350
16 Consolidated Drain Rehabilitation						400			400
17 Ramona Park Plat Water Main						350			350
18 East Milham Avenue Water Main Replacement								250	250
19 SCADA System Upgrade								60	60
20 Shuman Wellfield Iron Removal Facility						5,650			5,650
21 Lovers Lane Water Main Abandonment								50	50
22 Schuring Road Water Main Replacement								525	525
23 East Shore Drive Water Main Replacement								310	310
24 Northeast Quadrant Well Field Development						1,200			1,200
25 Woodland Elementary School Water Main								115	115
26 East Milham Avenue Water Main Abandonment								160	160
TOTALS				125		14,560	1,000	6,040	21,725



## 2016-2017 CAPITAL IMPROVEMENT PROGRAM PROJECTS



Projects listed below are not location specific:

Number shown within symbol denotes project number

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Water

**PROJECT NUMBER:** 1

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**PROJECT TITLE:** Shaver Road Water Main Replacement

**PROJECT DESCRIPTION:** Replacement of deteriorating water mains in Shaver Road from South Westnedge Avenue to West Osterhout Avenue.

**PROJECT JUSTIFICATION/NEED:** The existing water main in this area of Shaver Road has been indentified as older cast iron pipe which has been prone to leaks and breakage. The project is scheduled with planned improvements to this section of Shaver Road.

FY 2016-17: Replacement of water main in Shaver Road from Vanderbilt Avenue to West Centre Avenue with planned roadway improvements.

FY 2019-20: Replacement of water main in Shaver Road from West Centre Avenue to South Westnedge Avenue with planned roadway improvements.

FY 2020-21: Replacement of water main in Shaver Road from West Osterhout Avenue to Vanderbilt Avenue with planned roadway improvements.

**PROJECT BENEFIT/IMPACT:** Replacement of the existing water main will provide improved reliability and water quality in this area of the city and eliminate future maintenance concerns with the reconstruction of the Shaver Road roadway.

**OPERATING FUND IMPACT:** \$4,000 decrease in operating costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Water

**PROJECT NUMBER: 2**

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**PROJECT TITLE:** Storm Drainage Improvements Program

**PROJECT DESCRIPTION:** Address identified flooding problem areas that adversely impact public streets, commercial areas and private properties. Improvements planned under this program include expansion of retention basins, structural modifications, storm retention basins, berming to redirect storm flows, storm sewer improvements, and drainage channel regrading among others.

FY 2016-17 – Winters Drive Pump Station

**PROJECT JUSTIFICATION/NEED:** Heavy rainfalls resulted in flooding of certain public streets and private homes, which previously had not experienced flooding problems. These locations have been identified and will be addressed on a priority basis under this program.

**PROJECT BENEFIT/IMPACT:** Planned improvements will eliminate flooding of public streets and private homes. Improvements would reduce damage claims, improve traffic safety on streets previously subject to flooding and protect the general public from flooding concerns.

**OPERATING FUND IMPACT:** Planned projects will reduce maintenance costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Water

**PROJECT NUMBER: 3**

---

**PROJECT TITLE:** Chopin Avenue Water Main Extension

**PROJECT DESCRIPTION:** Install water main on Chopin Avenue, extending west from Mozart Street approximately 900 feet, to service eighteen existing residences on Chopin Avenue.

**PROJECT JUSTIFICATION/NEED:** This project is in response to a favorable citizen survey for installation of public water main.

**PROJECT BENEFIT/IMPACT:** The water main will provide a public water supply to a previously unserved area of the city. Firefighting capability will be enhanced in the area with the availability of public water.

**OPERATING FUND IMPACT:** Nominal increase in operating costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Water

**PROJECT NUMBER:** 4

---

**PROJECT TITLE:** Mozart Street Water Main Extension

**PROJECT DESCRIPTION:** Install water main on Mozart Street, extending north from Beethoven Avenue approximately 500 feet, to service seven existing residences on Mozart Street.

**PROJECT JUSTIFICATION/NEED:** This project is in response to a citizen petition for installation of public water main.

**PROJECT BENEFIT/IMPACT:** The water main will provide a public water supply to a previously unserved area of the city. Firefighting capability will be enhanced in the area with the availability of public water.

**OPERATING FUND IMPACT:** Nominal increase in operating costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Water

**PROJECT NUMBER: 5**

---

**PROJECT TITLE:** Cliffwood Avenue/Archwood Drive Water Main

**PROJECT DESCRIPTION:** Installation of new water mains in Cliffwood Avenue from South Westnedge Avenue to the east end and in Archwood Drive from Cliffwood Avenue to the south end. This project would be done in conjunction with the installation of new sanitary sewer in the Cliffwood Avenue/Archwood Drive subdivision.

**PROJECT JUSTIFICATION/NEED:** The water mains in Cliffwood Avenue and Archwood Drive will provide public water to an unserved area of the city. The project is in accordance with the Water Utility Master Plan.

**PROJECT BENEFIT/IMPACT:** Water mains will provide this neighborhood with a needed public utility. Fire fighting capabilities will be substantially enhanced with the availability of public water.

**OPERATING FUND IMPACT:** Nominal increase in operating costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Water

**PROJECT NUMBER: 6**

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**PROJECT TITLE:** Winter Forest Drainage Improvements

**PROJECT DESCRIPTION:** Repair and maintenance of storm drainage outfalls through the Winter Forest Well Field that connects Winter Forest Drive and Woodland Avenue with the Schuring Drain.

**PROJECT JUSTIFICATION/NEED:** The storm drainage outfalls from the Winter Forest Drive and Woodland Avenue storm sewer systems discharge through an open channel across the Winter Forest Well Field. High storm sewer flows and volumes cause erosion and undercutting in the channel and leads to sedimentation in the Schuring Drain.

**PROJECT BENEFIT/IMPACT:** The project will stabilize and reinforce the outfall channel and improve the function and safety of the existing channel. A restored channel will provide improved storm sewer capacity and improved water quality to Portage Creek.

**OPERATING FUND IMPACT:** Slight reduction in temporary soil erosion repair costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Water

**PROJECT NUMBER: 7**

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**PROJECT TITLE:** Oakland Drive/Rosewood Avenue Water Main Replacement

**PROJECT DESCRIPTION:** Replacement of deteriorating water mains across Oakland Drive at the Rosewood Avenue intersection.

**PROJECT JUSTIFICATION/NEED:** The existing water main in this area of Oakland Drive has been identified as older cast iron pipe and has been prone to leaks and breakage. The project is scheduled with planned improvements to this section of Oakland Drive.

**PROJECT BENEFIT/IMPACT:** Replacement of the existing water main will provide improved reliability and water quality in this area of the city and eliminate future maintenance concerns with the reconstruction of the Oakland Drive roadway.

**OPERATING FUND IMPACT:** \$4,000 decrease in operating costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Water

**PROJECT NUMBER:** 8

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**PROJECT TITLE:** Northwest Water Storage Facility

**PROJECT DESCRIPTION:** The project involves the design and replacement of the Haverhill elevated water tank with a larger facility to serve the city. Project costs have increased to account for environmental and abatement costs associated with demolition of the existing water tank.

FY 2018-19: Construction of the Northwest Water Storage Facility and subsequent removal of the existing water tank.

**PROJECT JUSTIFICATION/NEED:** Projections of system requirements indicate that additional storage capacity will be needed in the northwest part of the city to address increased water demands.

**PROJECT BENEFIT/IMPACT:** The additional storage capacity will allow the water system to continue to meet the increased demand and fire flow.

**OPERATING FUND IMPACT:** Minimal potential operating maintenance/activities.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Water

**PROJECT NUMBER:** 9

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**PROJECT TITLE:** Idaho Avenue Water Main Replacement

**PROJECT DESCRIPTION:** Replacement of deteriorating water mains on Idaho Avenue from Oregon Avenue to South Westnedge Avenue.

**PROJECT JUSTIFICATION/NEED:** The existing water main on Idaho Avenue has been identified as older cast iron pipe, which has been prone to leaks and breakage. The project is scheduled with planned improvements to this section of Idaho Avenue.

**PROJECT BENEFIT/IMPACT:** Replacement of the existing water main will provide improved reliability and water quality in this area of the city and eliminate future maintenance concerns with the reconstruction of the Idaho Avenue roadway.

**OPERATING FUND IMPACT:** \$4,000 decrease in operating costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Water

**PROJECT NUMBER:** 10

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**PROJECT TITLE:** Romence Road Water Main Replacement

**PROJECT DESCRIPTION:** Replacement of deteriorating water mains on Romence Road from Kiltz Street to Constitution Boulevard.

**PROJECT JUSTIFICATION/NEED:** The existing water main in this area of Romence Road has been identified as older cast iron pipe, which has been prone to leaks and breakage. The project is scheduled with planned improvements to this section of Romence Road.

**PROJECT BENEFIT/IMPACT:** Replacement of the existing water main will provide improved reliability and water quality in this area of the city and eliminate future maintenance concerns with the reconstruction of the Romence Road roadway.

**OPERATING FUND IMPACT:** \$4,000 decrease in operating costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Water

**PROJECT NUMBER:** 11

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**PROJECT TITLE:** Lake Connection Elimination Program

**PROJECT DESCRIPTION:** Elimination and/or treatment of direct stormwater discharges to West Lake from Barberry Avenue and Forest Drive, and Gourneck Lake from Sudan Street.

**PROJECT JUSTIFICATION/NEED:** Provide appropriate storm drainage facilities in accordance with the Stormwater Master Plan. Treatment of stormwater prior to discharge is required under current Michigan Department of Environmental Quality.

**PROJECT BENEFIT/IMPACT:** Proper stormwater treatment and disposal has been shown to improve surface water and groundwater quality.

**OPERATING FUND IMPACT:** Minimal impact on operating budget.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Water

**PROJECT NUMBER:** 12

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**PROJECT TITLE:** South Westnedge Avenue Relief Storm Sewer

**PROJECT DESCRIPTION:** Installation of a relief storm sewer from the intersection of South Westnedge Avenue and J.L. Hudson Drive east to the wetlands mitigation area north of Romence Road Parkway.

**PROJECT JUSTIFICATION/NEED:** South Westnedge Avenue at J.L. Hudson Drive and the adjacent shopping area to the west have experienced recurrent flooding during periods of moderate rainfall.

**PROJECT BENEFIT/IMPACT:** Elimination of flooding conditions on South Westnedge Avenue and adjacent parking areas will improve traffic flow, protect private property and ensure safe driving conditions on South Westnedge Avenue during inclement weather conditions.

**OPERATING FUND IMPACT:** Minimal reduction in operating costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Water

**PROJECT NUMBER:** 13

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**PROJECT TITLE:** Water System Reliability Study Update

**PROJECT DESCRIPTION:** The Michigan Safe Drinking Water Act requires that water system owners provide the Michigan Department of Environmental Quality a water system reliability study. The study analyzes present and projected average daily water demands, fire flow demands and the basis of computed demand projections.

**PROJECT JUSTIFICATION/NEED:** Reliability studies must be provided to the Michigan Department of Environmental Quality every five years. The five year study interval and ten year demand projections are needed to ensure that the city water system is reliable and will meet the projected demands on the system. The study will identify any new additions to the system that will be required to ensure adequate flow.

**PROJECT BENEFIT/IMPACT:** The water reliability study will ensure that further new development in the city will not be restricted due to lack of water flow availability and adequate pressure.

**OPERATING FUND IMPACT:** No impact on operating costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Water

**PROJECT NUMBER:** 14

---

**PROJECT TITLE:** Portage Road Water Main Extension, Helen Avenue to Byrd Drive

**PROJECT DESCRIPTION:** Installation of water main on west side of Portage Road from Helen Avenue to Byrd Drive.

**PROJECT JUSTIFICATION/NEED:** The installation of the new water main extension is a system improvement intended to eliminate dead end water mains, improve water pressure and flow, increase the dependability of the water system and assure continuity of water service to businesses in the service area. This project was recommended in the 2013 Water Reliability Study.

**PROJECT BENEFIT/IMPACT:** The water main system improvement would provide added fire protection to existing businesses on Portage Road, encourage development/redevelopment along the Portage Road Corridor and adjacent vacant property and substantially reduce the possibility of unexpected water service disruptions.

**OPERATING FUND IMPACT:** Nominal increase in operating costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Water

**PROJECT NUMBER:** 15

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**PROJECT TITLE:** Pine View Water Storage Facility Renovation

**PROJECT DESCRIPTION:** Clean, repair and recoat the steel areas of Pine View water storage facility with a three-coat epoxy system.

**PROJECT JUSTIFICATION/NEED:** The existing water facility was constructed in 1992 and the original interior coating of the storage tank area will be reaching the end of their useful life. The exterior coating system was replaced in 2012. The interior coating system needs to be renovated on a regular basis to prevent long term deterioration.

**PROJECT BENEFIT/IMPACT:** Cleaning and recoating the surfaces of the water storage facility will maintain the structural integrity of the facility, provide consistent water quality and increase the service life of the facility.

**OPERATING FUND IMPACT:** Minimal reduction in annual spot painting.

## IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Water

**PROJECT NUMBER:** 16

---

**PROJECT TITLE:** Consolidated Drain Rehabilitation Program

**PROJECT DESCRIPTION:** Soils and water quality testing, analysis, channel cleaning and rehabilitation of the existing Consolidated Drain facility.

**PROJECT JUSTIFICATION/NEED:** Provide appropriate functioning storm drainage facilities in accordance with the Stormwater Master Plan and Well Head Protection Plan for stormwater discharges in proximity of Winter Forest Drive, Garden Lane and Portage Creek water wells. Pretreatment and detention of stormwater prior to discharge to water bodies is required under U.S. Environmental Protection Agency Phase II regulations.

**PROJECT BENEFIT/IMPACT:** Continued biological treatment will minimize pollutant loading to Portage Creek and provide additional protection to the city water supply wells. Regionalized stormwater detention lessens the chances of local flooding, provides natural habitat, and eliminates the safety and aesthetic concerns of numerous smaller basins in the watershed.

**OPERATING FUND IMPACT:** \$1,000 increase in operating costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Water

**PROJECT NUMBER:** 17

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**PROJECT TITLE:** Ramona Park Plat Water Main

**PROJECT DESCRIPTION:** Installation of new water mains in Gray Street, Mahoney Street, Lum Street and Hayes Street from South Sprinkle Road to Waruf Avenue. This project would be done in conjunction with the installation of new sanitary sewers in the Ramona Park plat.

**PROJECT JUSTIFICATION/NEED:** The water mains in Gray Street, Mahoney Street, Lum Street and Hayes Street will provide public water to an unserved area of the city. The project is in accordance with the Water Utility Master Plan. This project has been petitioned by benefiting property owners. This project is funded in part by special assessment bonds and will move forward in the Capital Improvement Program subject to property owner support.

**PROJECT BENEFIT/IMPACT:** Water mains will provide this neighborhood with a needed public utility. Fire fighting capabilities will be substantially enhanced with the availability of public water.

**OPERATING FUND IMPACT:** Nominal increase in operating costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Water

**PROJECT NUMBER:** 18

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**PROJECT TITLE:** East Milham Avenue Water Main Replacement

**PROJECT DESCRIPTION:** Replacement of deteriorating water mains in East Milham Avenue from South Westnedge Avenue to Concord Street.

**PROJECT JUSTIFICATION/NEED:** The existing water main in this area of East Milham Avenue has been identified as older cast iron pipe which has been prone to leaks and breakage. The project is scheduled with planned improvements to this section of East Milham Avenue roadway.

**PROJECT BENEFIT/IMPACT:** Replacement of the existing water main will provide improved reliability and water quality in this area of the city and eliminate future maintenance concerns with the reconstruction of the East Milham Avenue roadway.

**OPERATING FUND IMPACT:** \$4,000 decrease in operating costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Water

**PROJECT NUMBER:** 19

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**PROJECT TITLE:** SCADA System Upgrade

**PROJECT DESCRIPTION:** Replacement of the program logic controllers and radios of the utility supervisory control and data acquisition system (SCADA), which controls and monitors the water system consisting of 20 wells at 14 city well sites, Garden Lane Water Treatment Facility, 55 sanitary sewer lift stations and two water towers. The replacement/upgrade of the critical hardware of the SCADA system is planned every five years.

