

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Airport
Contact Mark Opitz
Type Study
Useful Life
Category Airport
Priority 4

Project #	AI-17-01
Project Name	"Micro Master Plan" for NE Hangar Development

Description

Undertaking the planning necessary to position the airport to be eligible for future Federal funding to purchase land and prepare a hangar development site northeast of existing airport land.

Justification

City and airport staff regularly field inquiries for hangar space (probably an average of 2 inquiries per month), even after all 40 hangar sites at the airport have been developed. To accommodate additional hangars, contiguous land would need to be purchased and added to the airport. The most suitable location for additional hangars appears to be the northeast end of the airport, north of the primary runway and east of the grass runway.

The City’s airport project manager at the Bureau of Aeronautics has indicated they there is adequate State funding currently available to provide a 50% match for preparing a “micro master plan” that studies the completion of a single large project at the airport. She estimates that such planning typically costs around \$50,000. While it would be beneficial to do a comprehensive master plan given that the airport is now developed as originally envisioned, the BOA doesn’t have enough State funds available at a 50/50 cost share to assist the City with undertaking a full master plan and environmental assessment, and our annual Federal entitlement funding allocation of \$150,000 is spoken for through 2018. (The City provides a 5% match to entitlement funds, which can be used for pavement maintenance projects and certain equipment purchases.) The City used TID #3 funds as its match for planning, designing and constructing the initial airport improvements, and City staff and TIF consultants continue to support the use of TID #3 for assisting with planning for additional hangar space to accommodate hangar demand, at least some of which is from business interests in Middleton and the west side of Madison. There is no guarantee that the BOA will have State funding available at a particular time in the future.

Expenditures	2017	2018	2019	2020	2021	Total
Planning/Design	30,000					30,000
Total	30,000					30,000

Funding Sources	2017	2018	2019	2020	2021	Total
TIF 3	30,000					30,000
Total	30,000					30,000

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Department Building Inspection
Contact Scott Ellarson
Type Improvement
Useful Life perpetuity
Category Storage
Priority 2

Project # BI-17-01
Project Name Scanning/Display Service for Plan Archive

Description

Hiring of service to scan building plan sets to PDF documents. This budget request includes \$10,000 per year for three years of scanning, plus \$1,200 for a display screen, \$1,000 for a laptop, and \$150 for a wall mount for the display screen.

Justification

Current building plans drawings are required to be submitted in PDF format because we have no space to store paper. Under last year's public works capital budget we started digitizing electronic copies of older building plans (many of which are becoming dog-eared and difficult to read) to allow for efficient indexing, storage, and retrieval. Electronic storage would provide a more efficient system to retrieve plans and provide copies to the public when requested. It will also free up office space creating a less congested, more efficient work environment. It would also allow us to add space to our waiting area for visitors stopping in at the permitting desk.

Expenditures	2017	2018	2019	2020	2021	Total
Equip/Vehicles/Furnishings	2,350					2,350
Other	10,000	10,000	10,000			30,000
Total	12,350	10,000	10,000			32,350

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	12,350	10,000	10,000			32,350
Total	12,350	10,000	10,000			32,350

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Department Building Inspection
Contact Todd Parkos
Type Replacement
Useful Life 20 years
Category Buildings
Priority 3

Project #	BI-17-02
Project Name	City Hall Fire Panel and Building Access

Description

This request is for a new fire alarm control panel and a computer based locking system for City Hall. The fire alarm control panel will replace a malfunctioning panel that is 24 years old. The computer based locking system will be a security upgrade to the existing locking system at City Hall. The new system will allow key card access for employees that will log who enters and exits the building. The system will also allow doors throughout City Hall (interior and exterior) to be programmed to lock and unlock at different times depending on staff needs.

The cost for the fire panel is \$2,570.
The cost for the building access upgrades is \$18,731.

Justification

The fire alarm control panel at City Hall is malfunctioning. In 2014, the alarm system starting to go off unexpectedly. When the alarm goes off, the Police Dispatcher and the Building and Facilities Manager are called. The Facilities Manager has had to come in to City Hall to fix the alarm in the middle of the night on weekends and at other off-duty times. The Police Department has found City Hall doors unsecured during routine security checks.

Expenditures	2017	2018	2019	2020	2021	Total
Equip/Vehicles/Furnishings	25,000					25,000
Total	25,000					25,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	25,000					25,000
Total	25,000					25,000

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Department Community Services
Contact Mark Walther
Type Equipment
Useful Life 10 years
Category Equipment: Miscellaneous
Priority 2

Project #	CS-17-01
Project Name	Radar speed display trailer replacement

Description

One (1) radar speed display trailer to replace a unit purchased in 2007 and not currently working. Initial trouble shooting has failed to fix it.

Justification

Radar speed display units are commonly used to address speeding issues. The City of Middleton has used them for the past 20 years since a home-made trailer mounted unit was built by the city mechanics sometime in the late 1990's. Since then the City of Middleton has purchased a manufactured radar speed display trailer in 2000 and 2007, 10 permanently pole mounted units placed near the 3 elementary schools along streets where school crossing guards are posted and on the streets bordering the middle school.

The trailer mounted units are placed in locations on request of the public reporting speeding issue, following speed studies or at the request of the police department.

This past year, the trailer mounted unit purchased in 2007 has stopped working. Initial trouble shooting has failed to identify the cause and so no repair has yet occurred. City Mechanic Brian Gebhard has advised me to seek a replacement unit. The other unit, purchased in 2000 is still working, but it will need replacing sometime in the future.

The proposed replacement model combines the features of an electronic portable changeable message signs (PCMS) with an integrated internal radar unit on a solar powered trailer. This allows the sign to display either a simple speed reading (47), a message tailored to a speed reading (eg. "THANKS FOR OBEYING THE SPEED LIMIT", "SPEED LIMIT 25 / YOUR SPEED 47 / SLOW DOWN") or used to display messages unrelated to speed like a regular PCMS. This makes this a very flexible unit.

Expenditures	2017	2018	2019	2020	2021	Total
Equip/Vehicles/Furnishings	15,585					15,585
Total	15,585					15,585

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	15,585					15,585
Total	15,585					15,585

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Department Community Services
Contact Mark Walther
Type Equipment
Useful Life 10 years
Category Equipment: Miscellaneous
Priority 3

Project #	CS-17-02
Project Name	Solar Trailers for Electronic Signs

Description

2 to 4 trailers with solar powered batteries on which to mount 2 to 4 electronic signs already owned by the City of Middleton consistent with the 6 currently owned. I would like to purchase pairs of trailers in order to mount pairs of signs as the signs are usually used in pairs. Cost listed is for 1 pair of trailers at \$6,000 each trailer equipped and delivered. Additional savings of about \$1,300 can be had if 2 trailers are purchased and I pick them up instead of paying for shipping. This project can be completed by purchasing all 2 pair of trailers in one year or some combination of pairs over a number of years depending on the availability of funding. The sooner the purchase, the sooner the signs can be put into service.

Justification

Electronic portable message signs (PCMS) are becoming more and more common and expected for traffic incidents, road maintenance projects and special events. Wisconsin DOT makes installing permanent signs part of every major highway construction project (like the West Beltline Hwy) and the portable ones are seen at every construction project to better inform drivers of road conditions. These signs are now best practice if not actually required equipment for highway construction and maintenance projects.

There are increasing calls from the Public Works, Water Utility and Police Departments for the signs for city projects ranging from traffic enforcement alert messages, annual street painting, water main breaks, increased road reconstruction projects, event traffic detours. These activities have called for up to 4 signs at a time; some deployments have lasted weeks making them unavailable for other needs during that time. Some requests have not been honored as the signs have been unavailable. It is apparent that as time goes on there will be increasing need for them. At the same time the original pair of trailers is now 7 years old and these will begin to show wear and will eventually need replacement.

We currently have 6 trailer-mounted-solar-powered PCMS like what I am requesting, plus 2 battery powered ones on home-made trailers. The solar trailers make the signs more useful by providing them with a stable, higher and more visible, transportable and quickly erectable mount with a longer lasting power supply (2 weeks) versus a 8-12 hour portable battery pack power supply on the home-made trailers and ground mounted posts that leave the signs more exposed to accidental and vandal damage (collision or tip over) due to their less stable and lower mount. Multiple trailer-mounted signs provide more flexibility to provide sign services to the increasing number of multiple City construction and maintenance projects, City-sponsored community events and for emergency incidents throughout the City of Middleton.

Expenditures	2017	2018	2019	2020	2021	Total
Equip/Vehicles/Furnishings	12,000	12,000				24,000
Total	12,000	12,000				24,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	12,000	12,000				24,000
Total	12,000	12,000				24,000

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Department Conservancy Lands
Contact Mark Wegner
Type Study
Useful Life 5 years
Category Conservation Area
Priority 1

Project #	CL-17-01
Project Name	Conservancy Lands Master Plan Update

Description
 Update to the Conservancy Lands master plan. The previous master plan was for the 2011-2016 period.

Justification
 The master plan addresses trail standards, management techniques, recommended policies, staffing issues, identifies needs, and provides implementation strategies for a five year period. The new period would be form 2017-2021.

Expenditures	2017	2018	2019	2020	2021	Total
Planning/Design	20,000					20,000
Total	20,000					20,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	20,000					20,000
Total	20,000					20,000

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Department Conservancy Lands
Contact Mark Wegner
Type Improvement
Useful Life 20 years
Category Conservation Area
Priority 2

Project #	CL-17-02
Project Name	Bock Community Forest - Restoration Management

Description

Restoration management in Bock Community Forest in pursuance of restoration management goals as approved by the Conservancy Lands Committee and Common Council. Includes: prescribed burns, plantings, mowing, and weed control, as well as interpretive signage. Planned activities for 2017 include; transplanting nursery shrubs from Bock Community Garden into Bock Community Forest, management of weeds in 16 acres of prairie, savanna, oak woodland to promote establishment of native species, and overseeding in all other areas.

Justification

This investment will keep the City on track in terms of restoration management goals as previously approved, and Resolution 2012-28, in which the City acknowledged the need for responsible and holistic planning for wetland, prairie, savanna and oak woodland restoration. Investment in these vital restoration management measures is eligible for a match from the Friends of Pheasant Branch. FOPB will provide 50/50 match grant funds as in past years. Conservancy Lands Master Plan Goals 1, 2. Conservancy Lands Master Plan Project Priority ranking of 2.

Expenditures	2017	2018	2019	2020	2021	Total
Planning/Design	30,000					30,000
Total	30,000					30,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	15,000					15,000
FOPB Grant	15,000					15,000
Total	30,000					30,000

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Department Conservancy Lands
Contact Mark Wegner
Type Improvement
Useful Life 20+ years
Category Conservation Area
Priority 1

Project #	CL-17-03
Project Name	City Trail Network Development and Enhancements

Description
2017 South Fork Segment – Market St. to Raven - \$25,300; Esser Pond Path - \$20,125; Stonefield Path - \$34,500; Middleton Shores Trail - \$46,000; Middleton Hills Outlot 10 Path - \$28,750; Harbor Village Path - \$34,500; Woodside Heights Path - \$20,000

Justification
Applicable Laws - State Statute 28.20; ADA Title 2 (35.150); WI ASHTO/DOT Standards
This is a priority based on trail use data for alternative transportation and outdoors recreation users. These segments provide vital links in the local and regional trail network, connecting existing paths, and providing access to Pheasant Branch Conservancy. Resurfacing of these paths with porous asphalt additionally furthers the City’s efforts to provide ADA accessibility to its public lands, and ensure the safety and continued popularity of the City’s outstanding trail network. In addition, the porous asphalt paths are a storm water best management practice as well as help reduce urban runoff. Conservancy Lands Master Plan Goal #4.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	209,175					209,175
Total	209,175					209,175

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	209,175					209,175
Total	209,175					209,175

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Department Conservancy Lands
Contact Mark Wegner
Type Improvement
Useful Life
Category Conservation Area
Priority 1

Project #	CL-17-04
Project Name	Middleton Hills Boardwalk Improvements

Description

The Middleton Hills Boardwalk needs to be replaced –it’s rotting and degrading. This boardwalk was built in 2001; the all wood construction is prone to rot due to high water levels. Each section of wood is 6’ W x 10’ L and will be replaced with a steel frame type boardwalk sections which are 6’ W x 10’ L. There will be a total of 700 linear feet replaced.

