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Project Title:	Runway 10/28 Safety Areas	**Project #:**	A-200310
Department:	Public Works - Airport	**Project Type:**	Airport
Phase:	Preliminary Design	**Sponsor:**	
Budget Action:	C - Scope	**Manager:**	Allison Bussler, DPW Director
Date:	August 27, 2015		

CAPITAL BUDGET SUMMARY

Year Project Phase	2007 Design	Phase I-2013 Construction	Phase II - 2014 Construction	Total Project
Expenditure Budget	$356,500	$260,000	$180,000	$796,500
Revenue Budget	$356,500	$260,000	$180,000	$796,500
Net County Cost	$0	$0	$0	$0

COST DOCUMENTATION		**REVENUE**	
Construction	$13,234,200	WI BOA 5%	$796,500
Design	$1,191,100	FAA 90%	$14,288,100
Construction Admin	$1,455,800	Project dependent on available Federal and/or State Funding	
Total Project Cost	$15,881,100	Total Revenue	$15,084,600
EXPENDITURE BUDGET	$796,500	**REVENUE BUDGET** (Airport Fund Balance)	$796,500

Project Scope & Description

To improve the currently non-compliant runway 10/28 safety area (RSA) and object free area (OFA) to provide for standard RSA and OFA dimensions by adding 400 feet of pavement on the West end of Runway 10/28, relocating navigational equipment, realigning Silvernail Rd., and implementing declared distances for arriving and departing aircraft. The previous scope involved implementing declared distances, but only on existing pavement, which would shorten the runway. The current Federal timeline is for design in 2016 and construction in 2017.

Location

Safety Areas off the west end of runway 10/28.

Analysis of Need

In October of 1999, the FAA issued Order 5200.8, *Runway Safety Area Program*. The RSA is intended to provide a measure of safety in the event of an aircraft excursion from the runway by significantly reducing the extent of personal injury (to both people on the ground and in the aircraft) and aircraft damage during overruns, undershoots and veer-offs. It is the objective of the Runway Safety Area Program that all RSA's at federally obligated airports conform to the standards set forth in FAA Advisory Circular (AC) 150/5300-13, *Airport Design.* As part of the Master Plan process there was a review of the RSA. Based strictly on above ground objects the RSA does not meet the FAA requirements. Pewaukee Road penetrates the RSA by an average of 375 feet, while Silvernail penetrates the RSA at an angle, with encroachment at the southwest corner by approximately 200 feet and encroachment at the northeast edge by 700 feet. Changes to airport design criteria, lack of federal funding for several years, changes in cost share percentages and concurrence from different divisions of FAA delayed project. In March 2012, the FAA agreed on a course of action.

With safety area compliance projects becoming a high priority for the BOA, it would be prudent to include this project in the plan in order to get it included in the BOA capital plan to ensure that the state can program adequate funds.

Alternatives

In the environmental analysis for the project, several alternatives were identified including the installation of Engineered Material Arresting System (EMAS), the addition of pavement on both ends of runway 10/28, and tunneling Pewaukee and/or Silvernail Rd. All of these options were found to be more impactful and more expensive both in construction costs and long term maintenance costs than the preferred alternative identified by this Capital Project. Additionally, the other alternatives served to shorten the available length of the runway which is unacceptable to our current users and to the projected aircraft operating demands.

Ongoing Operating Costs

The ongoing operating costs would be associated with the continued maintenance required for upkeep of the extended pavement, plus the extra area required for snow removal.

Previous Action

Approved for design, initial request for construction.

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Project Title:	Replace Brine Maker/Construct Canopy Roof	**Project #:**	201401
Department:	Public Works - Hwy Ops	**Project Type:**	Equipment Replacement
Phase:	Preliminary Design	**Sponsor:**	Public Works
Budget Action:	As Planned	**Manager:**	Allison Bussler, DPW Director
Date:	August 27, 2015		

CAPITAL BUDGET SUMMARY

Year	2015	2016	2017	Total
Project Phase	Budget & Concept Design	Construction	Construction	Project
Expenditure Budget	$10,500	$0	$313,200	$323,700
Revenue Budget	$0	$0	$0	$0
Net County Cost	$10,500	$0	$313,200	$323,700

COST DOCUMENTATION		**REVENUE**	
Design	$10,500		
Equipment	$190,000		
Construction	$100,000		
Contingency	$23,200		
Total Project Cost	$323,700	Total Revenue	$0
EXPENDITURE BUDGET	$323,700	**REVENUE BUDGET**	$0

Project Scope & Description

Replace existing brinemaker originally purchased in 2007 by Wisconsin Department of Transportation (DOT). Purchase of replacement brinemaker and five (5) additional 6,000 gallon tanks for salt brine storage and liquid blending of de-icing chemicals. Construct canopy roof off back of Highway Operations to shelter truck wash, liquid loading area and additional storage tanks.

Location

Highway Operations, 1641 Woodburn Road, Waukesha, WI 53188. Two of the five additional 6,000 gallon tanks will be located at the New Berlin and Sussex substations.

Analysis of Need/Return on Investment

The useful life of this type of equipment has not been established. We estimate that the existing brinemaker could have a useful life of 10 years. The Highway Operations Division has 100% of its trucks applying pre-wet to its salt as it comes off the salt spinner. Additionally, we anti-ice prior to storms and sell approximately 150,000 gallons of salt brine to other municipalities within Waukesha County and to the Jefferson County Highway Department.

It is essential that we continue to be able to produce salt brine as not using it as a pre-wet would increase our salt usage by at least 20%. When this project was proposed during 2013, the County used, on average, 16,532 tons of salt over the last 5 winter seasons. A 20% increase by not being able to pre-wet salt causing more bounce and scatter would add an additional 3,300 tons of salt use annually. At an average of $56 a ton, this would amount to an additional $184,880 cost on salt. Under this scenario, replacing the brinemaker would pay for itself in approximately 1.5 years.

The project includes the construction of a canopy roof to the Highway Operations building. The additional roofing is intended to provide cover from the elements while county staff refill trucks with salt brine during snow storms.

Alternatives

Replace equipment individually as it breaks down.

Ongoing Operating Costs

The current brinemaker continues to run with minimal costs to maintain at this point. We have spent approximately $500-700 per year on parts and sensors. This will continue to increase as the brinemaker ages.

Previous Action

2014-2018 capital plan: approved as new project
2015-2019 capital plan: approved as planned

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Project Title:	Fuel Tank Replacement and Infrastructure Project	Project #:	201415
Department:	Public Works - Central Fleet	Project Type:	Equipment Replacement
Phase:	Formation	Sponsor:	Public Works
Budget Action:	As Planned	Manager:	Allison Bussler, DPW Director
Date:	August 27, 2015		

CAPITAL BUDGET SUMMARY

Year	2018	2019	2020	2021	2022	2023	2024	Total
Project Phase	Constr	Constr	Constr	Constr	Constr	Constr	Constr	Project
Expenditure Budget	$400,000	$200,000	$200,000	$200,000	$200,000	$200,000	$100,000	$1,500,000
Revenue Budget	$0	$0	$0	$0	$0	$0	$0	$0
Net County Cost	$400,000	$200,000	$200,000	$200,000	$200,000	$200,000	$100,000	$1,500,000

COST DOCUMENTATION		Item	Quantity	Price	Total Cost
Tank Inspection & Testing	$20,000	Underground Tank Testing	5	$4,000	$20,000
Construction	$1,400,000	Underground tanks*	5	$150,000	$750,000
Contingency	$80,000	Above Ground Tanks*	25	$15,000	$375,000
		Monitors	5	$20,000	$100,000
Total Project Cost	$1,500,000	Card Readers	16	$15,000	$240,000
		Fuel Software Systems	2	$5,000	$10,000
		Signage/Fencing	All Sites		$5,000
EXPENDITURE BUDGET	$1,500,000	**Total**			$1,500,000

*Higher cost of underground tanks is partially due to larger capacity needed for highway operations at substations, including four 10,000 gallon tanks and one 6,000 gallon tank, and also due to necessary monitoring systems and electronic devices. By contrast smaller above ground tanks are needed at other locations and hold either 550 or 1,000 gallons. Previously, those underground tanks that could be replaced by above ground tanks were replaced, based on the implementation of a replacement plan in the early 1990s. Those underground tanks remaining were due to inadequate space (that would have required the purchase of additional land) and safety issues.

Project Scope & Description:

There are 16 vehicle fuel sites utilized by Waukesha County departments with a total of 30 tanks (5 Underground [UGT], and 25 Above Ground [AGT]). All tanks were installed in the early 1990's. The infrastructure is aging and will begin to exceed tank warranties and useful lives of technology and equipment associated with site operations. The 25 Above Ground and 5 Underground tanks will be replaced with similar tank styles, design, and capabilities. Note: all underground tanks are monitored with sensors designed to shut-off system operations immediately at time of detection thus eliminating the loss of fuel into the ground.

The project plan retains the same $1.5 million spending level, but is updated to spread out funding into later years. This allows for more initial research into replacement strategies and costs before committing too much funding. The concept for capital budgeting for tank replacement: $400,000 Capital dollars will be set aside beginning in 2018 and then $200,000 each year for a total $1.5 million funding level, replacing tanks as needed.

The budget strategy for the project is to fully fund the project and to utilize funds only as needed to complete improvements when necessitated by aging infrastructure. This strategy is similar to the method used in the Highway Paving program where funds are allocated to paving but not specifically to a location.

Location:

All 16 fuel sites that are utilized by Waukesha County Departments will require some form of replacements, upgrades and/or modifications. Sites include Highway Operations Center, Nashotah Substation, North Prairie Substation, Sussex Substation, New Berlin Substation, Nagawaukee Golf Course, Wanaki Golf Course, Moor Downs Golf Course, Nagawaukee Park, Nashotah Park, Menonomee Park, Fox Brook Park, Minooka Park, Fox River Park, Muskego Park, and Mukwonago Park.

Alternatives:

Three alternative options exist at this time: close the site(s), fuel off-site in the local area or consolidate fuel sites with other governmental agencies. Neither is an effective option given the nature of daily departmental operating procedures and emergency operation requirements.

Ongoing Operating Costs:

Waukesha County currently spends $40K annually to maintain all 16 of the vehicle fuel sites. The funding is contained within the Central Fleet Division's fuel budget.

Previous Action:

Regulatory requirements associated with the State of Wisconsin "Comm 10" statutes necessitated a fuel capital project in 2012-14 totaling $232K (project # 201211). The project focused on upgrading fuel dispenser spill containment and monitoring systems. The work contained in the 2012-14 project will not be duplicated in this project and therefore, no funds are anticipated to be duplicated in the future project. Approved as a new project in the 2014-2018 capital plan. Approved with delay in 2015-2019 capital plan.

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Project Title:	Communication Center Expansion	**Project #:**	200808
Department:	Public Works - Buildings	**Project Type:**	Facility Expansion
Phase:	Preliminary Design	**Sponsor:**	Gary Bell, Emerg. Prep. Director
Budget Action:	C – Scope, C - $ Update	**Manager:**	Allison Bussler, DPW Director
Date:	August 26, 2015		

CAPITAL BUDGET SUMMARY

Year	2015	2016	2017	Total
Project Phase	Budget & Concept	Design	Construction	Project
Expenditure Budget	$45,000	$203,000	$3,483,000	$3,731,000
Revenue Budget	$0	$0	$708,400	$708,400
Net County Cost	$45,000	$203,000	$2,774,600	$3,022,600

COST DOCUMENTATION		**REVENUE**	
Architect	$248,000	Municipal Cost Share per ordinance*	$350,000
Construction	$2,976,000	New Berlin Joining fee for	$358,400
Contingency	$238,000	infrastructure received in 2012	
Survey/Soil Test/Permits/Etc	$28,000	and reserved in General Fund Balance	
Furniture	$241,000		
Total Project Cost	$3,731,000	Total Revenue	$708,400
EXPENDITURE BUDGET	$3,731,000	**REVENUE BUDGET**	$708,400
		*Future new large member that requires expansion	

Project Scope & Description

This project was proposed in 2008 and will incorporate space for the Waukesha Communications Center (WCC) to accommodate additional dispatch agencies and space for the Emergency Operations Center (EOC) to better handle countywide emergencies. This project adds an approximate total of about 7,500 square feet to the WCC. Based on further research, the hiring of a new director, EOC training exercises, and actual experience with a large incident, the project expands the EOC to properly necessitate these functions. The project will also include storage and administrative space to free up existing space in the current facility to accommodate future county wide dispatch for all jurisdictions and have the needed space to better manage significant incidents.

Location

Waukesha County Communications Center, 1621 Woodburn Road, Waukesha, WI 53188

Analysis of Need

The existing facility was completed in 2004 and started operations that same year. The facility was designed to handle all the agencies that committed originally and a small increase to the number of agencies in the future. The current dispatch floor has workstations for fourteen 9-1-1 positions, one 9-1-1 supervisor position and two supervisor workstations. While the facility is capable of handling increases in activity and a small number of new partners in the existing structure, at some point the facility will need to expand to accommodate substantial growth due to more agencies joining. Since 2004, three police departments and three fire departments have been added to the WCC, as well as additional emergency management and Information Technology Division personnel. The most recent addition was in 2012 with New Berlin Police and Fire becoming part of the WCC. Within the next couple of years, growth is estimated to include additional police and fire departments, but the size of these agencies is unknown at this point. In addition, space is needed in the EOC to handle countywide incidents. The current square footage is insufficient for substantial growth due to new agencies. Construction costs are updated based on budget and concept developed in 2015. The increase in construction cost is related to the parking lot, site and drainage improvements, and increase in building square footage.

Alternatives

- Until the building is expanded, the dispatch floor can be re-configured to add up to four 9-1-1/dispatch positions and convert the two supervisors' workstations to 9-1-1/dispatch workstations, but room for support staff, storage, meeting rooms, etc. is in short supply.
- Only allow one partner/agency and deny all other agency requests.
- Create new formula to better account for all cost of new agencies that join the dispatch center.

Ongoing Operating Costs

The major components of the building already exist. Additional space and equipment will require additional staff and increases in personnel, maintenance and utilities costs. Estimated costs will be determined as the project construction design plan is completed.

Previous Action

2008-2012 capital plan: approved as new. 2009-2013, 2010-2014, 2011-2015; 2013-2017 capital plans: delayed one year. 2012-2016 capital plan: cost update. 2014-2018 capital plan: approved as planned. 2015-2019 capital plan: scope and cost update.

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Project Title:	HWY Ops-Fleet HVAC Upgrades	**Project #:**	201206
Department:	Public Works - Buildings	**Project Type:**	Mechanicals/Bldg Systems
Phase:	Preliminary Design	**Sponsor:**	Public Works
Budget Action:	As Planned	**Manager:**	Allison Bussler, DPW Director
Date:	August 13, 2015		

CAPITAL BUDGET SUMMARY

Year	2015	2017	Total
Project Phase	Budget & Concept Design	Construction	Project
Expenditure Budget	$45,000	$718,000	$763,000
Revenue Budget	$0	$0	$0
Net County Cost	$45,000	$718,000	$763,000

COST DOCUMENTATION		REVENUE	
Design	$45,000		
Construction	$663,000		
Contingency	$55,000		
Total Project Cost	$763,000	Total Revenue	$0
EXPENDITURE BUDGET	$763,000	**REVENUE BUDGET**	$0

Project Scope & Description
This project will upgrade the HVAC infrastructure including pumps, motors, air handling units and heaters at the Highway Operations and Fleet Facilities.

Location
Highway Operations and Fleet Facilities, 1641 Woodburn Road, Waukesha, WI 53188

Analysis of Need
The Highway Operations Center was constructed in 1997 and the Fleet Garage was constructed in 1998. The LAW study is a planning document to help the county plan for equipment replacement at the end of a piece of equipment's useful life, but before it fails. The study identified approximately 63 individual pieces of HVAC-related equipment that should be upgraded or replaced at these facilities.

Alternatives
Replace equipment individually as it breaks down.

Ongoing Operating Costs
Energy consumption will be reduced by replacing older equipment with newer high efficiency equipment. Estimated energy consumption reductions to be determined as part of the budget and concept design in 2015.

Previous Action
2012-2016 capital plan: approved as new project.
2013-2017, 2014-2018, 2015-2019 capital plan: approved as planned.

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Project Title:	MHC Roof Replacement	**Project #:**	201412
Department:	Public Works - Buildings	**Project Type:**	Roof Replacement
Phase:	Formation	**Sponsor:**	Public Works
Budget Action:	As Planned	**Manager:**	Allison Bussler, DPW Director
Date:	August 27, 2015		

CAPITAL BUDGET SUMMARY

Year	2017	2018	Total
Project Phase	Budget & Concept, Design	Construction	Project
Expenditure Budget	$15,000	$238,000	$253,000
Revenue Budget	$0	$0	$0
Net County Cost	$15,000	$238,000	$253,000

COST DOCUMENTATION		**REVENUE**	
Architect	$15,000	Energy rebates will be identified prior to construction year.	
Construction	$222,000		
Contingency	$16,000		
Total Project Cost	$253,000	Total Revenue	$0
EXPENDITURE BUDGET	$253,000	**REVENUE BUDGET**	$0

Project Scope & Description
This project is to replace 55,000 GSF (gross square feet) of 60 mil EPDM (rubber) roofing on the Mental Health Center.

