Project Number: CE125 Asset Type: Computer Equipment

Project Title: Enterprise Resource Planning (ERP) Software Migration CIP Status: Recurring

Department Name: Information Technology Project Category: Capital Upgrade Sector: Various

Project Purpose:

The purpose of this project is to migrate the City's Naviline SunGard Public Sector software from the current platform, which the City implemented in 1990. This project aligns with the City's e-Government initiative.

Project Narrative:

ERP refers to an integrated suite of software applications that support the core business functions of an organization. Currently support business functions include: Accounting, Utility Billing, Accounts Receivable, Building Permits, Business Licenses, Payroll/Personnel, Purchasing/Inventory, and Code Enforcement. The City's current ERP is not built to current software development standards and does not support customer friendly e-government initiatives. The new product will also expand current services that include but are not limited to: electronic building permit submittal and integration with the utility's GIS design software. The City has evaluated vendor solutions and plans to migrate to the MUNIS ERP solution through Tyler Technologies. This project will help the City meet the goal of enhanced eGovernment functionality Citywide.

External Funding Sources Available:

None

Projected Timetable:

2019 include the implementation of an Administrative Hearing Module

Impact on Operating Budget:

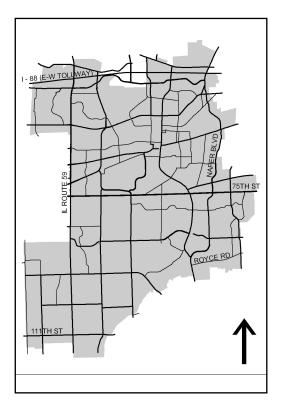
Impact to operating budget is dependent upon the selected ERP. Software costs will be budgeted upon vendor selection.

Funding Source Summary

Funding Source	2019	2020	2021	2022	2023	Total Source
Water Utility	100,000	0	0	0	0	100,000
Electric Utility	200,000	255,000	260,100	0	0	715,100
Unfunded Capital	595,000	0	0	0	0	595,000
Totals	895,000	255,000	260,100	0	0	1,410,100

Project Cost Summary

Expense Category	2018 Budget	2019	2020	2021	2022	2023	Total CIP
Technology - Hardware/Software	2,000,000	895,000	255,000	260,100	0	0	1,410,100
Totals	2,000,000	895,000	255,000	260,100	0	0	1,410,100



Budget Year:

Category Code: A

2019

Project Number: CE145

SAN Replacement

Department Name: Information Technology **CIP Status:**

Asset Type:

Recurring

Computer Equipment

Category Code: A

Budget Year:

Project Category: Capital Upgrade

Sector: Various

2019

Project Purpose:

Project Title:

Storage Area Network (SAN) server replacement.

Project Narrative:

Most of the city's core business processes are now completely digital which has led to an increase in demand for data storage. The City's Storage Area Network (SAN) has allowed the city to consolidate data storage and virtualize many of its servers, thus reducing the overall number of physical servers and the associated replacement and maintenance costs. The components of the Storage Area Network that were purchased over five years ago will reach the end of their life and will no longer be supported by the manufacturer.

External Funding Sources Available:

None

Projected Timetable:

To be completed in 2019.

Impact on Operating Budget:

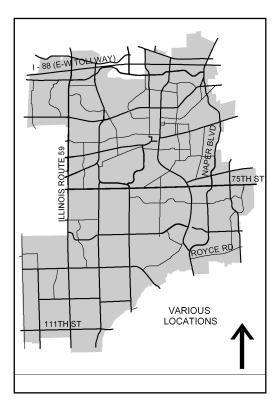
None

Funding Source Summary

Funding Source	2019	2020	2021	2022	2023	Total Source
Unfunded Capital	156,000	0	0	0	0	156,000
Totals	156,000	0	0	0	0	156,000

Project Cost Summary

Expense Category	2018 Budget	2019	2020	2021	2022	2023	Total CIP
Equip. & Maint.	0	156,000	0	0	0	0	156,000
Totals	0	156,000	0	0	0	0	156,000



Project Number: CE148 Asset Type: Computer Equipment

Project Title: Cityworks Service Request and Work Order Management System CIP Status: New

Department Name: Information Technology Project Category: Capital Upgrade Sector: Various

Project Purpose:

To enhance/upgrade the Cityworks service request and work order management software to include additional business components.