Justification

Applicable laws/ordinances/standards – ADA Title 2; City Ordinance 21.03; Conservancy Lands Open Space Plan Standards

Sections of the Middleton Hills Boardwalk are rotting and degrading due to being in wet conditions. These need to be replaced as they represent a public safety issue to those using the boardwalk and the failing sections require temporary closures often to protect user safety. Conservancy Lands Master Plan Goal #4.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	115,000					115,000
Total	115,000					115,000

Funding Sources	2017	2018	2019	2020	2021	Total
Grant	115,000					115,000
Total	115,000					115,000

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Department Conservancy Lands
Contact Mark Wegner
Type Improvement
Useful Life
Category Conservation Area
Priority n/a

Project #	CL-17-05
Project Name	Middleton Hills Restorations

Description

Implementation of a series of restoration projects in the Middleton Hills Conservancy Lands area. A: Old Field Unit, Outlot 64 – restoration of lot to prairie through prescribed burns, removal of non-native brush, and seeding of native prairie species. (\$10,680) B: Savanna Unit, Outlot 63 – restoration of lot to savanna/oak woodland through prescribed burns, removal of non-savanna trees, and seeding of native prairie species. (\$9,990) C: Construction of a ~3000-foot natural surface trail through Outlot 64, connecting to Frances Hammerstrom Trail and Pheasant Branch Conservancy trail network. (\$6,000) D: Oak Savanna – restoration of savanna via prescribed burns, removal of invasive species, and seeding of native prairie species. (\$6,900) E: Outlot 10/Pond Activity – restoration of prairie/savanna via prescribed burns, removal of invasive woody species, and interseed native prairie/savanna species. (\$3,000) F: Gaylord Nelson Pond - restoration of prairie/savanna via prescribed burns, removal of invasive woody species, and interseed native prairie/savanna species. (\$1,700) G: Frank Lloyd Wright Wetlands - restoration of prairie/savanna via prescribed burns, removal of invasive woody species, and interseed native prairie/savanna species. Threats include leafy spurge, reed canary grass, hybrid cattail, and buckthorn. (\$13,200)

Justification

These activities are part of a 5 year management plan. Conservancy Lands Master Plan Goals #1, 3, 4.

Expenditures	2017	2018	2019	2020	2021	Total
Planning/Design	51,470					51,470
Total	51,470					51,470

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	51,470					51,470
Total	51,470					51,470

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Department Conservancy Lands
Contact Mark Wegner
Type Improvement
Useful Life 20 - 30 years
Category Conservation Area
Priority 2

Project #	CL-17-06
Project Name	Stricker Pond Forebay Construction

Description

Initial conceptual design & alternative control structure analysis, wetland delineation, hydrologic model, permitting requirements and analysis of possible water quality benefits.

Justification

In order to revise the current storm water system a number of tasks will need to be completed before any excavation could take place. The design of a forebay for storm water entering Stricker’s Pond from the city of Middleton, similar to the one on the Madison side of the pond, may address all of the issues raised. A sediment forebay constructed to hold stormflow from incoming discharge points would enhance pollutant removal by allowing phosphorous laden sediments to settle out from the incoming storm water runoff before being delivered to the main pond. This project would address all of the issues around design, analysis, and site investigations. Subsequent years would implement these results. Conservancy Lands Master Plan Goal #3.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	23,500	21,500	150,000			195,000
Total	23,500	21,500	150,000			195,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	23,500	21,500	150,000			195,000
Total	23,500	21,500	150,000			195,000

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Department Conservancy Lands
Contact Penni Klein
Type Improvement
Useful Life 20 years
Category Conservation Area
Priority 2

Project #	CL-17-07
Project Name	Southfork PBC Creek Maintenance Project

Description

Construction of stone drainage swales to get surface water safely into the channel and minor grading along some sections of the bank and planting with native grasses will stabilize the area, and mitigate areas of erosion due to surface water from parking lots.

Justification

The Southfork of Pheasant Branch Creek has historically had problems of stream-channel erosion and suspended sediment because of urban land use changes in the basin. A streambank stabilization project was completed in October of 2013 to mitigate severe channel and bank erosion occurring in the reach of the South Fork of the Pheasant Branch Creek between Greenway Blvd and Deming Way caused by rapid urbanization of the drainage area and resulting increased flood peaks and water volumes. This project was largely successful although a few areas of erosion are developing due to surface water flows coming from adjacent parking lots. The construction will work to mitigate these problems. Conservancy Lands Master Plan Goal # 3.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	31,300					31,300
Total	31,300					31,300

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	31,300					31,300
Total	31,300					31,300

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Department Conservancy Lands
Contact Mark Wegner
Type Improvement
Useful Life 20 years
Category Conservation Area
Priority 2

Project #	CL-17-08
Project Name	Middleton Beach Road Trails Improvement Project

Description

Construction of a series of looping interlocking paved and unpaved trails through the Middleton Beach Road area for alternative transportation, business and outdoor recreational use is proposed. 1. A paved porous asphalt path will be installed from Middleton Beach Road into Lakeview East Park to provide needed ADA access routes to all play areas. 2. A passive 6-foot wide gravel walking trail system (no bikes) on the upland berms within the Mary E. Jacobson Conservancy will provide access to the neighboring community. Two six foot wide boardwalk segments will connect Middleton Beach Road to the gravel walking trail and to passive use areas.

Justification

None of the three major roads in the Middleton Beach Road Neighborhood have sidewalks causing pedestrians to walk on the street, in conflict with motor vehicles. Harbor Athletic Club also has many members that use Middleton Beach Road to exercise. The need for additional trails in this area has been previously noted in the approved 2011-2016 City of Middleton Conservancy Lands Plan and 2014-2019 City of Middleton Comprehensive Park and Open Space Plan. In summary an improved trail system will give walkers, joggers, bikers, birders, and anglers an excellent opportunity for alternative transportation and outdoor recreational use. Interpretive signs will educate the public about Alzheimer’s and dementia, childhood obesity, health and fish/wildlife habitat restoration as they encounter this unique area. Conservancy Lands Master Plan Goals #1,3,4.

Expenditures	2017	2018	2019	2020	2021	Total
Planning/Design	20,000					20,000
Construction/Maintenance	51,775					51,775
Total	71,775					71,775

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	71,775					71,775
Total	71,775					71,775

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Department Conservancy Lands
Contact Mark Wegner
Type Improvement
Useful Life 20 years
Category Conservation Area
Priority 1

Project #	CL-17-09
Project Name	Trail Marking & Delineation

Description

Vital striping of existing bike/ped paths and trails for DOT/DNR/City/Bike Federation standards, including: near Capitol Ice Arena, Orchid Heights Park, Parisi Park, the Middleton Hills, and the PBC parking lot. Installation of bollards in 10 key locations, including 7 along the South Fork Trail, 3 at the north and south entries to Graber Pond, replacing gates on Park Street, at the intersection of Branch Street and Century Avenue. These trails are heavily used for alternative transportation of outdoor recreation and user safety is a priority.

Justification

Applicable ordinances/standards – City Ordinance 21.03; Conservancy Lands Open Space Plan Standards; WIDOT/ASHTO Standards

Trail data reports show high use levels on our paved trails citywide. Older trails lacked standards for striping and marking creating conflicts for users to follow proper trail etiquette and signage and posing a public safety risk.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	15,000					15,000
Total	15,000					15,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	15,000					15,000
Total	15,000					15,000

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Department Conservancy Lands
Contact Mark Wegner
Type Study
Useful Life
Category Conservation Area
Priority 3

Project #	CL-17-10
Project Name	Boundary Road Park Master Plan

Description

Develop a management plan for the Boundary Road Park Conservancy Area to control invasive species and restore threatened habitat of oak savanna there.

Justification

Requested funds for this neglected conservancy area for 15 years now. Oak savanna remnant should be a priority habitat to restore as it has statewide significance. Oak savannas are the DNR's #1 habitat area to protect and restore; same for Dane County. Conservancy Lands Master Plan Goal #1.

Expenditures	2017	2018	2019	2020	2021	Total
Planning/Design	5,000					5,000
Total	5,000					5,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	5,000					5,000
Total	5,000					5,000

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Department EMS
Contact Steve Wunsch
Type Improvement
Useful Life 25 years
Category Buildings
Priority 2

Project #	E-17-01
Project Name	EMS Storage Cabinet Addtns & Training Rm Window Sys

Description

This project will add custom built-in laminate casework cabinetry and additional kitchen cabinets and countertop to two areas in the EMS station. This will also install remotely operated room darkening shade equipment on the upper clerestory windows in the EMS station training room and replace the failing analog AV projection system in the training room. NOTE: This is the third consecutive year that this request has been submitted for consideration

Justification

The casework and cabinetry that was originally installed in the EMS building for storage of employee’s personal protective gear and uniforms was based upon the staffing model of 12 full-time paramedics each of who work a 56-hour average work week. Starting in mid-2015, the paramedics transitioned to a 52-hour work week and in mid-2016 they made the final transition to a 48-hour work week. At the point of the final transition, two additional permanent full-time paramedics were added into the workforce. These personnel now do not have any areas which they are able to store their protective gear, uniforms, food, valuables, or personal hygiene supplies, so additional storage space will need to be added.

Ever since we moved into our building in September of 2010, we have dealt with an unintended design flaw in our training room. For purposes of energy conservation, upper clerestory windows were installed in the training room area, with the intention of using “natural” lighting instead of electrical lighting whenever the room is being used during daylight hours. Unfortunately this works too well and whenever multi-media presentations are used during training sessions, the intense sunlight floods the room and class participants cannot see the “washed out” images that are being displayed on the projection screen. The only way to alleviate this problem is to install some sort of remotely operated room darkening shade system to cover the east and west clerestory windows.

In addition, the original analog AV projection system used for training is beginning to fail. The large projection screen is no longer able to be brought up/down due to a deterioration of the fire retardant coating. The analog projector is also incompatible with modern digital media and computers (most computers today only have HDMI outputs and longer have VGA ports on them), so many instructors who come to teach at our facility encounter difficulties when trying to deliver multi-media presentations. The projector lamp is also getting very weak and the cost of replacing the lamp itself is over half the cost of purchasing a brand new projector.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	20,000					20,000
Total	20,000					20,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	20,000					20,000
Total	20,000					20,000

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Department EMS
Contact Steve Wunsch
Type Equipment
Useful Life 15 years
Category Equipment: Miscellaneous
Priority 3

Project #	E-18-01
Project Name	Zoll AED Replacement

Description

We are requesting funding for the replacement of 13 AED's that are aging and have reached the end of their useful life.

Justification

Way back in 2002 and 2003, EMS did a community wide fundraising event that raised money to buy a total of 13 AED's. Six of these units were put into PD squad cars, one went to the fire department, and the other six were put in city buildings (City Hall, Library, Golf Course, EMS, Aquatic Center, and the Senior Center). Since that time, an additional 15 AED's have been purchased by various city agencies out of their own budgets (3 by the fire department, 2 by EMS, 2 by Public Works, and 8 by the Police Department).

EMS has committed to keeping all 28 of these AED's updated with the latest software and stocked with new defibrillation pads, other disposable medical supplies, and batteries over their useful life. This alone has an impact on our budget of over \$5,200 each year. However, we do not have the ability to absorb the cost of replacing the AED's when they reach the end of their useful life, or if any of them need significant repairs. Since we started the AED program 14 years ago, we have had 2 out of 28 units fail which required costly repairs – both of them were PD units. The first repair that occurred in July 2013 was paid for by EMS in the amount of \$400. We also paid the cost of \$630 to complete the repairs on the second AED from the PD.

The problem is that going forward, without some additional funding from the city, we cannot be on the hook for repair or replacement of all 28 of the AED's that are deployed across the city. As I stated before, we are already investing \$5,200 a year just to keep these AED's ready for use on a daily basis. Beyond the initial 12 units that were purchased, individual city departments have elected to "expand their fleet" of AED's and they were purchased by those departments with their own resources. EMS assisted each of those departments to purchase those AEDs because we have access to substantial discounts from the manufacturer (Zoll) that those departments would not otherwise have been able to get on their own. But as time moves on, we (EMS) certainly cannot be expected to pay for repair or replacement of all of these additional 15 units that were purchased electively by these departments.

If we had to pay to replace all 28 units at \$1,500 each – that is a hefty sum of over \$42,000, which is not something that we can absorb within the confines of the existing EMS operational budget, which leads to the point that was made earlier. So far, we have had a reasonably good experience with these AED's. The only 2 repairs have been for PD units that were purchased back in 2002. The other 26 units have not had any problems - yet. At some point, I suspect we are going to face more AED units that will need to be repaired. One can make a good argument that the cost to repair this latest unit (\$630) is 40% of the cost of a new AED, so why not just keep on fixing them? The problem is that we also do want to set up a situation where an aging AED could fail during an emergency and potentially result in a life not being saved.

Unfortunately, Zoll cannot give any indication of the life expectancy of an AED. They are designed to be easily updated via software revisions. But there is no reliable way to predict the hardware life expectancy. Some of this is likely related to the environment in which they are used. Clearly an AED that is hauled around in a squad car in a wide range of environmental conditions is more likely to have problems when compared to an AED that sits in a building in a protective cabinet on the wall.

We need to put a plan forth for future replacements of the older AED's (six of which are PD units) at some yet to be determined milestone (15 years?). BUT, going forward, EMS cannot assume the cost for repairing any electively purchased units by any city department, nor can we fund the replacement of any AED's that have reached the end of their useful life.

Expenditures	2017	2018	2019	2020	2021	Total
Equip/Vehicles/Furnishings		19,500				19,500
Total		19,500				19,500

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Department EMS

City of Middleton, Wisconsin

Contact Steve Wunsch

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget		19,500				19,500
Total		19,500				19,500

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department EMS
Contact Steve Wunsch
Type Replacement
Useful Life 15 years
Category Buildings
Priority 4

Project #	E-19-01
Project Name	EMS Building Carpeting Replacement and Repainting

Description

The carpet flooring that was originally installed in the EMS building in 2008 is deteriorating and needs to be replaced. The majority of the latex paint on the drywall surfaces throughout the EMS building is deteriorating and needs to be repainted (10 years ago).