Location
Mental Health Center, 1501 Airport Road, Waukesha, WI 53188

Analysis of Need
This Mental Health Center was constructed in 1994 and has the original roofing system. EPDM roofs are typically under warranty for 15 years and have a useful life expectancy between 15 and 20 years. The roof is 21 years old and has been patched and deteriorated due to sun exposure. At time of replacement the roof will be 24 years old.

Alternatives
Patch the roof when leaks develop.

Ongoing Operating Costs
Operating costs will be reduced for labor and materials associated with repairing leaks and associated damages.

Previous Action
2014-2018 capital plan: approved as new project
2015-2019 capital plan: approved as planned

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Project Title:	LEC Mechanical Upgrades	**Project #:**	201413
Department:	Public Works - Buildings	**Project Type:**	Mechanicals/Bldg Systems
Phase:	Construction	**Sponsor:**	Public Works
Budget Action:	As Planned	**Manager:**	Allison Bussler, DPW Director
Date:	August 13, 2015		

CAPITAL BUDGET SUMMARY

Year Project Phase	2015 Budget & Concept, Design	2016 Construction	Total Project
Expenditure Budget	$220,000	$2,376,000	$2,596,000
Revenue Budget	$220,000	$0	$220,000
Net County Cost	$0	$2,376,000	$2,376,000

COST DOCUMENTATION		REVENUE	
Architect	$220,000	Energy rebates will be identified prior to construction year.	
Construction	$2,200,000		
Contingency	$176,000		
		Jail Assessment Fund Balance	$220,000
Total Project Cost	$2,596,000	Total Revenue	$220,000
EXPENDITURE BUDGET	$2,596,000	**REVENUE BUDGET**	$220,000

Project Scope & Description

This project will upgrade the HVAC infrastructure including chillers, air handling units, variable air volume (VAV) boxes, controls, pumps, and motors at the Law Enforcement Center (LEC).

Location

Law Enforcement Center, 515 West Moreland Blvd., Waukesha, WI 53188

Analysis of Need

The Law Enforcement Center was constructed in 1993 and houses administrative staff and jail cells. The LAW study is a planning document to help the county plan for equipment replacement at the end of a piece of equipment's estimated useful life, but before it fails. Mechanical HVAC equipment normally has a useful life of approximately 25 years depending on the quality of the equipment and the frequency of maintenance. With proper maintenance the useful life of the equipment can be extended. At the time of replacement the HVAC mechanical equipment will be 23 years old. Being a 24/7 operation, the chiller units, VAV boxes, and associated equipment at the LEC have a reduced life expectancy and experienced significant problems needing repairs in the last few years. The chillers and related equipment are outdated, use significantly more energy than new high efficiency models and have reached the end of their useful life. As a 24/7 Law Enforcement and Corrections facility, it is imperative that the County provide a properly conditioned environment for Law Enforcement and Corrections staff and inmates.

The project was updated in the 2015-2019 capital plan to include VAV boxes and associated controls due to equipment failure. Also these VAV boxes are no longer manufactured nor supported, so simply replacing them requires an expensive kit to continue with the temporary VAV technology.

Alternatives

Delay the project and replace equipment only when it can no longer be repaired, breaks down frequently and/or operation interruptions cannot continue to be tolerated. To replace the equipment when it breaks will result in excessive costs for temporary air conditioning, equipment acquisition, and significant operation interruptions. The replacement chiller and related equipment has a 90 day lead time for manufacturing and delivery. A planned, end of useful life, chiller and related equipment replacement will allow for minimal operational interruptions and equipment down time.

Ongoing Operating Costs

Energy consumption will be reduced by replacing the older equipment with newer high efficiency equipment and direct digital controls. Energy consumption reductions will be determined as part of the budget and concept design in 2015.

Previous Action

2014-2018 capital plan: approved as new project
2015-2019 capital plan: change scope; cost update; accelerate; change scope

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Project Title:	Courthouse Project – Criminal Courtroom Construction	**Project #:**	201418
Department:	Public Works - Buildings	**Project Type:**	New Building
Phase:	Formation	**Sponsor:**	Public Works
Budget Action:	As Planned	**Manager:**	Allison Bussler, DPW Director
Date:	August 30, 2015		

CAPITAL BUDGET SUMMARY

Year	2017	2018	2019	2020	Total
Project Phase	Budget & Concept	Design/ Constr	Construction	Construction	Project
Expenditure Budget	$700,000	$8,000,000	$14,000,000	$13,700,000	$36,400,000
Revenue Budget	$0	$0	$0	$0	$0
Net County Cost	$700,000	$8,000,000	$14,000,000	$13,700,000	$36,400,000

COST DOCUMENTATION		**REVENUE**	
Design	$2,275,000		
Construction Management	$2,275,000		
Construction	$30,450,000		
Contingency	$1,400,000		
Total Project Cost	$36,400,000	Total Revenue	$0
EXPENDITURE BUDGET	$36,400,000	**REVENUE BUDGET**	$0

Project Scope & Description

The existing courthouse, located at 515 W. Moreland Blvd., was constructed in 1959 and remains structurally sound. The Courthouse currently houses the Judiciary, Clerk of Courts, Family Court Counseling, District Attorney's Offices (including Victim/Witness), County Board Office, The County Board Room, Information Technology and other miscellaneous functions. Throughout the life of the Courthouse, extensive remodeling has taken place to add additional courtrooms and reconfigure interior space to meet the expanding needs of the services located in the Courthouse. Operational and business inefficiencies, particularly for the courts systems, have been created due to both space and building limitations. In addition, existing courtrooms do not meet current design standards. Also, the Courthouse building infrastructure is approaching the end of its useful life.

The County retained Zimmerman Architectural Studios to develop a "Courthouse Study," (capital project #200914), to provide a comprehensive analysis of Courthouse space requirements and design needs. Zimmerman was asked to present an analysis for both Waukesha County needs alone and an analysis of needs for a joint Waukesha County and City of Waukesha partnership. This study has been completed, and Zimmerman recommended a two-step design approach (below). This project is intended to address step 1. A separate future capital project will need to address step 2. While approving this project in the plan does not obligate future County Boards for step 2 (renovation of the existing courthouse facility as outlined in the aforementioned study), it does reflect the County's future guidance for the overall courthouse project.

Step 1: Construction of a new 4 story, 8 courtroom facility and relocation of 8 existing courtrooms to the new facility. This work also includes the demolition of the existing 1959 jail.

Step 2: This future capital project would renovate the existing Courthouse facility in a 3 stage vertical segmented approach to provide newly renovated facilities for all divisions, except the criminal courtrooms and the commissioner courtroom addressed in Step 1, and to also possibly provide space for the City of Waukesha facilities and services. Courthouse renovation will also include the installation of new state of the art mechanical, electrical, fire protection, window systems and new wall, floor and ceiling finishes in all renovated areas. This approach will not require temporary relocation of Courthouse personnel.

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Project Title:	Courthouse Project – Criminal Courtroom Construction	**Project #:**	201418
Department:	Public Works - Buildings	**Project Type:**	New Building
Phase:	Formation	**Sponsor:**	Public Works
Budget Action:	As Planned	**Manager:**	Allison Bussler, DPW Director
Date:	August 30, 2015		

Location
Waukesha County Courthouse, 515 West Moreland Blvd., Waukesha, WI 53188.

Analysis of Need

The existing Courthouse building, constructed in 1959, remains structurally sound. Over the years, extensive remodeling has taken place to add additional courtrooms and reconfigure interior space. Public access to the building is now limited to the main entrance (door #2) where security screening takes place. Customer circulation has been identified for improvement, particularly the Courts area. Due to the remodeling, some courtrooms are considered inadequate since the space and/or security does not measure up to current courtroom design standards.

Based on the needs identified by the County and analyzed by the consultant, the consultant has recommended the construction of a new 4-story Courts building adjacent and contiguous to the existing Courthouse and the relocation of 8 existing courtrooms to this building. This will address courtroom security needs, prisoner transport needs, and customer circulations needs. Due to the design of this new building, it will not be necessary to temporarily relocate any courtrooms or staff during construction.

The existing Courthouse is in need of complete replacement of its mechanical, electrical, plumbing, fire protection and window systems. The need for these replacements will coincide with the completion of the Courts Building and the vacating of 8 courtrooms in the existing Courthouse. The space left vacant by the courtrooms will be used in consideration with the consultant's recommendation for Step 2, as described previously in the Project Scope and Description.

At this time, there are a number of factors that may impact the design and the construction costs of future courthouse modernization projects. These factors make it difficult to provide detailed cost estimates for these projects. Those factors include but are not limited to: partnership with the City of Waukesha, future economic conditions and the maturing of the design process for the remaining 3 stages of work that are part of step 2. Additional design work will be performed to finalize the staging of the remaining work during the design phase of the step 1 effort.

Alternatives
Continue to operate all County functions and services at their present location utilizing existing facilities, risking HVAC failure, and without gaining future HVAC, utility and staffing efficiencies.

Ongoing Operating Costs
Continue at the present energy consumption and maintenance required.
The new project is expected to reduce energy costs given the opportunity to increase operational efficiency that state of the art equipment and windows provide.

Previous Action
The Courthouse Study was completed in August, 2013.
Approved as a new capital project in the 2014-2018 capital plan.
2015-2019 capital plan: approved as planned.

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Project Title:	Highway Substations HVAC Upgrades	**Project #:**	201109
Department:	Public Works - Buildings	**Project Type:**	Mechanicals/Bldg Systems
Phase:	Preliminary Design	**Sponsor:**	Public Works
Budget Action:	C - $ Update	**Manager:**	Allison Bussler, DPW Director
Date:	August 27, 2015		

CAPITAL BUDGET SUMMARY

Year	2014	2016	Total
Project Phase	Budget & Concept Design	Construction	Project
Expenditure Budget	$36,000	$200,000	$236,000
Revenue Budget	$0	$0	$0
Net County Cost	$36,000	$200,000	$236,000

COST DOCUMENTATION		**REVENUE**	
Architect	$36,000		
Construction	$184,000		
Contingency	$16,000		
Total Project Cost	$236,000	Total Revenue	$0
EXPENDITURE BUDGET	$236,000	**REVENUE BUDGET**	$0

Project Scope & Description

HVAC equipment controls and upgrades at the four Highway Division substations. Based on a consultant report identifying fewer pieces of equipment requiring replacement, project costs are reduced $375,000 for 2016. In recent years, individual pieces of equipment have failed and have already been replaced on an as-need basis through the Building Improvement Plan in the Department of Public Works operating budget.

Locations

Nashotah Substation–N46W33480 CTH R, Nashotah, WI 53058
New Berlin Substation–20300 W. Lawnsdale Road, New Berlin, WI 53058
North Prairie Substation–126 Oakridge Drive, North Prairie, WI 53153
Sussex Substation–N51W23093 Lisbon Road, Sussex, WI 53098

Analysis of Need

The equipment targeted to be replaced in this project has been identified to have reached the end of its useful life. Mechanical HVAC equipment normally has a useful life of approximately 25 years depending upon the quality of the equipment and the frequency of maintenance. With proper maintenance the useful life of the equipment can be extended. The substations were constructed as follows: Nashotah 1972 (43 years ago), New Berlin 1950 (65 years ago), North Prairie 1988 (27 years ago) and Sussex 1965 (50 years ago). The project proposes a concept and budget in 2014 to determine which equipment needs to be replaced, reconditioned or reused. This project will also allow the County to install high-efficiency equipment to reduce annual utility costs.

Alternatives

Repair or replace equipment when it breaks down.

Ongoing Operating Costs

Energy consumption will be modestly reduced with more efficient equipment.

Previous Action

- 2011-2015 capital plan: approved as a new project
- 2012-2016 capital plan: approved with cost update
- 2013-2017 capital plan: delayed
- 2014-2018 capital plan: approved as planned
- 2015-2019 capital plan: approved as planned

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Project Title:	Demolish Former Health & Human Services Building	**Project #:**	201503
Department:	Public Works - Buildings	**Project Type:**	Demolition
Phase:	Demolition	**Sponsor:**	Public Works
Budget Action:	C – Scope, C - $ Update	**Manager:**	Allison Bussler, DPW Director
Date:	August 26, 2015		

CAPITAL BUDGET SUMMARY

Year	2015	2016	Total
Project Phase	Design/Demolition	Demolition	Project
Expenditure Budget	$1,515,000	$1,785,000	$3,300,000
Revenue Budget	$0	$0	$0
Net County Cost	$1,515,000	$1,785,000	$3,300,000

COST DOCUMENTATION		**REVENUE**	
Design*	$100,000	Most of project will be funded with appropriated Capital Project Fund Balance.	
Removal/Demolition	$3,000,000		
Contingency	$200,000		
Total Project Cost	$3,300,000	Total Revenue	$0
EXPENDITURE BUDGET	$3,300,000	**REVENUE BUDGET**	$0

*Includes demolition consultant.

Project Scope & Description

This project includes the demolition of the former HHS buildings. The project includes the stabilization of site conditions, the construction of approximately 70 new public parking spaces and the preservation of the existing cellular tower/smoke stack.

Location: The former HHS building is located at 500 Riverview Drive, Waukesha, WI 53186.

Analysis of Need

The main building is over 100 years old (opened in 1910). As a result of a 1995 facilities improvement study of the Health and Human Services Building, the Waukesha County Board in 1995 approved expending nearly $1.3 million for building maintenance to extend the service life of the building 10-15 years. The facility analysis showed that it would not have been prudent use of tax dollars to make a greater investment in the building to extend the service life. The decision by the Waukesha County Board to extend the service life of the building 10-15 years started the planning process for a replacement Health and Human Services Building.

In 2010, the Waukesha County Board approved a capital project to construct a new Health and Human Services Building on the Moor Downs property to replace the former building. The new Health and Human Services Building was opened in 2013.

In 2013, Waukesha County evaluated use of the former Health and Human Services Building as temporary space for Courts operations during a future Courthouse remodeling project. The analysis showed that the former Health and Human Services Building would not have been suitable for this temporary use.

Alternatives & Previous Actions

- Retain the building and continue to incur repair, maintenance, and liability costs.
- Alternatives pursued and abandoned:

  Pursued County Board Resolution 168-R-007 to sell and relocate or tear down the former Waukesha County Health and Human Services Building. There were no proposals received for the sale and relocation that met the intent of the resolution, leaving building demolition as the recommended alternative.

  Pursued County Board adopted Resolution 169-R-006 to consider potential developer proposals for the former HHS building. During the summer of 2015, the County received one proposal, and the request for proposal committee deemed the proposal incomplete and recommending rejecting the proposal. The proposal was rejected by the County Board at the August Board meeting.

Ongoing Operating Costs

Operating costs to continue to repair and maintain the former HHS building are expected to be $58,000/yr. Insurance costs will continue to be incurred at $16,000/yr. Vandalism and other liability will continue to be a concern in a vacant building.

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Project Title:	UWW Roofing Upgrades	**Project #:**	201210
Department:	Public Works - Buildings	**Project Type:**	Roof Replacement
Phase:	Construction	**Sponsor:**	Public Works
Budget Action:	As Planned	**Manager:**	Allison Bussler, DPW Director
Date:	August 27, 2015		

CAPITAL BUDGET SUMMARY

Year	2012	2015	2016	2017	2018	Total
Project Phase	Design	Design & Construction	Design & Construction		Design & Construction	Project
Expenditure Budget	$67,000	$1,442,000	$700,000	$0	$2,000,000	$4,209,000
Revenue Budget	$0	$0	$0	$0	$0	$0
Net County Cost	$67,000	$1,442,000	$700,000	$0	$2,000,000	$4,209,000

COST DOCUMENTATION		**REVENUE**	
Architect	$67,000		
Construction	$3,852,000		
Contingency	$290,000		
Total Project Cost	$4,209,000	Total Revenue	$0
EXPENDITURE BUDGET	$4,209,000	**REVENUE BUDGET**	$0

Project Scope & Description

This project will repair and replace building envelope components on facilities at the University of Wisconsin–Waukesha (UWW) campus. The four main UWW campus facilities Northview/Library, Southview/Fine Arts, Commons/Administration/Westview and Fieldhouse are 49-years-old and constructed in 1966. The useful life of a roof ranges from 15 to 40 years depending on roof type. A 60 mil EPDM (rubber) roof usually lasts between 15 and 20 years. An asphalt ballasted roof has a useful life of 25 to 40 years. Extensive roof patching was undertaken in 2009 and tuckpointing completed in 2009 and 2010.

In the 2015-2019 capital plan, a portion of project funding originally planned for 2016 was delayed until 2018 to accommodate other priorities in the five-year capital plan. Funding remaining for 2015 and 2016 is budgeted to help ensure the roofs requiring more immediate attention are addressed in a timely manner. The roofs will continue to be monitored - and patched and repaired on an as needed basis.