**PROJECT JUSTIFICATION/NEED:** To protect against unattended failures of city water and sewer utility, the SCADA system has been in place for more than ten years and provides remote warning when a failure occurs at a well house or sewer lift station location. The level of warning afforded by SCADA allows utility crews to respond to such events as water service disruptions, for example, before they become problems.

**PROJECT BENEFIT/IMPACT:** Ensures that core technology infrastructure continues to function properly allowing for continued SCADA operations. System upgrade will make technology current and improve the utility system.

**OPERATING FUNDS IMPACT:** Cost savings may be realized in service and maintenance.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Water

**PROJECT NUMBER:** 20

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**PROJECT TITLE:** Shuman Well Field Iron Removal Facility

**PROJECT DESCRIPTION:** Design engineering and construction of an iron and manganese removal plant at the Shuman Well Field.

FY 2021-22: Design Engineering  
FY 2022-23: Construction of the Shuman Well Field Iron Removal Facility

**PROJECT JUSTIFICATION/NEED:** The project will increase water availability as well levels continue to be stressed in the Kalamazoo/Portage watershed. The Shuman Well will be able to supply significant water capacity from a different water source (aquifer). The presence of elevated concentrations of iron and manganese in this well can cause taste, odor, and other complaints from customers. An iron removal facility would improve the water quality of the Shuman Well and greatly increase the value of this well.

**PROJECT BENEFIT/IMPACT:** The project will provide necessary engineering and construction of an iron removal facility as determined by a previous feasibility study.

**OPERATING FUND IMPACT:** To be determined based on type of facility constructed.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Water

**PROJECT NUMBER:** 21

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**PROJECT TITLE:** Lovers Lane Water Main Abandonment

**PROJECT DESCRIPTION:** Abandonment of deteriorating water main in Lovers Lane from East Centre Avenue to Garden Lane.

**PROJECT JUSTIFICATION/NEED:** This area of Lovers Lane has two parallel existing water mains. One of the water mains has been identified as older cast iron pipe which has been prone to leaks and breakage. The project is scheduled with planned improvements to this section of Lovers Lane.

**PROJECT BENEFIT/IMPACT:** Abandonment of the existing water main will provide improved reliability and water quality in this area of the city and eliminate future maintenance concerns with the reconstruction of the Lovers Lane roadway.

**OPERATING FUND IMPACT:** \$4,000 decrease in operating costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Water

**PROJECT NUMBER:** 22

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**PROJECT TITLE:** Schuring Road Water Main Replacement

**PROJECT DESCRIPTION:** Replacement of deteriorating water mains in Schuring Road from Oakland Drive to Hampton Oaks Drive.

**PROJECT JUSTIFICATION/NEED:** The existing water main in this area of Schuring Road has been identified as older cast iron pipe which has been prone to leaks and breakage. The project is scheduled with planned improvements to this section of Schuring Road roadway.

**PROJECT BENEFIT/IMPACT:** Replacement of the existing water main will provide improved reliability and water quality in this area of the city and eliminate future maintenance concerns with the reconstruction of the Schuring Road roadway.

**OPERATING FUND IMPACT:** \$4,000 decrease in operating costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Water

**PROJECT NUMBER:** 23

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**PROJECT TITLE:** East Shore Drive Water Main Replacement

**PROJECT DESCRIPTION:** Replacement of deteriorating water mains in East Shore Drive from Cox's Drive to the east, a distance of 2,000 feet.

**PROJECT JUSTIFICATION/NEED:** The existing water main in this area of East Shore Drive has been identified as older cast iron pipe which has been prone to leaks and breakage. The project is scheduled with planned improvements to this section of East Shore Drive roadway.

**PROJECT BENEFIT/IMPACT:** Replacement of the existing water main will provide improved reliability and water quality in this area of the city and eliminate future maintenance concerns with the reconstruction of the East Shore Drive roadway.

**OPERATING FUND IMPACT:** \$4,000 decrease in operating costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Water

**PROJECT NUMBER:** 24

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**PROJECT TITLE:** Northeast Quadrant Well Field Development

**PROJECT DESCRIPTION:** The acquisition, development and construction of a new water supply located in the northeast area of the city. The project will include acquisition of property suitable for construction and treatment of a reliable water supply.

**PROJECT JUSTIFICATION/NEED:** United States Environmental Protection Agency regulations on arsenic levels have made several city wells unavailable for daily water demand. As demand continues to grow in the northeast quadrant of the city, additional fire flow and use capacity will be required to meet Michigan Department of Environmental Quality requirements.

**PROJECT BENEFIT/IMPACT:** The project will result in additional water capacity, increased fire flow capacity and improved reliability in the water system.

**OPERATING FUND IMPACT:** Increase in electrical and chemical costs offset by customer charges.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Water

**PROJECT NUMBER:** 25

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**PROJECT TITLE:** Woodland Elementary School Water Main

**PROJECT DESCRIPTION:** Installation of water main to loop the water main at the elementary school.

**PROJECT JUSTIFICATION/NEED:** The installation of the new water main extension is a system improvement intended to eliminate dead end water mains, improve water pressure and flow, increase the dependability of the water system and assure continuity of water service to customers in the service area. This project was recommended in the 2013 Water Reliability Study.

**PROJECT BENEFIT/IMPACT:** The water main system improvement would provide added fire protection to the school and existing adjacent homes and substantially reduce the possibility of unexpected water service disruptions.

**OPERATING FUND IMPACT:** Nominal increase in operating costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Water

**PROJECT NUMBER:** 26

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**PROJECT TITLE:** East Milham Avenue Water Main Abandonment

**PROJECT DESCRIPTION:** Abandonment of deteriorating water main in East Milham Avenue from South Sprinkle Road to Corporate Avenue

**PROJECT JUSTIFICATION/NEED:** This area of East Milham Avenue has two parallel existing water mains. One of the water mains has been identified as older cast iron pipe which has been prone to leaks and breakage. The project is scheduled with planned improvements to this section of East Milham Avenue.

**PROJECT BENEFIT/IMPACT:** Abandonment of the existing water main will provide improved reliability and water quality in this area of the city and eliminate future maintenance concerns with the reconstruction of the East Milham Avenue roadway.

**OPERATING FUND IMPACT:** \$4,000 decrease in operating costs.

CAPITAL IMPROVEMENT PROJECT SUMMARY SANITARY SEWER

Project Expenditures (\$000)

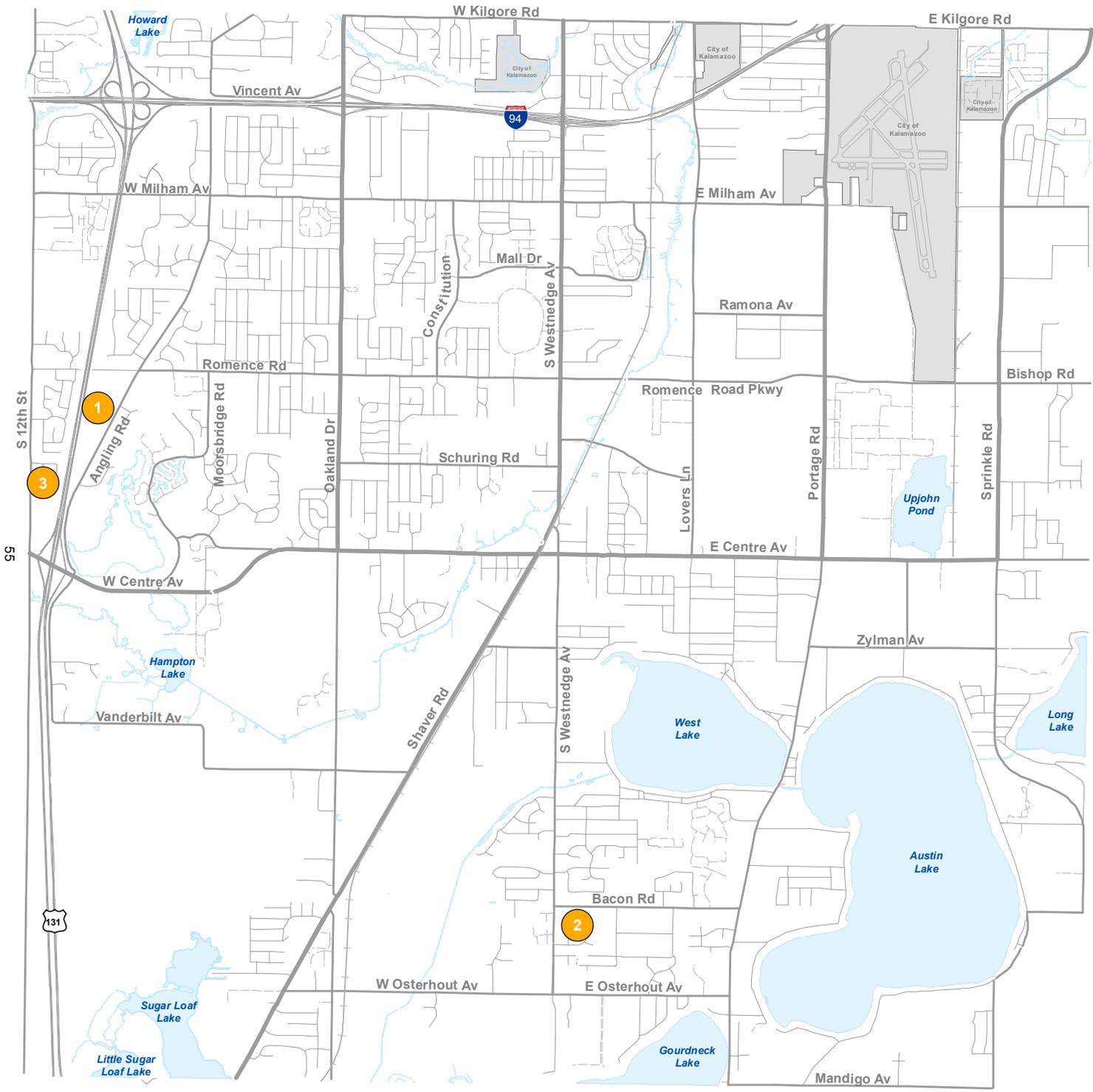
Project Number/Title	Fiscal Year											Total
	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26		
1 Angling Road Sanitary Sewer, Squire Heath Lane to Romence Road	1,320											1,320
2 Cliffwood Avenue/Archwood Drive Sanitary Sewer	270											270
3 Norfolk Circle Sanitary Sewer Replacement	120											120
4 Weaver Drive Sanitary Sewer, Charles Street to north end		315										315
5 Wetherbee Avenue Sanitary Sewer, Portage Road to Woodlawn Drive		210										210
6 Romence Road Sanitary Sewer, Angling Road to west end			295									295
7 Ramona Park Plat Sanitary Sewer					950							950
8 Lift Station Renovations					420							420
9 Trunk Sewer Condition Assessment					175							175
10 South Westmedge Ave Sanitary Sewer Lead Installation					60							60
11 SCADA System Upgrade					450							450
12 Pump Station Mechanical Upgrades						400						400
13 Zylman Avenue Sanitary Sewer, South Sprinkle Road to Deep Point Drive								660				660
<b>TOTALS</b>	1,710	525	295		1,605	450	400	660				5,645
Special Assessments	195	80	30		75							380
Capital Improvement Bonds	1,320	365	235		1,455	450	400	660				4,885
Municipal Street Fund	195	80	30		75							380
City Share Cash												

CAPITAL IMPROVEMENT PROJECT SUMMARY

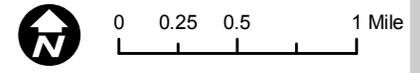
SANITARY SEWER

Funding Sources (\$000)

Project Number/Title	BANs	Fed/State Grants	Other Revenues	S/A Bonds	S/A's & Build Auth Bonds	CIP Bonds	Municipal Str. Fund	Sewer Fund	Total
1 Angling Road Sanitary Sewer, Squire Heath Lane to Romence Road				165		990	165		1,320
2 Cliffwood Avenue/Archwood Drive Sanitary Sewer				30		210	30		270
3 Norfolk Circle Sanitary Sewer Replacement						120			120
4 Weaver Drive Sanitary Sewer, Charles Street to north end				50		215	50		315
5 Wetherbee Avenue Sanitary Sewer, Portage Road to Woodlawn Drive				30		150	30		210
6 Romence Road Sanitary Sewer, Angling Road to west end				30		235	30		295
7 Ramona Park Plat Sanitary Sewer				75		800	75		950
8 Lift Station Renovations						420			420
9 Trunk Sewer Condition Assessment						175			175
10 South Westnedge Ave Sanitary Sewer Lead Installation						60			60
11 SCADA System Upgrade						450			450
12 Pump Station Mechanical Upgrades						400			400
13 Zylman Avenue Sanitary Sewer, South Sprinkle Road to Deep Point Drive						660			660
<b>TOTALS</b>				<b>380</b>		<b>4,885</b>	<b>380</b>		<b>5,645</b>



## 2016-2017 CAPITAL IMPROVEMENT PROGRAM PROJECTS



**1** Sanitary Sewer

Projects listed below are not location specific:

Number shown within symbol denotes project number

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Sanitary Sewer

**PROJECT NUMBER: 1**

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**PROJECT TITLE:** Angling Road Sanitary Sewer, Squire Heath Lane to Romence Road

**PROJECT DESCRIPTION:** Install sanitary sewer and appurtenances in Angling Road from Squire Heath Lane to Romence Road. This project is in conjunction with the planned Angling Road reconstruction project.

**PROJECT JUSTIFICATION/NEED:** The extension of sanitary sewers to developed and developable areas is recommended to protect the valuable groundwater resource from contamination. This area conforms to a Tier 2 impact area per the Sanitary Sewer/Street Reconstruction Policy. Proposed projects are prioritized based on environmental, land use and other factors to maximize the protection of the environment and effectively utilize available funding.

**PROJECT BENEFIT/IMPACT:** The project will provide sanitary sewer service to approximately 48 properties along Angling Road and reduce the potential for groundwater contamination.

**OPERATING FUND IMPACT:** When connected, developed properties in the project area will generate approximately \$14,300 in annual revenue. Corresponding treatment charges paid to the City of Kalamazoo will increase expenditures by approximately \$8,200 annually.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Sanitary Sewer

**PROJECT NUMBER:** 2

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**PROJECT TITLE:** Cliffwood Avenue/Archwood Drive Sanitary Sewer

**PROJECT DESCRIPTION:** Install sanitary sewer and appurtenances in Cliffwood Avenue from South Westnedge Avenue to the east end of the plat, and in Archwood Drive from Cliffwood Avenue to the south road end. This project is in conjunction with the local street reconstruction.

**PROJECT JUSTIFICATION/NEED:** The extension of sanitary sewers to developed and developable areas is recommended to protect the valuable groundwater resource from contamination. This area conforms to a Tier 2 impact area per the Sanitary Sewer/Street Reconstruction Policy. Proposed projects are prioritized based on environmental, land use and other factors to maximize the protection of the environment and effectively utilize available funding.

**PROJECT BENEFIT/IMPACT:** The project will provide sanitary sewer service to approximately 12 properties along Cliffwood Avenue and Archwood Drive and reduce the potential for groundwater contamination.

**OPERATING FUND IMPACT:** When connected, developed properties in the project area will generate approximately \$6,600 in annual revenue. Corresponding treatment charges paid to the City of Kalamazoo will increase expenditures by approximately \$4,000 annually.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Sanitary Sewer

**PROJECT NUMBER:** 3

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**PROJECT TITLE:** Norfolk Circle Sanitary Sewer Replacement

**PROJECT DESCRIPTION:** Replace sanitary sewer and appurtenances for Norfolk Circle from 12<sup>th</sup> Street to Norfolk Circle Drive. This project is in response to a recognized deficiency in the sanitary sewer collection system.

**PROJECT JUSTIFICATION/NEED:** The existing sanitary sewer that serves the Norfolk Circle area was constructed in the 1970's with clay pipe material. The material is subject to root intrusion and cracking. Recent flow blockages require constant monitoring and cleaning.