Justification

These upgrades to carpeting and paint are normal investments in building maintenance that can be expected after 10 years of use in a commercial environment.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance			12,000			12,000
Total			12,000			12,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget			12,000			12,000
Total			12,000			12,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department EMS
Contact Steve Wunsch
Type Equipment
Useful Life 10 years
Category Equipment: Miscellaneous
Priority 4

Project #	E-20-01
Project Name	Auto-Pulse Systems

Description

We are requesting funding for the purchase of two (2) automated Chest Compression Devices (CCD) (one for each City of Middleton EMS ambulance) at a total cost of \$36,000. We are requesting financial support to purchase two automated CCDs in order to provide patients with the best available emergency care. An automated CCD delivers superior cardiac compressions when compared to the variability in compression depth and rate that is normally found when human rescuers perform manual compressions. Due to improved perfusion from adequate, constant chest compressions from an automated CCD, cardiac drugs will be able to circulate faster and more completely, improving the chances of inducing a cardiac rhythm that can be defibrillated. Concurrent with restoring blood flow to normal levels, venipuncture for IV therapy has a better chance to be successfully completed. Automated CCDs also have been reported to reduce the risk of rib fractures and cartilage damage that is routinely encountered with manual chest compression during conventional CPR techniques. The use of an automated CCD for pre-hospital care translates into optimal patient care during the cardiac arrest event and dramatically increases the potential for increased survival rates.

Justification

Historically, over 8% of the ALS level ambulance calls that are responded to each year by MEMS require the performance of CPR. Performing a cost-benefit analysis in this situation is difficult when the cost is expressed as the loss of a life, and the benefit is a life saved. The overall benefit of this project to our community can simply be stated as the ability for Middleton EMS to achieve a significant reduction in mortality and morbidity for victims of cardiac arrest. We only need to look at the recently released American Heart Association (AHA) Emergency Cardiovascular Care (ECC) Guidelines 2010 which now places the absolute highest priority upon properly performed CPR. The new guidelines require rescuers to perform five cycles of 30 compressions and two ventilations between defibrillation attempts. As compared to previous standards for CPR, these new compression/ventilation ratios cause significant rescuer fatigue and exhaustion, which is why the AHA is also recommending that the rescuer who is performing chest compressions on the patient be switched every two minutes to avoid degradation in the quality and effectiveness of the CPR. Because of this new standard, we will need to have many more rescuers available at the resuscitation scene to rotate through the chest compressor role. But, because the automated CCD can deliver compressions non-stop for a virtually unlimited period of time, it will allow the rescuers to do other critical patient care tasks like securing the airway, starting IVs, administering drugs, defibrillation, packaging and moving the patient, as well as other necessary functions that are required by ACLS treatment protocols. As we come to understand the value of continuous correctly performed chest compressions on patient survival, and our knowledge that rescuers can only do high quality compressions for about 2 minutes at a stretch, an automated CCD will ensure the best patient care possible and improve the outcome and survival of cardiac arrest patients. Besides improving the quality of patient care, the use of an automated CCD will also reduce the risk of personal injury to the EMS crew and the firefighters who assist them on cardiac arrest calls. Rescuers are always at risk when it is necessary for them to perform CPR in awkward positions while moving patients through narrow and winding corridors, or descending treacherous stairways in multi-level residential settings. Furthermore, the risk of injury is high should an impact occur during transport to the hospital while firefighters and EMS personnel are performing CPR while standing unrestrained in the back of a moving ambulance. Another factor related to the use of human personnel to perform CPR that negatively affects patient care can be found in the ambulance patient compartment environment, where there is a very limited amount of space that rapidly becomes cramped whenever several people hover around the patient during resuscitation attempts. Having an automated CCD on the patient frees up that space for caregivers and allows uncluttered access to patient.

Expenditures	2017	2018	2019	2020	2021	Total
Equip/Vehicles/Furnishings				36,000		36,000
Total				36,000		36,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget				36,000		36,000
Total				36,000		36,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 thru 2021

Department Golf Course
Contact Jeremy Cabalka
Type Replacement
Useful Life 30 years
Category Golf Course
Priority 2

Project #	GC-17-01
Project Name	Pump Station Upgrade

Description

Vertical turbine pump station capable of supplying a minimum of 1500GPM of flow and 105PSI of water pressure. Upgraded intake system to eliminate foreign material from entering pumps and irrigation system. "Jockey" lift pump to supply lower amounts of water to irrigation system as needed without having to fire up large pumps. Newer electronic control system that runs more efficient and more reliably. Newer control system will also communicate with current Toro Lynx sprinkler control software to allow completely autonomous overnight irrigation. Wet-well improvements as needed for new pump station. Building improvements and/or new construction as needed for new pump station.

Justification

Current pump station originally dates back to 1960's and was designed for an 18 hole course. Basic building structure has remained the same. Current horizontal pump station features two 75hp motors driving 2 horizontal pumps. Various components have been replaced due to normal wear since then and electronics were modified during the course reconstruction to have variable speed control capability on one pump. Station has exceeded life expectancy by many years and has high maintenance costs. Overall pump capacity was not increased since the addition of 18 holes. Current pump output is around 1200GPM. Upgrading to 1500GPM pumps allows us to put the same amount of water down in a shorter timeframe, thus making it easier to schedule watering times and shorten watering times. Increased water output and new control system also allows the Toro Lynx sprinkler control system to best utilize pump output beginning to end of watering schedule by running the sprinklers in the most efficient pattern without worrying about running out of flow or making adjustments quicker than current pumps and controls can keep up with. Current electronic controls are considered "Legacy" by service provider. That means some parts are no longer available, not kept on hand, and are priced at a higher rate due to lack of demand. Current horizontal pumps require a vacuum priming system which entails a vacuum pump and vacuum lines connected to the main water pipes. In order for these pumps to pump water, the vacuum pump must first place a vacuum on the system to assist in "drawing" the water into the pump impeller. This system must run for several minutes to have adequate vacuum. This system comes with a certain degree of complexity and potential problems, including: Maintenance to the vacuum pump, motor, drying system, tank, vacuum lines, check valves and fittings. The inability to start and stop the pumps quickly as sometimes required to run the system at peak efficiency. With this style priming system and how our deep well output piping is run, you cannot run the sprinkler system fully automated. The deep well draws ground water to refill the pond. It empties into the wet-well, where the irrigation pumps draw their water supply from. With the system in automatic, it starts and stops the irrigation pumps as needed, but with the deep well pump running, the water in the wet-well is agitated to the point that the intake pipes for the irrigation pumps don't make a good enough seal and the vacuum priming system doesn't work. The irrigation pumps are on a timer to allow the priming system to have adequate time to prime the system. If the timer runs out, and the pumps start to run without adequate prime, severe pump damage will occur, which has been an issue in the past. The solution to this is to not run the deep well pump at the same time as the system is watering in automatic mode. The problem with this is the irrigation system can pump water out of the pond quicker than the deep well can refill it. This ok to do for one or two watering's, but then the deep well needs to run for a long period of time bring water level in the pond back up. Another problem with not running the deep well pump at the same time as the irrigation pumps, is the suction of foreign materials (pond debris) into the irrigation pump pipes. The piping from the deep well is run into the wet well partially in an effort to "push" foreign material away from the intake of the irrigation pipes. The intake pipes have screens on the bottom to prevent most of this material from entering the irrigation system causing damage to the pumps, valves and sprinklers. When the screens get clogged however, the intake pipes have to be unbolted and removed from the wet well, by use of chains and winches by 4 to 5 maintenance personnel, screens cleaned off, then reinstalled. During this process, which might take up to an hour, all irrigation must come to a stop. The pipes need to be pulled for this process about 20 times a season. It also calls into question whether or not the building ceiling was ever designed to handle the load of the weight of the pipe. Alternative to the current method is to have a crane come in and pull pipes through the roof. Sometimes this all has to take place at an extremely quick pace when a fertilizer application has been done and it needs to be watered in to prevent burning the grass and long term turf damage. Another advantage of the proposed new system would be the inclusion of a "jockey" pump. Currently we have no way to just water a small area at will without starting the entire pump station. A Jockey pump is a small pump with a lower horsepower motor that can be started to pressurize the system for watering small areas without having to start and run the rest of the pump station. New pump station would use vertical turbine pumps These pumps have impellers submerged in water and require no priming system to start. They also are more efficient. A vertical impeller pump will run roughly half the speed as a horizontal pump to pump the same amount of water, effectively doubling the service life of critical components like bearings. Water usage from an environmental standpoint also needs to be considered by everyone. New technologies with this system allow us to use the least amount of water necessary to perform the task at hand.

Running total of pump station repairs from 2014,2015, and 2016 seasons: ~\$26,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 thru 2021

Department Golf Course
Contact Jeremy Cabalka

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	215,000					215,000
Total	215,000					215,000

Funding Sources	2017	2018	2019	2020	2021	Total
Golf Course Fund	215,000					215,000
Total	215,000					215,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Golf Course
Contact Jeremy Cabalka
Type Equipment
Useful Life 10 years
Category Equipment: Miscellaneous
Priority 2

Project # GC-17-02
Project Name Large Tee Mower

Description
 Three wheeled machine with reel cutting units set at 1/2" for mowing the large tee box areas

Justification
 Current machine is used for this job was purchased used, hasn't been reliable, has vastly exceeded its expected replacement timeframe, and it is no longer economical to perform some upcoming necessary repairs. This is the only machine that mows the larger tees with no reasonable backup to it. Reels are worn to the point of needing replacement, Frame of machine has been broken, welded and reinforced multiple times in an effort to extend its life and is a very time consuming job to perform. Tires are worn out. Hoses are cracked and should be preventively replaced to minimize chances of oil leaks. Engine runs rough and fuel system should be rebuilt. Machine has ~4000hrs on it. Used about 3-4 days a week.
 Estimated parts cost of repairs:
 Tires- \$300
 Hoses- \$400
 Reels- \$850
 Injection pump and injector rebuild- \$1,500
 New machine would have newer technology to do a better job mowing, quicker, and be more reliable

Expenditures	2017	2018	2019	2020	2021	Total
Equip/Vehicles/Furnishings	40,000					40,000
Total	40,000					40,000

Funding Sources	2017	2018	2019	2020	2021	Total
Golf Course Fund	40,000					40,000
Total	40,000					40,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Golf Course
Contact Jeremy Cabalka
Type Unassigned
Useful Life 5 - 10 years
Category Equipment: Miscellaneous
Priority 2

Project #	GC-17-03
Project Name	Greens Rollers

Description
 Self-propelled, direct drive roller with accompanying trailer to roll greens

Justification
 Currently have 2 rollers that require an unbelievable amount of maintenance and service to keep in working condition. They are poorly designed, and have stood up even more poorly than ever thought possible. While the results of rolling are clearly reflected by change in green speeds (an increase of anywhere from 6 to 12 inches after rolling), they have become so unreliable that it is becoming increasingly difficult to deliver consistent rolling schedules and meet expectations. Cost to operate rollers over the last 2 seasons is at \$25.57/hr. with roughly 250 hours of use per year. Newer roller designs seem to have addressed the mechanical issues that plague these machines. Newer machines have also taken operator comfort into consideration and added features to make it more ergonomically correct to operate. New rollers considered would also have wider rolling paths of 72inches compared to our current rollers of 35inches, theoretically having to make half as many trips across the green will decrease time operating roller and extend roller life further yet

Expenditures	2017	2018	2019	2020	2021	Total
Equip/Vehicles/Furnishings	40,000					40,000
Total	40,000					40,000

Funding Sources	2017	2018	2019	2020	2021	Total
Golf Course Fund	40,000					40,000
Total	40,000					40,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Golf Course
Contact Jeremy Cabalka
Type Replacement
Useful Life 10+ years
Category Buildings
Priority 3

Project #	GC-17-04
Project Name	Pleasant View Golf Course Patio Furniture

Description

Looking to replace patio furniture. We bought new furniture for our patio upgrade in 2016 and now we would like to replace the remainder of the tables in 2017.

Justification

In 2016 we upgraded our patio furniture with the exception of our picnic tables. The picnic tables are no longer appropriate for service as they are too heavy to move around and do not fit in with our new patio upgrade. The tables and chairs are continuously in the elements and we are looking to replace our current picnic tables with industrial, weather resistant patio furniture. The fire pits have driven business and created an atmosphere that has enabled us to capture the non-golf clientele and retain golf customers. The replacement of the picnic tables with lighter weight patio furniture to match the 2016 patio furniture will help to complete the patio upgrade project.

Expenditures	2017	2018	2019	2020	2021	Total
Equip/Vehicles/Furnishings	20,000					20,000
Total	20,000					20,000

Funding Sources	2017	2018	2019	2020	2021	Total
Golf Course Fund	20,000					20,000
Total	20,000					20,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Golf Course
Contact Jeremy Cabalka
Type Equipment
Useful Life 10+ years
Category Buildings
Priority 3

Project #	GC-17-05
Project Name	Pleasant View Golf Course Walk In Cooler

Description

We are looking to expand our walk in cooler.

Justification

Currently our walk in cooler doesn't meet our storage needs with increased day to day operations. There is a safety risk with our current setup due to having to stack our keg beer in a very tight space. We are already restricting the amount of product that goes into the cooler. Keg beer stays fresher in a cooled environment versus room temperature. With the increased number of outings and events which require more refrigerated product, this space is not functional in a safe manner. We have already had safety issues arise when trying to change a keg without the proper spacing. The expanded space will alleviate the stacking of the 160 pound kegs and also allow us the space needed for both beverage and food storage.