Location

UWW Campus, 1500 N. University Avenue, Waukesha, WI 53188

Analysis of Need

A February 2009 roofing survey was completed on UWW facilities indicated that significant roofing upgrades are required to maintain the integrity of the roofs.

Alternatives

Continue to patch the roof as leaks occur.

Ongoing Operating Costs

Operating costs will be reduced for labor and materials associated with repairing leaks and associated damages.

Previous Action

- 2012-2016 capital plan: approved as a new project
- 2013-2017 capital plan: delay
- 2014-2018 capital plan: approved as planned
- 2015-2019 capital plan: cost update, delay

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DELETE PROJECT

Project Title:	UWW Roof Top Replacements	**Project #:**	201414
Department:	Public Works - Buildings	**Project Type:**	Mechanicals/Bldg Systems
Phase:	Formation	**Sponsor:**	Public Works
Budget Action:	Delete	**Manager:**	Allison Bussler, DPW Director
Date:	August 26, 2015		

CAPITAL BUDGET SUMMARY

Year Project Phase	2017 Budget & Concept, Design	2018 Construction	Total Project
Expenditure Budget	$46,000	$324,000	$370,000
Revenue Budget	$0	$0	$0
Net County Cost	$46,000	$324,000	$370,000

COST DOCUMENTATION		**REVENUE**	
Architect	$46,000	Energy rebates will be identified prior to construction year.	
Construction	$300,000		
Contingency	$24,000		
Total Project Cost	$370,000	Total Revenue	$0
EXPENDITURE BUDGET	$370,000	**REVENUE BUDGET**	$0

This project is being deleted from the capital plan. Roof top unit replacement will be funded through the five-year Building Improvement Plan in the Department of Public Works operating budget to provide more flexibility in replacing units as they fail.

Project Scope & Description

This project is for the replacement of the 9 roof top air handling units (RTU) at the University of Wisconsin Waukesha campus (UWW). This project would include energy efficiency that should qualify for Focus on Energy rebates. This project was delayed in the 2015-2019 capital plan in conjunction with the UWW roofing upgrade project, to accommodate project priorities in the five-year capital plan.

Location

UWW Campus, 1500 N. University Avenue, Waukesha, WI 53188

Analysis of Need

The UWW Campus was constructed in 1965. Most of the HVAC equipment is from the original construction and much of the existing equipment experienced equipment problems needing repairs to belts, motors and controls in the last few years. Mechanical equipment usually has a useful life expectancy of 25 to 30 years. Many times the useful life can be extended with a good preventative maintenance program. The roof top units and related equipment are outdated, use significantly more energy than new high efficiency models and have reached the end of their useful life. In addition to the rising cost of energy, it is prudent to replace older inefficient mechanical equipment and controls with new high efficiency equipment.

Alternatives

Do not replace the equipment and operate it until it breaks down with plans to replace it under emergency conditions, which will have potential impact on the daily operation of the university.

Ongoing Operating Costs

Energy consumption will be reduced by replacing the older equipment with newer high efficiency equipment. Energy consumption reductions will be determined as part of the budget and concept design in 2017.

Previous Action

2014-2018 capital plan: approved as new project
2015-2019 capital plan: delayed

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Project Title:	CTH I, CTH ES To CTH O Rehab	**Project #:**	201005
Department:	Public Works - Highways	**Project Type:**	Rehabilitation
Phase:	Preliminary Design	**Road Name:**	Beloit Road
Budget Action:	As Planned	**Manager:**	Allison Bussler, DPW Director
Date:	August 27, 2015		

CAPITAL BUDGET SUMMARY

Year	2015	2016	2017	2018	Total
Project Phase	Design	Land	Construction	Construction	Project
Expenditure Budget	$353,000	$1,164,000	$681,000	$0	$2,198,000
Revenue Budget	$0	$0	$0	$0	$0
Net County Cost	$353,000	$1,164,000	$681,000	$0	$2,198,000

COST DOCUMENTATION		**REVENUE**	
Design	$293,000	Surface Transportation	$2,726,000
WisDOT Plan Review	$60,000	Program -	
Land Acquisition	$1,164,000		
Construction	$2,989,000		
Construction Management	$299,000		
Contingency	$119,000		
Total Project Cost	$4,924,000	Total Revenue	$2,726,000
EXPENDITURE BUDGET	$2,198,000	**REVENUE BUDGET**	$0

Project Scope & Description

This 1.8-mile long project involves the two-lane rehabilitation/reconstruction of CTH I to bring it up to current standards. Improvements may include: widening the roadway, shoulders and clear zone areas, regrading the ditches and drainage areas, and improving the side road intersections. This project will also improve the horizontal and vertical alignment east of Calhoun Road. The road base and surface will be crushed and re-laid with a new surface on the top.

Location

City of New Berlin

Analysis of Need

The roadway vertical and horizontal alignments are substandard. Additionally, many of the side ditches, shoulders, and clear zones are below current standards. This segment of highway also has a high accident rate. The eastern portion is quickly becoming developed and traffic on CTH I is increasing due to a new Children's Hospital facility and retail development which is being constructed at the corner of Moorland Road and CTH I. Other development is planned between Calhoun Road and Moorland Road. The 2012 traffic volume is 4,950 vehicles per day.

Alternatives

Re-pave CTH I. While addressing the pavement condition, this alternate will not address shoulder, drainage, and alignment issues that exist along CTH I.

Ongoing Operating Costs

Operating costs are not expected to change.

Previous Action

- 2011-2015 capital plan: approved as a new project.
- 2012-2016 capital plan: project approved as planned.
- 2013-2017, 2014-2018, 2015-2019 Capital Plans: project approved as planned

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Project Title:	CTH Q. Oconomowoc River Bridge	**Project #:**	201201
Department:	Public Works - Highways	**Project Type:**	Bridge
Phase:	Preliminary Design	**Road Name:**	County Line Road
Budget Action:	As Planned	**Manager:**	Allison Bussler, DPW Director
Date:	August 26, 2015		

CAPITAL BUDGET SUMMARY

Year	2016	2017	2018	Total
Project Phase	Design	Right of Way	Construction	Project
Expenditure Budget	$119,000	$22,000	$112,000	$253,000
Revenue Budget	$0	$0	$0	$0
Net County Cost	$119,000	$22,000	$112,000	$253,000

COST DOCUMENTATION		**REVENUE**	
Design	$97,000	Federal Bridge Aid (Anticipated)	$450,000
State Review for Design	$22,000		
Land Acquisition	$22,000		
Construction	$472,000		
Construction Management	$66,000		
Contingency	$24,000		
Total Project Cost	$703,000	Total Revenue	$450,000
EXPENDITURE BUDGET	$253,000	**REVENUE BUDGET**	$0

Project Scope & Description

This project is a replacement of the CTH Q bridge over the Oconomowoc River. A single span slab bridge is anticipated, but various structure types will be investigated. The roadway will remain two lanes over the bridge and will be constructed to current standards. The roadway profile will likely need to be raised in elevation at the bridge to provide adequate navigational clearance. This will require reconstruction of additional approach roadway to match the profile. Right of way was purchased to the ultimate width of 100 feet in the 1960's for most of the expected project limits. Additional right of way and easements will be acquired as needed. Federal bridge aid is anticipated to be used on this project and at 80% of construction phase is estimated at $450,000.

Location

Towns of Merton and Erin

Analysis of Need

The existing bridge (P-67-0078) is a single-span steel deck girder structure constructed in 1925. The concrete deck was replaced and widened in 1981. The deck is in fair condition, though the deck edges are now spalling. The girder paint system has failed and girders have deteriorated with the loss of section near the abutments and on the outermost girders. The abutments are deteriorating with areas of delamination and spalling. The bridge is considered both "structurally deficient" and "functionally obsolete". The structure sufficiency number is 35.9, which indicates that structure replacement is warranted according to WisDOT guidelines and makes the bridge eligible for federal bridge replacement funding with a sufficiency below 50. The 2013 traffic volume on this roadway segment was 3,120 vehicles per day.

Alternatives

Rehabilitation, which does not address all structural and geometric deficiencies.

Ongoing Operating Costs

Maintenance costs will be reduced in the early years after construction beyond 2018.

Previous Action

- Approved as a new project in the 2012-2016 capital plan.
- Approved as planned in the 2013-2017 capital plan.
- Approved with a cost update in the 2014-2018 capital plan.
- Approved as planned in the 2015-2019 capital plan.

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Project Title:	CTH YY, Underwood Creek Structure	**Project #:**	201302
Department:	Public Works - Highways	**Project Type:**	Bridge
Phase:	Formation	**Road Name:**	Pilgrim Road
Budget Action:	As Planned	**Manager:**	Allison Bussler, DPW Director
Date:	August 27, 2015		

CAPITAL BUDGET SUMMARY

Year	2017	2018	2019	Total
Project Phase	Design	Land	Construction	Project
Expenditure Budget	$170,000	$179,000	$1,017,000	$1,366,000
Revenue Budget	$0	$0	$0	$0
Net County Cost	$170,000	$179,000	$1,017,000	$1,366,000

COST DOCUMENTATION		**REVENUE**	
			$0
Design	$170,000		
Land Acquisition	$179,000		
Construction	$877,000		
Construction Management	$105,000		
Contingency	$35,000		
Total Project Cost	$1,366,000	Total Revenue	$0
EXPENDITURE BUDGET	$1,366,000	**REVENUE BUDGET**	$0

Project Scope & Description

This project is a replacement of the CTH YY structure over Underwood Creek. The roadway will remain two lanes over the structure but the substandard shoulder width will be improved to current standards. The project is not straight-forward due to a number of site constraints which include: Underwood Creek runs parallel to the highway for 300 feet, site is adjacent to a city park (Wirth Park), structure is in close proximity to a public street and park entrance, project site is near a railroad crossing, school, and cemetery. The 2035 Regional Transportation Plan calls for CTH YY to become a 4-lane facility. Design of the project will include study of various alignments of future 4-lane expansion to determine best location for a 2-lane bridge. Various structure types will be considered. The project may require stream relocation, bridge site relocation, park entrance relocation, an additional stream crossing structure at park entrance, relocation of an existing pedestrian bridge, removal of existing retaining wall, and changes to roadway vertical alignment. Right-of-way acquisition to the ultimate width of 120 feet is required. Significant additional easements are anticipated.

Location

City of Brookfield

Analysis of Need

The existing structure is a single-span, concrete slab that spans approximately 18 feet. Also, the structure was widened to its current width using pre-stressed girders. Dates of initial construction and widening are unknown. The roadway and bridge transferred from City of Brookfield to county jurisdiction in 2006. The abutments and superstructure are in poor condition, per the 2012 structure inspection report. The roadway over the structure is narrow, with minimal shoulders. Structure replacement is recommended. The structure has a span of 18 feet and is not classified as a bridge per Federal Highway Administration (FHWA) standards, and therefore is not eligible for federal bridge aid. Traffic volume on CTH YY in 2011 was 14,100 vehicles per day.

Alternatives

Rehabilitate the existing bridge, which does not address all structural and geometric deficiencies.

Ongoing Operating Costs

Initial maintenance costs may be reduced.

Previous Action

- Approved as a new project in the 2013-2017 capital plan.
- Approved as planned in the 2014-2018 and 2015-2019 capital plans.

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Project Title:	CTH D, Deer Creek Bridge	**Project #:**	201303
Department:	Public Works - Highways	**Project Type:**	Bridge
Phase:	Preliminary Design	**Road Name:**	Cleveland Avenue
Budget Action:	As Planned	**Manager:**	Allison Bussler, DPW Director
Date:	August 13, 2015		

CAPITAL BUDGET SUMMARY

Year	2013	2017	2018	Total
Project Phase	Concept	Design-R/W	Construction	Project
Expenditure Budget	$5,000	$110,000	$116,000	$231,000
Revenue Budget	$0	$0	$0	$0
Net County Cost	$5,000	$110,000	$116,000	$231,000

COST DOCUMENTATION		REVENUE	
Budget/Concept	$5,000	Federal Bridge Aid (Anticipated)	$462,000
Design	$65,000		
Land Acquisition	$21,000		
WDOT Plan Review	$24,000		
Construction	$486,000		
Construction Management	$68,000		
Contingency	$24,000		
Total Project Cost	$693,000	Total Revenue	$462,000
EXPENDITURE BUDGET	$231,000	**REVENUE BUDGET**	$0

Project Scope & Description

This project is a rehabilitation of the CTH D bridge at Deer Creek. Anticipated scope includes culvert lining and grouting, headwall reconstruction, and approach ditch re-grading. Structure rehabilitation will effectively extend the life of the structure, while avoiding the need to close the highway and excavate the deep roadway embankment for a stream diversion. However, the proposed rehab does not address structure widening that may be needed for highway expansion. Under this project, the roadway will remain two lanes over the bridge. The acquisition of temporary easements is anticipated to construct this project. An independent engineering study report is being completed to verify the cost effectiveness of the proposed rehabilitation strategy. Waukesha County will apply for an estimated $462,000 in Federal Bridge Aid to help fund the project.

Location

City of New Berlin

Analysis of Need

The existing bridge (P-67-779) is a triple-barrel corrugated steel pipe culvert. Each barrel is 72-inches in diameter. The structure was initially constructed in 1959 with two culvert barrels. The culverts were lowered, and a third culvert barrel added in 1969 by a developer along with re-grading of Deer Creek. The structure now sits under a 30-feet high roadway embankment. The two original barrels are rusting through at the normal water line. The stone masonry headwalls are in poor condition. The riprap ditch at the northeast bridge approach is eroding. The existing structure appears to have adequate hydraulic capacity. The structure sufficiency number is 42.4, which indicates that structure replacement or rehabilitation is warranted according to WisDOT guidelines and makes the bridge eligible for Federal Bridge Aid (replacement or rehabilitation). The 2013 traffic volume on CTH D was 16,995 vehicles per day.

Alternatives

Reconstruct the existing bridge.

Ongoing Operating Costs

Initial maintenance costs may be reduced following construction.

Previous Action

- Approved as a new project in the 2013-2017 plan.
- Approved with a cost update in the 2014-2018 capital plan.
- Approved as planned in the 2015-2019 capital plan.

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Project Title:	CTH Y, Pilak Creek Tributary Bridge Rplc	**Project #:**	201304
Department:	Public Works - Highways	**Project Type:**	Bridge
Phase:	Formation	**Road Name:**	Racine Avenue
Budget Action:	As Planned	**Manager:**	Allison Bussler, DPW Director
Date:	August 13, 2015		

CAPITAL BUDGET SUMMARY

Year	2017	2018	2019	Total
Project Phase	Design	Land	Construction	Project
Expenditure Budget	$90,000	$24,000	$520,000	$634,000
Revenue Budget	$0	$0	$0	$0
Net County Cost	$90,000	$24,000	$520,000	$634,000

COST DOCUMENTATION		REVENUE	
			$0
Design	$90,000		
Land Acquisition	$24,000		
Construction	$448,000		
Construction Management	$18,000		
Contingency	$54,000		
Total Project Cost	$634,000	Total Revenue	$0
EXPENDITURE BUDGET	$634,000	**REVENUE BUDGET**	$0

Project Scope & Description

This project is a replacement of the CTH Y structure over an un-named tributary to Pilak Creek. The roadway will remain a two lane rural section over the structure. Various structure types will be considered. The City of Muskego is planning a bicycle facility along the west side of the highway. Accommodation of the bicycle facilities may require additional culvert length, as well as some land acquisition. Additional acquisition of easements may be required to construct this project.

Location

City of Muskego

Analysis of Need

The existing structure is a two-barrel corrugated steel plate arch. The structure was initially constructed in 1968 with a single barrel (84”x61”). A second barrel (103”x71”) was added in 1989. Both barrels are rusted through near the water line. The existing two-lane roadway over the structure has adequate shoulder width, and is consistent with the 2035 Regional Transportation Plan. The structure is not a bridge, as defined by Federal Highway Administration standards, and therefore is not eligible for federal bridge aid. The 2011 traffic volume on CTH Y was 13,100 vehicles per day.

Alternatives

Rehabilitate the existing structure, which is likely not cost effective.

Ongoing Operating Costs

Initial maintenance costs may be reduced.

Previous Action

- Approved as a new project in the 2013-2017 capital plan.
- Approved as planned in the 2014-2018 and the 2015-2019 capital plans.