Project Narrative:

Cityworks is the City's primary GIS asset management service request/work order system. This project is to fund consulting services and the implementation of this software upgrade. This project will coordinate efforts with Public Works, Transportation, Engineering, and Development, DPU-Electric and DPU-Water/Wastewater. Projects planned for the immediate future include the sidewalk replacement programs, sign inventory management, electric utility, and water utility assets, including Springbrook. These work order system upgrades in conjunction with the capabilities of the new ERP system (CE125) will provide a cost effective software tool will be developed to maximize asset performance while lowering the costs of maintenance and replacement of assets. It will also detects failure conditions in advance; eliminates manual actions, handoffs and paperwork; and reduces the time between problem identification and resolution.

External Funding Sources Available:

None

Projected Timetable:

Impact on Operating Budget:

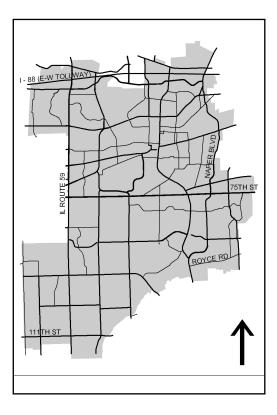
Annual maintenance.

Funding Source Summary

Funding Source	2019	2020	2021	2022	2023	Total Source
Water Utility	225,000	242,760	0	0	0	467,760
Electric Utility	192,000	188,700	0	0	0	380,700
Unfunded Capital	128,000	139,740	0	0	0	267,740
Totals	545,000	571,200	0	0	0	1,116,200

Project Cost Summary

Expense Category	2018 Budget	2019	2020	2021	2022	2023	Total CIP
Technology - Hardware/Software	620,000	545,000	571,200	0	0	0	1,116,200
Totals	620,000	545,000	571,200	0	0	0	1,116,200



Budget Year:

Category Code: B

2019

Project Number: CE149 Asset Type: Computer Equipment

Project Title: Virtual Server and Storage Area Network Upgrade CIP Status: New

Department Name: Information Technology Project Category: Capital Upgrade Sector: Various

Project Purpose:

Upgrade the capabilities of the City's core virtual server environment to appropriately support the type and amount of data being utilized.

Project Narrative:

The City's current virtual environment supports over one hundred virtual servers and applications. With the increase in the number applications and amount of data being utilized, the City is reaching the capacity limit of the network. More powerful virtual host servers and an enterprise-grade storage area network are necessary to keep up with the demand of the applications and users. The upgrade with allow the City to support the size of today's data, improve business process automation, and increase workflow automation. This project will rollover to 2019.

External Funding Sources Available:

None

Projected Timetable:

To be completed in 2019.

Impact on Operating Budget:

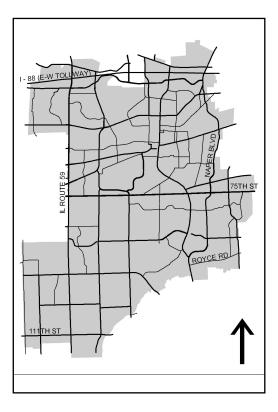
Hardware will include five year warranties

Funding Source Summary

Funding Source	2019	2020	2021	2022	2023	Total Source
G.O. Bond: Prior Issues	192,500	0	0	0	0	192,500
Water Utility	77,000	0	0	0	0	77,000
Electric Utility	115,500	0	0	0	0	115,500
Totals	385,000	0	0	0	0	385,000

Project Cost Summary

Expense Category	2018 Budget	2019	2020	2021	2022	2023	Total CIP
Technology - Hardware/Software	385,000	385,000	0	0	0	0	385,000
Totals	385,000	385,000	0	0	0	0	385,000



Budget Year:

Category Code: A

2019

Project Number: CE157 Asset Type: Computer Equipment Budget Year: 2019

Project Title: Geographic Information System (GIS) Land Base Additions CIP Status:

Department Name: Information Technology Project Category: Capital Upgrade Sector: Various

Project Purpose:

The Geographic Information System (GIS) land base includes planimetric data (buildings, roads, etc.), topographic data (contours, elevations) and digital orthophotography (scanned aerial photos). It is used as the basis for nearly all of the City's GIS applications. Due to the growth of the City, the GIS land base needs to be updated on a recurring basis.