Expenditures	2017	2018	2019	2020	2021	Total
Equip/Vehicles/Furnishings	15,000					15,000
Total	15,000					15,000

Funding Sources	2017	2018	2019	2020	2021	Total
Golf Course Fund	15,000					15,000
Total	15,000					15,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Golf Course
Contact Jeremy Cabalka
Type Replacement
Useful Life 15 years
Category Equipment: Miscellaneous
Priority 3

Project #	GC-17-06
Project Name	Enclosed Bedknife Grinder

Description

The grinder is used to sharpen all of our bedknives for our fairway, tees, and greens mowers. Approx.: 100+ bedknives in a season. Each cutting unit has a bedknife replaced at least once a season. Greens mowers and tee mowers will go through multiple bedknives in a season. Every new bedknife must be ground after it has been mounted to the bedknife bar to insure accuracy.

Justification

Our current grinder is using outdated technology and is worn to the point that is very difficult to impossible get repeatability on any 2 of the same bedknives. This comes at the expense of less than ideal cut quality, hurting turf health and appearance. Current grinder is also not enclosed, allowing grinding dust to disperse though out the rest of the shop. This contaminates other projects with grinding dust that may be going at the same time (Engine rebuilding, cutting unit rebuilding, bearing replacements. Critical items that require cleanliness). Also current grinder without enclosure is loud. Ear protection must be worn by everyone in the shop when grinder is running. Long term exposure to noise and grinding dust has caused concern among workers. Newer grinder would be totally enclosed to eliminate noise and dust. Newer grinders are quicker, more accurate, and feature more automation than current grinder. Increased automation allows an operator to set up the machine, get it running and walk away from it completely while the grinder completes a grind cycle without any further operator input. This frees up this person to do other work.

Expenditures	2017	2018	2019	2020	2021	Total
Equip/Vehicles/Furnishings	25,000					25,000
Total	25,000					25,000

Funding Sources	2017	2018	2019	2020	2021	Total
Golf Course Fund	25,000					25,000
Total	25,000					25,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Golf Course
Contact Jeremy Cabalka
Type Replacement
Useful Life 10+ years
Category Golf Course
Priority 4

Project #	GC-17-07
Project Name	Pleasant View Golf Course Water Heater

Description

We are looking to replace our current water heater.

Justification

The gas control valve on our current water heater is shorting out. On days of big events and normal day to day operations, it shorts out and we lose our hot water until we reset it. It's a health concern to not have hot water due to the dishes we need to wash. Because the water heater is ten years old, the gas control valve is approaching replacement time. The cost of the valve is half the price of a new water heater. Due to the age of the heater, the heating element is also a risk factor that hasn't come into play yet.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	5,000					5,000
Total	5,000					5,000

Funding Sources	2017	2018	2019	2020	2021	Total
Golf Course Fund	5,000					5,000
Total	5,000					5,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Informational Technology
Contact Todd Forman
Type Improvement
Useful Life 10+ years
Category Street Construction
Priority 2

Project #	IT-17-01
Project Name	City Wide Fiber Network

Description

The Informational Services Department would like to connect the City buildings with an underground fiber network for high speed network connectivity. Connections to Tourism and the MOC are still necessary.

Justification

As the use of technology increases, the expectations for the reliability of that technology increases. The City has grown from a one department local area network to a City wide area network. This growth necessitates redundancy, reliability and accessibility. High speed connectivity leverages a maximum efficiency for network resources. Owning our own network eliminates high annual connection service charges.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	100,000					100,000
Total	100,000					100,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	100,000					100,000
Total	100,000					100,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Informational Technology
Contact Todd Forman
Type Improvement
Useful Life 10 years
Category Equipment: Miscellaneous
Priority 2

Project # IT-17-02
Project Name Meeting Rooms Technology Upgrades

Description

Improve/Upgrade existing technology in City Hall meeting rooms. Replace/Upgrade existing projectors with Monitors and smart devices to create a bring your own device set up for presentations/training. This request is based upon feedback from city staff and meeting attendees indicating the current equipment and configuration does not meet their needs. This project will also include updating the video recording equipment and servers as submitted by our vendor and tablets for the Mayor and Council members

Justification

Current equipment is inadequate to allow proper viewing of presentations for everyone in attendance during meetings and training. The replacement of existing equipment and purchase of additional displays will allow correct this as well providing a bring your own device functionality to our primary meeting room.

The video recording equipment is getting obsolete. Replacement of like equipment will become difficult and more difficult as time passes. A system upgrade will necessitate the upgrade of software and hardware.

Meeting Rooms: \$25,000
 Video Recording Equipment: \$20,000
 Video Servers: \$10,000
 9 Tablets with keyboards/covers: \$10,000

Expenditures	2017	2018	2019	2020	2021	Total
Equip/Vehicles/Furnishings	65,000					65,000
Total	65,000					65,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	65,000					65,000
Total	65,000					65,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Informational Technology
Contact Todd Forman
Type Improvement
Useful Life 8 - 10 years
Category Public Safety
Priority 2

Project #	IT-17-03
Project Name	Police 911 System Upgrade/Replacement

Description

The Police Department's 911 system is at the end of its useful life. It is built on the Microsoft XP/2003 server platform. The system needs upgraded, both for operating system support and phone system integration. The current system will not be supported with any phone system upgrades.

Justification

A 2014 estimate to upgrade the 911 system hardware and software with training and support was \$250,000. The estimate essentially replaces the old system entirely. An RFP would likely be issued to solicit better pricing and upgraded services provided by the E911 features for mobile users.

Expenditures	2017	2018	2019	2020	2021	Total
Equip/Vehicles/Furnishings	325,000					325,000
Total	325,000					325,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	325,000					325,000
Total	325,000					325,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Informational Technology
Contact Todd Forman
Type Improvement
Useful Life 8 - 10 years
Category General
Priority 3

Project #	IT-17-04
Project Name	Sire Document and Agenda Mgmt System Replacement

Description

The Sire platform has been sold and the version we have is no longer supported. Civic Systems will continue to offer help desk support, but there will be no upgrades. Eventually the software will no longer work with our system.

Justification

The City will solicit proposals to replace the current document and agenda management system. This will include the video integration of meetings with a web interface and data conversion. Software costs can be anticipated to come in between \$60,000 - \$80,000, with additional costs for the data conversion.

Expenditures	2017	2018	2019	2020	2021	Total
Other	100,000					100,000
Total	100,000					100,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	100,000					100,000
Total	100,000					100,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Parks, Rec, and Forestry

Contact

Type Equipment

Useful Life 25 years

Category Park Improvements

Priority 1

Project #	PR-17-01
Project Name	General City-Wide Playground Equipment Upgrades

Description

Health and safety item to replace worn/broken or non-safety approved playground equipment in parks (e.g. slides, play panels, swings, sand diggers, etc.), as well as new volleyball nets, tennis court nets, basketball hoop backboards and bike racks. Replacement of trash & recycling cans, picnic tables, and Information/bulletin boards. Vandalism (graffiti) repairs and removals at parks. The PRFC open space plan (2014) reflects the required improvements to be in compliance with NRPA standards and laws. Includes ADA water fountains, picnic tables, benches, and access routes – all ADA Title 2 compliance required.

Justification

This provides for the annual maintenance and improvements of playground equipment and parks equipment at the City’s 27 parks and 5 special use areas. It helps address annual wear and tear, safety concerns, ADA accessibility measures, and remedying vandalism. Throughout the City 3 water fountains need to be replaced; 2 flooding hydrants need to be replaced; plumbing fixture replacement, grill replacement, hand dryer installation, and LED interior light conversion needs at Lakeview Park are part of this years list. This will keep the City’s parks in compliance with ADA 35.150/Title 2; NRPA standards and laws per approved PRFC Open Space Plan.

Expenditures	2017	2018	2019	2020	2021	Total
Equip/Vehicles/Furnishings	35,000	35,000	35,000	35,000		140,000
Total	35,000	35,000	35,000	35,000		140,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	35,000	35,000	35,000	35,000		140,000
Total	35,000	35,000	35,000	35,000		140,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Parks, Rec, and Forestry

Contact

Type Improvement

Useful Life 25 years

Category Park Improvements

Priority 1

Project #	PR-17-02
Project Name	General City-Wide Fall Zone Improvements

Description

1,500-2,000 cubic yards of Best Matt Woodchips are to be placed in the fall zone safety and ADA access pads in 28 parks and 5 special use areas citywide. The City continues to utilize Best Matt Woodchip Safety Surfacing materials as recommended by WPRA and NRPA rather than more expensive rubberized mulch or rubber mats which do not weather well in Wisconsin. Rubber mats are strategically put in place under slides and swings—avg. cost \$100/each and are a mandated safety item. Best Matt Woodchips are a mandated safety surface.

Justification

These improvements are an essential item to the continued safety of the City’s parks. These improvements are an essential item to the continued safety of the City’s parks. Without attention, hard ground may become exposed, at which point children will be much more susceptible to injury—increasing City liability. In the past, people have broken bones on the playgrounds and pursued litigation, but the city has won because it maintains the NRPA and WPRA standards. The amount and composition of material added each year is mandated by national ASTM standards.

Expenditures	2017	2018	2019	2020	2021	Total
Equip/Vehicles/Furnishings	20,000	20,000	20,000	20,000		80,000
Total	20,000	20,000	20,000	20,000		80,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	20,000	20,000	20,000	20,000		80,000
Total	20,000	20,000	20,000	20,000		80,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Parks, Rec, and Forestry
Contact Rebecca Price
Type Replacement
Useful Life 5 - 10 years
Category Park Improvements
Priority 2

Project #	PR-17-03A
Project Name	Water Slide Repairs/Restoration

Description
 Water slides at the pool have paint that is cracked, chipped and peeling. Making for an uncomfortable and potentially dangerous trip down the slip.

Justification
 Approximately 35,000 people use the pool per summer, and the water slides are a key feature at the pool. If the slides are in disrepair, someone could become injured in using them.

Expenditures	2017	2018	2019	2020	2021	Total
Other	27,500					27,500
Total	27,500					27,500

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	27,500					27,500
Total	27,500					27,500

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Parks, Rec, and Forestry
Contact Rebecca Price
Type Replacement
Useful Life 5 - 10 years
Category Park Improvements
Priority 3

Project # PR-17-03B
Project Name Sand Area Playground equipment repair

Description

Some of the playground equipment at the pool is quite old and in need of replacement. The pieces are wooden and are chipped and splintered. Pieces have been removed over the years, due to being broken, and have not been replaced. The equipment is from a Danish company with limited US vendors. The goal would be to order replacement parts for the large playground pieces, and then new items from a local company.

Justification

Approximately 35,000 people use the pool per summer, and the sand play area is a key feature for patrons 8 and under. For small children there are few features for them to utilize, however the sand play area is regularly used by this age group.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	10,000					10,000
Total	10,000					10,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	10,000					10,000
Total	10,000					10,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Parks, Rec, and Forestry
Contact Mark Wegner
Type Unassigned
Useful Life
Category Public Nuisance Abatement
Priority 2

Project #	PR-17-04
Project Name	Emerald Ash Borer Program

Description

This ongoing project is in response to the presence of the Emerald Ash Borer (EAB) in Middleton. The plan for 2017 is for city staff to remove 141 ash trees and contractors to remove 170 ash trees. In addition, contractors will plant 250 new trees. Based on past removal and planting costs, removals will cost approximately \$91,500; planting will cost approximately \$82,500; and three interns will cost \$23,400.

Justification

Ash tree removal and replacement has been occurring in Middleton since 2010. In that time approximately 1,349 ash trees have been removed (by July 2016) and 1,109 highly diverse trees have been planted. There are still 1,247 ash trees in Middleton parks, streets, and parking lots. Unless the current City policy of no treatment of ash trees is changed, continuation of the removal/replacement program is necessary.

Expenditures	2017	2018	2019	2020	2021	Total
Other	197,400					197,400
Total	197,400					197,400

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	197,400					197,400
Total	197,400					197,400

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Parks, Rec, and Forestry

Contact

Type Improvement

Useful Life 20 years

Category Park Improvements

Priority 1

Project #	PR-17-05
Project Name	Lakeview Porous Path Resurfacing

Description

Porous path resurfacing on selected paths in Lakeview Park, will provide ADA compliant access to several areas of the park. A: Path running parallel to Allen Boulevard, connects the park’s southeast entrance to the proposed Veteran’s Tribute and the splash pad – approx. 1350 ft. (\$45,225) B: Section of path from the southeast corner of Lakeview Pond to the splash pad entrance – approx. 450 ft. (\$15,100) C: Section of path north of splash pad entrance to Maywood path – approx. 625 ft. (\$21,000)

Justification

Applicable Laws - State Statute 28.20; ADA Title 2 (35.150); WI ASHTO/DOT Standards

Currently certain paths at Lakeview Park do not meet the standards set in the 2012 ADA report. Several of the paths have cracks, gaps, and significant cross slopes.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	81,325					81,325
Total	81,325					81,325

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	81,325					81,325
Total	81,325					81,325

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Parks, Rec, and Forestry

Contact

Type Improvement

Useful Life 20+ years

Category Park Improvements

Priority 1

Project #	PR-17-06
Project Name	VFW Memorial Shelter at Lakeview Park

Description

This project combines a new park shelter and public restrooms with a Veterans' Tribute Garden to create a new public use space for family gatherings, special events, and general support of other park uses and to recognize Middleton area veterans and Veterans of Foreign American Wars.