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Project Title:	CTH O, I-94 to USH 18	**Project #:**	201502
Department:	Public Works - Highways	**Project Type:**	Rehabilitation
Phase:	Formation	**Road Name:**	Moorland Road
Budget Action:	As Planned	**Manager:**	Allison Bussler, DPW Director
Date:	August 13, 2015		

CAPITAL BUDGET SUMMARY

Year	2019	2020	2021	2022	Total
Project Phase	Design	Land	Construction	Construction	Project
Expenditure Budget	$500,000	$500,000	$1,150,000	$0	$2,150,000
Revenue Budget	$0	$0	$0	$0	$0
Net County Cost	$500,000	$500,000	$1,150,000	$0	$2,150,000

COST DOCUMENTATION		REVENUE	
Design	$400,000	Surface Transportation Program - Milwaukee	$4,600,000
WisDOT Plan Review	$100,000		
Land Acquisition	$500,000		
Construction	$5,000,000		
Construction Management	$500,000		
Contingency	$250,000		
Total Project Cost	$6,750,000	Total Revenue	$4,600,000
EXPENDITURE BUDGET	$2,150,000	**REVENUE BUDGET**	$0

Project Scope & Description

This 0.8 mile long project involves the rehabilitation/reconstruction of CTH O to bring it up to current standards. Improvements will include: replacing the existing concrete pavement, reconfiguring intersections to improve safety, replacing older traffic signals, minor grading, adding sidewalks and storm water improvements. Access to Brookfield Square Mall and other businesses adjacent to Moorland Road will need to be maintained during construction. Therefore traffic control will be a major challenge for this project. The Department will apply for $4,600,000 in federal STP-M funds for this project.

Location

City of Brookfield

Analysis of Need

The concrete pavement along this portion of Moorland Road (CTH O) has deteriorated to the point where it now has a pavement condition index (PCI) of 30 which is regarded as poor. A PCI of 20 would indicate that the pavement has failed. The roadway was first built in 1978 and was rehabilitated in 2001 but that rehabilitation is now at the end of its useful life, paving slabs have deteriorated, paving joints have faulted and the concrete pavement is in need of replacement. Pavement issues are further compounded by the fact that this portion of Moorland Road is one of the busiest on the County system with over 30,000 vehicles per day using the corridor which serves as a major access road to Brookfield Square Mall and to the Bluemound Road corridor.

Alternatives

- Attempt further rehabilitation. This alternate is not recommended because it is not considered cost-effective due to the poor condition of the existing pavement and the high cost of traffic control needed to maintain traffic for this roadway.
- Reconstruct\rehabilitate CTH O as described above.

Ongoing Operating Costs

Operating costs are not expected to change.

Previous Action

Approved as a new project in the 2015-2019 Capital Plan

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Project Title:	CTH P, Bark River Bridge	**Project #:**	200606
Department:	Public Works - Highways	**Project Type:**	Bridge
Phase:	Construction	**Road Name:**	Sawyer Road
Budget Action:	C - $ Update	**Manager:**	Allison Bussler, DPW Director
Date:	August 13, 2015		

CAPITAL BUDGET SUMMARY

Year	2007	2008	2009	2011	2015	2016	Total
Project Phase	Design	R/W	Const.	Const.	Const.	Const.	
Expenditure Budget	$124,000	$110,000	$96,400	$137,600	$106,000	$286,000	$860,000
Revenue Budget	$0	$0	$0	$0	$0	$0	$0
Net County Cost	$124,000	$110,000	$96,400	$137,600	$106,000	$286,000	$860,000

COST DOCUMENTATION		REVENUE	
DOT Design Review	$30,000		
Design	$144,000	Federal Bridge Aid	$926,000
Land Acquisition	$110,000		
Construction	$1,306,000		
Construction Management	$131,000		
Contingency	$65,000		
Total Project Cost	$1,786,000	Total Revenue	$926,000
EXPENDITURE BUDGET	$860,000	REVENUE BUDGET	$0

Project Scope & Description

This project includes the replacement of an existing box culvert with a new culvert, dam spillway, and roadway approaches. The roadway will remain a two-lane facility and will be constructed to current standards. The project includes bicycle/pedestrian accommodations. The project includes land acquisition, as well as additional temporary and permanent easements. The Village of Summit has assumed ownership of the dam spillway. Waukesha County and Village of Summit have executed a project agreement. Per Federal Highway Administration (FHWA) rules, the spillway construction is ineligible for Federal Bridge funds; therefore, Waukesha County will fund 100% of the spillway portion of the project. The project will receive an estimated $926,000 in Federal Bridge Aid on the bridge portion of the project.

Increased funds for this project are needed due to soil conditions that require increased dewatering and excavation for box culvert foundation, as well as increased depth and size of four sheet pile retaining walls.

Location

Village of Summit.

Analysis of Need

The existing bridge (B-67-959) is a two-cell box culvert that was constructed in 1932. The upstream and downstream ends of the culvert are severely deteriorated. The railing is deteriorating and is substandard design. The structure has no approach guardrail. The roadway over the structure is narrow with minimal shoulders. The structure sufficiency number is 44.7, which indicates that a structure replacement is warranted, and eligible for federal funding as the sufficiency is below 50. There is a dam spillway constructed integrally with the box culvert on the upstream side of the culvert.

Alternatives

- Reconsider in a future capital plan.
- Reconstruct the existing bridge and roadway approaches to current WisDOT standards.

Ongoing Operating Costs Initial maintenance costs will be reduced.

Previous Action Approved as a new project in the 2006-2010 Plan. Approved with cost update in the 2007-2011, 2008 - 2012 Plans. Approved as planned in the 2009-2013 and 2010-2014 Plans. Approved with cost update in the 2011-15 Plan. Approved with cost update in the 2015-2019 capital plan.

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Project Title:	Waukesha West Bypass	**Project #:**	200917
Department:	Public Works - Highways	**Project Type:**	Jurisdictional Plan Implementation
Phase:	Construction	**Road Name:**	Meadowbrook Road/Merrill Hills Road
Budget Action:	C – Scope, C - $ Update, C - Rev Update	**Manager:**	Allison Bussler, DPW Director
Date:	August 30, 2015		

CAPITAL BUDGET SUMMARY

Year	2009	2010	2011 *	2012 *	2013	2016	Total
Project Phase	Design	Design	Right of Way	Right of Way	Construction	Construction	Project
Expenditure Budget	$250,000	$1,750,000	$2,000,000	$3,600,000	$1,220,000	$2,137,000	$10,957,000
Revenue Budget	$250,000	$0	$1,400,000	$3,600,000	$0	$200,000	$5,450,000
Net County Cost	$0	$1,750,000	$600,000	$0	$1,220,000	$1,937,000	$5,507,000

COST DOCUMENTATION		**REVENUE**	
Design	$3,382,000	Surface Transportation Program (STP)- (not budgeted)	$3,200,000
		STP - (Right of Way Acq.) budgeted	$2,600,000
Land Acquisition	$5,600,000	State ROW reimbursement	(State 100%)
Construction	$4,500,000	STP - (Right of Way Acq.) budgeted	$2,400,000
Construction Management	$450,000	County ROW reimbursement	(Cty 80%)
Contingency	$225,000	Capital project fund balance	$250,000
		WisDOT final Design reimbursement	$200,000
Total Project Cost	$14,157,000	Total Revenue	$5,450,000
EXPENDITURE BUDGET	$10,957,000	**REVENUE BUDGET**	$5,450,000

** Funding will only be spent if project proceeds per the memorandum of understanding.*

Project Scope & Description

Waukesha County has signed a memorandum of understanding (MOU) with the Wisconsin Department of Transportation (WisDOT) and City of Waukesha for completion of the West Waukesha Bypass, which clearly defines each party's responsibility for the completion of the corridor.

Under the terms of the MOU, Waukesha County is responsible for the completion of the environmental Impact Statement (EIS) and the preliminary design for the entire corridor. This capital project will complete the preliminary design for the West Waukesha Bypass from STH 59 to I-94, real estate acquisition for the entire corridor south of Northview Rd and the final design and construction of the West Bypass from USH 18 to Northview Rd. The roadway will be designed as a 4 lane facility.

The MOU further states that the City of Waukesha will construct the portion north of Northview Road. The Wisconsin Department of Transportation will construct the bypass between STH 59 and USH 18 and contribute toward the cost of real estate. Waukesha County will be responsible for real estate acquisition south of Northview Road up to the cost of $3 million (offset with 80% Federal funding) and the State of Wisconsin will reimburse the County for up to an additional $2.6 million for total land acquisition costs of $5.6 million. Waukesha County will also be responsible for the construction of the new roadway between USH 18 and Northview Road

As the Bypass will become a State Trunk Highway, a jurisdictional transfer agreement has been signed with WisDOT. STH 74 between STH 190 in Pewaukee and Menomonee Avenue in Lannon will be transferred to Waukesha County. CTH TT, Sunset to Northview and the new highway goes to the State jurisdiction.

The EIS is now complete and the project is progressing into final design and real estate acquisition. To make the construction of the USH 18 and West Bypass intersection simpler, the Wisconsin Department of Transportation has requested that the final design and construction of this intersection be included into Waukesha County's project to build the bypass from just north of USH 18 to Northview Rd. Hence the Wisconsin DOT will reimburse Waukesha County for the cost to design the USH 18 project - estimated at $200,000. A project agreement will be required for the design work. Design costs have been changed to account for actual design fees as well as a WisDOT request to include the final design of the USH 18 in the County's final design contract. Other cost increases reflect a $3,200,000 Federal funding cap for construction and the latest construction estimates, which use the latest bid unit prices to build the estimate.

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Project Title:	Waukesha West Bypass	**Project #:**	200917
Department:	Public Works - Highways	**Project Type:**	Jurisdictional Plan Implementation
Phase:	Construction	**Road Name:**	Meadowbrook Road/Merrill Hills Road
Budget Action:	C – Scope, C - $ Update, C - Rev Update	**Manager:**	Allison Bussler, DPW Director
Date:	August 30, 2015		

Location
City and Town of Waukesha

Analysis of Need
The St. Paul Avenue-Sunset Drive-Merrill Hills Road corridor is a two-lane roadway that has been acting as a de facto West Waukesha Bypass since the portion of CTH TT between USH 18 and Northview Road was opened in 1997. New development has occurred adjacent to CTH TT as well as the areas west and south of the corridor with traffic volumes along CTH TT north of USH 18 over 16,000 vehicles per day and approximately 12,000 vehicles per day south of USH 18 and along Sunset. Traffic volumes along St. Paul Avenue are over 20,000 vehicles per day. Typically roadways are widened to four-lanes once traffic volumes reach 13,000 vehicles per day. From 2006 through 2008, there have been 145 crashes along the bypass route between Northview and STH 59 resulting in 56 injuries. Additionally Merrill Hills Road has substandard vertical and horizontal alignment, shoulder widths are narrow and most intersections lack bypass lanes. Although development has slowed along the corridor, growth in the area continues at a slower pace. This continued growth and the projected use of the road for I-94 traffic relief for those going south, will add further pressure to the existing under-capacity, substandard route and if the roadway is not improved will cause an increase in the rate of accidents and congestion.

Alternatives
Rehabilitate CTH TT which may address some of the geometric needs of the roadway, but does not meet the long term capacity requirements of the corridor.

Ongoing Operating Costs
Waukesha County will lose 3.4 miles of two-lane highway but gain 4.9 miles of two-lane roadway and 3.6 miles of four-lane road, a net gain of 17.4 lane miles. The total annual operating cost increase is estimated at $114,000. Potential revenue offsets include about $22,000 in state revenue associated with more miles in the overall CTH system to maintain. Additional lane miles from this project may qualify for federal funding for future capital projects as needed. These estimates are based on full implementation of jurisdictional transfers that are expected to take place over multiple years.

Previous Action
Project 200009, widen CTH TT between USH 18 and Northview was approved in previous budgets but was removed from the 2009 capital plan pending negotiations with the State of Wisconsin and the City of Waukesha. This project for the construction of the entire Waukesha West Bypass includes project 200009 but has had no previous County Board action. Approved as a new project by ordinance in 2009 in conjunction with approval of memorandum of understanding. Project expenditures have been modified for cost update in the 2011-2015 Plan. 2012-2016 capital plan: approved with cost and revenue updates. Approved with cost updates in 2013-2017 capital plan. Approved with cost updates in 2015-2019 capital plan.

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Project Title:	CTH NN, STH 83 to CTH ES	**Project #:**	201006
Department:	Public Works - Highways	**Project Type:**	Rehabilitation
Phase:	Construction	**Road Name:**	CTH NN
Budget Action:	C – Scope, C - $ Update, C - Rev Update	**Manager:**	Allison Bussler, DPW Director
Date:	August 13, 2015		

CAPITAL BUDGET SUMMARY

Year	2013	2014	2015	2016	Total
Project Phase	Design	Design	Land/const	Const.	Project
Expenditure Budget	$288,000	$0	$818,000	$1,798,000	$2,904,000
Revenue Budget	$0	$0	$0	$1,762,000	$1,762,000
Net County Cost	$288,000	$0	$818,000	$36,000	$1,142,000

COST DOCUMENTATION		REVENUE	
Design	$50,000	CHIP - D	$544,000
Land Acquisition	$619,000	Mukwonago Agreement	$1,218,000
Construction	$1,950,000		
Construction Management	$190,000		
Contingency	$95,000		
Total Project Cost	$2,904,000	Total Revenue	$1,762,000
EXPENDITURE BUDGET	$2,904,000	REVENUE BUDGET	$1,762,000

Project Scope & Description

Rehabilitate 1.1 miles of CTH "NN" to meet Wisconsin Department of Transportation (WisDOT) design standards and provide a two-lane facility with a two-way-left-turn-lane throughout. At the request of the Village of Mukwonago, the project has been re-scoped to provide an urbanized roadway section, which consists of additional widening, curb and gutter, storm sewer, sidewalks and the need for a stormwater retention pond. An agreement to provide $1,218,000 in funding for these additional amenities for the Village will be required. Real estate acquisition is anticipated to 40 feet from the centerline, and additional easement and access rights may need to be purchased. The Department has allocated $544,000 in State CHIP-D funding (County Highway Improvement Program – Discretionary) for the project.

A Jurisdictional Transfer Agreement is planned between the Village of Mukwonago and the County for this segment of CTH NN. The Village is also in discussion with Wisconsin Department of Transportation to then transfer the roadway to WisDOT. WisDOT's ultimate plans may include the possibility of rerouting STH 83 to CTH NN. County staff is participating in those discussions and has communicated to the parties the County's intent to improve CTH NN while staying within the County's expenditure budget.

Location: Village of Mukwonago

Analysis of Need

This portion of CTH NN through Mukwonago carries 9,500 vehicles per day and is an arterial highway linking STH 83 to CTH ES and Holtz Drive. CTH NN and Holtz Drive act as a STH 83 bypass around the east side of Mukwonago. With two schools, a number of businesses and subdivision and condominium driveways, CTH NN has an odd mix of bypass and turn lanes. The pavement in this area is in poor condition with a pavement condition index of 32, roadway ditches are poor to non-existent and shoulders are below standard.

Alternatives

- Repave CTH NN. While addressing pavement condition, this alternate does not address access, drainage or shoulder issues along CTH NN.
- Rehabilitate/reconstruction of the existing roadway.

Ongoing Operating Costs

Operating costs may decrease in the early years following reconstruction.

Previous Action

- 2010-2014, 2013-2017 capital plan: approved as planned.
- 2012-2016 capital plan: revenue source modified.
- 2014-2018 capital Plan: Delayed
- 2015-2019 capital plan: Change in scope, Cost and revenue update.

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Project Title:	CTH M, CTH YY to East County Line	**Project #:**	201008
Department:	Public Works - Highways	**Project Type:**	Priority Corridor
Phase:	Preliminary Design	**Road Name:**	North Avenue
Budget Action:	C - $ Update	**Manager:**	Allison Bussler, DPW Director
Date:	August 26, 2015		

CAPITAL BUDGET SUMMARY

Year	2014	2015	2016	2017	2018	Total
Project Phase	Design	Design	Design/Land	Land	Const	Project
Expenditure Budg	$0	$1,098,000	$1,200,000	$1,800,000	$2,861,000	$6,959,000
Revenue Budget	$0	$0	$0	$0	$210,000	$210,000
Net County Cost	$0	$1,098,000	$1,200,000	$1,800,000	$2,651,000	$6,749,000

COST DOCUMENTATION		**REVENUE**	
Design	$1,090,000	STP - M (Anticipated)	$10,607,000
WisDOT Design Review	$208,000		
Land Acquisition	$2,800,000	Local Municipality	$210,000
Construction	$11,712,000		
Construction Management	$1,170,000		
Contingency	$586,000		
Total Project Cost	$17,566,000	Total Revenue	$10,817,000
EXPENDITURE BUDGET	$6,959,000	**REVENUE BUDGET**	$210,000

Project Scope & Description

This project involves the reconstruction and widening of 2.1 miles of CTH M (North Avenue) from CTH YY (Pilgrim Road) to 124th Street to four lanes and the replacement of a bridge over Underwood Creek. The use of a median or a two-way left turn lane to provide for left turn movements will be evaluated during the design phase of this project. The roadway alignment will stay at its present location. Land will be acquired to a distance of 60 feet from the roadway centerline and additional grading easements and vision corners may be required. Federal aid is anticipated to be used on this project and at 80% is estimated at $10,607,000. Additional revenue of $210,000 from the City of Brookfield and Village of Elm Grove is anticipated as the local share for sidewalk and other requested amenities. The cost update includes $200,000 moved from a related project (201202 CTH M, Calhoun Road to CTH YY) to provide funds for a single environmental document and other reports encompassing both projects. Also, construction management is updated to reflect standard road cost estimates.