**PROJECT BENEFIT/IMPACT:** The project will reduce the potential for sanitary sewer backups and reduce the potential for groundwater contamination.

**OPERATING FUND IMPACT:** Reduction in sanitary sewer maintenance costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Sanitary Sewer

**PROJECT NUMBER:** 4

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**PROJECT TITLE:** Weaver Drive Sanitary Sewer, Charles Street to north end

**PROJECT DESCRIPTION:** Install sanitary sewer and appurtenances in Weaver Drive from Charles Street to north end. This project is in conjunction with the local street reconstruction.

**PROJECT JUSTIFICATION/NEED:** The extension of sanitary sewers to developed and developable areas is recommended to protect the valuable groundwater resource from contamination. This area conforms to a Tier 1 impact area per the Sanitary Sewer/Street Reconstruction Policy and sewer connection is required. Proposed projects are prioritized based on environmental, land use and other factors to maximize the protection of the environment and effectively utilize available funding.

**PROJECT BENEFIT/IMPACT:** The project will provide sanitary sewer services to approximately 12 properties along Weaver Drive and reduce the potential for groundwater contamination.

**OPERATING FUND IMPACT:** When connected, developed properties in the project area will generate approximately \$2,500 in annual revenue. Corresponding treatment charges paid to the City of Kalamazoo will increase expenditures by approximately \$1,500 annually.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Sanitary Sewer

**PROJECT NUMBER: 5**

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**PROJECT TITLE:** Wetherbee Avenue Sanitary Sewer, Portage Road to Woodlawn Drive

**PROJECT DESCRIPTION:** Install sanitary sewer and appurtenances in Wetherbee Avenue from Portage Road to Woodlawn Drive. This project is in conjunction with local street reconstruction.

**PROJECT JUSTIFICATION/NEED:** The extension of sanitary sewers to developed and developable areas is recommended to protect the valuable groundwater resource from contamination. The area conforms to a Tier 1 impact area per the Sanitary Sewer/Street Reconstruction Policy and sewer connection is required. Proposed projects are prioritized based on environmental, land use and other factors to maximize the protection of the environment and effectively utilize available funding.

**PROJECT BENEFIT/IMPACT:** The project will provide sanitary sewer services to approximately six properties along Wetherbee Avenue and reduce the potential for groundwater contamination.

**OPERATING FUND IMPACT:** When connected, developed properties in the project area will generate approximately \$1,250 in annual revenue. Corresponding treatment charges paid to the City of Kalamazoo will increase expenditures by approximately \$650 annually.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Sanitary Sewer

**PROJECT NUMBER:** 6

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**PROJECT TITLE:** Romence Road Sanitary Sewer, Angling Road to west end

**PROJECT DESCRIPTION:** The extension of sanitary sewers and appurtenances in Romence Road from the end of the existing sanitary sewer, west of Angling Road, to the west dead end of Romence Road.

**PROJECT JUSTIFICATION/NEED:** The extension of sanitary sewers to developed areas is recommended to protect the valuable groundwater resource from contamination. This area conforms to a Tier 2 impact area per the Sanitary Sewer/Street Reconstruction Policy. Proposed sewer extension projects are prioritized based on environmental land use and other factors to maximize the protection of the environment and effectively utilize available funding.

**PROJECT BENEFIT/IMPACT:** The project will provide sanitary sewer service to approximately nine properties along this section of Romence Road and reduce the potential for groundwater contamination. The deteriorated roadway will be replaced with new asphalt pavement.

**OPERATING FUND IMPACT:** When connected, developed properties in the project area will generate approximately \$2,700 in annual revenue. Corresponding treatment charges paid to the City of Kalamazoo will increase expenditures by approximately \$1,600 annually.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Sanitary Sewer

**PROJECT NUMBER:** 7

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**PROJECT TITLE:** Ramona Park Plat Sanitary Sewer

**PROJECT DESCRIPTION:** Installation of sanitary sewers and appurtenances in the following streets: Gray Street, Mahoney Street, Lum Street and Hayes Street from South Sprinkle Road to Waruf Avenue. This project will be done in conjunction with the Ramona Park Plat Water Main Project and local street reconstruction.

**PROJECT JUSTIFICATION/NEED:** The sanitary sewers will complete the public sanitary sewer system in the neighborhood and provide public sewer service to an unserved area of the city. Sanitary sewers protect the city groundwater resources from contamination and improve public health and safety. This area conforms to a Tier 1 impact area per the Sanitary Sewer/Street Reconstruction Policy and sewer connection is required. This project has been previously petitioned by benefiting property owners.

**PROJECT BENEFIT/IMPACT:** Sanitary sewers will provide service to approximately 30 properties and reduce the potential for groundwater contamination.

**OPERATING FUND IMPACT:** When connected, existing developed properties in the project area will generate approximately \$22,000 annual income, with corresponding expenditures for treatment charges to the City of Kalamazoo of \$15,000.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Sanitary Sewer

**PROJECT NUMBER: 8**

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**PROJECT TITLE:** Lift Station Renovations

**PROJECT DESCRIPTION:** Replacement of control panels, pumps, wet well and additional site landscaping.

**PROJECT JUSTIFICATION/NEED:** Although routine maintenance is accomplished each year on sanitary sewer lift stations, renovation is needed periodically to improve the efficiency, reliability and overall appearance of the lift stations. Most lift stations in the city were installed more than twenty years ago and are at the point where major renovation is needed. Renovation will result in the most cost effective upgrade with the least inconvenience to customers.

**PROJECT BENEFIT/IMPACT:** Renovations of these facilities will improve the efficiency and reliability of the lift stations, improve overall appearance and reduce required annual maintenance cost.

**OPERATING FUND IMPACT:** Substantial reduction in maintenance cost.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Sanitary Sewer

**PROJECT NUMBER:** 9

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**PROJECT TITLE:** Trunk Sewer Condition Assessment

**PROJECT DESCRIPTION:** Investigate the structural condition of the sanitary sewer trunk system through video and other nondestructive testing methods.

**PROJECT JUSTIFICATION/NEED:** The city trunk sewer system was constructed in the late 1960's through the 1980's. The system consists primarily of concrete pipe and structures. It is a system requirement to assess the assets of the sewer system to anticipate replacement and rehabilitation.

**PROJECT BENEFIT/IMPACT:** Investigation of the trunk sewer condition will provide data to schedule system maintenance and replacement needs as well as locate potential failure locations.

**OPERATING FUND IMPACT:** Cost savings may be realized in avoiding costly repairs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Sanitary Sewer

**PROJECT NUMBER:** 10

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**PROJECT TITLE:** South Westnedge Avenue Sanitary Sewer Lead Installation

**PROJECT DESCRIPTION:** Install sanitary sewer service leads where service leads do not exist and replace problematic sanitary sewer leads in conjunction with the South Westnedge Avenue street reconstruction project, South Shore Drive to Osterhout Avenue.

**PROJECT JUSTIFICATION/NEED:** When various sanitary sewers were constructed, service leads to undeveloped properties were not installed. The roadways will be reconstructed, improved and service leads installed concurrent with the road projects.

**PROJECT BENEFIT/IMPACT:** Sanitary sewer service leads installed concurrently with the road projects will minimize construction activity. In addition, open cutting of the new pavement will not be necessary, reducing maintenance costs.

**OPERATING FUND IMPACT:** Sewer connections generate approximately \$3,500 annual income, with expenditures for treatment charges of approximately \$1,500 annually.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Sanitary Sewer

**PROJECT NUMBER:** 11

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**PROJECT TITLE:** SCADA System Upgrade

**PROJECT DESCRIPTION:** Replacement of the program logic controllers and radios for the utility supervisory control and data acquisition system (SCADA), which controls and monitors the utility system consisting of 20 wells at 14 city well sites, 55 sanitary sewer lift stations, Garden Lane Water Treatment Facility and two water towers. The city plans the replacement/upgrade of the critical hardware of the SCADA system every five years.

**PROJECT JUSTIFICATION/NEED:** To protect against unintended failures of the City water and sewer utility, the current SCADA system will have been in place for more than ten years and provides remote warning when a failure occurs at a well house or sewer lift station location. The level of warning afforded by SCADA allows utility crews to respond to such events as, for example, sanitary sewer lift station pump failures before they become problems.

**PROJECT BENEFIT/IMPACT:** Ensures that core technology infrastructure continues to function properly allowing for continued SCADA operations. System upgrade will make technology current and improve the utility system.

**OPERATING FUNDS IMPACT:** Cost savings may be realized in service and maintenance.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Sanitary Sewer

**PROJECT NUMBER:** 12

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**PROJECT TITLE:** Pump Station Mechanical Upgrades

**PROJECT DESCRIPTION:** Replacement of control panels, pumps, motor control units and other mechanical appurtenances.

**PROJECT JUSTIFICATION/NEED:** Although routine maintenance is accomplished each year on sanitary sewer pump stations, renovation is needed periodically to improve the efficiency, reliability and overall appearance of the lift stations. The larger “block” pump stations in the city were installed more than thirty years ago and are heavily used to pump sewage to the trunk sewer system. Renovation will result in the most cost effective upgrade with the least inconvenience to customers.

**PROJECT BENEFIT/IMPACT:** Renovations of these facilities will improve the efficiency and reliability of the pump stations, improve overall efficiency and reliability and reduce required annual maintenance cost.

**OPERATING FUND IMPACT:** Substantial reduction in maintenance cost.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Transportation and Utilities

**PROJECT CATEGORY:**  
Sanitary Sewer

**PROJECT NUMBER:** 13

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**PROJECT TITLE:** Zylman Avenue Sanitary Sewer, South Sprinkle Road to Deep Point Drive

**PROJECT DESCRIPTION:** Install sanitary sewer and appurtenances in Zylman Avenue from South Sprinkle Road to Deep Point Drive. This project will be done in conjunction with the Zylman Avenue water main project and local street reconstruction projects.

**PROJECT JUSTIFICATION/NEED:** The extension of sanitary sewers to developed and developable areas is recommended to protect the valuable groundwater resource from contamination. This area conforms to a Tier 1 impact area per the Sanitary Sewer / Street Reconstruction Policy and sewer connection is required. Proposed projects are prioritized based on environmental, land use and other factors to maximize the protection of the environment and effectively utilize available funding.

**PROJECT BENEFIT/IMPACT:** The project will provide sanitary sewer services to approximately 12 properties along Zylman Avenue and reduce the potential for groundwater contamination to nearby Long Lake.

**OPERATING FUND IMPACT:** When connected, developed properties in the project area will generate approximately \$4,400 in annual revenue. Corresponding treatment charges paid to the City of Kalamazoo will increase expenditures by approximately \$2,600 annually.

CAPITAL IMPROVEMENT PROJECT SUMMARY POLICE

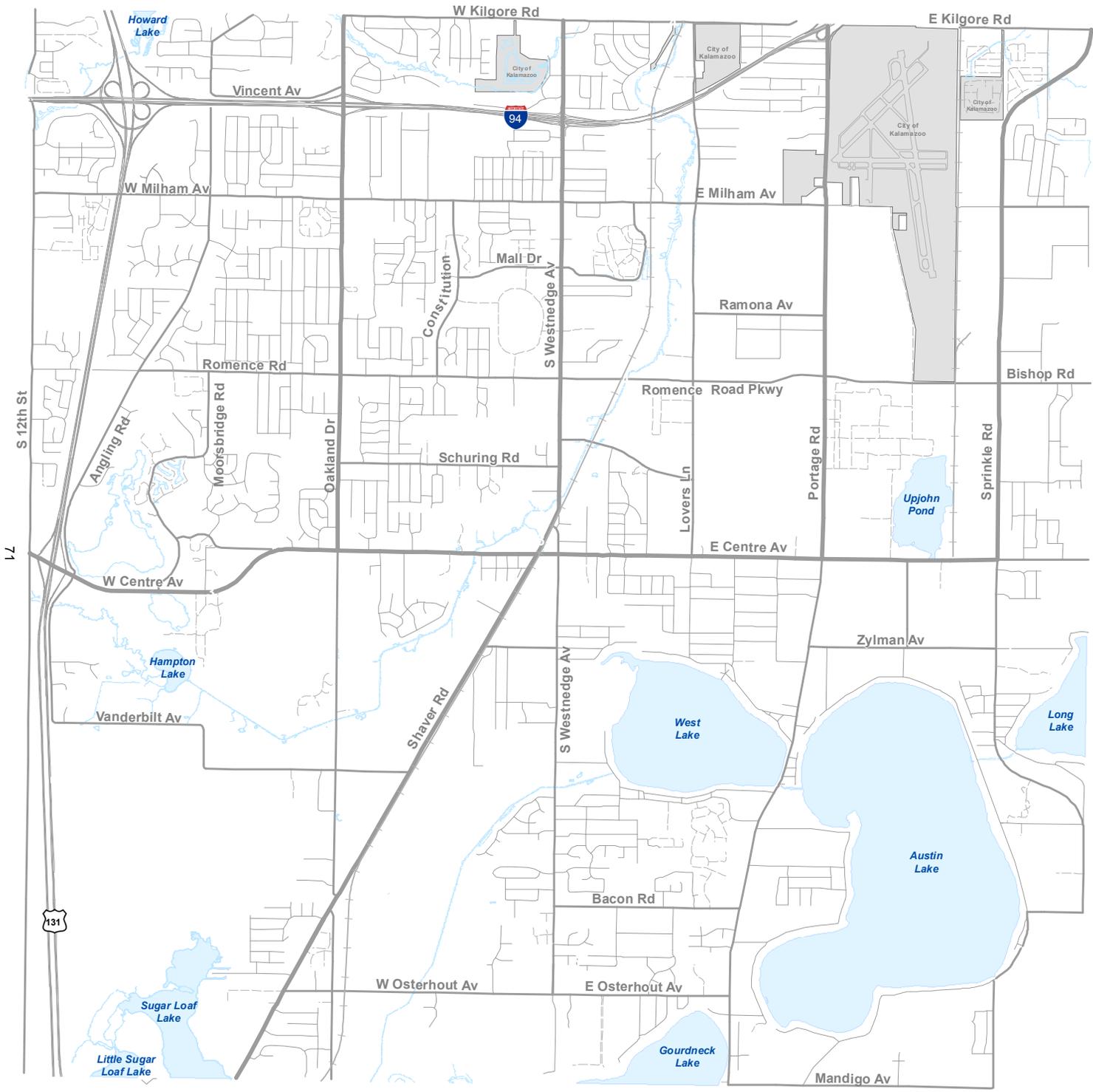
Project Expenditures (\$000)

Project Number/Title	Fiscal Year										Total	
	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26		
1 Police Vehicles												
2 Radio Infrastructure Equipment Replacement	244	203	170	203	317	170	170	170	170	179	1,996	
3 Crash/Crime/Fire Scene Illustrator	156										156	
4 Mobile Digital Surveillance	85										85	
5 Public Safety Facility Improvements		25									25	
6 Mobile Computer/Mobile Video Replacement Project			47		350		50				350	
7 9-1-1 Phone and Radio Equipment Replacement								300			300	
<b>TOTALS</b>	485	228	217	203	667	170	220	470	170	179	3,009	
Federal/State Grants												
Other Revenues	241		47		350		50	300			988	
Capital Improvement Bonds	244	228	170	203	317	170	170	170	170	179	2,021	
City Share Cash												

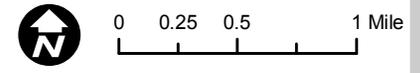
CAPITAL IMPROVEMENT PROJECT SUMMARY POLICE

Funding Sources (\$000)

Project Number/Title	SAFETEA- LU Funding	Fed/State Grants	Other Revenues	S/A's & S/A Bonds	Gen'l. Ob. Bonds	CIP Bonds	Other Financing	CIP Fund	Total
1 Police Vehicles								1,996	1,996
2 Radio Infrastructure Equipment Replacement						156			156
3 Crash/Crime/Fire Scene Illustrator						85			85
4 Mobile Digital Surveillance								25	25
5 Public Safety Facility Improvements						97			97
6 Mobile Computer/Mobile Video Replacement Project						350			350
7 9-1-1 Phone and Radio Equipment Replacement						300			300
TOTALS						988		2,021	3,009



## 2016-2017 CAPITAL IMPROVEMENT PROGRAM PROJECTS



Projects listed below are not location specific:



Number shown within symbol denotes project number

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Safety, Police Division

**PROJECT CATEGORY:**  
Police

**PROJECT NUMBER: 1**

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**PROJECT TITLE:** Police Vehicles

**PROJECT DESCRIPTION:** Replace marked units after 105,000 miles. Replace unmarked units after 95,000 miles or ten years. Corresponding replacements of both marked and unmarked vehicles with related equipment are planned for future years.