Justification

In addition to the restroom, the shelter will have a 200 person capacity area for family gatherings and events. The new large shelter will provide a beautiful facility; The splash pad's popularity has created the need for refuge from the sun for families who want to spend long periods of time at the park and additional restroom facilities. In addition the veterans' memorial will provide much deserved recognition for Middleton's veterans and all those servicemen and women who served their country over time.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	445,631					445,631
Total	445,631					445,631

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	145,631					145,631
Donation	300,000					300,000
Total	445,631					445,631

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Parks, Rec, and Forestry

Contact

Type Improvement

Useful Life 20 years

Category Unassigned

Priority 1

Project #	PR-17-07
Project Name	Quisling Park Soccer Field Improvements

Description
 A: Soccer fields 2 & 4 improvements, including: herbicide application, regrading, reseeding, fertilization, mowing, aeration, and irrigation installation - \$75,000.

Justification
 Continuation of 2014 field improvements to increase tournaments, tourism and economic development.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	75,000					75,000
Total	75,000					75,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	75,000					75,000
Total	75,000					75,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Parks, Rec, and Forestry
Contact
Type Improvement
Useful Life 20 years
Category Park Improvements
Priority 1

Project #	PR-17-08
Project Name	Firefighters Memorial Park

Description

A: Construction and installation of a firefighter themed playground (\$40,000) B: Installation of a 20 foot by 20 foot shade shelter, with 4-seat tables and 1-ADA approved table. The shelter will be placed on a porous paved slab on the east side of the path leading to the parking lot from the diamonds. (\$10,000)

Justification

There is currently no playground equipment at FFMP. Parents with children playing ball have nothing to occupy younger children who are not playing. The shade shelter would be in close proximity to the playground and provide shelter to children and parents utilizing the area.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	50,000					50,000
Total	50,000					50,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	50,000					50,000
Total	50,000					50,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Parks, Rec, and Forestry
Contact
Type Improvement
Useful Life 20 years
Category Park Improvements
Priority 1

Project #	PR-17-09
Project Name	Fireman's Park Path Resurfacing

Description
 A: Porous overlay of the path from Lee Street to the Fireman’s Park shelter – approx. 150 ft. (\$5,700) B: Construction of a path from the Fireman’s Park play structure to the sidewalk on North Avenue – approx. 250 ft. (\$25,000)

Justification
 Applicable Laws - State Statute 28.20; ADA Title 2 (35.150); WI ASHTO/DOT Standards
 These paths will provide ADA compliant access to the park shelter as well as the park play structure, from both Lee Street and North Avenue.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	30,700					30,700
Total	30,700					30,700

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	30,700					30,700
Total	30,700					30,700

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Parks, Rec, and Forestry

Contact

Type Improvement

Useful Life 10+ years

Category Park Improvements

Priority 2

Project #	PR-17-10
Project Name	Lakeview Park Entry Signs

Description

Installation of two, two-sided, wood entry signs, 8-foot and 10-foot, at Lakeview Park to replace the existing dated signs.

Justification

With the recent additions of the veteran’s memorial, new parking lot, and Mendota Avenue reconstruction, Lakeview Park is the City’s most visited park. The signs will coincide the new improvements to the park and provide an aesthetically pleasing addition to the park’s entryways.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	12,000					12,000
Total	12,000					12,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	12,000					12,000
Total	12,000					12,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Planning
Contact Mark Opitz
Type Improvement
Useful Life 20+ years
Category Street Construction
Priority 2

Project #	PL-17-01
Project Name	Pleasant View Road Expansion

Description

Reconstruction and widening of Pleasant View Road from a 2-lane rural cross-section to a 4-lane boulevard with bike lanes, between University Green (just north of Highway 14) and Greenway Blvd. Design costs associated with Phase 2 of the project (south of Greenway Blvd.) will be added in the future. These cost estimates were updated by Strand Associates in August 2016.

2017: Begin preliminary design engineering and environmental analyses (including soils investigations): \$776,850
 2018: Continue preliminary design engineering and environmental analyses, plus right-of-way plat \$799,850
 2019: Begin property acquisition, relocation of overhead utilities (\$350,000); Begin Phase 2 design engineering (Middleton share): \$52,500
 2020: Continue property acquisition, relocation of overhead utilities (\$350,000); Continue Phase 2 design engineering, plus right-of-way plat (Middleton share): \$57,500
 2021: Phase 2 property acquisition, relocation of overhead utilities (\$85,000)

Justification

Traffic volumes along Pleasant View Road are steadily increasing due to the extension of the road south to Highway M a few years ago coupled with development in Middleton, west Madison, and Verona. Drivers are using this direct route as an alternative to the Beltline corridor. It is critical that the City begin design engineering so that this multi-year project remains competitive for securing Federal funding through the Metropolitan Planning Organization before the City's TID #3 expenditure period ends in 2025. The MPO has tentatively identified 2021 as the earliest year it is able to begin allocating funds for the project, and the organization wants to see design work begin in earnest so that other projects in the Madison area don't "bump" Pleasant View Road down in priority. Madison has also allocated funding to begin design engineering for its portion of the corridor.

Expenditures	2017	2018	2019	2020	2021	Total
Planning/Design	776,850	799,850	52,500	57,500		1,686,700
Land Acquisition			300,000	300,000	35,000	635,000
Construction/Maintenance			50,000	50,000	50,000	150,000
Total	776,850	799,850	402,500	407,500	85,000	2,471,700

Funding Sources	2017	2018	2019	2020	2021	Total
TIF 3	776,850	799,850	402,500	407,500	85,000	2,471,700
Total	776,850	799,850	402,500	407,500	85,000	2,471,700

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Planning
Contact Eileen Kelley
Type Improvement
Useful Life 20+ years
Category Street Reconstruction
Priority 2

Project #	PL-17-02
Project Name	University and Parmenter Intersection Improvements

Description

Provide eastbound and westbound left-turn lanes at the University Avenue and Parmenter Street intersection. This cost estimate is for the intersection improvements, and does not include the cost for additional right-of-way needed.

Justification

The intersection of University Avenue and Parmenter Street experiences operational deficiencies during existing weekday morning and afternoon peak traffic periods. Much of the operational and safety deficiencies at this intersection can be attributed to the existing lane configuration along University Avenue. University Avenue does not provide exclusive left-turn lanes at Parmenter Street. Through movements are hesitant to use the inner lanes along University Avenue at Parmenter Street due to being stuck behind left-turning vehicles. As a result, the distribution of traffic is disproportionate between the two travel lanes. Furthermore, the disproportionate lane utilization can lead to through-movement vehicles in the inner lanes quickly changing lanes in anticipation of left-turning vehicles. This condition results in a higher probability of sideswipe and rear-end crashes. While protective-permissive traffic signal phasing is provided for the predominant left-turn movements during peak traffic periods, the lack of exclusive left-turn lanes leads to a high amount of green time required for University Avenue movements. As a result, the deficient intersection lane configuration and signal phasing leads to delays along University Avenue and Parmenter Street.

Expenditures	2017	2018	2019	2020	2021	Total
Planning/Design	150,000					150,000
Construction/Maintenance		1,500,000				1,500,000
Total	150,000	1,500,000				1,650,000

Funding Sources	2017	2018	2019	2020	2021	Total
TIF 3	150,000	1,500,000				1,650,000
Total	150,000	1,500,000				1,650,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Planning
Contact Abby Attoun
Type Replacement
Useful Life 20 years
Category Information
Priority 3

Project #	PL-17-03
Project Name	Landmark Plaque Replacement

Description

The Landmarks Commission would like to replace 25 plaques (\$200/each for a total of \$5,000). In addition, the Landmarks Commission would like to move the 15 plaques that are on private property (affixed to buildings) to the terrace area on boulders or posts so that they are visible to passersby (\$500/each for a total of \$7,500).

Justification

The plaques in the City designated the 27 local historic landmarks are 30+ years old. Many of the plaques contain inaccurate information. All of the plaques contain outdated information. We have started to receive complaints from owners of historic properties about the content on the plaques. We have replaced two plaques in the past two years based on complaints received.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	12,500					12,500
Total	12,500					12,500

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	12,500					12,500
Total	12,500					12,500

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Planning
Contact
Type Improvement
Useful Life perpetuity
Category Unassigned
Priority 3

Project #	PL-17-04
Project Name	Bus pull-out along northbound John Q Hammons Dr.

Description

Construction of a turnout along the east side of John Q Hammons Drive to accommodate two Metro buses at the northbound bus stop located between Greenway Blvd. and the driveway serving Fairfield Hotel, Starion Financial, and three other businesses.

Justification

In August 2014, Metro Transit established a time point near the Greenway Blvd / John Q Hammons Dr. intersection to coordinate connections between several bus routes. At the time, City and Metro staff decided to locate the bus stop several hundred feet north of Greenway Blvd. so that stopped buses straddling the bike lane and travel lane wouldn't block northbound traffic close to the intersection. The bus stop (which includes a shelter and concrete boarding pad) is located a few feet south of a driveway that serves five businesses in the northeast quadrant of the intersection. Subsequently, the City has received several complaints from drivers about limited sight distance from the driveway caused by buses that typically remain stopped for five minutes or longer to accommodate passenger transfers and short breaks for bus drivers.

In consultation with Metro, planning and engineering staff have developed a plan to establish a bus turnout closer to the Greenway Blvd. intersection. The turnout would help keep two buses from encroaching into the northbound travel lane and bike lane. No right-of-way acquisition is necessary, although one terrace tree would be removed. The cost estimate is based on \$4,350 for 541 sq.ft. of concrete flatwork; \$10,800 for 270 linear ft. of curb and gutter; \$630 for 538 sq.ft. of asphalt; and an allowance for mobilization, traffic control, and landscape restoration. Metro hasn't made any substantive changes to bus routes and schedules in this area for over two years, so City staff are confident that this bus stop will remain in use for the foreseeable future. The Pedestrian/Bicycle/Transit Committee recommends funding this project in 2017 to improve sight distance and safety at the driveway's intersection with JQH Dr.

Expenditures	2017	2018	2019	2020	2021	Total
Planning/Design	20,000					20,000
Total	20,000					20,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	20,000					20,000
Total	20,000					20,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Planning
Contact Mark Opitz
Type Improvement
Useful Life 10 years
Category Water
Priority 4

Project #	PL-17-05
Project Name	Water Connection for Terrace Ave Irrigation System

Description

The cistern that captures rainwater from the roof of the Terrace Avenue Pavilion has a capacity of 550 gallons, an amount that is depleted after approximately four days without rain. Rather than rely on manual filling of the cistern, a pipe connection to a nearby water supply (a hydrant or drinking fountain) would provide a reliable and automated water supply during periods of dry weather.

Justification

The cistern has not proven to be as reliable or as cost-effective as anticipated. Aside from developing a leak twice since its installation, the cistern appears only to have enough capacity to provide water for up to four days without rain. During the growing season, Public Lands staff visit the site twice per week, remove the manhole cover, and assess the water level to ensure that the cistern doesn't run dry. (If the cistern runs dry, then the pump serving the irrigation system needs to be re-primed, which can be a challenging and time-consuming process.) To fill the cistern, a Public Lands crewmember runs a hose to the hydrant on the south side of the street and waits approximately 45 minutes for it to fill the 550 gallon reservoir. The hose occasionally breaks from cars running over it. During 2016, the City will spend at least \$1,500 through a maintenance agreement with Olson Toon Landscaping to start up, monitor, and winterize the irrigation system. There's an additional, \$150 charge to re-prime the pump when necessary.

This capital budget request would provide a permanent water connection that could be used as a back-up to when the water runs low in the cistern. Alternately, it could provide the sole water source if the cistern were to be abandoned.

Expenditures	2017	2018	2019	2020	2021	Total
Planning/Design	10,000					10,000
Total	10,000					10,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	10,000					10,000
Total	10,000					10,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Police
Contact Chief Charles Foulke
Type Equipment
Useful Life 12 years
Category Equipment: Miscellaneous
Priority 2

Project # PD-17-01
Project Name Squad Car Emergency Lighting, Siren and Controller

Description

It is the objective of this request to fund the replacement of top lights, auxiliary emergency lighting, sirens and the controllers for each of the ten marked patrol vehicles. The replacement package includes Sound Off NForce 54" LED Light bars, Sound Off brand surface mounted LED lighting for side markings, dual Sound Off sirens, Fleet power supply units and the Sound Off Blue Print Controllers delivered and installed. The complete package is priced at \$8,295.00 per vehicle for a total project cost of \$82,950.00.

Justification

The emergency lighting, siren and controllers currently installed in all MiPD marked patrol vehicles were purchased in 2004. The life expectancy of these various components is 10-12 years. In 2015, the Police Department began having to regularly repair and replace various components within the squad lighting systems. In doing so, we found that the main components were no longer in production and support for these units was limited. In June of 2016, one of the top light units failed completely and had to be replaced. A second top light is currently having issues, but we are trying to limp it along until they can all be replaced.