Location

City of Brookfield, Village of Elm Grove

Analysis of Need

CTH M or North Avenue has been identified as a priority corridor for widening to four lanes by the Department of Public Works. This portion of CTH M is shown as a four-lane roadway in the 2035 SEWRPC Jurisdictional Highway Plans for Waukesha County. Traffic volumes recorded in 2011 along this portion of CTH M range from approximately 14,100 vehicles per day (VPD) at Pilgrim Road to 20,400 VPD at 124th Street. These volumes indicate that the existing two-lane roadway is beyond its operating capacity, and is in need of widening.

Alternatives

- Rehabilitate CTH M: This alternate will address pavement issues but will not provide the capacity warranted by traffic volumes, or improve ingress to the highway.
- Reconstruct CTH M to provide necessary additional capacity.

Ongoing Operating Costs

Operating costs are expected to increase by approximately $28,800 per annum for the additional lane miles after the 2018 construction phase is completed.

Previous Action

- 2010 -2014 capital plan: approved as a new project.
- 2011-2015, 2012-2016, 2013-2017 capital plans: approved with a cost update.
- 2014-2018, 2015-2019: As Planned

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Project Title:	CTH M, Calhoun Rd – CTH YY	**Project #:**	201202
Department:	Public Works - Highways	**Project Type:**	Priority Corridor
Phase:	Preliminary Design	**Road Name:**	North Avenue
Budget Action:	C - $ Update	**Manager:**	Allison Bussler, DPW Director
Date:	August 27, 2015		

CAPITAL BUDGET SUMMARY

Year	2016	2017	2018	2019	2020	Total
Project Phase	Design	Design/Land	Land	Construction		Project
Expenditure Budget	$324,000	$1,732,000	$0	$1,309,000	$0	$3,365,000
Revenue Budget	$0	$0	$0	$90,000	$0	$90,000
Net County Cost	$324,000	$1,732,000	$0	$1,219,000	$0	$3,275,000

COST DOCUMENTATION		**REVENUE**	
Design	$228,000	STP - M	$4,878,000
WisDOT Design Review	$96,000		
Land Acquisition	$1,732,000	City of Brookfield	$90,000
Construction	$5,406,000		
Construction Management	$511,000		
Contingency	$270,000		
Total Project Cost	$8,243,000	Total Revenue	$4,968,000
EXPENDITURE BUDGET	$3,365,000	**REVENUE BUDGET**	$90,000

Project Scope & Description

This project involves the reconstruction and expansion of approximately one mile of CTH M (North Avenue) from Calhoun Road to CTH YY (Pilgrim Road) to four lanes. The use of a median or a two-way left turn lane will be evaluated during the design phase of the project. The roadway alignment will stay at its present location. Land will be acquired to a distance of 60 feet from the roadway centerline with additional easements and vision corners as may be required. Federal aid of $4,878,000 and local funds of $90,000 are anticipated to be used on this project. Local funds are to be included to pay for sidewalks and additional amenities as requested by the City. The expenditure budget is decreased $200,000 to transfer funding to a related project (201008 CTH M, YY to East County Line) for environmental documentation that will accommodate both projects.

Location

City of Brookfield

Analysis of Need

CTH M or North Avenue has been identified as a priority corridor for widening to four lanes by the Department of Public Works. This portion of CTH M is shown as a four-lane roadway in the 2035 SEWRPC Jurisdictional Highway Plans for Waukesha County. Traffic volumes recorded in 2011 along this portion of CTH M are approximately 14,400 vehicles per day (VPD). These volumes indicate that the existing two-lane roadway is beyond the operating capacity, and is in need of widening.

Alternatives

- Rehabilitate CTH M: This alternate will address pavement issues but will not provide the capacity warranted by traffic volumes, or improve ingress to the highway.
- Reconstruct CTH M as described above.

Ongoing Operating Costs

Operating costs are expected to increase by approximately $13,700 per annum for the additional lane miles, after the planned 2019 construction is completed.

Previous Action

Approved as a new project in 2012-2016 plan
Approved with cost update in 2013-2017, 2014-2018, 2015-2019 plans
Delayed in 2015-2019 plan

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Project Title:	CTH C, Mill Street to Oakwood Road	**Project #:**	201116
Department:	Public Works - Highways	**Project Type:**	Rehab/Jurisdictional Transfer
Phase:	Construction	**Road Name:**	Genesee Street
Budget Action:	C – Scope, C - $ Update, C - Rev Update	**Manager:**	Allison Bussler, DPW Director
Date:	August 13, 2015		

CAPITAL BUDGET SUMMARY

Year	2014	2015	2016	Total
Project Phase	Design	Design/Land	Land/Const	Project
Expenditure Budget	$130,000	$103,000	$2,128,000	$2,361,000
Revenue Budget	$0	$0	$741,000	$741,000
Net County Cost	$130,000	$103,000	$1,387,000	$1,620,000

COST DOCUMENTATION		REVENUE	
Design	$208,000	City of Delafield	$741,000
Land Acquisition	$83,000		
Construction	$1,800,000		
Construction Management	$180,000		
Contingency	$90,000		
Total Project Cost	$2,361,000	Total Revenue	$741,000
EXPENDITURE BUDGET	$2,361,000	**REVENUE BUDGET**	$741,000

Project Scope & Description

The City of Delafield passed a resolution dated July 28, 2008 requesting a jurisdictional transfer of this segment of roadway. The jurisdictional agreement will need to be finalized and approved by both parties. As part of this agreement, Waukesha County would enter into an agreement for cost-sharing of the reconstruction. Between Mill Street and Church Street, the project includes the reconstruction of the existing two-lane roadway to an urban section with bypass lanes as needed. The existing culvert structure will be replaced by a bridge and to improve the hydraulic capacity. Storm sewer, sidewalks and curb and gutter will be added. From Church Street to Oakwood Road, the pavement will be resurfaced and widened to provide on street bicycle accommodations and a path along the east side of the roadway. The road will remain a two-lane rural roadway. The City of Delafield's share of the project consists of the additional costs to incorporate the City-requested amenities, such as sidewalks, storm sewers, bypass lanes, streetscaping and landscaping, street lights, bike paths, decorative railings, etc. Additional funds are being requested because the costs for design and the city amenities are more than originally budgeted.

Location

City of Delafield

Analysis of Need

This roadway was last resurfaced in 1996 and the latest Pavement Condition Index (PCI) for this segment is 50. Major rehabilitation is recommended when PCI ratings drops below 40. Additionally, the twin galvanized steel culverts over the Bark River were placed in 1950 and show signs of deterioration. Traffic volumes within this segment have steadily increased to 10,036 vehicles per day (2013).

Alternatives

- Reconsider in a future capital plan.
- Reconstruct CTH C as outlined above.

Ongoing Operating Costs

Initial and future costs will be reduced as a result of the jurisdictional transfer.

Previous Action

- 2011-2015 capital plan: approved as a new project.
- 2012-2016, 2013-2017, and 2014-2018 capital plan: approved as planned.
- 2015-2019 capital plan: approved with cost update.

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Project Title:	CTH XX, Pebble Brook Creek Bridge	**Project #:**	201402
Department:	Public Works - Highways	**Project Type:**	Bridge
Phase:	Preliminary Design	**Road Name:**	Oakdale Drive
Budget Action:	Delay, C - $ Update	**Manager:**	Allison Bussler, DPW Director
Date:	August 13, 2015		

CAPITAL BUDGET SUMMARY

Year	2014	2015-16	2017	2018	2019	Total
Project Phase	Concept		Design	R/W	Construction	Project
Expenditure Budget	$5,000	$0	$55,000	$11,000	$47,000	$118,000
Revenue Budget	$0	$0	$0	$0	$0	$0
Net County Cost	$5,000	$0	$55,000	$11,000	$47,000	$118,000

COST DOCUMENTATION		REVENUE	
Budget/Concept	$5,000	Federal Bridge Aid (Anticipated)	$188,000
Design	$40,000		
State Review For Design	$15,000		
Land Acquisition	$11,000		
Construction	$184,000		
Construction Management	$42,000		
Contingency	$9,000		
Total Project Cost	$306,000	Total Revenue	$188,000
EXPENDITURE BUDGET	$118,000	**REVENUE BUDGET**	$0

Project Scope & Description

This project is an overlay of the CTH XX bridge over Pebble Brook Creek. A concrete overlay is anticipated, but several overlay types will be considered during design. Concrete repairs will be made to the spalled areas of the deck edges. Existing bridge railing may be salvaged/remounted or completely replaced with this project. Approach guardrail will be replaced to meet current standards. The asphalt bridge approaches will be repaved, and concrete approach slabs will be added at the structure. Right of way was purchased to the ultimate width of 100 feet at this bridge in the 1970's. No additional fee acquisition is anticipated. Some easements may be necessary due to the proximity to railroad right of way. The draft rehabilitation report indicates that construction costs should be $184,000, plus construction management and contingency. Federal bridge aid is anticipated to be used, and at 80% of construction phase, is estimated at $188,000. This project is delayed due to the federal bridge aid funding cycle.

Location - Town of Waukesha

Analysis of Need

The existing bridge (B-67-195) is a two-span concrete box culvert that was constructed in 1980. The roof of the box culvert serves as the roadway driving surface. Most of the box culvert is in good condition. However, approximately 5% of the top deck surface is delaminated, and some concrete is beginning to spall. The delamination is due to corrosion of the top mat of bar steel. This bar steel is not epoxy coated. There is also spalling of concrete along both edges of the deck (roof) at the drip edge. The approach guardrail is in poor condition and does not meet current standards. The roadway is functionally classified as a 'Principal Arterial'. The bridge is considered 'structurally deficient' due to its current condition rating. The structure sufficiency number is 68.8. This indicates that structure rehabilitation is warranted according to WisDOT guidelines which makes the bridge eligible for federal bridge rehabilitation funding when the sufficiency index is below 80. An independent engineering study report will need to be prepared for this project prior to application for federal bridge funding. This report verifies that the proposed project scope is a cost-effective rehabilitation strategy. The 2013 traffic volume on this roadway segment was 5,510 vehicles per day.

Alternatives

Reconstruct the existing bridge and roadway approaches to current WisDOT standards. This alternate, while addressing the deficiencies, is not warranted.

Ongoing Operating Costs

Maintenance costs will be reduced in the early years after construction beyond 2018.

Previous Action

- Approved as a new project in the 2014-2018 capital plan.
- Approved as planned in the 2015-2019 capital plan.

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Project Title:	CTH SR – Extension, STH 190 to CTH K	**Project #:**	201507
Department:	Public Works - Highways	**Project Type:**	Jurisdictional Plan Implementation
Phase:	Formation	**Road Name:**	Springdale Road
Budget Action:	C - Rev	**Manager:**	Allison Bussler, DPW Director
Date:	August 30, 2015		

CAPITAL BUDGET SUMMARY				
Year	2019	2020	2021	Total
Project Phase	Design	Design - R/W	Construction	Project
Expenditure Budget	$447,000	$1,783,000	$1,337,000	$3,567,000
Revenue Budget	$0	$0	$0	$0
Net County Cost	$447,000	$1,783,000	$1,337,000	$3,567,000

COST DOCUMENTATION		REVENUE	
Design	$447,000		
Land Acquisition	$1,783,000	STP - M	$5,350,000
Construction	$5,815,000	Surface Transportation Program	
Construction Management	$581,000	Milwaukee	
Contingency	$291,000		
Total Project Cost	$8,917,000	Total Revenue	$5,350,000
EXPENDITURE BUDGET	$3,567,000	**REVENUE BUDGET**	$0

Project Scope & Description

A study conducted in 2007 by the Waukesha County Department of Public Works to determine the feasibility of constructing the 1.90-mile extension of Springdale Rd from STH 190 to CTH K found that such an extension is possible. The route would generally follow a direct north-south course except in the vicinity of Capitol Airport where it would move to the west to minimize wetland impacts and stay out of the clear zone of the east-west runway at Capitol Airport. The feasibility study did not predict traffic volumes on the new roadway, instead it simply studied the impacts of a four-lane roadway – which is the Southeast Wisconsin Regional Planning Commission's recommended typical section for the roadway.

Based on traffic volumes on CTH V to the north (7,200 vehicles per day (VPD) in 2012), and existing CTH SR to the south (12,000 VPD in 2014), it is assumed that traffic volumes will not warrant the construction of a four-lane roadway in the first 20-year life cycle of the new facility. A two-lane roadway could be constructed initially. Once traffic warrants are met, the road could then be converted to a four-lane section. An in-depth traffic study will be needed as part of this project to derive anticipated traffic volumes which would confirm this assumption. If a four-lane roadway is found to be warranted initially, significantly greater funding would be needed for that larger roadway. Regardless of typical section, right of way would be purchased to the ultimate width of 130 feet.

The 2007 study also found that there are significant amount of wetlands – 8.6 acres along the route. It is assumed that these wetlands can be filled and those impacts mitigated at other sites. If it is not possible to place fill in the wetlands, then land bridges would need to be constructed the cost of which may add up to $19.0 million to the project.

Project assumes $5,350,000 of federal Surface Transportation Program – Milwaukee (STP – M) funding.

Location

City of Pewaukee and City of Brookfield

Analysis of Need

A recurring theme of the Highway network on the eastern side of Waukesha County is the lack of north-south roadways, which directly connect Washington County to Towns and Cities south of Menomonee Falls. Currently, the Pilgrim Rd/Moorland Rd corridor is the only direct connection from New Berlin to Germantown. The South Eastern Wisconsin Regional Planning Commission - Regional Transportation System Plan for 2035 plan calls for a 1.90-mile long extension of Springdale Road from Capitol Drive (STH 190) to Lisbon Road (CTH K). That extension would provide a new continuous north-south corridor from Greenfield Avenue (STH 59) to County Line Road (CTH Q). The provision of an extended Springdale Road would likely provide some relief to heavily used arterial roadways such as Barker Road and CTH F. It would also improve emergency response times for residents living east of the Canadian National Railroad and south of Lisbon Road.

Alternatives

- Construct the ultimate four-lane roadway. This project would almost double the cost of the project and may not be justified by the anticipated traffic volumes.
- Reconsider Barker Road corridor.

Ongoing Operating Costs:

Operational costs are expected to increase by an estimated $24,300

Previous Action: Approved as a County Board-added project in 2015-2019 capital plan

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Project Title:	CTH I, Fox River Bridge	**Project #:**	201601
Department:	Public Works - Highways	**Project Type:**	Bridge
Phase:	Preliminary Design	**Road Name:**	River Road
Budget Action:	New	**Manager:**	Allison Bussler, DPW Director
Date:	August 26, 2015		

CAPITAL BUDGET SUMMARY

Year	2016	2017-19	2020	2021	Total
Project Phase	Concept	Budget	Design	Construction	Project
Expenditure Budget	$6,000	$0	$79,000	$96,000	$181,000
Revenue Budget	$0	$0	$0	$0	$0
Net County Cost	$6,000	$0	$79,000	$96,000	$181,000

COST DOCUMENTATION		**REVENUE**	
Budget/concept	$6,000	Federal Bridge Aid	$384,000
Design	$57,000		
State review for Design	$22,000		
Land Acquisition	$0		
Construction	$403,000		
Construction Management	$57,000		
Contingency	$20,000		
Total Project Cost	$565,000	Total Revenue	$384,000
EXPENDITURE BUDGET	$181,000	**REVENUE BUDGET**	$0

Project Scope & Description

This project is a rehabilitation of the CTH I bridge over the Fox River and is expected to include concrete deck replacement. In addition, the scope is expected to include railing replacement, approach paving, approach guardrail replacement, repair of riprap slope paving, and painting of the pier columns. The roadway will remain two lanes over the bridge. Right of way acquisition is not anticipated. The Waukesha County Bicycle Plan shows a proposed trail along the Fox River at the site of this project. This project does not include bridge widening for purpose of bicycle trail. A bridge rehabilitation report will be necessary to verify the cost effectiveness of the proposed rehabilitation scope. Following WisDOT approval of the rehabilitation report, Waukesha County will apply for an estimated $384,000 in federal bridge aid.

Location

Town of Waukesha

Analysis of Need

The existing bridge (B-67-097) is a two-span, pre-stressed concrete girder structure that was constructed in 1965. A concrete overlay was placed on the deck in 1996. The substructure and girders are generally in good condition. The bridge is considered “structurally deficient” due to the condition of the deck. The deck edges and soffit underside are spalling. A thermal infrared scan of the wearing surface in 2014 indicates the concrete overlay is 22% delaminated. The riprap slope paving beneath the bridge has missing stone, and should be repaired. The paint system is in poor condition on the cast-in-place pier columns. The structure sufficiency number is 77.2, which indicates that structure rehabilitation is warranted according to WisDOT guidelines and makes the bridge eligible for federal bridge funding (rehabilitation) with a sufficiency below 80. The 2013 traffic volume on this roadway segment was 2,325 vehicles per day

Alternatives

Reconstruct the existing bridge, but will not be eligible for federal bridge aid.

Ongoing Operating Costs

Maintenance costs will be reduced in the early years after construction beyond 2021.