**PROJECT JUSTIFICATION/NEED:** It will be necessary to replace vehicles and related equipment in the upcoming years due to mileage and maintenance costs. Patrol vehicles are required to respond to emergency calls 24 hours a day, seven days a week, and reliability must be assured. The number of hours on an engine far exceeds the odometer reading. As a result, the wear on engine and parts is greater than a personal vehicle with similar mileage. As the mileage and engine hours increase, the vehicles become less responsive in maneuvering, and repair costs increase.

**PROJECT BENEFIT/IMPACT:** Provide transportation for police personnel, enabling emergency response.

**OPERATING FUND IMPACT:** Project will reduce annual repair and maintenance costs estimated at \$30,000 annually.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Safety, Police Division

**PROJECT CATEGORY:**  
Police

**PROJECT NUMBER: 2**

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**PROJECT TITLE:** Radio Infrastructure Equipment Replacement

**PROJECT DESCRIPTION:** Replace radio voter system, receiver equipment and equipment at five tower sites, as well as the 800 MHz base equipment.

**PROJECT JUSTIFICATION/NEED:** Replace and upgrade aging receiver and transmitter equipment at five tower sites, replace the repeater voter system, and replace the 800 MHz base equipment. The radio equipment is over ten years old and at end of design life. The manufacturer no longer supports the equipment, and replacement parts are not available.

**PROJECT BENEFIT/IMPACT:** Effective communications are essential in the Central Communications Center. Given the age of the existing equipment, critical failure is possible which will negatively impact emergency services, emergency communication, emergency response and firefighter and police officer safety.

**OPERATING FUND IMPACT:** No impact because monies for preventative maintenance are already in the operating budget.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Safety, Police Division

**PROJECT CATEGORY:**  
Police

**PROJECT NUMBER:** 3

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**PROJECT TITLE:** Crash/Crime/Fire Scene Illustrator

**PROJECT DESCRIPTION:** Replace evidence mapping total station.

**PROJECT JUSTIFICATION/NEED:** Upgrade and replace the evidence mapping total station. The current equipment is ten years old and outdated. Newer systems have been developed to more accurately capture and measure traffic accident scenes, fire scenes and crime scenes with laser technology. The new scanning equipment provides an exact record of the scene, replacing crime sketches and reconstruction with 3D imaging. Also, forensic scientists can accurately analyze line of sight, blood splatter, and bullet trajectories.

**PROJECT BENEFIT/IMPACT:** Effective mapping or illustrations of fire scenes, crime scenes and reconstruction of traffic accidents are essential in evidence collection and court presentations. The use of this equipment will significantly reduce time spent on-scene, while improving safety and minimizing traffic congestion, as well as accurately documenting fire and crime scenes. This scanning technology provides the ideal data collection solution for accident reconstruction experts, law enforcement personnel, fire marshals and forensic scientists.

**OPERATING FUND IMPACT:** Standard software maintenance agreement

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Safety, Police Division

**PROJECT CATEGORY:**  
Police

**PROJECT NUMBER:** 4

---

**PROJECT TITLE:** Mobile Digital Surveillance

**PROJECT DESCRIPTION:** A mobile camera/surveillance system that includes a digital wireless network to bring real time video to the command center. Provides mobility and placement in high crime or repetitive problem areas with recording and date stamping for prosecution.

**PROJECT JUSTIFICATION/NEED:** Provide stable, self-installable, surveillance camera system with broadband/WiFi access.

**PROJECT BENEFIT/IMPACT:** Identification and prosecution of perpetrators, reduction in crime, and increased public safety.

**OPERATING FUND IMPACT:** Project will provide technology to reduce annual personnel costs associated with surveillance activities.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Safety, Police Division

**PROJECT CATEGORY:**  
Police

**PROJECT NUMBER:** 5

---

**PROJECT TITLE:**

Public Safety Facility Improvements

**PROJECT DESCRIPTION:**

FY 2018-19: Replace roofing insulation and flashing on the public safety annex, replace insulated glass and acoustical tile, and add an energy recovery exhaust system at headquarters. Complete repairs outlined in the Paradigm Design, Inc. facility audit.

FY 2022-23: Carpet replacement throughout facility. Complete additional repairs, as outlined in the Paradigm Design, Inc. facility audit.

**PROJECT JUSTIFICATION/NEED:**

A facility audit was conducted by Paradigm Design, Inc. in 2013 to evaluate needed repairs and upgrades within the Public Safety facility. The completed evaluation recommended various projects to ensure the integrity of the facility and upgrades to air handling equipment for the original structure. Also, the addition to the annex building for covered parking of police vehicles is needed to better maintain the patrol fleet and will reduce winter damage and snow removal costs.

**PROJECT BENEFIT/IMPACT:**

Improves and maintains quality of building use and decreases energy needs.

**OPERATING FUND IMPACT:**

Project will reduce annual maintenance costs to mitigate potential building system repairs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Safety, Police Division

**PROJECT CATEGORY:**  
Police

**PROJECT NUMBER:** 6

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**PROJECT TITLE:** Mobile Computer/Mobile Video Replacement Project

**PROJECT DESCRIPTION:** The mobile computer/mobile video project will upgrade all existing hardware, including all patrol car ruggedized mobile computers and digital mobile recorders. Project includes electronic traffic citations, computerized crash/traffic reports, and remote-connected handheld devices. With technology advances, computer/video replacements for marked patrol cars are scheduled for upgrades as the equipment reaches its life expectancy.

**PROJECT JUSTIFICATION/NEED:** Upgrades current technology and provides electronic reporting/citations, crash/traffic reports and other data, thereby increasing the efficiency of the patrol officers. Mobile video recording units document officer activities and citizen contacts and are used for evidence and training.

**PROJECT BENEFIT/IMPACT:** Increased employee efficiency by utilizing driver license barcodes and computerized accident reports. Provides additional information for investigative/arrest purposes, improving efficiency and increasing safety of operational personnel.

**OPERATING FUND IMPACT:** Project will reduce anticipated repair costs of up to \$20,000 annually for existing system components.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Safety, Police Division

**PROJECT CATEGORY:**  
Police

**PROJECT NUMBER:** 7

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**PROJECT TITLE:** 9-1-1 Phone and Radio Equipment Replacement

**PROJECT DESCRIPTION:** Replace 9-1-1 Portage Public Safety Communications Center phone and radio equipment.

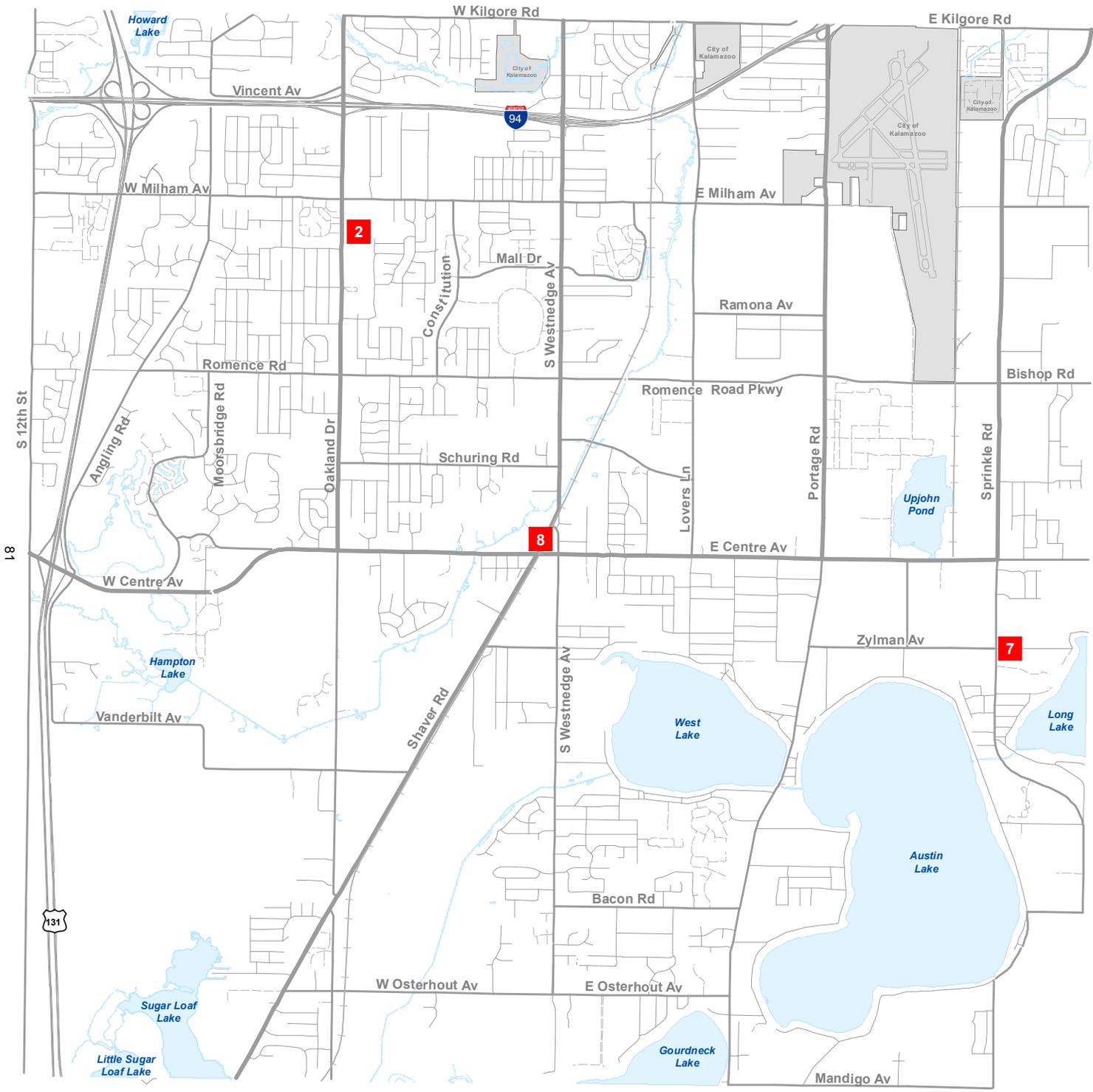
**PROJECT JUSTIFICATION/NEED:** Funds will be required to upgrade and/or replace the 9-1-1 phone and radio equipment; the industry standard for replacement is approximately seven to ten years. The current equipment was upgraded in 2014; therefore, funds should be set aside for future replacement of radio and phone equipment.

**PROJECT BENEFIT/IMPACT:** Effective communications are essential in the Central Communications Center.

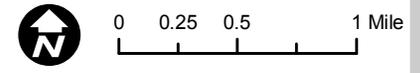
**OPERATING FUND IMPACT:** Standard software maintenance agreement







## 2016-2017 CAPITAL IMPROVEMENT PROGRAM PROJECTS



**1** Fire

Projects listed below are not location specific:

- 1**
- 3**
- 4**
- 5**
- 6**

Number shown within symbol denotes project number

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Safety, Fire Division

**PROJECT CATEGORY:**  
Fire

**PROJECT NUMBER: 1**

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**PROJECT TITLE:** Replace 2001 Sutphen Aerial Tower

**PROJECT DESCRIPTION:** Replace 2001 Sutphen Aerial Tower

**PROJECT JUSTIFICATION/NEED:** At the time of replacement, this vehicle will be 17 years old and approaching the end of its useful life. Although several items on the aerial ladder were upgraded in 2015, all other items will be 17 years old. Since these upgrades took place, additional repairs were required causing concern over the capabilities of this aerial device. Repair parts will become more difficult to obtain. Replacement of the vehicle is in accord with the Fire Department Apparatus Strategic Plan, which specifies the replacement of each fire apparatus at the end of its useful life. The new vehicle will incorporate advances in fire apparatus design and will be compliant with all current standards and ISO requirements.

**PROJECT BENEFIT/IMPACT:** A new aerial device will allow the Fire Division to safely perform life safety and fire suppression activities. The new vehicle will comply with all current standards and safety features.

**OPERATING FUND IMPACT:** Reduced maintenance and operating expenses.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Safety, Fire Division

**PROJECT CATEGORY:**  
Fire

**PROJECT NUMBER:** 2

---

**PROJECT TITLE:** Fire Station No. 2 Facility Replacement

**PROJECT DESCRIPTION:** New construction of an approximate 15,000 square foot new Fire Station No. 2 facility on Oakland Drive.

FY 2016-17: Project costs include the purchase of an emergency generator for the existing station, which will be designed for reuse in the new fire station facility.

FY 2017-18: Project costs for fiscal year 2017-18 include detailed architectural design and engineering work for the new fire station facility.

FY 2018-19: Project costs include costs associated with the building of a new station.

**PROJECT JUSTIFICATION/NEED:** A facility audit was conducted by Paradigm Design Inc. in 2013 to evaluate needed repairs and upgrades within Fire Station No. 2. Station No. 2 is the oldest in the system and requires extensive work to ensure integrity of the structure. The evaluation recommended various repairs to the building roof, plumbing, electrical, flooring, fire suppression and alarm system. In addition to the condition of the building, the overall facility and living quarters are small and not properly sized for the operational needs of the Fire Division. In 2015, an additional feasibility study was completed by Paradigm Design to determine existing and future programming and operational needs of the Fire Division. The study determined construction of a new, larger fire station facility is warranted.

**PROJECT BENEFIT/IMPACT:** To ensure Fire Station facilities meet the program and operational needs of the community, while ensuring facilities are in good working order.

**OPERATING FUND IMPACT:** Reduce maintenance and operating costs

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Safety, Fire Division

**PROJECT CATEGORY:**  
Fire

**PROJECT NUMBER:** 3

---

**PROJECT TITLE:** Replace Two Rescue Units

**PROJECT DESCRIPTION:** Replace two four-wheel drive Sport Utility Vehicle (SUV) type vehicles for emergency operations. Existing vehicles will then be repurposed for use by the Administrative Fire Chiefs.

**PROJECT JUSTIFICATION/NEED:** These are marked as emergency response vehicles and are used by operations personnel as primary rescue response vehicles.

**PROJECT BENEFIT/IMPACT:** The new vehicles will provide the latest safety features and emergency equipment and allow for appropriate room for required equipment.

**OPERATING FUND IMPACT:** Reduced operating and maintenance costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Safety, Fire Division

**PROJECT CATEGORY:**  
Fire

**PROJECT NUMBER:** 4

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**PROJECT TITLE:** Replace Battalion Chief Vehicle

**PROJECT DESCRIPTION:** Replace Battalion Chief Vehicle

**PROJECT JUSTIFICATION/NEED:** A three-year rotation has been implemented for this vehicle. At the end of the third year, the vehicle will rotate out as a back-up Battalion Chief vehicle as well as a utility vehicle.

**PROJECT BENEFIT/IMPACT:** This vehicle will be used as the primary response unit by the Battalion Chief to serve as Incident Commander at emergency scenes.

**OPERATING FUND IMPACT:** Reduced operating and maintenance costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Safety, Fire Division

**PROJECT CATEGORY:**  
Fire

**PROJECT NUMBER: 5**

---

**PROJECT TITLE:** Training Officer Vehicle

**PROJECT DESCRIPTION:** Truck or SUV Vehicle for Training Officer

**PROJECT JUSTIFICATION/NEED:** This is a marked emergency response vehicle utilized primarily by the Training Officer for his daily activities, as well as an emergency response vehicle for incidents and fire investigations.

**PROJECT BENEFIT/IMPACT:** The new vehicle will provide the latest safety features in design advancements, and the emergency equipment that is installed will also meet the newest standards available at the time of purchase.