City of Middleton Lead Mechanic Gebhard and Officer Raffel have conducted research and sought bids on various emergency lighting replacement systems. In doing so they have determined that the best value for the dollar system is currently being offered by the Sound Off Corporation. On site testing of these units and their controller was recently conducted and the products were found to be of excellent quality and versatility.

The control units for these new Sound Off systems are of this century and no longer use the antiquated and limiting lever control system that is currently deployed by this department. The new fully programmable digital control heads provide numerous safety and lighting control options. The actual physical operation of these new units is markedly different from the current systems and will take some training to get officer accustomed to. For this reason, we do not believe that it is safe to have varying systems in different marked patrol units. The patrol vehicle's emergency lighting system is generally utilized in high stress situations where staff does not have the luxury of time to stop and think about the functionality of the equipment in their respective vehicle. This must be a trained reflect move that is of second nature. Once again, to perform at this level we believe that we must replace all marked unit controllers in a single process and are therefore seeking to replace all emergency lighting systems in 2017.

Expenditures	2017	2018	2019	2020	2021	Total
Equip/Vehicles/Furnishings	82,950					82,950
Total	82,950					82,950

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	82,950					82,950
Total	82,950					82,950

Capital Improvement Plan
City of Middleton, Wisconsin

2017 thru 2021

Department Police
Contact Captain Charles Foulke
Type Replacement
Useful Life 3+ years
Category Vehicles
Priority 2

Project #	PD-18-01
Project Name	Squad Car Replacement

Description

It is the objective of this request to fund the replace the three highest mileage departmental patrol vehicles and one unmarked unit. The Middleton Police Department currently operates a fleet of ten fully marked patrol vehicles and ten unmarked units. Three of the highest mileage marked vehicles in the fleet are Ford sedans. These sedans are being phased out of the patrol fleet, in favor of sport utility vehicles, as the SUV provides room for two officers to travel in a single vehicle and they have sufficient room for larger staff members wearing a full police uniform.

Justification

The City of Middleton lead Mechanic Brian Gebhard is recommending that marked patrol vehicles be replaced every three years, when they have reached between seventy and eighty thousand miles, due to maintenance costs and appearance. Gebhard has estimated the annual increase in vehicle maintenance costs for patrol vehicles above the eighty thousand mile mark to be between \$3,000.00 and \$4,000.00.

The individual squad costs include the police equipment tear down and re-build performed by General Communications, the purchasing of some new internal equipment to outfit the new model vehicles, \$1,125.00 of computer components previously budgeted for by the City of Middleton Information Technology Department and a credit for the vehicle's trade in value. The three Taurus sedans will be provided to the City of Middleton Administrative fleet for a total trade in value of \$14,000.00.

The three sedans will be replaced with Ford Police Interceptor all-wheel drive SUV's. The cost for each of these new patrol vehicles, with all of the standard police equipment installed, is projected at \$46,156.00 per unit. The total cost of the three new vehicles, minus the trade-in value of the three retired sedans, is \$124,468.00.

It is also the recommendation of City of Middleton lead Mechanic Brian Gebhard that the Police Department seek to replace one of its aging unmarked vehicles in 2017. Although not the oldest unmarked vehicle in the fleet, the 2008 Chevrolet Impala is the most worn. This unit would be replaced with an unmarked vehicle estimated to cost, with scaled down police equipment installed, \$36,500.00. The Chevrolet Impala would be traded in at the time of purchase and has an estimated trade-in value of \$4,500.00.

The cost for the new unmarked vehicle, with the necessary police equipment installed and minus the trade-in, \$32,000.00.

The total requested vehicle replacement budget for the Police Department in 2017 is: \$156,468.00.

Estimate for Future Year Vehicle Replacement Expenses

2018: 2 Ford Police Interceptor SUV's @ \$48,003.00 and one unmarked vehicle @ \$37,960.00, minus a \$16,500.00 credit for auctioning of replaced vehicles: \$117,466.00.
 2019: 2 Ford Police Interceptor SUV's @ \$49,923.00 and one unmarked vehicle @ \$39,478.00, minus a \$17,500.00 credit for auctioning of replaced vehicles: \$121,824.00.
 2020: 2 Ford Police Interceptor SUV's @ \$51,919.00 and one unmarked vehicle @ \$41,057.00, minus a \$17,500.00 credit for auctioning of replaced vehicles: \$127,395.00.
 2021: 2 Ford Police Interceptor SUV's @ \$53,996.00 and one unmarked vehicle @ \$42,700.00, minus a \$17,500.00 credit for auctioning of replaced vehicles: \$133,192.00.

Expenditures	2017	2018	2019	2020	2021	Total
Equip/Vehicles/Furnishings		117,466	121,824	127,395	133,192	499,877
Total		117,466	121,824	127,395	133,192	499,877

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Police
Contact Captain Charles Foulke



Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Police
Contact Chief Charles Foulke
Type Equipment
Useful Life 10 years
Category Equipment: Miscellaneous
Priority n/a

Project #	PD-18-02
Project Name	Simulcast Radio Transmit Installation

Description

The current MIPD radio system receives from multiple sites around the city, and transmits from a single site located at the PD. The multiple receive sites greatly improve the ability of officers portable radios to be heard by the dispatcher.

Justification

The single transmit site at the PD, while quite powerful, is not capable of penetrating all buildings and shielded areas in the city. As the city continues to grow, and as more commercial/heavy construction buildings are erected, this situation becomes more common/gets worse.

Simulcast transmit is a technology that radiates the repeater/outgoing signal from multiple sites simultaneously. Thus, transmit performance is improved in the same way that receive performance is improved by multiple receive sites. This technology, when first introduced, was prohibitively expensive. However recent advances have reduced the cost of simulcast systems by an order of magnitude or more.

No radio system can provide 100% coverage, however simulcast technology has the ability to significantly improve signal strength and building penetration.

For problem buildings, a simulcast site can even be deployed in that building, possibly being paid for by the building owner. Some municipalities have ordinances that require adequate public safety radio coverage inside structures, and require that this be addressed in any new construction. A simulcast-capable system would be one way for us to enable a future building owner to provide improved PD radio coverage in his/her building, whether required by ordinance or voluntary.

Expenditures	2017	2018	2019	2020	2021	Total
Equip/Vehicles/Furnishings		81,000				81,000
Total		81,000				81,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget		81,000				81,000
Total		81,000				81,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Police
Contact Chief Charles Foulke
Type Replacement
Useful Life 8 - 10 years
Category Equipment: Miscellaneous
Priority 6

Project #	PD-18-03
Project Name	Squad Radio Replacement

Description

It is the objective of this request to replace police band radios in nineteen vehicles operated by this department and the single radio in the Community Service Vehicle. The Middleton Police Department currently operates ten fully marked patrol units and ten unmarked units. The Middleton Police Department radio system is also utilized daily in the Community Services Vehicle operated by Mark Walther.

Justification

Due to our geographic location, Middleton police officers have the potential to interoperate with officers from the Dane County Sheriff's Office, Wisconsin State Patrol, UW-Madison Campus Police, and the Madison Police Department. Middleton has CAPMAR (Capital Area Police Mutual Aid Response) agreements with these and other nearby agencies, all of which operate on different radio systems.

The new "DaneCom" county radio system has improved our ability to communicate with surrounding agencies in many circumstances. However, the DaneCom system still has several interoperability gaps that are problematic for Middleton. In an emergency, police officers require direct and reliable communications with other agency officers that they may be working with.

Middleton squads are currently equipped with two (2) mobile radios, each on a different radio frequency band, to allow for access to these multiple surrounding radio systems.

The Madison/UW radios are beyond their useful life expectancy, and are no longer supported by the manufacturer. The manufacturer of the main squad car radio, used for our local Middleton, Dane County, and State systems, has announced an end of support date of December 31st, 2018. Parts and service will no longer be reliably available for these radios after this date.

Middleton Police radio communication consultant Tom Adler has worked with various radio manufacturers and retailers exploring long term product solutions and cost comparisons. We are requesting replacement of the entire police department mobile fleet radios, rather than a staggered replacement, so as to more quickly address the manufacturer support issue as well as to provide standardization among all of the radios. A consistent equipment array in all squads minimizes confusion, and lessens the possibility of reflex errors in urgent situations.

The cost to purchase and install the dual band radios in the ten marked patrol vehicles and in Walther's Community Awareness vehicle is \$155,407.96.

The cost to replace the nine VHF & 800 megahertz radios in the unmarked patrol vehicles is \$64,604.34.

The cost to purchase and install vehicular repeater programming software is \$480.00.

The total cost of the squad radio replacement project is \$220,492.30. This is a 2018 request.

Expenditures	2017	2018	2019	2020	2021	Total
Equip/Vehicles/Furnishings		220,492				220,492
Total		220,492				220,492

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget		220,492				220,492
Total		220,492				220,492

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Police
Contact Chief Charles Foulke
Type Replacement
Useful Life 8 - 10 years
Category Equipment: Miscellaneous
Priority 6

Project #	PD-19-01
Project Name	Portable Radio Replacement

Description

It is the objective of this request to replace all police handheld portable radios utilized by Middleton Police and Community Service Staff. The Middleton Police Department currently owns and operates 41 portable radios.

Justification

Due to our geographic location, Middleton police officers have the potential to interoperate with officers from the Dane County Sheriff's Office, Wisconsin State Patrol, UW-Madison Campus Police, and the Madison Police Department. Middleton has CAPMAR (Capital Area Police Mutual Aid Response) agreements with these and other nearby agencies, all of which operate on different radio systems.

The new "DaneCom" county radio system has improved our ability to communicate with surrounding agencies in many circumstances. However, the DaneCom system still has several interoperability gaps that are problematic for Middleton. In an emergency, police officers require direct and reliable communications with other agency officers that they may be working with.

Each Middleton officer is equipped with a single-band portable radio. These radios are not capable of direct communications with the radios used by Madison and UW police officers. The manufacturer has announced a December 31st, 2018, end of support date for these radios as well. The dual-band portable radios being requested as replacements will allow for our officers to have direct communications with all surrounding law enforcement agencies.

The requested portable radios will be utilized in the field by the following personnel: 38 units to sworn officers, 1 unit utilized as a backup radio in the Dispatch Center, 1 radio assigned to Community Service Officer Walther and 1 spare unit.

Middleton Police radio communication consultant Tom Adler has worked with various radio manufacturers and retailers exploring long term product solutions and cost comparisons. We are requesting replacement of the entire police department portable radio system, rather than a staggered replacement, so as to more quickly address the manufacturer support issue as well as to provide standardization among all of the radios. A consistent equipment array minimizes confusion, and lessens the possibility of reflex errors in urgent situations.

The cost to replace all 41 portable radios and microphones is \$239,722.90. This is a 2019 request.

Expenditures	2017	2018	2019	2020	2021	Total
Equip/Vehicles/Furnishings			239,773			239,773
Total			239,773			239,773

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget			239,773			239,773
Total			239,773			239,773

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Public Works
Contact Shawn Stauske
Type Improvement
Useful Life 20 years
Category Street Paving
Priority 2

Project #	PW-17-01
Project Name	University Ave. Reconstruction

Description

Funding for City share of costs of County project to replace deteriorated concrete pavement with improved aggregate base support and asphalt pavement. Pavement replacement will be done within the existing curb lines, and will include new median areas to eliminate current two-way left turn lanes and provide marked bike lanes. The first phase is tentatively planned from Allen Blvd. to just west of Park St. (section with median) and the second phase is planned from Park St. to Cayuga St. (undivided section). Budget constraints may affect phase limits. The County has provided a concept-level cost estimate for the City’s share of the first phase, but has not yet prepared a cost estimate for the second (2018) phase.

Following reconstruction, the County intends to transfer jurisdiction of the roadway to the City.

Justification

The current concrete roadway is in poor condition, and the County is amenable to leading a jointly funded reconstruction project. University Ave. is classified as a principal arterial roadway, and carries a high volume of traffic connecting Middleton and outlying communities to Madison and serving the local business community.

Within the second phase of the project, the City may want to consider reconfiguring the University / Parmenter intersection to better serve the volume of traffic of the current and growing downtown area. Some of those costs may be eligible for TID funding.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	1,500,000	1,000,000				2,500,000
Total	1,500,000	1,000,000				2,500,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	1,500,000	1,000,000				2,500,000
Total	1,500,000	1,000,000				2,500,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Public Works
Contact Shawn Stauske
Type Improvement
Useful Life 20 years
Category Street Paving
Priority 2

Project #	PW-17-02
Project Name	N High Point Rd Resurfacing - S City Limit-Terrace

Description

Mill and Overlay asphalt pavement, with replacement of deficient curb & gutter and sidewalk. Design work will be done by City Engineering Technician III, and project work will be bid with other funded mill & overlay projects (see requests PW-17-02 through PW-17-09) to gain economy of scale.

Justification

Current asphalt is beyond the end of its service life, is badly cracked, and is difficult to maintain. Snow plows routinely remove loose sections of asphalt pavement, which then creates a very rough ride and requires extensive patching costs the following spring.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	365,300					365,300
Total	365,300					365,300

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	365,300					365,300
Total	365,300					365,300

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Public Works
Contact Shawn Stauske
Type Improvement
Useful Life 20 years
Category Street Paving
Priority 2

Project #	PW-17-03
Project Name	Park Shores Ct. Resurfacing

Description

Mill and Overlay asphalt pavement, with replacement of deficient curb & gutter and sidewalk. Design work will be done by City Engineering Technician III, and project work will be bid with other funded mill & overlay projects (see requests PW-17-02 through PW-17-09) to gain economy of scale.