Previous Action

None

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Project Title:	CTH O & I Intersection Reconstruction	**Project #:**	201603
Department:	Public Works - Highways	**Project Type:**	Rehabilitation
Phase:	Formation	**Road Name:**	Moorland Road
Budget Action:	New	**Manager:**	Allison Bussler, DPW Director
Date:	August 27, 2015		

CAPITAL BUDGET SUMMARY

Year	2016	2017	2018	2019	2020	Total
Program Project		Design	Land Aquis	Const.		Project
Expenditure Budget	$0	$45,000	$50,000	$414,000	$0	$509,000
Revenue Budget	$0	$0	$0	$125,500	$0	$125,500
Net County Cost	$0	$45,000	$50,000	$288,500	$0	$383,500

COST DOCUMENTATION		**REVENUE**	
Design	$193,000	Surface Transportation	
WisDOT Design Review	$30,000	Program - Milwaukee (STP - M)	$1,840,000
Land Acquisition	$50,000		
Construction	$1,806,000	Developer Agreement 1 - Budgeted	$63,000
Construction Mgmt	$180,000	Developer Agreement 2 - Budgeted	$62,500
Contingency	$90,000		
Total Project Cost	$2,349,000	Total Revenue	$1,965,500
EXPENDITURE BUDGET	**$509,000**	**REVENUE BUDGET**	**$125,500**

Project Scope & Description

This project involves improvements to the intersection at Moorland Rd and Beloit Road. Left turn lanes on Moorland Rd will be turned into double left turn lanes, right turn islands will be added, Beloit Rd will be restriped to provide two lanes in each direction, failing pavement on Moorland Rd will be replaced and traffic signals will be upgraded.

Proposed developments in the area have indicated the need for a number of incremental improvements at this intersection to meet their needs. Additionally, pavement conditions and future background growth have identified further deficiencies at this location. However due to the proximity of I-43, it has been determined that a single project funded with developer, county and federal freight funding would disrupt traffic patterns less and cause less potential safety problems than a series of small incremental projects. The project assumes $1,840,000 in federal STP-M revenues.

Location

City of New Berlin

Analysis of Need

This intersection controls traffic on two heavily used roadways, Moorland Road and Beloit Road, and is a major gateway to New Berlin from I-43. Recent traffic impact studies conducted for developments in the area have shown that the intersection operates at a low level of service and that relatively small increases in traffic are having a large impact on the intersection operations. As more developments occur in the area, background traffic will grow. The existing intersection capacity is insufficient to meet the current and future traffic volumes and turning movements. Also, while the roadway was last rehabilitated in 2006, the latest Pavement Condition Index (PCI) for this segment is 45, the concrete pavement on Moorland Road is in poor condition and should be replaced. Traffic volumes within this segment of Moorland road are currently 31,000 vehicles per day.

Alternatives

- Reconstruct the intersection to provide necessary additional capacity.
- Reconsider project in a future capital plan.

Ongoing Operating Costs

Minor operational cost increase due to increased size and number of turn lanes.

Previous Action

None

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Project Title:	CTH O, CTH I to CTH ES	**Project #:**	201610
Department:	Public Works - Highways	**Project Type:**	Rehabilitation
Phase:	Formation	**Road Name:**	Moorland Road
Budget Action:	New	**Manager:**	Allison Bussler, DPW Director
Date:	August 27, 2015		

CAPITAL BUDGET SUMMARY

Year	2020	2021	2022	Total
Project Phase	Design	Land Aquis.	Construction	Project
Expenditure Budget	$923,000	$961,000	$2,035,000	$3,919,000
Revenue Budget	$0	$0	$0	$0
Net County Cost	$923,000	$961,000	$2,035,000	$3,919,000

COST DOCUMENTATION		**REVENUE**	
WisDOT Design Review	$200,000	STP - M	$8,144,000
Design	$723,000	Surface Transportation Program - Milwaukee	
Land Acquisition	$961,000		
Construction	$8,851,000		
Construction Management	$885,000		
Contingency	$443,000		
Total Project Cost	$12,063,000	Total Revenue	$8,144,000
EXPENDITURE BUDGET	$3,919,000	**REVENUE BUDGET**	$0

Project Scope & Description

This 1.4-mile long project involves the rehabilitation/reconstruction of CTH O to bring it up to current standards. Improvements will include: replacing the existing concrete pavement, reconfiguring intersections to improve safety, replacing older traffic signals, minor grading, adding sidewalks and storm water improvements. Access to other businesses and residences adjacent to Moorland Road will need to be maintained during construction. Therefore, traffic control will be a major challenge for this project. The Department will apply for $8,144,000 in federal STP-M funds for this project.

Location

City of New Berlin

Analysis of Need

The concrete pavement along this portion of Moorland Road (CTH O) now has a pavement condition index (PCI) of 50 which is regarded as fair. While the PCI isn't in poor condition, the transverse and longitudinal joints show signs of significant deterioration, and it is anticipated that the roadway will be ready for a pavement replacement by 2022. The roadway was first built in 1978 and was rehabilitated in 2006 but that rehabilitation will be at the end of its useful life by 2022 and the concrete pavement will need to be replaced. Pavement issues are further compounded by the fact that this portion of Moorland Road is one of the busiest on the County system with over 30,000 vehicles per day using the corridor which serves as a major access road to Between I-43 and I-94.

Alternatives

Attempt further rehabilitation. This alternate is not recommended because it is not considered cost-effective due to the poor condition of the existing pavement and the high cost of traffic control needed to maintain traffic for this roadway.

Ongoing Operating Costs

Operating costs are not expected to change.

Previous Action

None

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Project Title:	CTH C, Hasslinger Drive Intersection	**Project #:**	201611
Department:	Public Works - Highways	**Project Type:**	Spot Improvement
Phase:	Formation	**Road Name:**	Kettle Moraine Drive
Budget Action:	New	**Manager:**	Allison Bussler, DPW Director
Date:	August 26, 2015		

CAPITAL BUDGET SUMMARY

Year	2018	2019	2020	Total
Project Phase	Design	Land Acquis.	Construction	Project
Expenditure Budget	$152,000	$214,000	$827,000	$1,193,000
Revenue Budget	$0	$0	$0	$0
Net County Cost	$152,000	$214,000	$827,000	$1,193,000

COST DOCUMENTATION		REVENUE	
Design	$152,000		
Land Acquisition	$214,000		
Construction	$719,000		
Construction Management	$72,000		
Contingency	$36,000		
Total Project Cost	$1,193,000	Total Revenue	$0
EXPENDITURE BUDGET	$1,193,000	**REVENUE BUDGET**	$0

Project Scope & Description

The purpose of this proposed project is to correct the safety problems along the curved segment of CTH C (Kettle Moraine Drive) at Hasslinger Drive. Proposed improvements addressing the conditions described above and other existing potential hazards include:

1. Realign approximately 2,200' of CTH C with one gradual horizontal curve.
2. Realign and combine Hasslinger Drive, the private Oakland Road and the driveway as one common intersection approach aligned perpendicular to CTH C. Include a right turn-only lane and acceleration taper along CTH C at this reconfigured 'T'-intersection. Combining the driveways will remove the visual effect for north bound traffic whereby the road appears to be straight – not curved.
3. Widen the CTH C lane widths from 11' to 12', its paved shoulders from 1' to 3' and clear zones along this curve. Add new pavement edges.
4. Add center line and shoulder rumble strip pavement markings to alert motorists approaching and driving through this curved highway segment.
5. Add intersection area highway lighting.

Location

Town of Merton

Analysis of Need

A sharp curve along CTH C (Kettle Moraine Drive) has an awkwardly configured intersection with a residential street (Hasslinger Drive), a driveway and a private road (Oakland Road). Drivers must react suddenly to the changing curve radii of its existing alignment. This rural highway intersection has among the highest collision rates along Waukesha's County Trunk Highways. There have been twenty-one (21) crashes reported during the past 13 years at this intersection where average daily traffic is approximately 3,800 vehicles/day for a crash rate of 1.174. All of these crashes involved northbound vehicles running off the right side of CTH C at the midpoint of its curve. All but one had occurred with wet-snow pavement and/or dark conditions. One crash had a fatality and four others had severe injuries.

Alternatives

Changing this intersection to a full-way stop or a roundabout is not warranted and would not address the prevailing northbound traffic flow problem along CTH C.

Ongoing Operating Costs

None

Previous Action

None

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Project Title:	CTH D, Moraine Hills Drive Intersection	**Project #:**	201613
Department:	Public Works - Highways	**Project Type:**	Spot Improvement
Phase:	Formation	**Road Name:**	CTH D
Budget Action:	New	**Manager:**	Allison Bussler, DPW Director
Date:	August 13, 2015		

CAPITAL BUDGET SUMMARY

Year	2019	2020	2021	Total
Project Phase	Design	Land Acquis	Construction	Project
Expenditure Budget	$62,000	$365,000	$683,000	$1,110,000
Revenue Budget	$0	$0	$0	$0
Net County Cost	$62,000	$365,000	$683,000	$1,110,000

COST DOCUMENTATION		REVENUE	
Design	$62,000		
Land Acquisition	$365,000		
Construction	$594,000		
Construction Management	$59,000		
Contingency	$30,000		
Total Project Cost	$1,110,000	Total Revenue	$0
EXPENDITURE BUDGET	$1,110,000	**REVENUE BUDGET**	$0

Project Scope & Description

The purpose of this proposed project is to correct the safety problems along the curved segment of CTH D at Moraine Drive. Proposed improvements addressing the conditions described above and other existing potential hazards include:

1. Realign approximately 1,200 feet of CTH D with one gradual horizontal curve.
2. Widen the CTH D lane widths from 11' to 12', add shoulders that are 8 feet wide of which 3 feet are paved and the rest gravel and clear zones along this curve. Add pavement safety edges.
3. Improve clear zones to proper standards
4. Add center line and shoulder rumble strip pavement markings to alert motorists approaching and driving through this curved highway segment

Location

Town of Ottawa

Analysis of Need

A sharp horizontal curve at the intersection of CTH D and Moraine Hills Drive has been the site of a number of run off the road crashes. Not only is the curve at Moraine Hills Drive substandard but the approach alignments are such that in combination with the curve they form reverse curves as drivers approach the location. This combined with a relatively steep grade has been the cause of crashes. The crash rate for this location is 1.8 crashes per million vehicles entering, which includes one fatality. This rate is above the limit of 1.5 crashes per million vehicles entering above which action is recommended.

Alternatives

Improved signing and marking may reduce the crash rate but are not as effective as improving the roadway geometry per the recommended scope.

Ongoing Operating Costs

None

Previous Action

None

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Project Title:	CTH E, Woodland Drive Intersection	**Project #:**	201614
Department:	Public Works - Highways	**Project Type:**	Spot Improvement
Phase:	Formation	**Road Name:**	CTH E
Budget Action:	New	**Manager:**	Allison Bussler, Director DPW
Date:	August 26, 2015		

CAPITAL BUDGET SUMMARY

Year	2020	2021	2022	Total
Project Phase	Design	Land Acquis.	Construction	Project
Expenditure Budget	$75,000	$116,000	$844,000	$1,035,000
Revenue Budget	$0	$0	$0	$0
Net County Cost	$75,000	$116,000	$844,000	$1,035,000

COST DOCUMENTATION		REVENUE	
Design	$75,000		
Land Acquisition	$116,000		
Construction	$734,000		
Construction Management	$73,000		
Contingency	$37,000		
Total Project Cost	$1,035,000	Total Revenue	$0
EXPENDITURE BUDGET	$1,035,000	**REVENUE BUDGET**	$0

Project Scope & Description

The purpose of this proposed project is to correct the safety problems along the curved segment of CTH E at Woodland Drive. Proposed improvements addressing the conditions described above and other existing potential hazards include:

1. Realign approximately 1,500 feet of CTH E with one gradual horizontal curve.
2. Widen the CTH E lane widths from 11' to 12', add shoulders that are 8 feet wide of which 3 feet are paved and the rest gravel and clear zones along this curve. Add pavement safety edges.
3. Improve clear zones to proper standards
4. Add center line and shoulder rumble strip pavement markings to alert motorists approaching and driving through this curved highway segment.

Location

Town of Merton

Analysis of Need

A sharp horizontal curve at the intersection of CTH E just south of Woodland Drive has been the site of a number of run off the road crashes. Not only is the curve substandard, but on the north bound approach, there is also a sharp crest just to the south of its location, which limits drivers' sight distance. In combination with the horizontal curve, this causes an unsafe situation. The crash rate for this location is 1.433 crashes per million vehicles entering, which includes one fatality.

Alternatives

Improved signing and marking may reduce the crash rate but are not as effective as improving the roadway geometry per the recommended scope.

Ongoing Operating Costs

None

Previous Action

None

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Project Title:	CTH V V, Main Street to STH 74	**Project #:**	201620
Department:	Public Works - Highways	**Project Type:**	Rehab/Jurisdictional Transfer
Phase:	Formation	**Road Name:**	Silver Spring Drive
Budget Action:	New	**Manager:**	Allison Bussler, Director DPW
Date:	August 27, 2015		

CAPITAL BUDGET SUMMARY

Year	2017	2018	2019	Total
Project Phase	Design	Land Acquis.	Construction	Project
Expenditure Budget	$21,000	$60,000	$146,000	$227,000
Revenue Budget	$0	$0	$0	$0
Net County Cost	$21,000	$60,000	$146,000	$227,000

COST DOCUMENTATION		**REVENUE**	
		STP-M	$665,000
Design	$78,000		
WisDOT Design Review	$26,000		
Land Acquisition	$60,000		
Construction	$619,000		
Construction Management	$78,000		
Contingency	$31,000		
Total Project Cost	$892,000	Total Revenue	$665,000
EXPENDITURE BUDGET	$227,000	**REVENUE BUDGET**	$0

Project Scope & Description

The Village of Sussex has approached Waukesha County to take over this portion of CTH V V. A jurisdictional transfer agreement will need to be finalized and approved by both parties before any design or construction work would take place. The agreement would include a cost share agreement for any amenities that might requested by the Village.

This project will rehabilitate 0.54 miles of CTH V V to meet Wisconsin Department of Transportation (WisDOT) design standards. The project scope includes manhole and culvert repairs, replacing broken and settled curbs, and repaving the roadway and restriping. Minor real estate acquisition is anticipated for easements and utilities. The Department has applied for $665,000 in STP-Milwaukee funding for the project.

Location

Village of Sussex

Analysis of Need

The existing pavements is nearing the end of its service life and is in need of resurfacing/rehabilitation and has a pavement condition index of 45 which is in the poor to fair range. The pavement deficiencies include transverse and longitudinal cracking, some alligator cracking and minor settlement/heaving. Some curb lines have settled and need replacing. There has also been settlement around some manholes. Some minor repair work has been identified to one of the box culverts on this portion of CTH V V. Traffic volumes along this portion of CTH VV are approximately 8,000 vehicles per day as measured in 2012.

Alternatives

- Repave CTH V V. While addressing pavement condition, this alternate does not address curb settlement, manhole or culvert issues along CTH V V.
- Reconstruction of the existing roadway. While addressing the issues this is a more expensive alternate.

Ongoing Operating Costs

This project once complete will lower the Departments operational costs.

Previous Action

None

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Project Title:	Bridge Aid Program	**Project #:**	9131
Department:	Public Works - Highways	**Project Type:**	Bridge
Phase:	Program Project	**Road Name:**	
Budget Action:	As Planned	**Manager:**	Allison Bussler, Director DPW
Date:	August 27, 2015		

CAPITAL BUDGET SUMMARY

Year Project Phase	Previous	2016	2017	2018	2019	2020	Total Project
Expenditure Budget	$180,000	$100,000	$100,000	$0	$0	$0	$380,000
Revenue Budget	$0	$0	$0	$0	$0	$0	$0
Net County Cost	$180,000	$100,000	$100,000	$0	$0	$0	$380,000

COST DOCUMENTATION		**REVENUE**	
Previous	$180,000		
2016 Appropriation	$100,000		
2017 Appropriation	$100,000		
2018 Appropriation	$0		
2019 Appropriation	$0		
2020 Appropriation	$0		
Total Project Cost	$380,000	Total Revenue	$0
EXPENDITURE BUDGET	$380,000	**REVENUE BUDGET**	$0

Project Scope & Description
The program provides assistance to municipalities for the replacement of large drainage structures. The project normally provides 50% of the funding for engineering, design, and construction of town-, village-, or city-initiated projects that do not receive federal or state aid.

Location
Various

Analysis of Need
Wisconsin Statute 82.08 requires the County to fund half the cost of construction or repair of local bridge and culvert projects initiated by townships. Such projects arise during the course of the budget year and funds are distributed on the basis of requests received. Requests that exceed the remaining funding for one year are carried over to the next year. This funding program has historically been expanded to cover all municipalities.

Alternatives
- County participation in the program is required by a statutory mandate.
- The County could opt out of participation with cities and villages.

Ongoing Operating Costs
The projects do not require departmental budget operating expenditures. Projects are reviewed by County engineering staff.