**OPERATING FUND IMPACT:** Reduced operating and maintenance costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Safety, Fire Division

**PROJECT CATEGORY:**  
Fire

**PROJECT NUMBER:** 6

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**PROJECT TITLE:** Replace Fire Marshal Vehicle

**PROJECT DESCRIPTION:** Truck or SUV Vehicle for Fire Marshall

**PROJECT JUSTIFICATION/NEED:** The current 2004 Ford Explorer will be 12 years old with an anticipated mileage of 95,000 miles. This is a marked emergency response vehicle utilized primarily by the Fire Marshal for daily activities, as well as an emergency response vehicle for incidents and fire investigations.

**PROJECT BENEFIT/IMPACT:** The new vehicle will provide the latest safety features in design advancements, and the emergency equipment that is installed will also meet the newest standards available at the time of purchase.

**OPERATING FUND IMPACT:** Reduced operating and maintenance costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Safety, Fire Division

**PROJECT CATEGORY:**  
Fire

**PROJECT NUMBER:** 7

---

**PROJECT TITLE:** Fire Station No. 3 Facility Improvements

**PROJECT DESCRIPTION:** FY 2016-17: Replace windows with more energy efficient windows. Replace carpeted areas and paint interior walls.

FY 2021-22: Asphalt drive replacement.

**PROJECT JUSTIFICATION/NEED:** A facility audit conducted by Paradigm Design Inc. in 2013 evaluated needed repairs within Fire Station No. 3. The evaluation recommended scheduled repairs and upgrades throughout the facility. Windows and hardware are rapidly deteriorating to a point of needing replacement. Carpet and painting are also addressed within report. Asphalt depressions and cracks are rapidly expanding due to the continuous apparatus traffic in and out of the station.

**PROJECT BENEFIT/IMPACT:** To maintain facilities in good working order, allowing safe occupancy and to keep the building within the current applicable codes.

**OPERATING FUND IMPACT:** Reduce maintenance and operating costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Safety, Fire Division

**PROJECT CATEGORY:**  
Fire

**PROJECT NUMBER:** 8

---

**PROJECT TITLE:** Fire Station No. 1 Facility Improvements

**PROJECT DESCRIPTION:** FY 2016-17: Heating and cooling system upgrades to include replacement of condensing unit and ventilation upgrades located on the operations/living quarters portion of the building which are original equipment from when the building was constructed in 1984.

FY 2017-18: Replace the carpeting and begin replacement of ceiling tile throughout facility. This includes all offices, training room and lobby area of the administrative portion of the building, as well as all offices and living quarters of the operational portion of the building.

FY 2022-23: Complete the replacement of ceiling tiles and replace windows throughout the building.

**PROJECT JUSTIFICATION/NEED:** A facility audit conducted by Paradigm Design Inc. in 2013 evaluated needed repairs within Fire Station No. 1. The evaluation recommended scheduled repairs and upgrades throughout the facility.

**PROJECT BENEFIT/IMPACT:** To maintain facilities in good working order, allowing safe occupancy and to keep the building within the current applicable codes.

**OPERATING FUND IMPACT:** Reduce maintenance and operating costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Safety, Fire Division

**PROJECT CATEGORY:**  
Fire

**PROJECT NUMBER:** 9

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**PROJECT TITLE:** Replace Thermal Imaging Cameras

**PROJECT DESCRIPTION:** Replacement of the present thermal imaging devices with new, state-of-the-art units on scheduled 5-year replacement plan interval.

**PROJECT JUSTIFICATION/NEED:** Newer technology continues to allow thermal imaging equipment to provide better quality images while reducing weight and increasing durability. These units are used on all fires and many alarms. Currently, the Fire Division has six thermal imaging devices. The long-range plan is to replace three devices at a time on regular intervals as new technologies emerge.

**PROJECT BENEFIT/IMPACT:** Thermal imaging devices are used to locate trapped occupants, find hidden fire during overhaul, and to locate heat sources, such as fluorescent ballasts that activate fire alarms. The use of these devices allows firefighters to be more efficient and safer at emergency scenes.

**OPERATING FUND IMPACT:** Reduced maintenance costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Safety, Fire Division

**PROJECT CATEGORY:**  
Fire

**PROJECT NUMBER:** 10

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**PROJECT TITLE:** Replace 2002 Fire Pumper

**PROJECT DESCRIPTION:** Replace the 2002 Type I Fire Pumper with a new fire engine.

**PROJECT JUSTIFICATION/NEED:** At the time of replacement, the 2002 Fire Pumper will be 20 years old. The new fire pumper will then serve as a front-line engine responding to all fire calls in and outside of city limits.

**PROJECT BENEFIT/IMPACT:** Replacement of the vehicle is in accordance with the Fire Department Apparatus Strategic Plan, which specifies the replacement of each fire apparatus at the end of its useful life. The new vehicle will incorporate advances in fire apparatus design and will be compliant with all current standards and requirements.

**OPERATING FUND IMPACT:** Reduced operating and maintenance costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Safety, Fire Division

**PROJECT CATEGORY:**  
Fire

**PROJECT NUMBER:** 11

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**PROJECT TITLE:** Replace Personal Protective Equipment

**PROJECT DESCRIPTION:** Replacement of firefighting personal protective equipment components.

**PROJECT JUSTIFICATION/NEED:** Personal protective clothing must be replaced when it can no longer be maintained to manufacturer specifications, as determined by an advanced inspection by a qualified independent service provider. This project will allow the systematic replacement of approximately one-half of all personal protective clothing every five years.

**PROJECT BENEFIT/IMPACT:** Replacement of aged personal protective equipment will ensure greater protection during firefighting and rescue operations, as well as incorporating the latest design, technology and safety improvements. Liability will be reduced by having equipment that is manufactured to the current standard.

**OPERATING FUND IMPACT:** Reduced repair costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Safety, Fire Division

**PROJECT CATEGORY:**  
Fire

**PROJECT NUMBER:** 12

---

**PROJECT TITLE:** Replace 1998 Aerial Apparatus

**PROJECT DESCRIPTION:** Replace the 1998, 100-foot quint aerial apparatus.

**PROJECT JUSTIFICATION/NEED:** At the time of replacement, this vehicle will be over 24 years in age and approaching the end of its useful life. Through the city accreditation process and the recent ISO survey, this apparatus should be replaced and maintained as part of the city's strategic apparatus program.

**PROJECT BENEFIT/IMPACT:** The purchase of a new aerial type apparatus will meet the current NFPA 1901 Standards and will provide for the best delivery of emergency services for the city.

**OPERATING FUND IMPACT:** Reduced maintenance and operating expenses.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Safety, Fire Division

**PROJECT CATEGORY:**  
Fire

**PROJECT NUMBER:** 13

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**PROJECT TITLE:** Replace 2004 Pumper Squad Vehicle

**PROJECT DESCRIPTION:** Replace Pumper Squad Vehicle

**PROJECT JUSTIFICATION/NEED:** At the time of replacement, this vehicle will be 20 years old and approaching the end of its useful life. Repair parts will become more difficult to obtain. Replacement of the vehicle is in accordance with the Fire Department Apparatus Strategic Plan, which specifies the replacement of each fire apparatus at the end of its useful life. The new vehicle will incorporate advances in fire apparatus design and will be compliant with all current NFPA 1901 standards and requirements.

**PROJECT BENEFIT/IMPACT:** A new pumper squad vehicle will allow the Fire Division to safely perform life safety and fire suppression activities. An apparatus of this type combines many needed components in one vehicle. The new vehicle will comply with all current standards and safety features.

**OPERATING FUND IMPACT:** Reduced maintenance and operating expenses.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Safety, Fire Division

**PROJECT CATEGORY:**  
Fire

**PROJECT NUMBER:** 14

---

**PROJECT TITLE:** Mobile Computer/Mobile Video Replacement

**PROJECT DESCRIPTION:** The mobile computer/mobile video project will upgrade all existing hardware, including all ruggedized mobile computers and digital mobile recorders. The project includes integrated digital recording capabilities, enhanced connectivity to the city network, and replacement of equipment, which will reach end of life.

**PROJECT JUSTIFICATION/NEED:** The current video system will be replaced with new technology, to include digital recordings stored electronically. Outdated mobile laptop computers will be replaced with new mobile devices.

**PROJECT BENEFIT/IMPACT:** As new technologies emerge, updating mobile computers and video on a regular basis will increase safety of incident responders through access to pre-incident surveys, hazardous material information, and other pertinent occupancy information.

**OPERATING FUND IMPACT:** Wireless connectivity fees and program support costs are included in the operational budget.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Safety, Fire Division

**PROJECT CATEGORY:**  
Fire

**PROJECT NUMBER:** 15

---

**PROJECT TITLE:** Self-Contained Breathing Apparatus

**PROJECT DESCRIPTION:** Replace the Self-Contained Breathing Apparatus at the end of its useful life.

**PROJECT JUSTIFICATION/NEED:** Self-Contained Breathing Apparatus (SCBA) is required for all Fire Division activities where the atmosphere may be immediately dangerous to life or health. Air tanks must periodically be replaced to comply with the U.S. Department of Transportation requirements concerning pressurized tanks. Units will be replaced with models that meet current standards.

**PROJECT BENEFIT/IMPACT:** SCBA is a key component of firefighter personal protective equipment. The benefit of having adequate state-of-the-art equipment is increased safety for firefighters operating in hostile environments.

**OPERATING FUND IMPACT:** Reduced maintenance costs.

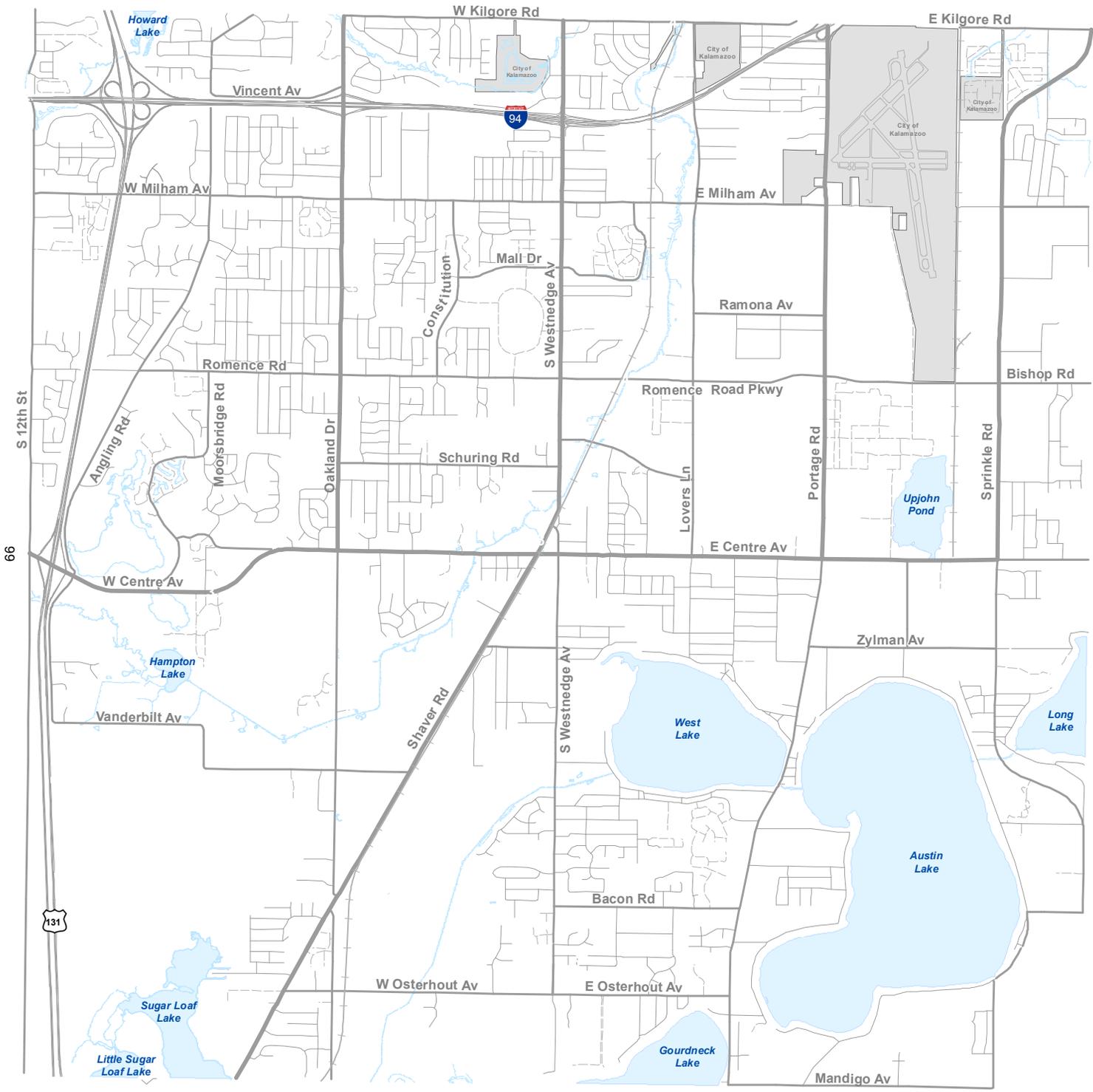


CAPITAL IMPROVEMENT PROJECT SUMMARY

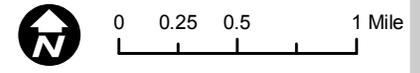
PUBLIC FACILITIES

Funding Sources (\$000)

Project Number/Title	SAFE/TEA- LU Funding	Fed/State Grants	Other Revenues	S/A's & S/A Bonds	CIP Bonds	CIP Bonds	Building Authority	CIP Fund	Total
1 Integrated Access Control and Camera System					270				270
2 Information Systems Improvements					643			132	775
3 Election Equipment					50				50
4 Senior Center Improvements					50			110	160
5 City Centre Parking/Walkway Resurface					300			35	335
6 Public Services Facility Parking and Driveway Improvements					255				255
7 City Centre Area Improvements					50				50
8 Lake Center Area Improvements					50				50
9 Cemetery Improvements					150			25	175
10 Alternative Energy Facilities Evaluation								50	50
11 Parks, Recreation and Public Services Facility Improvements					199			86	285
12 Video Training and Conferencing System								40	40
13 Building Maintenance Studies								70	70
14 City Hall Improvements					50				50
15 Phone System Upgrade								30	30
16 BS&A Software Application Replacement					300				300
TOTALS					2,367			578	2,945



## 2016-2017 CAPITAL IMPROVEMENT PROGRAM PROJECTS



 Public Facilities

Projects listed below are not location specific:

- 
- 
- 
- 

Number shown within symbol denotes project number

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Technology Services

**PROJECT CATEGORY:**  
Public Facilities

**PROJECT NUMBER: 1**

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**PROJECT TITLE:** Integrated Access Control and Camera System

**PROJECT DESCRIPTION:** An integrated building access control and surveillance camera system using a standardized platform and modern .net software to provide advanced security to city buildings and specific public areas.

**PROJECT JUSTIFICATION/NEED:** The current city access control and surveillance camera systems consist of at least four different systems built over a ten-year period in a non-integrated fashion. The Public Safety and Parks systems are no longer supported and experience regular failures. A new integrated system is required to maintain efficient and reliable building security and surveillance and extend the system to all primary city buildings. A new integrated system will accomplish several important goals:

1. The consolidation of disparate systems to one integrated system using a standard platform.
2. Extends the system to currently unsupported facilities and locations where safety is paramount.
3. Incorporates new integrated features such as remote access controls, “smart I.D.” card management, video capture and retention, infrared night vision, advanced authentication, pop-up alarms and intrusion detection, dispatch integration, non-proprietary equipment support and sophisticated management reporting.
4. Reduces the cost to re-key city facilities if keys are lost and makes daily operational management more efficient.

**PROJECT BENEFIT/IMPACT:** Ensures a reliable working security and surveillance system at primary city facilities and integrates disparate systems to a single platform on modern .net software.

**OPERATING FUND IMPACT:** Minimal maintenance costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Technology Services

**PROJECT CATEGORY:**  
Public Facilities

**PROJECT NUMBER: 2**

---

**PROJECT TITLE:** Information Systems Improvements

**PROJECT DESCRIPTION:** Information system infrastructure sustainability and equipment upgrades.

**PROJECT JUSTIFICATION/NEED:** This program was established to provide for the following:

- Update core technology components through a leasing strategy. Currently, over 300 core components are replaced on an industry-standard three-to-four year schedule including computers, printers, scanners, servers and other essential hardware.
- Upgrades to the city network, Intranet and Internet as required for continued compatibility, efficiency and communication.
- Replacement and repair of damaged information systems hardware and software components.
- Network preparation for future technology upgrades.