Justification

Current asphalt is beyond the end of its service life, is badly cracked, and is difficult to maintain. Some sections have sunk, creating icy conditions in winter. Snow plows routinely remove loose sections of asphalt pavement, which then creates a rough ride and requires extensive patching costs the following spring.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	97,700					97,700
Total	97,700					97,700

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	97,700					97,700
Total	97,700					97,700

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Public Works
Contact Shawn Stauske
Type Improvement
Useful Life 20 years
Category Street Paving
Priority 3

Project # PW-17-04
Project Name Sweeney Dr. Resurfacing: Fortune Dr- S Terminus

Description
 Mill and Overlay asphalt pavement, with replacement of deficient curb & gutter and sidewalk. Design work will be done by City Engineering Technician III, and project work will be bid with other funded mill & overlay projects (see requests PW-17-02 through PW-17-09) to gain economy of scale.

Justification
 Current asphalt is cracked and is getting difficult to maintain. Pavement condition is beyond the limit of continued maintenance with chip seal applications, but not yet so bad as to require much more expensive complete reconstruction of the roadway and base course.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	23,300					23,300
Total	23,300					23,300

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	23,300					23,300
Total	23,300					23,300

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Public Works
Contact Shawn Stauske
Type Improvement
Useful Life 20 years
Category Street Paving
Priority 3

Project # PW-17-05
Project Name Cardinal Dr. Resurfacing

Description
 Mill and Overlay asphalt pavement, with replacement of deficient curb & gutter and sidewalk. Design work will be done by City Engineering Technician III, and project work will be bid with other funded mill & overlay projects (see requests PW-17-02 through PW-17-09) to gain economy of scale.

Justification
 Current asphalt is cracked and is getting difficult to maintain. Pavement condition is beyond the limit of continued maintenance with chip seal applications, but not yet so bad as to require much more expensive complete reconstruction of the roadway and base course.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	69,800					69,800
Total	69,800					69,800

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	69,800					69,800
Total	69,800					69,800

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Public Works
Contact Shawn Stauske
Type Improvement
Useful Life 20 years
Category Street Paving
Priority 3

Project #	PW-17-06
Project Name	Amherst Rd. Resurfacing

Description

Mill and Overlay asphalt pavement, with replacement of deficient curb & gutter and sidewalk. Design work will be done by City Engineering Technician III, and project work will be bid with other funded mill & overlay projects (see requests PW-17-02 through PW-17-09) to gain economy of scale.

Justification

Current asphalt is cracked and portions have settled from recent housing reconstruction activity. Pavement condition is beyond the limit of continued maintenance with chip seal applications, but not yet so bad as to require much more expensive complete reconstruction of the roadway and base course. New asphalt would nicely cap the recent redevelopment in the area.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	135,000					135,000
Total	135,000					135,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	135,000					135,000
Total	135,000					135,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Public Works
Contact Shawn Stauske
Type Improvement
Useful Life 20 years
Category Street Paving
Priority 4

Project # PW-17-07
Project Name Maywood Ave. Resurfacing: Branch St -Allen Blvd.

Description
 Mill and Overlay asphalt pavement, with replacement of deficient curb & gutter and sidewalk. Design work will be done by City Engineering Technician III, and project work will be bid with other funded mill & overlay projects (see requests PW-17-02 through PW-17-09) to gain economy of scale.

Justification
 Current asphalt is beyond the end of its service life, is cracked, and is beginning to get expensive to maintain. Pavement condition is beyond the limit of chip seal maintenance, but not yet so bad as to require much more expensive complete reconstruction of the roadway and base course.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	181,500					181,500
Total	181,500					181,500

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	181,500					181,500
Total	181,500					181,500

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Public Works
Contact Shawn Stauske
Type Improvement
Useful Life 20 years
Category Street Paving
Priority 4

Project #	PW-17-08
Project Name	Middleton St Resurfacing University-Elmwood Ave

Description

Mill and Overlay asphalt pavement, with replacement of deficient curb & gutter and sidewalk. Design work will be done by City Engineering Technician III, and project work will be bid with other funded mill & overlay projects (see requests PW-17-02 through PW-17-09) to gain economy of scale.

Justification

Current asphalt is at the end of its service life, is cracked, and is beginning to get expensive to maintain. Pavement condition is beyond the limit of chip seal maintenance, but not yet so bad as to require much more expensive complete reconstruction of the roadway and base course.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	29,300					29,300
Total	29,300					29,300

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	29,300					29,300
Total	29,300					29,300

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Public Works
Contact Shawn Stauske
Type Improvement
Useful Life 20 years
Category Street Paving
Priority 4

Project # PW-17-09
Project Name Bristol St Resurfacing: University Ave-Elmwood Ave

Description
 Mill and Overlay asphalt pavement, with replacement of deficient curb & gutter and sidewalk. Design work will be done by City Engineering Technician III, and project work will be bid with other funded mill & overlay projects (see requests PW-17-02 through PW-17-09) to gain economy of scale.

Justification
 Current asphalt is at the end of its service life, is cracked, and is beginning to get expensive to maintain. Pavement condition is beyond the limit of chip seal maintenance, but not yet so bad as to require much more expensive complete reconstruction of the roadway and base course.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	32,600					32,600
Total	32,600					32,600

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	32,600					32,600
Total	32,600					32,600

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Public Works

Contact

Type Unassigned

Useful Life 20 years

Category Unassigned

Priority 3

Project #	PW-17-11
Project Name	Maywood, Mayflower, Wood: Reconstruction

Description

Street improvements in the Sak's Woods neighborhood consistent with the City's five year street improvement plan approved 4/19/16. Work will include asphalt pavement replacement and limited replacements of sidewalk, curbs and driveway aprons on the following street segments:
 -Maywood Ave.: Park St. - Branch St. (approx. 2,100' x 40' = 9,400 s.y.)2015 PASER rating = 3
 -Mayflower Dr.: University Ave. - Maywood Ave. (approx. 1,000' x 40' = 4,500 s.y.)2015 PASER rating = 4
 -Wood Rd., Wood Cir. W., Wood Cir. E. (approx. 1,160' x 40' = 5,200 s.y.)2015 PASER rating = 4

Repairs to Water and Sewer Utility facilities will be coordinated with the project, but will be funded directly by those Utilities.

Justification

Improvement of street pavement (majority is about 40 years old) to mitigate problems associated with numerous patches and potholes, and to provide a smoother ride.

Design process will include consideration of traffic calming feature(s) on Maywood Ave. and consideration of sidewalk construction along Wood Rd., Wood Cir. W. and Wood Cir. E., each of which currently lacks sidewalk on either side of the street.

Expenditures	2017	2018	2019	2020	2021	Total
Planning/Design	65,000					65,000
Construction/Maintenance		575,000				575,000
Total	65,000	575,000				640,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	65,000	575,000				640,000
Total	65,000	575,000				640,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Public Works
Contact Shawn Stauske
Type Improvement
Useful Life 20 years
Category Street Paving
Priority 3

Project # PW-17-12
Project Name Clark, Lee: Reconstruction

Description

Street improvements in the high school area consistent with the City's five year street improvement plan approved 4/19/16. Work will include asphalt pavement replacement and limited replacements of sidewalk, curbs and driveway aprons on the following street segments:
 -Clark St.: north of Lee St. (approx. 635' x 36' = 2,600 s.y.) 2015 PASER rating = 2
 -Lee St. (approx. 475' x 36' = 1,900 s.y.) 2015 PASER rating = 6

Repairs to Water and Sewer Utility facilities will be coordinated with the project, but will be funded directly by those Utilities.

Justification

Improvement of street pavement (majority is about 55 years old) to mitigate problems associated with numerous patches and potholes, and to provide a smoother ride.

Design process will include consideration of sidewalk construction along Clark St., which currently lacks sidewalk serving the Clark St. Community School (and Middleton Youth Center).

Expenditures	2017	2018	2019	2020	2021	Total
Planning/Design	40,000					40,000
Construction/Maintenance		240,000				240,000
Total	40,000	240,000				280,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	40,000	240,000				280,000
Total	40,000	240,000				280,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Public Works
Contact Shawn Stauske
Type Replacement
Useful Life 5 years
Category GIS
Priority 3

Project # PW-17-13
Project Name Aerial Photography: Fly Dane Partnership

Description

Update of existing 2014 aerial photography, with priority given to recent growth areas of the City (especially Hidden Oaks, Misty Valley, and Bishops Bay). The photos are made available on the City's GIS, and are very helpful in looking at current property and roadway conditions with various overlays of property and utility lines.

Justification

Current aerial photos assist engineers, planners and designers in reviewing land uses and pavement markings, and serve as base information in preparing improvement plan drawings. Photos are also useful to property owners in helping resolve property disputes.

Expenditures	2017	2018	2019	2020	2021	Total
Other	24,000					24,000
Total	24,000					24,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	24,000					24,000
Total	24,000					24,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Public Works
Contact Shawn Stauske
Type New
Useful Life 20 years
Category Pedestrian Improvements
Priority 5

Project #	PW-17-14
Project Name	N Gammon Rd: Sidewalk Fortune-Tiedeman Pond

Description

Proposed sidewalk extension and boardwalk connection along the west side of N. Gammon Rd. from Fortune Dr. to Tiedeman Pond, to connect pedestrians from the east side of Gammon Rd. to the boardwalk around the pond.

Justification

City staff and district aldermen have, over several years, heard from citizens that they'd like a reasonably convenient and safe crossing of Gammon Rd. that would connect their neighborhoods on the east side of the road to the pond and park on the west side of the road. Since no direct connection currently exists, it is not known what latent demand exists or whether pedestrian crossing activity would coincide with peak traffic times.

Staff had looked into the concept of a crosswalk at Woodgate Rd., but the concept was not supported by committees. As an alternative, staff looked into this concept which would direct pedestrians to the crosswalk at Fortune Dr., which was recently improved to include a median refuge island and rectangular rapid flashing beacons (RRFB).

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	20,000					20,000
Total	20,000					20,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	20,000					20,000
Total	20,000					20,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Public Works
Contact Shawn Stauske
Type Equipment
Useful Life 15 years
Category Equipment: PW Equip
Priority 4

Project #	PW-17-15
Project Name	TIG Welder

Description
 Tungsten Inert Gas (TIG) welder to replace the current 1995 spool arc aluminum / stainless steel welder.

Justification
 From our Lead Mechanic: The current spool arc welder is very outdated and difficult to use when welding light metals. Certain projects recently have been sent out because the City equipment is not suitable for making the necessary repairs.

Expenditures	2017	2018	2019	2020	2021	Total
Equip/Vehicles/Furnishings	7,785					7,785
Total	7,785					7,785

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	7,785					7,785
Total	7,785					7,785

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Public Works
Contact Shawn Stauske
Type Improvement
Useful Life perpetuity
Category Information
Priority 3

Project #	PW-17-16
Project Name	Survey Services: Underground Electrical Facilities

Description

Hire a professional surveyor to produce record drawings of field-locations of City-owned electrical and communication facilities associated with street lighting (including underground conductors), traffic signals, and fiber optic lines. City lighting and wiring will be included in the City's GIS, and will be useful in responding to field locate requests through Diggers Hotline.

Justification

MG&E used to locate City-owned underground electric conductors associated with street lighting, but several years ago notified the City that they would discontinue that practice. City staff typically relies upon GIS and attached record drawings to mark the locations of sanitary sewer, storm sewer and water facilities. Failure to accurately mark City-owned electric facilities has a potentially high liability, but location information is not currently available in GIS or comprehensive record drawings.

Expenditures	2017	2018	2019	2020	2021	Total
Other	10,000					10,000
Total	10,000					10,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	10,000					10,000
Total	10,000					10,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Public Works
Contact Shawn Stauske
Type Equipment
Useful Life 15 years
Category Pedestrian Improvements
Priority 4

Project #	PW-17-17
Project Name	Maywood Ave: RRFB at Crosswalk to Lakeview Path

Description

Installation of rectangular rapid flashing beacons (RRFB) at Maywood Ave. crosswalk, mid-block at the extension of the Lakeview Park path near the Springtree Apartments.

Justification

There are many pedestrians, including young children and elderly people, that access Lakeview Park from the nearby neighborhood, Springtree Apartments, and Heritage Senior Living complex. There have been frequent reports of drivers not properly yielding to pedestrians in the crosswalk.

The crosswalk is fairly well marked, signed and lit, it's on a fairly wide, straight section of road, and I believe the police have placed red flags on each side, so it isn't apparent how better to highlight for drivers that there's a crosswalk there. There is a slight bend in the road to the west of the crosswalk, the area is generally shaded due to the trees and brush along the south side of the road, and with vehicles often parked along both sides of the street drivers may not notice pedestrians entering the road.

Pedestrian safety could be enhanced by RRFB lights that would provide additional warning to drivers when pedestrians are present.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	10,000					10,000
Total	10,000					10,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	10,000					10,000
Total	10,000					10,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Public Works
Contact Shawn Stauske
Type Equipment
Useful Life 15 years
Category Pedestrian Improvements
Priority 4

Project # PW-17-18
Project Name CTH Q: RRFB at Shorecrest Dr.