Project Narrative:

Previously the City updated the land base every three years, with the last update in FY 2013. In order to reduce budget costs associated with a land base update, City staff recommend a transition to an update on an as-needed basis. In FY 2019 the City will complete a full land base update including topographic, planimetric data, and digital orthophotography. The project to update the GIS land base includes the following key tasks: RFP development and selection of a vendor/consultant, ground control survey and aerial photography, LiDAR (light detection and ranging) data acquisition, development of digital orthophotography and oblique photography, and final delivery of all data products.

External Funding Sources Available:

None

Projected Timetable:

Impact on Operating Budget:

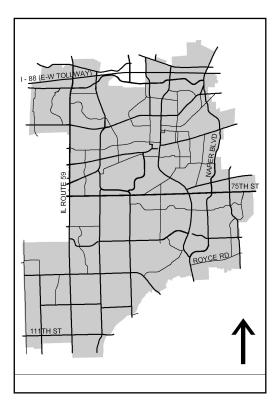
None

Funding Source Summary

Funding Source	2019	2020	2021	2022	2023	Total Source
Water Utility	20,000	0	0	0	0	20,000
Electric Utility	30,000	0	0	0	0	30,000
Unfunded Capital	50,000	0	0	0	0	50,000
Totals	100,000	0	0	0	0	100,000

Project Cost Summary

Expense Category	2018 Budget	2019	2020	2021	2022	2023	Total CIP
Professional Services	0	100,000	0	0	0	0	100,000
Totals	0	100,000	0	0	0	0	100,000



Project Number: CE158 Asset Type: Computer Equipment Budget Year: 2019

Project Title: Replacement Datacenter Switches CIP Status: New

Department Name: Information Technology **Project Category:** Capital Upgrade **Sector:**

Project Purpose:

Replacement of the core network switches at the city's three datacenters.

Project Narrative:

To replace the existing core network switches and data center firewalls in the city's three datacenters that were installed in 2012.

External Funding Sources Available:

None

Projected Timetable:

Impact on Operating Budget:

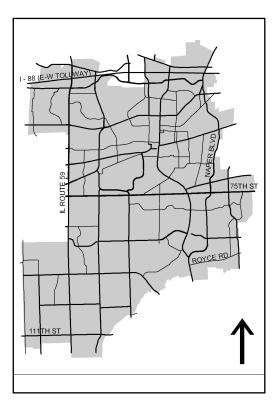
Will replace existing hardware so there will be no impact on the operating budget.

Funding Source Summary

Funding Source	2019	2020	2021	2022	2023	Total Source
Water Utility	50,000	0	0	0	0	50,000
Electric Utility	75,000	0	0	0	0	75,000
Unfunded Capital	125,000	0	0	0	0	125,000
Totals	250,000	0	0	0	0	250,000

Project Cost Summary

Expense Category	2018 Budget	2019	2020	2021	2022	2023	Total CIP
Equip. & Maint.	0	250,000	0	0	0	0	250,000
Totals	0	250,000	0	0	0	0	250,000



Project Number: CE159 Asset Type: Computer Equipment Budget Year: 2019

Project Title: Fiber Cabling for the Public Safety and Naper Settlement CIP Status: New

Department Name: Information Technology Project Category: Capital Upgrade Sector: Various

Project Purpose:

To add a redundant link to Aurora for the Public Safety Radio system and to upgrade the current network fiber cabling between the main network switch at the Police Department and the communication closets within the building and to the Fire Administration building. Also to upgrade the network fiber cable between the Municipal Center and the Naper Settlement campus.