**PROJECT BENEFIT/IMPACT:** Ensures that core technology infrastructure continues to function properly allowing for continued city operations. It also insures that the city continues to utilize industry-standard, up-to-date technology allowing for and improved communication flow and resulting efficiencies.

**OPERATING FUND IMPACT:** Savings will continue to be realized due to warranty provisions and extensions paid under the lease agreement that precludes the necessity to purchase separate maintenance contracts with operating funds.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
City Clerk

**PROJECT CATEGORY:**  
Public Facilities

**PROJECT NUMBER:** 3

---

**PROJECT TITLE:** Election Equipment

**PROJECT DESCRIPTION:** Purchase and implementation of new voting equipment to include ballot tabulators and disabled voter assistance devices.

**PROJECT JUSTIFICATION/NEED:** Election equipment in the State of Michigan is reaching the end of its useful life having been in place since 2004. Additionally, the software used to program the equipment is no longer supported. As a result, the Bureau of Elections (BOE) has engaged in a Request for Proposals (RFP) process for new election equipment. The BOE anticipates rolling out the new equipment statewide in advance of the May 2017 Election. While the actual cost of the equipment is yet to be determined along with level of financial contribution from the State of Michigan, the BOE is recommending that communities identify approximately \$2,000 for each piece of voting equipment. In Portage, this amounts to 25 tabulators for a total of \$50,000 (19 tabulators for precincts and six for absentee voting).

**PROJECT BENEFIT/IMPACT:** The accuracy and integrity of elections and the electoral process are a basic function of government. Replacement of outdated equipment will help to preserve the ability to conduct fair and accurate elections.

**OPERATING FUND IMPACT:** Minimal impact on operating fund.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Parks, Recreation and Senior Citizen Services

**PROJECT CATEGORY:**  
Public Facilities

**PROJECT NUMBER:** 4

---

**PROJECT TITLE:** Senior Center Improvements

**PROJECT DESCRIPTION:** FY 2016-17: A building and property study will assist the administration in planning for program and partner expansion. Additionally, once costs are identified, future planning for funding can begin.

FY 2017-18: Architectural and electrical renovations and repairs identified in the 2013 building maintenance review to include emergency lighting upgrades, repairs to exterior wood surfaces and ceiling repair to restrooms and kitchen.

FY 2019-20: Continued preventative facility maintenance in accordance with 2013 review to include carpet and acoustical tile replacement. Interior and exterior facility painting and the replacement of parking lot asphalt and restriping also included in this phase.

FY 2024-25: Additional improvements and renovations to include painting, lighting upgrades and kitchen and restroom renovations.

**PROJECT JUSTIFICATION/NEED:** Routine and preventive improvements are required to maintain appearance and efficient operation. Periodical upgrades are necessary to keep the Senior Center and parking lot in proper condition.

**PROJECT BENEFIT/IMPACT:** Protect and maintain the public investment in the facility to ensure that the quality and safety of the facility is maintained for citizens, city employees, and other users.

**OPERATING FUND IMPACT:** Use of the facility by the public has a direct correlation to the condition of the facility. The public and members defray the cost of operating the facility.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Services

**PROJECT CATEGORY:**  
Public Facilities

**PROJECT NUMBER: 5**

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**PROJECT TITLE:** City Centre Parking/Walkway Resurface

**PROJECT DESCRIPTION:** FY 2017-18: Milling, asphalt overlay, curb repairs, sidewalk repairs, and striping of the Police/Fire/Central Park parking lots.

FY 2021-22: Milling, asphalt overlay, curb repairs, sidewalk repairs, and striping of the Senior Center Park parking lot.

FY 2025-26: Milling, asphalt overlay, curb repairs, sidewalk repairs, and striping of the City Hall parking lot.

**PROJECT JUSTIFICATION/NEED:** The City Centre public parking spaces, drives and walkways are used by hundreds of citizens and employees daily. It is essential to schedule preventative maintenance of asphalt lots and walkways to ensure the integrity of the surfaces and meet constituent needs.

**PROJECT BENEFIT/IMPACT:** Provide appropriate access for citizens to public buildings and facilities.

**OPERATING FUND IMPACT:** \$2,000 annual savings estimated for City Centre asphalt parking lots and walkways due to timely capital maintenance.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Services

**PROJECT CATEGORY:**  
Public Facilities

**PROJECT NUMBER:** 6

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**PROJECT TITLE:** Public Services Facility Parking and Driveway Improvements

**PROJECT DESCRIPTION:** FY 2017-18, FY 2018-19, FY 2019-20 and FY 2020-2021: The asphalt driveway and parking lot has deteriorated over the years. Preventive maintenance will require phased replacement of the parking lot and driveway asphalt and restriping.

**PROJECT JUSTIFICATION/NEED:** Routine and preventive maintenance is required to maintain proper condition, appearance and efficient operation of the Public Services driveway and parking lots.

**PROJECT BENEFIT/IMPACT:** Protect and maintain the public investment in the facility in order to ensure that the quality and safety of the facility is maintained for citizens, contractors and city employees.

**OPERATING FUND IMPACT:** Use of the facility by the public and city employees has a direct correlation to the condition of the facility. Preventive maintenance will help defray the cost of operating the facility.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Community Development

**PROJECT CATEGORY:**  
Public Facilities

**PROJECT NUMBER:** 7

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**PROJECT TITLE:** City Centre Area Improvements

**PROJECT DESCRIPTION:** Consistent with Portage 2025 Visioning Project, install the following public improvements within the City Centre Area (CCA):

- Replace existing street lights along South Westnedge Avenue, Shaver Road and Centre Avenue adjacent to municipal facilities with the shepherd’s hook-style light fixture.
- Install pedestrian refuge island in South Westnedge Avenue near Liberty Park to facilitate pedestrian crossing of South Westnedge Avenue.
- Design and install CCA gateway signage.

**PROJECT JUSTIFICATION/NEED:** The CCA is the “identifying” center and heart of the City of Portage. The importance of the CCA has been documented over 30 years in planning documents where the vision to establish an “identity” and a “downtown” has extended from the early focus of centralizing “civic” activities in the geographic center of the community in the 1981 Comprehensive Plan. The citizen-based Portage 2025 Visioning Project identified goals for the CCA in 2008, and most recently, the proposed improvements are also consistent with the 2014 CCA Subarea Plan incorporated into the 2014 Comprehensive Plan.

**PROJECT BENEFIT/IMPACT:** Completion of these projects will help to identify and emphasize the importance of the CCA consistent with the Portage 2025 Visioning goals and 2014 CCA Subarea Plan.

**OPERATING FUND IMPACT:** Minimal maintenance costs are anticipated.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Community Development

**PROJECT CATEGORY:**  
Public Facilities

**PROJECT NUMBER:** 8

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**PROJECT TITLE:** Lake Center Area Improvements

**PROJECT DESCRIPTION:** Consistent with Lake Center Subarea Plan adopted with the 2014 Comprehensive Plan update, install the following improvements within the Portage Road corridor, between East Centre Avenue and East Osterhout Avenue:

- Design and install Lake Center gateway signage near East Centre Avenue and East Osterhout Avenue.
- Design and install way-finding signs to bikeways, multi-use trails, public parks, schools and other amenities along the corridor.

**PROJECT JUSTIFICATION/NEED:** The Lake Center area of the community has a unique character with diverse neighborhoods, well established and locally-owned businesses along Portage Road, and important natural resources including Austin and West lakes. The Lake Center business district has been identified as a commercial revitalization corridor and in 2013, an effort was initiated to develop a specific subarea plan to provide more detailed guidance for improvements and redevelopment efforts in this important area of the community.

**PROJECT BENEFIT/IMPACT:** Completion of these projects will help to identify and emphasize the importance of the Lake Center area of the community and will supplement other recent and proposed capital improvement project such as the FY 2014-15 Portage Road reconstruction project and proposed sidewalk and bikeway projects within and connecting to the Portage Road corridor.

**OPERATING FUND IMPACT:** Minimal maintenance costs are anticipated.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Services

**PROJECT CATEGORY:**  
Public Facilities

**PROJECT NUMBER:** 9

---

**PROJECT TITLE:** Cemetery Improvements

**PROJECT DESCRIPTION:** FY 2017-18: Overlay asphalt roads as needed within South Cemetery. Upgrades to signage and fencing at Indian Fields, Dry Prairie, South and Central Cemeteries.

FY 2022-23: Plotting and marking out new section and irrigation updates at South Cemetery to accommodate projected needs for burial spaces.

FY 2025-26: Land acquisition for additional cemetery land to support future burials.

**PROJECT JUSTIFICATION/NEED:** Upgrade drives and ensure facilities are in attractive condition. Develop new sections of South Cemetery as existing sections fill and the acquisition of land to support future burials as the current cemetery sections reach capacity.

**PROJECT BENEFIT/IMPACT:** Meet the future needs for burial lots in city cemeteries.

**OPERATING FUND IMPACT:** None.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Services

**PROJECT CATEGORY:**  
Public Facilities

**PROJECT NUMBER:** 10

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**PROJECT TITLE:** Alternative Energy Facilities Evaluation

**PROJECT DESCRIPTION:** Independent energy consultant evaluation of selected city facilities to determine the feasibility, practicality and economic viability of utilizing alternative sources to provide energy demand. Alternative energy sources such as wind and solar generated electricity, geothermal heat transfer, as well as alternative fleet vehicle fuels will be evaluated.

**PROJECT JUSTIFICATION/NEED:** In accordance with City Council objectives to expand and update city facilities and to increase efficiency by applying new technology, a review and evaluation of city owned facilities and assets will provide data to determine if an energy conversion is practical and reliable. Facilities to be evaluated include city buildings, pumping stations and park structures. Fleet vehicles will also be evaluated.

**PROJECT BENEFIT/IMPACT:** The purpose of the evaluation is to identify feasible and cost effective measures which can be implemented as part of an alternative energy action plan.

**OPERATING FUND IMPACT:** Potential reduction in total energy costs and expenditures.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Services

**PROJECT CATEGORY:**  
Public Facilities

**PROJECT NUMBER:** 11

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**PROJECT TITLE:** Parks, Recreation and Public Services Facility Improvements

**PROJECT DESCRIPTION:** FY 2017-18: Replacement of metal doors and frames throughout facility, masonry work, replacement of overhead doors and upgrades to lighting in administrative area.

FY 2018-19: Replacement of roof, insulation and flashing to portions of the facility and painting metal roof.

FY 2020-21: Demolition of original Public Services igloo salt storage building, and construction of new cold storage structure.

FY 2022-23: Carpet and ceiling tile replacement, upgrade to condensing units and fresh air handling renovations.

**PROJECT JUSTIFICATION/NEED:** A facility audit was conducted by Paradigm Design Inc. in 2013 to evaluate needed repairs and upgrades within the Public Services facility. The completed evaluation recommended various projects to ensure the integrity of the facility.

**PROJECT BENEFIT/IMPACT:** Protect and maintain the public investment in the facility in order to ensure that the quality and safety of the facility is maintained for citizens, contractors and city employees.

**OPERATING FUND IMPACT:** Use of the facility by the public and city employees has a direct correlation to the condition of the facility. Preventative maintenance will help defray the cost of operating the facility

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Technology Services

**PROJECT CATEGORY:**  
Public Facilities

**PROJECT NUMBER:** 12

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**PROJECT TITLE:** Video Training and Conferencing System

**PROJECT DESCRIPTION:** Fully integrated learning object repository, video streaming library, media delivery and digital learning system.

**PROJECT JUSTIFICATION/NEED:** The city currently utilizes a homegrown digital library of electronic training materials utilized for employee training. The system contains nearly 1,000 data files residing on an obsolete two-terabyte standalone hard drive system. The hard drive system is nearly 10 years old and frequently requires maintenance due to drive failures which create data loss situations. This project will replace a limited and unreliable system with a true digital training and media delivery system for onsite and remote distance learning for one or several simultaneous groups and/or locations. In addition to providing a repository of content, the system will also track individual employee training progress, allow for remote test taking and allow for the transmission and recording of live and interactive training sessions to multiple locations simultaneously.

**PROJECT BENEFIT/IMPACT:** The system will provide flexibility in managing employee training by reducing the cost and time involved with sending employees to offsite training sessions or requiring employees to be onsite for ongoing training. This system can also be used collaboratively by other Kalamazoo County agencies on a user-fee basis.

**OPERATING FUND IMPACT:** \$5,000 annual maintenance costs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**

Public Services

**PROJECT CATEGORY:**

Public Facilities

**PROJECT NUMBER:** 13

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**PROJECT TITLE:**

Building Maintenance Studies

**PROJECT DESCRIPTION:**

FY 2018-19 and FY 2023-24: Independent consultant studies of all city buildings and facilities to determine infrastructure improvement and maintenance needs in City Hall, Police, Public Services, Senior Center, Central Fire Station, Fire Station No. 2, Fire Station No. 3 plus five structures in the Celery Flats Historical Area.

**PROJECT JUSTIFICATION/NEED:**

In accordance with the City Council objective to “Maintain a systematic preventive maintenance program for city-owned buildings” the city coordinates extensive building maintenance reviews in five-year intervals. The goal is to keep city buildings in quality condition by identifying repair and maintenance concerns before major problems occur.

**PROJECT BENEFIT/IMPACT:**

The purpose of the review is to identify and prioritize immediate and long-term maintenance needs in order to implement prudent scheduled maintenance to ensure for the maximum use and life of these publicly owned buildings. Specific areas of review include roofing, HVAC systems, mechanical/electrical systems, floors, ceilings, wall finished, windows and lighting and energy conservation.

**OPERATING FUND IMPACT:**

Planned capital maintenance may reduce annual operating expenditures by as much as \$5,000 per year in the facilities covered by the studies.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Community Development

**PROJECT CATEGORY:**  
Public Facilities

**PROJECT NUMBER:** 14

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**PROJECT TITLE:** City Hall Improvements

**PROJECT DESCRIPTION:** Upgrades to mechanical and electrical systems including replacement of 80-ton condensing unit and replacement of 45 kW generators.

**PROJECT JUSTIFICATION/NEED:** Updates of building mechanical, electrical and architectural features are proposed consistent with needs addressed in the 2013 Paradigm Building Preventative Maintenance Study.

**PROJECT BENEFIT/IMPACT:** Timely replacement of aging building components and architectural features will protect the public investment in City Hall in order to ensure that the quality and safety of this municipal facility is maintained for citizens and employees.

**OPERATING FUND IMPACT:** Planned capital investments should reduce annual operating and maintenance expenditures.

**CAPITAL IMPROVEMENT PROJECT PROFILE**

**DEPARTMENT:**  
Technology Services

**PROJECT CATEGORY:**  
Public Facilities

**PROJECT NUMBER:** 15

---

**PROJECT TITLE:** Phone System Upgrade

**PROJECT DESCRIPTION:** Upgrade of the city Voice-Over-Internet-Protocol (VOIP) phone system.

**PROJECT JUSTIFICATION/NEED:** The VOIP phone system was installed in 2010 and the IP phone units were upgraded in 2015. By 2021, the VOIP phone system will be eleven years old and the IP phone units will be six years old. This project will update the VOIP phone system in order to maintain quality phone service and utilize new features available at that time.

**PROJECT BENEFIT/IMPACT:** The upgrades will provide the city with continued and reliable phone services utilizing the most up-to-date systems and technologies available at the time of upgrade and ensure adequate network data processing throughput speed.

**OPERATING FUND IMPACT:** None.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Technology Services

**PROJECT CATEGORY:**  
Public Facilities

**PROJECT NUMBER:** 16

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**PROJECT TITLE:** BS&A Software Application Replacement

**PROJECT DESCRIPTION:** An integrated software solution used by the city for numerous primary data processing activities such as budgeting, cash receipting, accounts payable, purchase orders, assessing, utility billing, permits, work orders, field inspections and more.