Previous Action
- 1996-2000 capital plan: approved as on going program project as planned.
- 1997-1999: funding suspended.
- Approved as planned in subsequent five-year plans.
- 2001-2005 to 2009-2013 capital plans: approved with additional years.
- 2010-2014 through 2014-2018 capital plans: funding suspended.
- Approved with cost update in 2015-2019 capital plan.

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Project Title:	Culvert Replacement Program Through 2017	**Project #:**	9817
Department:	Public Works - Highways	**Project Type:**	Bridge
Phase:	Program Project	**Road Name:**	Various
Budget Action:	As Planned	**Manager:**	Allison Bussler, DPW Director
Date:	August 27, 2015		

CAPITAL BUDGET SUMMARY

Year Project Phase	Previous	2016	2017	2018*	2019*	2020*	Total Project
Expenditure Budget	$1,920,000	$100,000	$100,000	$0	$0	$0	$2,120,000
Revenue Budget	$20,000		$0	$0	$0	$0	$20,000
Net County Cost	$1,900,000	$100,000	$100,000	$0	$0	$0	$2,100,000

COST DOCUMENTATION		**REVENUE**	
Previous	$1,920,000		
2016 Appropriation	$100,000	Village of Pewaukee Reimbursement	$20,000
2017 Appropriation	$100,000		
Total Project Cost	$2,120,000	Total Revenue	$20,000
EXPENDITURE BUDGET	**$2,120,000**	**REVENUE BUDGET**	**$20,000**

* Funding levels for years after 2017 are as planned, but shifted to a new capital project #201618, Culvert Replacement Program 2018 – 2022.

Project Scope & Description
Provide annual funding for a countywide culvert replacement program.

Location
Various

Analysis of Need
The Public Works Department replaces a number of culverts every year because of deterioration. This program is designed to address larger culvert structures that require extensive design, more land acquisition and higher construction costs. Generally the individual cost of culvert replacements is approximately $50,000 and do not warrant capital projects. However, when grouped together the annual costs exceed $100,000. The County averages one to two culvert replacements per year under this program. Individual culvert locations are not normally known until the year they are to be replaced. For 2014, the Village of Pewaukee requested a water main relocation as part of culvert replacement project on CTH M, and is reimbursing the County for these costs, estimated at $20,000.

Alternatives
Schedule individual projects as needed.

Ongoing Operating Costs
The projects do not require departmental budget operating expenditures. Projects are reviewed by County engineering staff.

Previous Action
- 1998-2002 capital plan: project approved as a new program.
- 2001-2005 capital plan: approved as planned.
- 2002-2006 to 2013-2017 capital plans: approved with additional years.
- 2014-2018 capital plans: approved with cost and revenue updates.
- 2015-2019 Approved as planned

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Project Title:	Culvert Replacement Program 2018 - 2022	**Project #:**	201618
Department:	Public Works - Highways	**Project Type:**	Bridge
Phase:	Program Project	**Road Name:**	Various
Budget Action:	New	**Manager:**	Allison Bussler, DPW Director
Date:	August 26, 2015		

CAPITAL BUDGET SUMMARY

Year Project Phase	2018	2019	2020	2021	2022	Total Project
Expenditure Budget	$100,000	$100,000	$100,000	$100,000	$100,000	$500,000
Revenue Budget	$0	$0	$0	$0	$0	$0
Net County Cost	$100,000	$100,000	$100,000	$100,000	$100,000	$500,000

COST DOCUMENTATION		**REVENUE**	
2018 Appropriation	$100,000		
2019 Appropriation	$100,000		
2020 Appropriation	$100,000		
2021 Appropriation	$100,000		
2022 Appropriation	$100,000		
Total Project Cost	$500,000	Total Revenue	$0
EXPENDITURE BUDGET	**$500,000**	**REVENUE BUDGET**	**$0**

Project Scope & Description
Provide annual funding for a countywide culvert replacement program.

Location
Various

Analysis of Need
The Public Works Department replaces a number of culverts every year because of deterioration. This program is designed to address larger culvert structures that require extensive design, more land acquisition and higher construction costs. Generally the individual cost of culvert replacements is approximately $50,000 and do not warrant capital projects. However, when grouped together the annual costs exceed $100,000. The County averages one to two culvert replacements per year under this program. Individual culvert locations are not normally known until the year they are to be replaced.

Alternatives
Schedule individual projects as needed.

Ongoing Operating Costs
The projects do not require departmental budget operating expenditures. Projects are reviewed by County engineering staff.

Previous Action
Capital Project 9817 – Culvert Replacement Program Through 2017

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Project Title:	Repaving Program 2013-2017	**Project #:**	200911
Department:	Public Works - Highways	**Project Type:**	Repaving
Phase:	Program Project	**Road Name:**	
Budget Action:	C - Rev Update	**Manager:**	Allison Bussler, DPW Director
Date:	August 27, 2015		

CAPITAL BUDGET SUMMARY

Year	2013	2014	2015	2016	2017	Total
Project Phase						
Expenditure Budget	$1,200,000	$2,000,000	$3,000,000	$3,000,000	$3,000,000	$12,200,000
Revenue Budget	$0	$330,000	$330,000	$600,000	$600,000	$1,860,000
Net County Cost	$1,200,000	$1,670,000	$2,670,000	$2,400,000	$2,400,000	$10,340,000

COST DOCUMENTATION

	Paver Study	UWW Pav.	Hwy Paving & shouldering
2013	$20,000	$50,000	$1,130,000
2014	$70,000	$50,000	$1,880,000
2015	$50,000	$50,000	$2,900,000
2016	$50,000	$50,000	$2,900,000
2017	$50,000	$50,000	$2,900,000
Total Project Cost	$240,000	$250,000	$11,710,000
EXPENDITURE BUDGET			$12,200,000

REVENUE

County Highway Improvement Program (CHIP) and County Highway Improvement Program - Discretionary (CHIP-D)

	CHIP	CHIP-D	Total
2014	$330,000		$330,000
2015	$330,000		$330,000
2016	$300,000	$300,000	$600,000
2017	$300,000	$300,000	$600,000
Total Revenue	$1,260,000	$600,000	$1,860,000
REVENUE BUDGET			$1,860,000

Project Scope & Description

The project involves resurfacing or rehabilitation of county trunk highways to remove distressed areas and provide improved riding surfaces. It is the Department of Pubic Work's goal to pave approximately 20 miles of roadway on an annual basis. Crush, relay and surface or other alternative methods will be used as necessary in lieu of a simple patch and overlay. The project includes the cost of the ongoing Pavement Inspection Program, which determines the sections of highways to be repaved, along with the cost of shouldering, the paving program at UW-Waukesha and parking lots at the Department's substation facilities. The program now reflects using both CHIP and CHIP-D funding to offset project expenditures.

Location

Various locations throughout the county.

Analysis of Need

The Department of Public Works presently maintains about 400 centerline miles of asphalt-surfaced roadways on the county trunk system and the parking lots at UW Waukesha. The typical useful life of pavement is 15 years. The Department reconstructed existing two-lane roadways to four-lane facilities. These four-lane facilities are now coming to the end of their design life and need repaving. As asphalt pavements age, the surface tends to rut and crack due to vehicle loads and weathering of the asphalt. The Department has initiated a pavement management program, using Cartegraph's Pavementview software to rate pavement conditions and manage pavement projects. The average Overall Condition Index (OCI) of asphaltic pavements in 2014 was 65. It is the county's goal to maintain an average OCI rating of 70 with less than 10% of roadways under a PCI of 40. Resurfacing projects take into consideration the OCI of existing pavements and classification of the road. The OCI ratings are updated on a rolling three-year schedule.

Alternatives

- Spot repairs and patching. The result will be a slight delay in the deterioration of the system.
- Resurface roadways based on pavement conditions determined by the PAVER pavement management system and Department review.

Ongoing Operating Costs

The cost of maintaining a two-lane roadway in good condition is projected to cost approximately $7,000 per mile annually (2013).

Previous Action

- 2009-2013 capital plan: approved as a new project.
- 2010-2014 and 2011-2015 capital plans: approved as planned.
- 2014-2018 capital plan: approved with revenue update.
- 2015-2019 capital plan approved as planned

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Project Title:	Repaving Program 2018-2022	**Project #:**	201416
Department:	Public Works - Highways	**Project Type:**	Repaving
Phase:	Program Project	**Road Name:**	Various
Budget Action:	As Planned	**Manager:**	Allison Bussler, DPW Director
Date:	August 27, 2015		

CAPITAL BUDGET SUMMARY

Year	2018	2019	2020	2021	2022	Total
Project Phase						
Expenditure Budget	$3,100,000	$3,100,000	$3,150,000	$3,150,000	$3,200,000	$15,700,000
Revenue Budget	$0	$0	$0	$0	$0	$0
Net County Cost	$3,100,000	$3,100,000	$3,150,000	$3,150,000	$3,200,000	$15,700,000

COST DOCUMENTATION				**REVENUE**	
	Paver Study	UWW Pav.	Hwy Paving & shouldering		
2018	$50,000	$55,000	$2,995,000		
2019	$50,000	$55,000	$2,995,000		
2020	$50,000	$55,000	$3,045,000		
2021	$50,000	$55,000	$3,045,000		
2022	$50,000	$55,000	$3,095,000		
Total Project Cost	$250,000	$275,000	$15,175,000	Tot. Revenue	$0
EXPENDITURE BUDGET			$15,700,000	**REVENUE BUDGET**	$0

Project Scope & Description

The project involves resurfacing or rehabilitation of county trunk highways to remove distressed areas and provide improved riding surfaces. It is the Department of Pubic Work's goal to pave approximately 20 miles of roadway on an annual basis. Crush, relay and surface or other alternative methods will be used as necessary in lieu of a simple patch and overlay. The project includes the cost of the ongoing Pavement Inspection Program, which determines the sections of highways to be repaved, along with the cost of shouldering, the paving program at UW-Waukesha and parking lots at the Department's substation facilities.

Location

Various locations throughout the county.

Analysis of Need

The Department of Public Works presently maintains about 400 centerline miles of asphalt-surfaced roadways on the county trunk system and the parking lots at UW Waukesha. The typical useful life of pavement is 15 years. The Department reconstructed existing two-lane roadways to four-lane facilities. These four-lane facilities are now coming to the end of their design life and need repaving. As asphalt pavements age, the surface tends to rut and crack due to vehicle loads and weathering of the asphalt. The Department has initiated a pavement management program, using Cartegraph's Pavementview software to rate pavement conditions and manage pavement projects. The average Overall Condition Index (OCI) of asphaltic pavements in 2014 was 65. It is the county's goal to maintain an average OCI rating of 70 with less than 10% of roadways under a PCI of 40. Resurfacing projects take into consideration the OCI of existing pavements and classification of the road. The OCI ratings are updated on a rolling three-year schedule.

Alternatives

- Spot repairs and patching. The result will be a slight delay in the deterioration of the system.
- Resurface roadways based on pavement conditions determined by the PAVER pavement management system and Department review.

Ongoing Operating Costs

The cost of maintaining a two-lane roadway in good condition is projected to cost approximately $7,000 per mile annually (2013).

Previous Action

- Approved as a new project in the 2014-18 capital plan
- Approved as planned in 2015-2019 Capital Plan

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Project Title:	Signals & Safety Improvements	**Project #:**	200427
Department:	Public Works - Highways	**Project Type:**	Spot Improvement
Phase:	Program Project	**Road Name:**	
Budget Action:	Scope Change – Add New Projects, Revenue Update	**Manager:**	Allison Bussler, DPW Director
Date:	August 30, 2015		

CAPITAL BUDGET SUMMARY

Year	2014	2015	2016	2017	2018	2019	Total Project
Expenditure Budget	$950,000	$842,400	$1,250,000	$1,250,000	$0	$0	$4,292,400
Revenue Budget	$0	$0	$0	$0	$0	$0	$0
Net County Cost	$950,000	$842,400	$1,250,000	$1,250,000	$0	$0	$4,292,400

COST DOCUMENTATION		REVENUE	
2014 Appropriation*	$950,000		
2015 Appropriation	$842,400		
2016 Appropriation	$1,250,000		
2017 Appropriation	$1,250,000		
2018 Appropriation	$0	Federal HSIP (Highway Safety Improvement Program)	$4,914,000
2019 Appropriation	$0		
Total Project Cost	$4,292,400	Total Revenue	$4,914,000
EXPENDITURE BUDGET	$4,292,400	**REVENUE BUDGET**	$0

*At year-end 2014, $250,000 of unspent appropriations were allowed to lapse since $250,000 of budgeted County Highway Improvement Program – Discretionary funding was not available for these projects, as originally budgeted.

Project Scope & Description

This program addresses roadway safety needs in two specific areas. Firstly, there are upgrades to existing traffic signals and new locations where traffic signals are warranted. Secondly, there are locations where there are significant safety issues, these may occur at intersections, or where there is poor roadway geometry. For the intersections that meet signal warrants, the Department will study signal and roundabout alternatives. For intersections that are upgraded, new equipment and some minor geometric updates will be included to increase intersection safety and performance. Where safety is the concern the Department will conduct safety studies and proceed with the solution which best addresses the observed needs. The following projects will be studied, designed and constructed over the next two years (2016-17). Others may be added if funding allows. Beginning in 2018, intersection and safety projects will be introduced separately and evaluated on their merits against all other capital projects.

			COST ESTIMATE		
Intersection	**Location**	**Year**	**County Share (In Co. Budget)**	**HSIP Funded (Not in Co. Budget)**	**Total Cost Estimate**
****CTH I, between Her DR and Pint Dr: realign roadway to remove substandard curve.**	**Town of Vernon**	**Design in 2016, Construction in 2017**	**$176,000**	**$1,016,000**	**$1,192,000**
CTH YY and Burleigh Rd - Intersection: Upgrade existing signals and improve turn lanes and approaches (Revised increase of $251,000).	City of Brookfield	Design in 2014/15, Construction in 2016	$1,619,000	$0	$1,619,000
CTH V V, CTH E Intersection: Install roundabout to reduce crashes.	Town of Merton	Design in 2015/16, Complete construction in 2017	$316,000	$1,043,000	$1,359,000
CTH JJ and Silvernail: Improve intersection to address high crash rates (Revised decrease of $257,000).	City of Pewaukee	Design 2014/15, Construction 2016	$105,000	$495,000	$600,000
****CTH CI, County line to STH 67, safety project to improve signing, marking, improve lateral clearances**	**Towns of Eagle and, Ottawa**	**Design in 2016 & 2017, Construction in 2018**	**$46,000**	**$276,000**	**$322,000**
CTH V V, Lilly Rd intersection: realign left turn lanes and upgrade traffic signal.	Village of Menomonee Falls	Design in 2015/16, Construction in 2017	$114,000	$716,000	$830,000
CTH KF/JK intersection: Add traffic signal and turn lanes to improve safety.	City of Pewaukee	Design in 2015/16, Construction in 2017	$200,000	$860,000	$1,060,000

****New project**

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Project Title:	Signals & Safety Improvements	**Project #:**	200427
Department:	Public Works - Highways	**Project Type:**	Spot Improvement
Phase:	Program Project	**Road Name:**	
Budget Action:	Scope Change – Add New Projects, Revenue Update	**Manager:**	Allison Bussler, DPW Director
Date:	August 30, 2015		

Analysis of Need

As the County's population continues to grow, roadway vehicular traffic volumes and crashes increase, resulting in the need to install new traffic signals or roundabouts, or make geometric changes to reduce crash rates, delays and congestion. Some existing signals are more than 20-years-old and are in need of new features such as turn arrows and pedestrian phases. Some high crash site locations do not meet traffic signal warrants and need to be addressed with other lower cost improvements.

Alternatives

- Use signing and marking to address crash issues. This alternate can reduce the number of crashes and should be used when appropriate, but it does not always bring crashes down to acceptable levels
- Implement improvements as described.

Ongoing Operating Costs

Increased costs of approximately $9,600 annually per new signal installation and additional lane miles.

Previous Action

- 2004-2008 capital plan: approved as a combined program.
- 2005-2009, 2006-2010, 2007-2011, 2008-2012 and 2011-2015 capital plans: approved as planned.
- 2009-2013 capital plan: cost update.
- 2010-2014 capital plan: approved use of stimulus funds.
- 2013-2017 capital plan: Cost update. Addition of HSIP funded project.
- 2014-2018 capital plan: add new projects, revenue update
- 2015-2019 capital plan: add new projects, revenue update

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Project Title:	Energy Efficiency Improvements	**Project #:**	201208
Department:	Parks & Land Use	**Project Type:**	Renovation/Upgrade
Phase:	Program Project	**Sponsor:**	
Budget Action:	Accelerate, C – Scope, C - Rev Update	**Manager:**	Dale Shaver, PLU Director
Date:	August 26, 2015		

CAPITAL BUDGET SUMMARY

Year	Previous	2014	2015	2016	2017	Total
Phase:	Design &	Design &	Design &	Design &	Design &	
Program Project	Installation	Installation	Installation	Installation	Installation	
Expenditure Budget	$705,000	$215,200	$75,000	$180,000	$260,000	$1,435,200
Revenue Budget	$0	$100,000	$75,000	$65,000	$0	$240,000
Net County Cost	$705,000	$115,200	$0	$115,000	$260,000	$1,195,200

COST DOCUMENTATION		**REVENUE**	
		General Fund Balance*	$823,200
Architect/Consultant	$50,000	*To fund non-enterprise, General Fund	
Construction	$425,000	improvements	
Contingency	$40,000		
Previous: 2012 through 2014	$920,200	Ice Arenas Fund Balance	$100,000
Total Project Cost	$1,435,200	Golf Course Fund Balance	$140,000
EXPENDITURE BUDGET	$1,435,200	**REVENUE BUDGET**	$240,000

Project Scope & Description

This project will continue the implementation of Energy Efficiency Improvements at Waukesha County facilities. Focus on sound return on investments will continue to demonstrate a sound business approach to energy saving and will provide the strong reduction of utility expenditures in the operating budget.