Project Narrative:

The current network fiber cabling in the Police Department and to the Fire Administration building was originally installed when the buildings were built. The fiber connects the main network switch at the Police Department to the switches in each one of the local are network closets in the building and to the Fire Administration building. The fiber, being twenty years old, is not able to transmit at the higher communication speeds that the new network switches are capable of. The link from the Municipal Center to Naper Settlement is also in need of replacement to transmit the current data speeds for now and future growth. Part of the project will roll over to 2019.

External Funding Sources Available:

None

Projected Timetable:

Impact on Operating Budget:

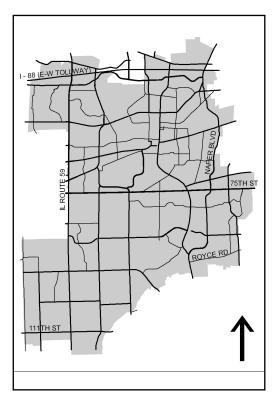
There will be no impact on the operating budget since this is a physical upgrade.

Funding Source Summary

Funding Source	2019	2020	2021	2022	2023	Total Source
Water Utility	0	0	0	0	35,720	35,720
Electric Utility	0	0	0	0	53,580	53,580
Unfunded Capital	0	0	0	0	89,301	89,301
Totals	0	0	0	0	178,601	178,601

Project Cost Summary

Expense Category	2018 Budget	2019	2020	2021	2022	2023	Total CIP
Construction	235,000	0	0	0	0	178,601	178,601
Totals	235,000	0	0	0	0	178,601	178,601



Project Number: CE160 Asset Type: Computer Equipment Budget Year: 2019

Project Title: Conference Room Upgrades CIP Status: New

Department Name: Information Technology Project Category: Capital Upgrade Sector:

Project Purpose:

IT Department seeks to standardize conference room experience and make Skype-enabled.

Project Narrative:

Current conference room technology is not standard; each room provides a unique method to connect, display presentations and conduct conference calls. This CIP will provide for standard functions and connectivity. Additionally, each updated room will be fully-integrated in the City's conference call solution to provide easy-to-use connections for City employees and guests.

External Funding Sources Available:

None

Projected Timetable:

This project will start in 2019 and end in 2022 and initial plan calls for 4 conference rooms per year at \$60,000 each.

Impact on Operating Budget:

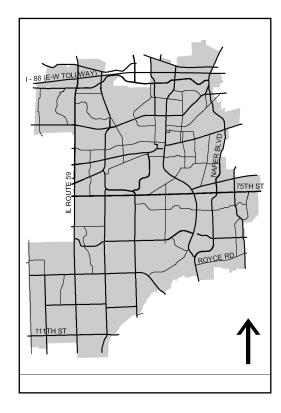
None

Funding Source Summary

Funding Source	2019	2020	2021	2022	2023	Total Source
Unfunded Capital	120,000	244,800	124,848	127,345	0	616,993
Totals	120,000	244,800	124,848	127,345	0	616,993

Project Cost Summary

Expense Category	2018 Budget	2019	2020	2021	2022	2023	Total CIP
Professional Services	0	20,000	40,800	20,808	21,224	0	102,832
Technology - Hardware/Software	0	100,000	204,000	104,040	106,121	0	514,161
Totals	0	120,000	244,800	124,848	127,345	0	616,993



Project Number:CE161Asset Type:Computer EquipmentBudget Year:2019

Project Title: Legal Contract Management CIP Status: New

Department Name: Information Technology Project Category: Capital Upgrade Sector:

Project Purpose:

Improve the City's process of contract management.

Project Narrative:

The current contract management process is manual and therefore tedious. The goal is to find a solution that integrates with the City's existing ERP that provides initial completion and renewal workflows.