**PROJECT JUSTIFICATION/NEED:** The average replacement period for this type of software solution is between 10 and 15 years. This project allows the city to replace this software solution in Fiscal Year 2025-26, at which time it will have been in service for 11 years and in need of replacement.

**PROJECT BENEFIT/IMPACT:** Ensures a reliable working and up-to-date integrated software solution used by the city for numerous primary data processing activities.

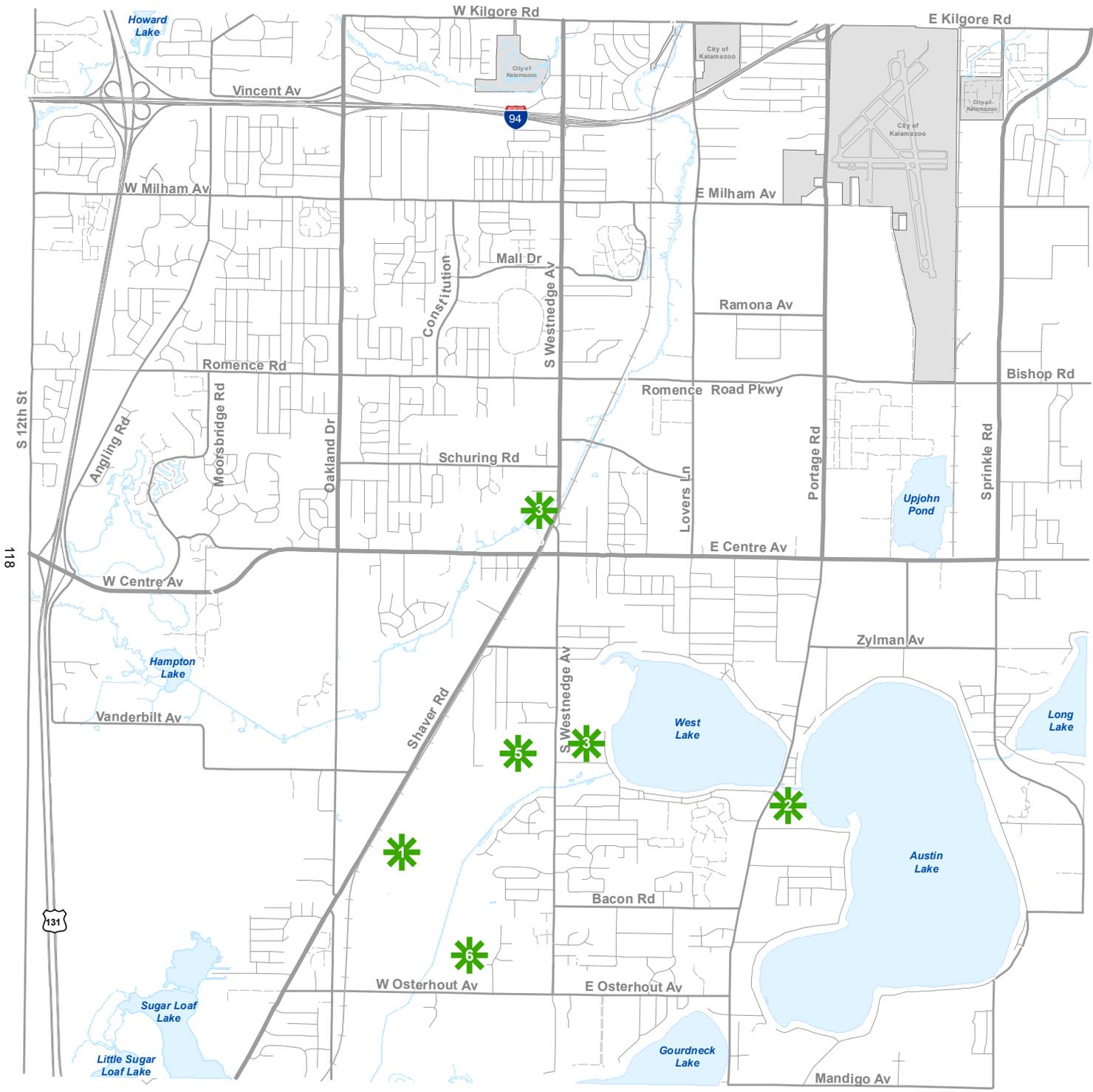
**OPERATING FUND IMPACT:** The annual software maintenance fees are estimated at \$45,000.

CAPITAL IMPROVEMENT PROJECT SUMMARY													PARKS AND RECREATION												
Project Expenditures (\$000)													Project Expenditures (\$000)												
Project Number/Title	Fiscal Year												Total												
	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26	Total														
1	400					500																	900		
2	97	71	40	53	40	30	62	67	35														539		
3	80	50					120																250		
4	50		40			40		40	20														190		
5	45																						45		
6	35				30																		95		
7		155			120			85															450		
8		75					60																135		
9		60				65																	125		
10		40						35															75		
11		35		35		35		35															175		
12			50			50																	150		
13				70																			70		
14				50																			50		
15				40																			40		
16					70																		70		
17												30											30		
TOTALS	707	486	130	248	260	720	272	262	135														3,389		
Other Revenues (donations)																									
Capital Improvement Bonds	627	411	50	173	190	615	242	152	50														2,600		
Other Financing																									
City Share Cash	80	75	80	75	70	105	30	110	85														789		

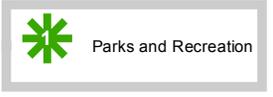
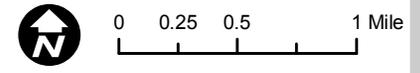
CAPITAL IMPROVEMENT PROJECT SUMMARY PARKS AND RECREATION

Funding Sources (\$000)

Project Number/Title	BANs	Fed/State Grants	Other Revenues	S/A's & S/A Bonds	Bonds	CIP Bonds	Other Financing	CIP Fund	Total
1 Eliason Nature Reserve Development						900			900
2 Court Resurfacing/Repair						350		189	539
3 Playground Improvements						250			250
4 Park Perimeter Fencing Improvements						50		140	190
5 South Westside Park Improvements								45	45
6 Schrier Park Improvements								95	95
7 Park Parking Lot/Walkway Improvements						450			450
8 Park Restroom/Shelter Improvements						135			135
9 Softball Field Improvements						125			125
10 Millennium Park Improvements								75	75
11 Picnic Support Equipment Improvements								175	175
12 Park Trail Improvements						150			150
13 Celery Flats Historical Area Improvements						70			70
14 Lakeview Park Improvements						50		40	90
15 Central Park Improvements								40	40
16 Portage Creek Bicentennial Park Improvements						70			70
17 Ramona Park Improvements								30	30
<b>TOTALS</b>						<b>2,600</b>		<b>789</b>	<b>3,389</b>



## 2016-2017 CAPITAL IMPROVEMENT PROGRAM PROJECTS



Projects listed below are not location specific:



Number shown within symbol denotes project number

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**

Parks, Recreation & Senior Citizen Services

**PROJECT CATEGORY:**

Parks and Recreation

**PROJECT NUMBER: 1**

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**PROJECT TITLE:**

Eliason Nature Reserve Development

**PROJECT DESCRIPTION:**

FY 2016-17: Phase II development to include construction of nature trails and decking and park boundary fencing. The trails will connect to the Bishop's Bog Preserve trail enhancing linkage for park users.

FY 2021-22: Phase III to include acquisition of property for northern entry and development of north entry drive, parking, picnic shelter and play structure.

**PROJECT JUSTIFICATION/NEED:**

A coordinated approach is necessary to ensure that the park property is developed according to the master plan. This park site provides opportunities for both wetland and upland opportunities. The various phases of the project are also part of the "Natural Place to Move" initiative.

**PROJECT BENEFIT/IMPACT:**

The Eliason Nature Reserve provides additional passive and active recreation opportunities, and preserves important natural features and open space for the growing community. Expansion of the trail system and provision of additional non-motorized facilities will enhance community quality of life.

**OPERATING FUND IMPACT:**

\$3,000 for litter removal, restroom cleaning, mowing and other yearly maintenance. Trail maintenance is estimated to be \$600 per year.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Services

**PROJECT CATEGORY:**  
Parks and Recreation

**PROJECT NUMBER: 2**

---

**PROJECT TITLE:** Court Resurfacing/Repair

**PROJECT DESCRIPTION:**

FY 2016-17: Lakeview Park: Removal of existing court and construction of one tennis/pickleball court with the addition of two pickleball courts. This project also includes existing basketball court removal and construction of new courts.

FY 2017-18: Lexington Green Park: Existing tennis/hockey court removal and replacement with a tennis/pickleball and hockey court.

FY 2018-19: Lexington Green Park: Existing Basketball court removal and replacement of deteriorated asphalt surface.

FY 2019-20: Oakland Drive Park: Basketball court removal and replacement of deteriorated asphalt surface.

FY 2020-21: Westfield Park: Removal and replacement of basketball court deteriorated asphalt surface.

FY 2021-22: Haverhill Park: Removal and replacement of basketball court.

FY 2022-23: Ramona Park: Removal and replacement of one full court and one half court basketball court.

FY 2023-24: Haverhill Park: Removal and replacement of tennis/pickleball courts.

FY 2024-25: Haverhill Park: Removal and replacement of hockey rink.

FY 2025-26: Harbors West Park: Removal and replacement of hockey rink.

**PROJECT JUSTIFICATION/NEED:** To provide court surfaces that are safe, playable and attractive for patrons. Scheduled upgrades, recoating and resurfacing must be coordinated at regular intervals as well as periodic fencing replacement, backboards, rims and tennis court posts for safety and user benefit.

**PROJECT BENEFIT/IMPACT:** Maintain and improve the quality of court recreation opportunities and provide safe playing conditions.

**OPERATING FUND IMPACT:** None.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Parks, Recreation & Senior Citizen Services

**PROJECT CATEGORY:**  
Parks and Recreation

**PROJECT NUMBER:** 3

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**PROJECT TITLE:** Playground Improvements

**PROJECT DESCRIPTION:** FY 2016-17: Replacement of play structures and swing sets at Central Park and West Lake Nature Preserve. These structures do not meet current code and need to be replaced. The structures were installed prior to 1993.

FY 2017-18: Replacement of play structures and swing sets at Ramona Park (playground at soccer fields) and Haverhill Park. These play structures were installed prior to 1993.

FY 2022-23: Replacement of play structures and swing sets at Harbors West Park and Lexington Green Park to maintain safe play areas for the community.

**PROJECT JUSTIFICATION/NEED:** Park play structures receive intensive use and all playgrounds require upgrades to meet Consumer Product Safety Commission and American Society for Testing and Materials regulations in order to limit liability and maintain American Disabilities Act (ADA) standards. These improvements will further minimize future repairs and provide for safe and reliable play areas. Playground surfacing, edging and use zone expansion will be needed for several playground sites in order to meet current standards.

**PROJECT BENEFIT/IMPACT:** Extend the usable life of playground facilities, improve safety for the community and maintain aesthetic appeal of municipal park areas.

**OPERATING FUND IMPACT:** Minimal effect.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Services

**PROJECT CATEGORY:**  
Parks and Recreation

**PROJECT NUMBER:** 4

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**PROJECT TITLE:** Park Perimeter Fencing Improvements

**PROJECT DESCRIPTION:** FY 2016-17: Replace split rail fencing at Oakland Drive, Haverhill and Westfield Parks. Central Park chain link fence replacement.

FY 2018-19: Replace split rail fencing at Lakeview and Schrier Parks.

FY 2021-22: Replace split rail fencing at Ramona, West Lake Nature Preserve, and Lexington Green Parks.

FY 2023-24: Replace split rail fencing at Harbors West and Portage Creek Bicentennial Parks.

FY 2024-25: Replace split rail fencing at Millennium Park and Central Park.

**PROJECT JUSTIFICATION/NEED:** Split rail fencing delineates park boundaries, prevents unwanted vehicular access, controls unwanted access to areas within parks and is an aesthetically pleasing element of city parks. In locations where additional security is necessary, chain link fencing is used for park boundaries or internal spaces. The wooden split rail fencing deteriorates from exposure to the elements and requires ongoing maintenance and replacement. Chain link fence also deteriorates over time and requires upgrading/replacement.

**PROJECT BENEFIT/IMPACT:** Each park should make a positive physical and visual statement to visitors. Attractive and safe fencing in all of the parks promote a positive image for public benefit.

**OPERATING FUND IMPACT:** No impact.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Parks, Recreation & Senior Citizen Services

**PROJECT CATEGORY:**  
Parks and Recreation

**PROJECT NUMBER: 5**

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**PROJECT TITLE:** South Westnedge Park Improvements

**PROJECT DESCRIPTION:** South Westnedge Park is home to the popular skateboarding park and inline hockey rink. Both constructed in 2005, these activity areas require upgrades. The inline rink will be resurfaced and bleachers added for spectators. The skate park surfacing will be patched and repaired as needed. A covered picnic pavilion will also be installed adjacent to these areas promoting group gatherings.

**PROJECT JUSTIFICATION/NEED:** Age and popularity of these areas create the need to keep them safe and inviting.

**PROJECT BENEFIT/IMPACT:** Improvements will continue to attract new visitors and the addition of group amenities will promote a positive family and team sports environment.

**OPERATING FUND IMPACT:** Minimal effect

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Services

**PROJECT CATEGORY:**  
Parks and Recreation

**PROJECT NUMBER:** 6

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**PROJECT TITLE:** Schrier Park Improvements

**PROJECT DESCRIPTION:** FY 2016-17: Construct a pavilion on the north side of the existing building. Refurbish fireplace and chimney at enclosed shelter. Upgrade heating systems and install central air conditioning.

FY 2020-21: Schrier Park shelter improvements including window and door upgrades and installation of kitchen facilities for group rental use.

FY 2024-25: Schrier Park shelter improvements including new roof and flooring.

**PROJECT JUSTIFICATION/NEED:** Improvements will provide additional picnic and storage space, while upgrading the heating systems and installing air conditioning will improve energy efficiency while improving usability. An outdoor pavilion attached to the building will allow for larger rentals and increase usability to the area. Schrier Park improvements are identified in the city Recreation and Open Space Plan.

**PROJECT BENEFIT/IMPACT:** Family and small groups will be able to utilize open-air shelter during inclement weather, and rentability of pavilion will be enhanced by shelter. Connecting facility to city utilities will provide dependable, economical, and environmentally sound utilities.

**OPERATING FUND IMPACT:** Estimated costs include: Water utility at \$800 per year. Security equipment maintenance at \$200 per year.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Services

**PROJECT CATEGORY:**  
Parks and Recreation

**PROJECT NUMBER:** 7

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**PROJECT TITLE:** Park Parking Lot/Walkway Improvements

**PROJECT DESCRIPTION:** FY 2017-18: Renovate eastern portions of the Ramona Park lots. Continued repairs to failed asphalt in other park lots and walkways and restripe parking lots at other parks.

FY 2020-21: Overlay remainder of Ramona Park parking lots. Continued repairs to failed asphalt in other park parking lots and walkways.

FY 2023-24: Overlay Bicentennial Park and Schrier Park parking lots. Continued repairs to failed asphalt in other park parking lots and walkways and restripe parking lots at other parks.

FY 2025-26: Overlay South Westnedge Park lower baseball and concession parking lots. Continued repairs to failed asphalt in other park parking lots and walkways and restripe parking lots at other parks.

**PROJECT JUSTIFICATION/NEED:** Regular, periodic upgrades of these surfaces will greatly extend the functional life. Parking lot lines and safety markings must be renewed on a regular basis to maintain functionality.

**PROJECT BENEFIT/IMPACT:** Attractive, functional parking facilities enhance the use of city park facilities.

**OPERATING FUND IMPACT:** No impact.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Services

**PROJECT CATEGORY:**  
Parks and Recreation

**PROJECT NUMBER:** 8

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**PROJECT TITLE:** Park Restroom/Shelter Improvements

**PROJECT DESCRIPTION:** FY 2017-18: Structural improvements of the public restrooms and picnic shelters to maintain appearance and ensure quality facilities. Repainting, reroofing, of building and shelters, upgrade and add security lighting and camera systems, and repair tile floors and walls. Park improvements include Lakeview, Ramona, Lexington Green, and Portage Creek Bicentennial Park at West Milham Avenue, and Celery Flats.