Description

Installation of rectangular rapid flashing beacons (RRFB) at CTH Q crosswalk at the intersection with Shorecrest Dr.

Justification

The Shorecrest neighborhood is accessed only via Shorecrest Dr. at CTH Q, and there is currently no sidewalk along the east side of CTH Q in that area.

Pedestrians and bicyclists desiring to visit Orchid Heights Park or the trails in the nearby Pheasant Branch Conservancy have no good option to using the crosswalk at the intersection of CTH Q and Shorecrest Dr. Fortunately, the crosswalk is fairly well marked, signed and lit, and it's on a fairly wide, straight section of road near the crest of a hill, so pedestrians and approaching drivers should be able to see each other. Despite that, there have been complaints of drivers who have failed to properly yield to pedestrians.

Pedestrian safety could be enhanced by RRFB lights that would provide additional warning to drivers when pedestrians are present.

Expenditures	2017	2018	2019	2020	2021	Total
Equip/Vehicles/Furnishings	8,000					8,000
Total	8,000					8,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	8,000					8,000
Total	8,000					8,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Public Works
Contact Shawn Stauske
Type Improvement
Useful Life perpetuity
Category Information
Priority 5

Project #	PW-17-19
Project Name	Survey Services: Miscellaneous

Description

Hire professional surveyor to:
 -Provide bench marks in developing areas,
 -Resolve inconsistencies and discontinuities in public street rights-of-way (notably Graber Rd.), and
 -Annex Town islands and clean up "holes" in historic annexations (notably at University/Allen intersection, St. Bernard's cemetery, and Century Ave.)

Justification

Work is intended to support development on a consistent elevation datum and clean up gaps in City mapping records to resolve inconsistencies in GIS information.

Expenditures	2017	2018	2019	2020	2021	Total
Other	15,000					15,000
Total	15,000					15,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	15,000					15,000
Total	15,000					15,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Public Works
Contact Shawn Stauske
Type Improvement
Useful Life 7 years
Category Planning
Priority 5

Project #	PW-17-20
Project Name	City-wide Transportation Network Plan Update

Description

Update of the City’s transportation network plan and recommendations for improvements, most recently approved in November, 2006. At the time of plan approval, it was recommended that the plan be updated after about 7 years or so.

Justification

Much of the existing-year / future-year analysis in the 2006 plan is pretty dated. As a result, many of the plan recommendations are no longer applicable, due to changes in land uses and roadways in the past 10 years.

This plan update would re-evaluate items such as roadway classification, transit service, bike/ped connectivity, traffic demand management (TDM) methodologies, and the current roadway system. Modeling and analysis would be included for traffic operations and crash analysis at 43 intersections (25 intersections have already been counted in recent development studies) for near-term, mid-term, and design-year (Year 2050).

Expenditures	2017	2018	2019	2020	2021	Total
Other	85,000					85,000
Total	85,000					85,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	85,000					85,000
Total	85,000					85,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Public Works
Contact Shawn Stauske
Type Improvement
Useful Life 10 years
Category Rail Spur
Priority 4

Project #	PW-17-21
Project Name	Rail Spur Rehabilitation

Description
 Rehabilitation of the City-owned railroad spur tracks serving the industrial park and Greenway Station.

Justification
 Like other roads, railroads degrade through use and over time. Without periodic rehabilitation of rail components and adjacent drainage ditches, the rail structure breaks down and creates unsafe operating conditions. In the past, the City has received notice that the railroad operator will not run trains on our tracks, which has disrupted business at Future Foam and Hall Lumber. The City has also been notified of eroded ditches, washed out stone ballast support of the railroad ties, rotted ties and broken rail sections.

Rehabilitation work was done in 1996 (\$40K), 1999 (\$22K), 2000 (\$17K), 2001 (\$17K) and 2006 (\$48K). Minor repairs are funded in the 2016 operating budget (\$15K). No significant rehabilitation work has been done in the past 10 years.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	50,000					50,000
Total	50,000					50,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	50,000					50,000
Total	50,000					50,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Public Works
Contact Shawn Stauske
Type Improvement
Useful Life 20 years
Category Street Paving
Priority 3

Project #	PW-18-01
Project Name	CTH Q Resurfacing

Description

Funding for City share of costs of County project to improve asphalt pavement consistent with the City’s five year street improvement plan approved 4/19/16. The County will be doing the design work, and they have not yet provided a concept-level cost estimate for the City’s share of the project. The budget request noted here is based on an assumption of a scope of work similar to the Allen Blvd. resurfacing project done in 2015.

Following reconstruction, the County intends to transfer jurisdiction of the roadway to the City.

Justification

The current roadway surface is in fair condition, but with the intended jurisdictional transfer to the City, the County is amenable to leading a jointly funded resurfacing project. CTH Q is classified as a principal arterial roadway, and carries a fairly high volume of traffic connecting Middleton to Westport and Waunakee.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance		250,000				250,000
Total		250,000				250,000

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget		250,000				250,000
Total		250,000				250,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Sewer Utility
Contact Dave Sarbacker
Type Replacement
Useful Life 75 years
Category Sewer
Priority 2

Project #	SU-17-01
Project Name	Sewer Main Replacement

Description
 Replace deficient sanitary sewer main in conjunction with road reconstruction projects.

Justification
 Cost effective time to replace sewer mains identified to be deficient.

Expenditures	2017	2018	2019	2020	2021	Total
Planning/Design	17,500	31,000	42,500	20,000	17,500	128,500
Construction/Maintenance	175,000	310,000	425,000	200,000	175,000	1,285,000
Total	192,500	341,000	467,500	220,000	192,500	1,413,500

Funding Sources	2017	2018	2019	2020	2021	Total
Sewer Utility	192,500	341,000	467,500	220,000	192,500	1,413,500
Total	192,500	341,000	467,500	220,000	192,500	1,413,500

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Sewer Utility
Contact Dave Sarbacker
Type Improvement
Useful Life 15 years
Category Equipment: Miscellaneous
Priority 2

Project #	SU-17-02
Project Name	Sewer Video Equipment

Description
 Replace aged sanitary sewer main inspection equipment. Equipment is currently co-op owned by Middleton, Waunakee, Deforest, Lodi and Town of Westport with new equipment to be same.

Justification
 New CMOM regulations require additional video inspections. Current equipment is unreliable and has high maintenance costs.

Expenditures	2017	2018	2019	2020	2021	Total
Equip/Vehicles/Furnishings	45,000					45,000
Total	45,000					45,000

Funding Sources	2017	2018	2019	2020	2021	Total
Sewer Utility	45,000					45,000
Total	45,000					45,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Stormwater Utility
Contact Gary Huth
Type Improvement
Useful Life 10 - 20 years
Category Storm Sewer/Drainage
Priority 2

Project #	SW-17-01
Project Name	Pheasant Branch, Bank Toe Stabilization

Description

A portion of this project was to be the third and necessary phase of the construction of the new Donna Dr sedimentation basin near the Police Station. The work was scheduled for 2016, but now is proposed to be combined with additional lengths of stream in this reach that also require stabilization measures. The segment abutting the Donna Dr pond is critical to ensure the stability of the stream bank against catastrophic failure. The bank supports a perched infiltration pond. The work includes reinforcing the toe of bank against sloughing due to saturation from infiltration processes.

Costs shown include engineering and construction.

Justification

The critical portion of this work is necessary to protect the City's investment in the new pond and in the Pheasant Branch corridor. This portion, relative to the overall pond project cost, is relatively low (\$20,000 v \$374K for Phase 1, the Pond; and \$177K for Phase 2, the stabilization of the upper bank). The remainder of the proposed 2017 project (\$105,000), while not as dire, was identified a few years ago as in need of attention.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	125,000					125,000
Total	125,000					125,000

Funding Sources	2017	2018	2019	2020	2021	Total
Stormwater Utility	125,000					125,000
Total	125,000					125,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Stormwater Utility
Contact Gary Huth
Type Improvement
Useful Life 15 - 25 years
Category Storm Sewer/Drainage
Priority 3

Project #	SW-17-02
Project Name	South Pond Dredging

Description

This is the next major priority item for storm water maintenance. It will be the first one wholly funded by the SWU. Work consists of sampling sediments, doing a topo survey before and after (to measure volume removed) and dredging accumulated sediments from pond bottom. Also needed is the identification of lands to be used for dewatering of the dredge material.

Justification

South Pond is reaching the end of its functional life as a regional sediment trap in the Pheasant Branch watershed, tributary to Lake Mendota. The sediment trapping efficiency of a pond begins to fall off when the permanent pool of water is less than three feet in depth. Measurements from two years ago show some areas to be as little as two feet in depth.

NOTE: Absent any design, the construction cost shown should be considered as a rough estimate, subject to other potential costs not yet identified. For example, the City may need to acquire a dewatering site to accomplish the dredging.

Expenditures	2017	2018	2019	2020	2021	Total
Planning/Design	60,000					60,000
Construction/Maintenance		585,000				585,000
Total	60,000	585,000				645,000

Funding Sources	2017	2018	2019	2020	2021	Total
Stormwater Utility	60,000	585,000				645,000
Total	60,000	585,000				645,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Vehicle and Equipment Reque
Contact Brian Gebhard
Type Equipment
Useful Life
Category Vehicles
Priority n/a

Project #	V-17-01
Project Name	2017 Vehicle & Equipment Requests

Description

Vehicle and equipment budget requests as submitted by Lead Mechanic Brian Gebhard in priority order based on equipment age, use, mileage, repair history, etc. See file for 2017 vehicle and equipment requests - new and replacement.

Justification

Expenditures	2017	2018	2019	2020	2021	Total
Equip/Vehicles/Furnishings	1,483,645					1,483,645
Total	1,483,645					1,483,645

Funding Sources	2017	2018	2019	2020	2021	Total
Capital Budget	1,483,645					1,483,645
Total	1,483,645					1,483,645

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Water Utility
Contact Dave Sarbacker
Type Equipment
Useful Life 20 years
Category Equipment: Miscellaneous
Priority 2

Project # WU-17-02
Project Name Tower #2 Cathodic Protection

Description
 Replace Cathodic Protection Equipment.

Justification
 When the tower was painted in 2012, the Cathodic Protection equipment was removed. Per the engineering firm for the project, it's best to wait 3 to 5 years to re-install the equipment. This helps protect the interior of the tower from rust and corrosion. Request approved for 2015, resubmit for installation in 2017

Expenditures	2017	2018	2019	2020	2021	Total
Planning/Design	5,000					5,000
Equip/Vehicles/Furnishings	50,000					50,000
Total	55,000					55,000

Funding Sources	2017	2018	2019	2020	2021	Total
Water Utility	55,000					55,000
Total	55,000					55,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Water Utility
Contact Dave Sarbacker
Type Replacement
Useful Life 75 years
Category Water
Priority 2

Project #	WU-17-03
Project Name	Water Main Replacement

Description
Replace water main in conjunction with road construction projects.

Justification
Cost effective method of replacing old cast iron main.

Expenditures	2017	2018	2019	2020	2021	Total
Planning/Design	17,500	55,000	77,500	30,000	17,500	197,500
Construction/Maintenance	175,000	550,000	775,000	300,000	175,000	1,975,000
Total	192,500	605,000	852,500	330,000	192,500	2,172,500

Funding Sources	2017	2018	2019	2020	2021	Total
Water Utility	192,500	605,000	852,500	330,000	192,500	2,172,500
Total	192,500	605,000	852,500	330,000	192,500	2,172,500

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Water Utility
Contact Dave Sarbacker
Type Equipment
Useful Life 20 years
Category Equipment: Miscellaneous
Priority 2

Project # WU-17-05
Project Name Tower #2 Mixer

Description
 Water Mixing System for Tower #2.

Justification
 Water quality improvement. Approved in 2014, to be installed in 2017

Expenditures	2017	2018	2019	2020	2021	Total
Planning/Design	3,500					3,500
Equip/Vehicles/Furnishings	35,000					35,000
Total	38,500					38,500

Funding Sources	2017	2018	2019	2020	2021	Total
Water Utility	38,500					38,500
Total	38,500					38,500

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Water Utility
Contact Dave Sarbacker
Type Maintenance
Useful Life 15 years
Category Water
Priority 2

Project # WU-17-06
Project Name Elevated Tank Painting

Description
 Repaint of Elevated Tank #1

Justification
 Recommendation from inspection report dated 7/6/2014

Expenditures	2017	2018	2019	2020	2021	Total
Planning/Design	20,000					20,000
Construction/Maintenance	200,000					200,000
Total	220,000					220,000

Funding Sources	2017	2018	2019	2020	2021	Total
Water Utility	220,000					220,000
Total	220,000					220,000

Capital Improvement Plan
City of Middleton, Wisconsin

2017 *thru* 2021

Department Water Utility
Contact Dave Sarbacker
Type Improvement
Useful Life 20 years
Category Water
Priority 2

Project #	WU-17-07
Project Name	Quarry Res. Roof Membrane & Insulation Replacement

Description
 Replace roof membrane and insulation on roof covering the Quarry Reservoir.

Justification
 Membrane installed 1995 and has past it's life expectancy of 20 yrs. This membrane keeps rainwater from entering our fresh water storage facility.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance	140,000					140,000
Total	140,000					140,000

Funding Sources	2017	2018	2019	2020	2021	Total
Water Utility	140,000					140,000
Total	140,000					140,000