External Funding Sources Available:

None

Projected Timetable:

Impact on Operating Budget:

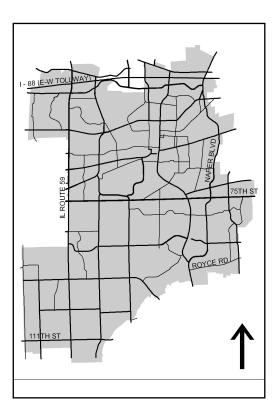
None

Funding Source Summary

Funding Source	2019	2020	2021	2022	2023	Total Source
Water Utility	0	102,000	0	0	0	102,000
Electric Utility	0	153,000	0	0	0	153,000
Unfunded Capital	0	265,200	0	0	0	265,200
Totals	0	520,200	0	0	0	520,200

Project Cost Summary

Expense Category	2018 Budget	2019	2020	2021	2022	2023	Total CIP
Professional Services	0	0	156,366	0	0	0	156,366
Technology - Hardware/Software	0	0	363,834	0	0	0	363,834
Totals	0	0	520,200	0	0	0	520,200



Project Number: EQ052 Asset Type: Equipment

Project Title: City Council Chambers Audio Visual Equipment Replacement CIP Status:

Department Name: Information Technology Project Category: Capital Upgrade

Budget Year: 2019 Category Code: A

New

Sector: Northeast,

Northwest, Southeast, Southwest, Various

Project Purpose:

The purpose of this project is to replace outdated and non-functional audio visual equipment located in the City Council Chambers in order to ensure quality presentation of recorded meetings both online and on the city's government access station.

Project Narrative:

The sound and visual systems in the Council Chambers is inadequate for the Council members, staff, and audience to view and hear meeting proceedings clearly in person & via City channel broadcast. The main equipment (i.e. cameras, speakers, amplifiers, wiring) was last replaced in 2011. In cooperation with NCTV17, City staff will conduct a full audio and visual system analysis and will work towards a complete audio and visual system replacement in Council Chambers. These upgrades will continue to improve the City's transparency and engagement with the community.

External Funding Sources Available:

None

Projected Timetable:

Impact on Operating Budget:

None

Funding Source Summary

Funding Source	2019	2020	2021	2022	2023	Total Source
Unfunded Capital	200,000	0	0	0	0	200,000
Totals	200,000	0	0	0	0	200,000

Project Cost Summary

Expense Category	2018 Budget	2019	2020	2021	2022	2023	Total CIP
Technology - Hardware/Software	0	200,000	0	0	0	0	200,000
Totals	0	200,000	0	0	0	0	200,000

Project Number: LR079

Upgrade Citywide Radio Communication System

Department Name: Information Technology

Asset Type: CIP Status: Long Range Communications

New

Project Category: Capital Maintenance

Budget Year: 2

2019

Category Code:

Sector: Northeast,

Northwest, Southeast, Southwest, Various

Project Purpose:

Project Title:

Upgrade Harris Radio System to modernize the citywide mission critical radio communication system.

Project Narrative:

Naperville and Aurora currently share a radio communication system. The current hardware and software platform is reaching the end of life. The upgrade solution will enhance system redundancy and resiliency, at the same time improve user experience and functionality and reduce hardware footprint by taking advantage of virtual applications. The upgrade will allow the City to stay on the more open platform by upgrading to the radio platform to SR10. The upgrade will also include adding a microwave ring to the existing infrastructure. The primary work schedule for 2019 includes the console upgrades and future work in 2021 will look to replace radio equipment. All work associated with this project will be coordinated with the City of Aurora.

External Funding Sources Available:

City of Aurora is a Partner Agency

Projected Timetable:

Console Upgrades - 2019 and Radio Equipment Upgrade/Replacement - 2021

Impact on Operating Budget:

Maintenance costs already included in operating budget. Reduced maintenance costs with upgrade.

Funding Source Summary

Funding Source	2019	2020	2021	2022	2023	Total Source
Water Utility	80,000	0	104,040	0	0	184,040
Electric Utility	120,000	0	156,060	0	0	276,060
Unfunded Capital	800,000	0	1,040,400	0	0	1,840,400
Totals	1,000,000	0	1,300,500	0	0	2,300,500

Project Cost Summary

Expense Category	2018 Budget	2019	2020	2021	2022	2023	Total CIP
Equip. & Maint.	0	1,000,000	0	1,300,500	0	0	2,300,500
Totals	0	1,000,000	0	1,300,500	0	0	2,300,500