FY 2022-23: Electrical and plumbing upgrades to all restrooms. Lakeview Park shelter replacement, and reroof shelters at Westfield, Harbors West, Westfield, and Oakland Drive parks. Addition/replacement of shelter map cases, upgrade signage and add electrical service to Westfield, Central, Lexington Green, and West Lake Park shelters.

**PROJECT JUSTIFICATION/NEED:** Major remodeling is required at these structures to replace roofs, replace doors, partitions, interior fixtures, repaint and replace deteriorated walks and steps.

**PROJECT BENEFIT/IMPACT:** Park restrooms and shelters must be well maintained to enhance the quality experience patrons expect when visiting a city park.

**OPERATING FUND IMPACT:** None.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Services

**PROJECT CATEGORY:**  
Parks and Recreation

**PROJECT NUMBER:** 9

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**PROJECT TITLE:** Softball Field Improvements

**PROJECT DESCRIPTION:** FY 2017-18: Level ball field #3 and #4 due to sinking terrain. Upgrade irrigation systems, replacement of outfield fencing with eight foot tall fencing at South Westnedge and Ramona Park ball fields. Replace all player benches in the dug outs, and install notification sound system at South Westnedge Park.

FY 2021-22: Level ball fields #1 and #2 due to sinking terrain. Upgrade irrigation systems, replace spectator bleachers, and replace/repair fencing as needed.

**PROJECT JUSTIFICATION/NEED:** Approximately 3,000 participants and spectators visit these facilities each week from April through October. Periodic capital maintenance will protect the significant investment in this site as a result of the work completed in FY 2017-2018 and FY 2021-2022. Periodic improvements may be necessary to address settling of subsurface material and earth. The Recreation and Open Space Plan identifies the need for these improvements.

**PROJECT BENEFIT/IMPACT:** Regular capital maintenance of softball facilities will provide a consistently high standard for the largest city adult recreation program. Capital maintenance will result in much safer and playable ball fields.

**OPERATING FUND IMPACT:** Capital maintenance of softball facilities will decrease annual expenditures for infield and outfield maintenance and irrigation repairs by approximately \$2,000 per year.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Services

**PROJECT CATEGORY:**  
Parks and Recreation

**PROJECT NUMBER:** 10

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**PROJECT TITLE:**

Millennium Park Improvements

**PROJECT DESCRIPTION:**

FY 2017-18 and FY 2023-24: Necessary retrofits of existing compressors and coolant package for the Millennium Park ice rink. Rebuild and update compressors with upgraded refrigerant system. Interior site improvements to concession and storage areas to include updated service area, skate storage and concession inventory storage.

**PROJECT JUSTIFICATION/NEED:**

System requires repairs and upgrades due to normal wear and operation, and to remain compliant with changes to environmental regulations.

The Millennium Park ice rink is a valued recreation opportunity as the only outdoor ice rink in the area. The rink serves over 8,000 skaters a season from December through March.

**PROJECT BENEFIT/IMPACT:**

Maintain and improve efficiency of Millennium Park ice rink coolant system. Reduce breakdowns, and cut energy costs to operate system. Enable service area to be more efficient and increase storage capacity

**OPERATING FUND IMPACT:**

Reduction of energy costs and system breakdowns.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Services

**PROJECT CATEGORY:**  
Parks and Recreation

**PROJECT NUMBER:** 11

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**PROJECT TITLE:** Picnic Support Equipment Improvements

**PROJECT DESCRIPTION:** FY 2017-18, FY 2019-20, FY 2021-22, FY 2023-24 and 2025-26: Activities will include the purchase and installation of uniform refuse receptacles, park benches and the replacement of park grills and picnic tables.

**PROJECT JUSTIFICATION/NEED:** The quality of the experience a family or group enjoys when using a park or having a picnic relates directly to the condition of the support equipment. Attractive and functional tables, grills and refuse containers must be a part of the park environment. Upgrading the picnic tables to composite or vinyl coated will decrease the annual maintenance for wood replacement and graffiti removal.

**PROJECT BENEFIT/IMPACT:** Attractive, functional equipment will enhance the use of city park facilities.

**OPERATING FUND IMPACT:** Reduced annual maintenance cost.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Public Services

**PROJECT CATEGORY:**  
Parks and Recreation

**PROJECT NUMBER:** 12

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**PROJECT TITLE:** Park Trail Improvements

**PROJECT DESCRIPTION:** FY 2018-19: Activities will include filling and sealing asphalt cracks and seal coating of park trails, Super Deck replacement, and woodchip trail upgrades.

FY 2021-22: Asphalt trail repairs and bridge decking replacement.

FY 2024-25: Asphalt trail repair, Super Deck replacement, and woodchip trail upgrades.

**PROJECT JUSTIFICATION/NEED:** Park trails pass through uplands, forest and wetland areas. The trails must be resurfaced and maintained to ensure user safety and prevent damage to adjacent areas. Well-maintained and defined trails prevent encroachment into sensitive areas by the public. This project is identified in the Recreation and Open Space Plan.

**PROJECT BENEFIT/IMPACT:** Well-maintained trails protect the significant investment in these facilities while providing safe and aesthetically pleasing usage of city trail system.

**OPERATING FUND IMPACT:** No impact.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Parks, Recreation & Senior Citizen Services

**PROJECT CATEGORY:**  
Parks and Recreation

**PROJECT NUMBER:** 13

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**PROJECT TITLE:** Celery Flats Historical Area Improvements

**PROJECT DESCRIPTION:** FY 2019-20: Exterior repairs and painting of all four historical structures and the Interpretive Center.

**PROJECT JUSTIFICATION/NEED:** The community supports the Celery Flats Historical Area and proposed improvements and enhancements will encourage the full use of the park. As historical facilities continue to age, structures require periodic upgrades. Projects are included in the Recreation and Open Space Plan and the preventative maintenance study to ensure the integrity of these facilities.

**PROJECT BENEFIT/IMPACT:** The Celery Flats improvements will provide cultural, historical and educational opportunities for current and future generations to enjoy.

**OPERATING FUND IMPACT:** Reduction of non-routine repairs.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Parks, Recreation & Senior Citizen Services

**PROJECT CATEGORY:**  
Parks and Recreation

**PROJECT NUMBER:** 14

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**PROJECT TITLE:** Lakeview Park Improvements

**PROJECT DESCRIPTION:** Continue development along waterfront areas to include large enclosed deck/pavilion on Austin Lake and a small deck and trails along channel. Replace the restroom facility with an upgraded building that meets current standards and will better serve intense use of park.

**PROJECT JUSTIFICATION/NEED:** Development of lakefront area along Lakeview Park is identified in the Park Master Plan, Recreation and Open Space Plan and Lake Center Subarea Plan. Opening portions of the waterfront will enhance fishing and wildlife viewing opportunities. The existing restroom facility is the oldest in the system and outdated with respect to size and accessibility and needs total replacement.

**PROJECT BENEFIT/IMPACT:** Lakeview Park is a heavily used community park. These projects would improve recreation opportunities and properly emphasize the water attributes of waterfront areas.

**OPERATING FUND IMPACT:** Annual cost for deck/pavilion is estimated to be \$800.

**CAPITAL IMPROVEMENT PROJECT FILE**

**DEPARTMENT:**  
Parks, Recreation & Senior Citizen Services

**PROJECT CATEGORY:**  
Parks and Recreation

**PROJECT NUMBER:** 15

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**PROJECT TITLE:** Central Park Improvements

**PROJECT DESCRIPTION:** FY 2019-20: Bandshell and pavilion improvements to include painting and lighting upgrades.

**PROJECT/JUSTIFICATION/NEED:** Summer events are scheduled at the bandshell and require preventive maintenance to the electrical and lighting systems. To maintain the quality of the facility, renovations to the bandshell, pavilion, and landscaping are necessary to meet the needs of park patrons.

**PROJECT BENEFIT/IMPACT:** Continued development and improvement of the City Centre for expanded public use is essential to meet demands. The identified improvements will contribute to meeting the needs of the public.

**OPERATING FUND IMPACT:** None.

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Parks, Recreation & Senior Citizen Services

**PROJECT CATEGORY:**  
Parks and Recreation

**PROJECT NUMBER:** 16

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**PROJECT TITLE:** Portage Creek Bicentennial Park Improvements

**PROJECT DESCRIPTION:** Enhancement of the Portage Creek Bicentennial Park (PCBP) trail activities to include the addition of outdoor fitness equipment and play pockets. Installation of outdoor fitness equipment for adults and play pockets for youth, will be strategically placed and include protective surfacing.

**PROJECT JUSTIFICATION/NEED:** As the community progresses into their model of “A Natural Place to Move”, PCBP trail remains an outlet for active recreation and has become a very popular destination for walkers, runners and bikers making it an ideal location to further promote active lifestyles. Play pockets are independent play components which are nature and educationally based around plants and animals in our environment. They encourage young ones to continue down the path in search of the next play pocket. Offering additional activities contributes to a healthier community by appealing to a larger population.

**PROJECT BENEFIT/IMPACT:** In an effort to modernize recreational efforts, this enhancement will provide the public with a new means of physical fitness without the requirement of obtaining a gym membership. It will keep Portage moving toward their model and has the potential to draw users from outside the community.

**OPERATING FUND IMPACT:** Minimal effect

## CAPITAL IMPROVEMENT PROJECT PROFILE

**DEPARTMENT:**  
Parks, Recreation & Senior Citizen Services

**PROJECT CATEGORY:**  
Parks and Recreation

**PROJECT NUMBER:** 17

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**PROJECT TITLE:** Ramona Park Improvements

**PROJECT DESCRIPTION:** FY 2022-23: Upgrade beach house and contact station mechanical and electrical systems, replace walkway handrails, and fishing dock components as needed.

**PROJECT JUSTIFICATION/NEED:** Ramona Park Beach attendance has increased significantly. The beach house requires renovations for on-going staff training, patron facility use and youth fishing programs. Planned improvements will create a more patron friendly facility by providing adequate and accessible restroom facilities, improved shower area, a first aid room and a service oriented beach house area. It will also provide a safer work place for staff by renovating the current facility to provide for improved storage of supplies and equipment.

**PROJECT BENEFIT/IMPACT:** Provide safe, top-quality facilities for the thousands of park visitors using athletic fields and waterfront facilities each year. Provides needed water recreation, rental and picnic facilities for residents of Portage and Kalamazoo County.

**OPERATING FUND IMPACT:** Minimal Impact

CAPITAL IMPROVEMENT PROJECT SUMMARY DEBT SERVICE

Project Expenditures (\$000)

Project Number/Title	Fiscal Year												Total	
	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26				
1 Building Authority -1996 A	57													57
2 Building Authority - 1996 B	13													13
3 MTF - 1997 (Major St)	112	132												244
4 City Share - 2001	6	6	6	6	5	5								34
5 MTF - 2008 (Refinancing)	240	232	243	249	235	0								1,199
6 MTF - 2010 (Refinancing)	649	682	717	350	369	356								3,123
7 City Share - 2010 (Refinancing)	83	84	77	60	50	40	41							435
8 Building Authority - 2011 (Refinancing)	756	771	761	625	654	659	447							4,673
9 City Share - 2003	10	10	9	9	9	9	8	8						72
10 Capital Improvement LTGO - 2009	132	128	128	124	100	97	96	93	90	85				1,073
11 Capital Improvement LTGO - 2010	172	214	214	209	204	199	162	158	157	153				1,842
12 Capital Improvement LTGO - 2011	112	111	100	98	100	98	100	66	64	62				911
13 Capital Improvement LTGO - 2012 (Refinancing)	816	900	766	747	780	764	767	755	571	564				7,430
14 Capital Improvement LTGO - 2012	97	95	94	89	86	87	85	84	50	47				814
15 Capital Improvement LTGO - 2013	67	66	65	62	107	105	100	84	85	54				795
16 Capital Improvement LTGO - 2013 (Refunding)	335	295	293	283	272	273	258	242	238	226				2,715
17 Capital Improvement LTGO - 2015A (Refunding)	585	533	521	477	461	448	429	414	380	362				4,610
18 Capital Improvement LTGO - 2015B	384	381	361	355	219	212	207	200	192	185				2,696
<b>TOTALS</b>	<b>4,626</b>	<b>4,640</b>	<b>4,355</b>	<b>3,743</b>	<b>3,651</b>	<b>3,352</b>	<b>2,700</b>	<b>2,104</b>	<b>1,827</b>	<b>1,738</b>				<b>32,736</b>
Other Financing														
City Share Cash	4,626	4,640	4,355	3,743	3,651	3,352	2,700	2,104	1,827	1,738				32,736

CAPITAL IMPROVEMENT PROJECT SUMMARY DEBT SERVICE

Funding Sources (\$000)

Project Number/Title	BANs	Fed/State Grants	Other Revenues	S/A's & S/A Bonds	Gen'l. Ob. Bonds	Utility Bonds	Other Financing	CIP Fund	Total
1 Building Authority - 1996 A								57	57
2 Building Authority - 1996 B								13	13
3 MTF - 1997 (Major St)								244	244
4 City Share - 2001								34	34
5 MTF - 2008 (Refinancing)								1,199	1,199
6 MTF - 2010 (Refinancing)								3,123	3,123
7 City Share - 2010 (Refinancing)								435	435
8 Building Authority - 2011 (Refinancing)								4,673	4,673
9 City Share - 2003								72	72
10 Capital Improvement LTGO - 2009								1,073	1,073
11 Capital Improvement LTGO - 2010								1,842	1,842
12 Capital Improvement LTGO - 2011								911	911
13 Capital Improvement LTGO - 2012 (Refinancing)								7,430	7,430
14 Capital Improvement LTGO - 2012								814	814
15 Capital Improvement LTGO - 2013								795	795
16 Capital Improvement LTGO - 2013 (Refunding)								2,715	2,715
17 Capital Improvement LTGO - 2015A (Refunding)								4,610	4,610
18 Capital Improvement LTGO - 2015B								2,696	2,696
<b>TOTALS</b>								<b>32,736</b>	<b>32,736</b>

CAPITAL IMPROVEMENT PROJECT SUMMARY DEBT SERVICE (cont.)

Project Number/Title		Project Expenditures (\$000)											Total	
		Fiscal Year												
		16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25				
1	General Obligation Financing -2016-2017		254	254	254	254	254	254	254	254	254	254	254	2,286
2	General Obligation Financing -2017-2018		234	325	144	403	189	98	121	77				1,591
3	General Obligation Financing -2018-2019			325	325	325	325	325	325	325	325	325	325	2,275
4	General Obligation Financing -2019-2020				144	144	144	144	144	144	144	144	144	864
5	General Obligation Financing -2020-2021					403	403	403	403	403	403	403	403	2,015
6	General Obligation Financing -2021-2022						189	189	189	189	189	189	189	756
7	General Obligation Financing -2022-2023							98	98	98	98	98	98	294
8	General Obligation Financing -2023-2024								121	121	121	121	121	242
9	General Obligation Financing -2024-2025											77	77	77
Administrative Services Fee														
TOTALS		254	488	904	867	1,529	1,504	1,511	1,655	1,688				10,400
Other Financing														
City Share Cash		254	488	904	867	1,529	1,504	1,511	1,655	1,688				10,400

CAPITAL IMPROVEMENT PROJECT SUMMARY DEBT SERVICE (cont.)

Funding Sources (\$000)

Project Number/Title	BANs	Fed/State Grants	Other Revenues	S/A's & S/A Bonds	Gen'l. Ob. Bonds	Utility Bonds	Other Financing	CIP Fund	Total
1 General Obligation Financing -2016-2017								2,286	2,286
2 General Obligation Financing -2017-2018								1,591	1,591
3 General Obligation Financing -2018-2019								2,275	2,275
4 General Obligation Financing -2019-2020								864	864
5 General Obligation Financing -2020-2021								2,015	2,015
6 General Obligation Financing -2021-2022								756	756
7 General Obligation Financing -2022-2023								294	294
8 General Obligation Financing -2023-2024								242	242
9 General Obligation Financing -2024-2025								77	77
Administrative Services Fee									
<b>TOTALS</b>								<b>10,400</b>	<b>10,400</b>