Energy efficiency improvements for Years 2012 and 2013 consisted primarily of government center campus building lighting upgrades at the Courthouse and Mental Health Center. Year 2014 projects included: Installation of digital controls on all HVAC equipment at the high energy use County facilities such as Retzer Nature Center, Eble and Naga-Waukee Ice Arenas and Expo Arena to enable monitoring, troubleshooting and adjustment of the equipment through a central computer system. This enterprise energy management system maximizes the efficiencies of the HVAC system and saves significant staff cost in trouble shooting issues at remote locations. Currently the Department of Public Works – Facility Management Division has the Government Campus buildings on the system. Adding the additional buildings would save staff time and further leverage the existing technology. Funding for 2015 and 2016 will be used to install LED lighting at Wanaki and Naga-Waukee Golf Course and at the Retzer Nature Center.

The remaining lighting projects designed by Leedy and Petzold Associates that were not able to be funded under the former Energy Efficiency and Conservation Block Grant (EECBG) grant are now included in this capital project. The final lighting projects will focus on buildings, parking lot lighting and interior lighting at park facilities.

Project Examples and projected ROI

2014	Eble Ice Arena	Facility HVAC Automation	2.6 years ROI
2014	Nagawaukee Ice Arena	Facility HVAC Automation	3.0 years ROI
2014	Retzer Nature Center	Facility HVAC Automation	6.0 years ROI
2014	Expo Arena, Eble Park Drive (Lighting)	Facility HVAC Automation	4.5 years ROI
2015-16	Wanaki GC, Naga-Waukee GC, Retzer Nature Center	Lighting LED upgrade	5.0 years ROI
2017	Parks:FoxR,FoxB,Muk, Mus, Nag, Nas	Lighting LED upgrade	5.5 years ROI

Location

Various Waukesha County owned facilities.

Analysis of Need

With improvements in lighting and mechanical equipment technology and the increasing cost of energy and water, it is in Waukesha County's best interest to continually evaluate opportunities to conserve energy and reduce utility costs. The individual projects submitted were selected based upon the returns on investment as well contributing to successful implementation of the Waukesha County Sustainability Plan.

Alternatives

Reconsider in a future capital plan.

Ongoing Operating Costs

Utility costs will continue to increase based on rate increases and consumption. The County can take steps to manage and reduce consumption. Energy consumption will be reduced by an overall estimated average of 18% based on the consultants design by replacing the existing lighting fixtures with the new higher efficiency lighting fixtures and with the addition of Building Automation Systems for high energy buildings.

Previous Action

Capital Project 200805 Energy Conservation completed in 2008 and 2009. Capital Project 200918 Energy Efficiency and Conservation Block Grant completed in 2010 and 2011. 2012-2016 capital plan: approved as a new project. 2013-2017 capital plan: approved as planned. 2014-2018 capital plan: approved with scope and cost updates. 2015-2019 capital plan: approved with scope and cost updates.

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Project Title:	Wanaki Golf Course Bridge Replacement	**Project #:**	201309
Department:	Parks & Land Use	**Project Type:**	Bridge
Phase:	Preliminary Design	**Sponsor:**	
Budget Action:	Delay, C - $ Update	**Manager:**	Dale Shaver, PLU Director
Date:	August 27, 2015		

CAPITAL BUDGET SUMMARY

Year	2013	2014	2017	2018	Total
Program Project	Design	Construction	Construction	Construction	Project
Expenditure Budget	$50,000	$160,000	$257,500	$257,500	$725,000
Revenue Budget	$50,000	$160,000	$257,500	$257,500	$725,000
Net County Cost	$0	$0	$0	$0	$0

COST DOCUMENTATION	Cost	**REVENUE**	
Design/Engineering	$50,000	Golf Course Fund Balance	$725,000
Bridge Construction	$440,000		
Foundation Construction	$100,000	Note: Department management	
Demolition existing structures	$20,000	will seek partial reimbursement through	
Erosion and Sediment Control	$25,000	State Stewardship grant funds, which, if	
Golf car paths at approaches	$50,000	received, will replenish Golf Course Fund	
Restoration and Landscape	$15,000	balance.	
Contingency	$25,000		
Total Project Cost	$725,000	Total Revenue	$725,000
EXPENDITURE BUDGET	**$725,000**	**REVENUE BUDGET**	**$725,000**

Project Scope & Description

2012 Bridge evaluations have revealed deteriorating conditions that have led to one bridge failure. Current bridge construction dates back to early 1970's, and consists of metal pipe culverts in the Fox River, with stone abutments and crushed stone fill and surfacing. Rain events cause flooding and washout of the six bridges. Bridge closures due to flooding cause golf course closure and loss of revenue following rain events. The proposed project will improve the flow of the Fox River, reduce the total number of bridge structures, and provide safe, compliant and aesthetic crossings of the river. The project proposes reducing six current bridges down to four structures to maintain golf course playability, allowing for use by course maintenance equipment, while reducing on-going structure maintenance cost. One of the structures will be designed and rated to accommodate heavy loads of golf course maintenance equipment, while the other smaller structures will be rated for pedestrian/golf cart loads. Costs are updated to reflect additional work to understand bedrock and soil conditions for the proposed bridge foundations, updated unit costs for the appropriate load rating and span for each structure, anticipated permit applications and approvals related to wetland and floodplain impacts.

Location

Wanaki Golf Course, located in the Village of Menomonee Falls.

Analysis of Need

A bridge evaluation conducted in 2012 identifies structural failures, and need for replacement. Original construction consists of metal culvert pipe and stone endwalls dating back to early 1970's. Metal culvert pipe has deteriorated and in some cases failed, necessitating limiting the loads on one of the bridges. The existing bridges have served a useful life of over 40 years. The current structures have been evaluated for the option of continuing to repair in specific areas, and attempt to extend the life of the structures. Removal of the existing structures will also improve flow of the Fox River in this area, and reduce continual damage to the stone surface and endwalls in large rain events.

Alternatives

The design team reviewed bridge locations, evaluated the repair of existing bridge types to extend the life of current structures; reviewed multiple bridge types including prefab steel, laminated wood, precast concrete bridges; analyzed reduction of number of bridges to reduce cost and impact to Fox River. Criteria for final design decisions included cost effectiveness, ability to obtain required regulatory permits, minimize impacts to floodplain, reduce long term maintenance, and aesthetics in the golf course setting.

Ongoing Operating Costs

It is expected that a reduction of labor and material costs to continuously repair existing structures will be realized. Future maintenance of new structures will be performed by golf course and parks staff. Removal of existing structures will reduce time spent on repair of the six bridges on an on-going basis, and improve the ability of the current staff to focus on golf course turf conditions. Savings will be realized to maintain four bridges, as opposed to the former six bridges, with one structure being more substantial to accommodate heavier loads, and the other structures to be lighter load ratings to accommodate pedestrian/golf car traffic.

Previous Action

Approved as a new project in the 2013-2017 plan. Approved as planned in the 2014-2018 plan. Approved with a change in scope, cost update and delay in the 2015-2019 plan.

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Project Title:	Waukesha-Brookfield Multi-Use Trail Project	**Project #:**	201407
Department:	Parks & Land Use	**Project Type:**	Trail System
Phase:	Preliminary Design	**Sponsor:**	
Budget Action:	Delay, C - $ Update, C - Rev Update	**Manager:**	Dale Shaver, PLU Director
Date:	August 13, 2015		

CAPITAL BUDGET SUMMARY							
Year	2014	2015	2016	2017	2018	2019	Total
Program Project	Prelim Design	Design/Eng.	Design/Eng.	Design/Eng.	Construction	Construction	Project
Expenditure Budget	$50,000	$450,000	$0	$0	$2,716,000	$0	$3,216,000
Revenue Budget	$0	$427,500	$0	$0	$2,580,300	$0	$3,007,800
Net County Cost	$50,000	$22,500	$0	$0	$135,700	$0	$208,200

COST DOCUMENTATION		REVENUE	
		80% Fed/State WisDOT	$2,533,000
Design	$500,000	10% State WDNR	$316,500
Construction	$2,616,000	5% City of Brookfield	$158,300
Contingency	$100,000		
Total Project Cost	$3,216,000	Total Revenue	$3,007,800
EXPENDITURE BUDGET	$3,216,000	**REVENUE BUDGET**	$3,007,800

Project Scope & Description

In 2009, the Waukesha County Board adopted the updated Comprehensive Development Plan for Waukesha County. Through a collaborative effort between the Department of Parks and Land Use, the Department of Public Works, all municipalities within the County, the Wisconsin Department of Transportation, the Wisconsin Department of Natural Resources and the Southeast Wisconsin Regional Planning Commission (SEWRPC) an updated Bicycle Plan was developed and adopted by the Waukesha County Board as part of the Comprehensive Development Plan in 2012.

A component of the Bicycle Plan includes an approximately four-mile bike-pedestrian trail from the City of Waukesha at Frame Park, to the City of Brookfield at Mitchell Park, and the Brookfield redevelopment district along the old Chicago-Pacific Railroad. The project will be coordinated with the State of Wisconsin Department of Transportation, Department of Natural Resources, Army Corps of Engineers, Chicago-Pacific Railroad Company, State of Wisconsin Railroad Commission, City of Brookfield and City of Waukesha. The trail will offer two trail heads, and crosses three roadways, underpasses Bluemound Road and Interstate 94, crosses the Fox River three times, and crosses the Pewaukee River once.

The Department of Parks and Land Use will secure funding from multiple sources. The project has been awarded $2,533,000 (80:20 cost share reimbursable program) from the Wisconsin Department of Transportation through the Federal Transportation Alternatives Program (TAP) Grant. The project form is updated to reflect the actual grant amount. Of the remaining project costs, it is anticipated that $316,500 will come from the Wisconsin DNR Stewardship (50:50) – Recreational Trails program. The City of Brookfield and Waukesha County will split the remaining costs, except for $50,000 that Waukesha County will spend in preliminary design. The County does not anticipate plowing the trail in the winter. Depending on future use and demand, this trail may be maintained cooperatively with the City for year round use.

Location

The project is located on the abandoned railroad corridor, and is located on the southern terminus at Moreland Boulevard in the City of Waukesha, and on the northern terminus at River Road/Brookfield Road in the City of Brookfield. Features or destinations along the trail include the GE Medical Training Center located on Watertown Plank Road.

Analysis of Need

The project is identified as a north-south connector trail in the Waukesha County Bike/Pedestrian Plan. This project will serve an estimated 120,000 people in the Waukesha-Brookfield area. This project connects public parks and green space, and is a re-use of an abandoned railroad corridor. The project will offer economic benefits by connecting business and employment centers in the communities.

Alternatives

The project alternatives are to not build a connector trail in this part of the county, or build a connector bicycle lane or paved shoulder facility as part of the CTH F overlay project. This county road is a simple overlay project, and not a reconstruction project, and also has limited available right-of-way for separated trail purposes.

Ongoing Operating Costs

This project will generate an additional four lineal miles of trail to maintain. This facility will be maintained by the current parks staffing level located at Fox Brook Park, with assistance from the City of Brookfield Parks, Recreation & Forestry Department.

Previous Action

Prior to this capital project, no previous action has been taken, other than to acquire the required additional land area.
Approved as a new project in the 2014-2018 capital plan
Approved as planned in the 2015-2019 capital plan

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Project Title:	Park Beach Area Renovations	**Project #:**	201408
Department:	Parks & Land Use	**Project Type:**	Renovation/Upgrade
Phase:	Preliminary Design	**Sponsor:**	
Budget Action:	C - Scope, C - $ Update	**Manager:**	Dale Shaver, PLU Director
Date:	August 27, 2015		

CAPITAL BUDGET SUMMARY							
Year	2015	2016	2017	2018	2019	2020	Total
	Analysis						Project
Expenditure Budget	$15,000	$0	$0	$0	$0	$0	$15,000
Revenue Budget	$0	$0	$0	$0	$0	$0	$0
Net County Cost	$15,000	$0	$0	$0	$0	$0	$15,000

COST DOCUMENTATION	Cost	**REVENUE**	
Feasibility/Site Analysis	$15,000		
Architecture/Engineering	$0		
Construction	$0		
Contingency	$0		
Total Project Cost	$15,000		
EXPENDITURE BUDGET	$15,000	**REVENUE BUDGET**	$0

Project Scope and Description

At Mukwonago Park, in 2015, the Department will conduct a feasibility/site analysis of the existing 1940's era beach house to relocate and/or renovate as a beach house, rental pavilion or a combination of both.

The Department of Parks and Land Use is recommending this project be deferred at this time and replaced with Capital Project 201605 Menomonee Beach House Renovation to reflect facility use levels and recent challenges associated with lifeguard staffing.

Previous Action
Approved as a new project in 2014-2018 capital plan. Approved as planned in the 2015-2019 capital plan.

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Project Title:	Camp Pow Wow Expansion	**Project #:**	201504
Department:	Parks & Land Use	**Project Type:**	Facility Expansion
Phase:	Preliminary Design	**Sponsor:**	
Budget Action:	Delay	**Manager:**	Dale Shaver, PLU Director
Date:	August 27, 2015		

CAPITAL BUDGET SUMMARY

Year	2015	2016	2017	2018	2019	2020	Total
Project Phase	Design/Engineering					Construction	Project
Expenditure Budget	$54,400	$0	$0	$0	$0	$695,600	$750,000
Revenue Budget	$0	$0	$0	$0	$0	$375,000	$375,000
Net County Cost	$54,400	$0	$0	$0	$0	$326,600	$375,000

COST DOCUMENTATION		**REVENUE**	
Design/Engineering	$54,400		
Construction	$644,000		
Contingency	$51,600		
		Partnership with ARCh	
Total Project Cost	$750,000	Total Revenue	$375,000
EXPENDITURE BUDGET	$750,000	**REVENUE BUDGET**	$375,000

Project Scope & Description

Since 1959, the Association for the Rights of Citizens with handicaps (ARCh) through Camp Pow Wow has been providing outdoor recreational opportunities for adults and children with disabilities. In 1998, in partnership with Waukesha County, a lodge was built in Menomonee Park as the camp's home base. Amenities include: a full-service kitchen, restrooms with showers, nurse's office, covered patio, indoor and outdoor fireplace, and heat and air conditioning.

Camp Pow Wow Lodge is reserved exclusively for ARCh annually from May through September. September through May the building is reservable to the public.

Expansion of the current facility will improve functional issues for the camp program and campers' personal health needs including separation of private nurse room, Americans with Disabilities Act (ADA) code updates, restroom expansion and improved energy efficiency. Site improvements will include accessible path connections and educational signage will increase usability and access of the site for camp programs. This project is delayed in the 2016-2020 Capital Plan to allow ARCh more time for fundraising.

Analysis of Need

Due to the success of Camp Pow Wow's programming, ARCh has expressed the need for expansion for several years. These improvements will allow ARCh to meet its program needs, comply with ADA codes and continue to retain and attract users of this unique program. Representatives of ARCh have offered to fundraise and partner with Waukesha County to assist with the expansion project. The ARCh organization celebrated its 55th Anniversary in 2014. Therefore, this is an opportune time to launch a fundraising campaign for expansion. The original construction was made possible through a 50/50 cost share agreement between the County. This expansion project is again proposed with a 50/50 cost share agreement between the County and ARCh.

Location

Menomonee Park is located in the northeastern section of Waukesha County in the Villages of Lannon and Menomonee Falls.

Alternatives

1. Allow camp to function within current space and functionality provided.
2. Partner with ARCh to update and expand the current facility to accommodate additional program participants and functionality desired.

Ongoing Operating Costs

Expected minimal increase in operating cost due to additional square footage and restroom plumbing fixtures. Some utility savings due to upgrading HVAC and lighting to more efficient equipment and fixtures.

Previous Action

Approved as a new project in the 2015-2019 Capital Plan.

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Project Title:	Minooka Restroom Shelter	**Project #:**	201602
Department:	Parks & Land Use	**Project Type:**	Renovation/Upgrade
Phase:	Preliminary Design	**Sponsor:**	
Budget Action:	Delay, C - $ Update	**Manager:**	Dale Shaver, PLU Director
Date:	August 30, 2015		

CAPITAL BUDGET SUMMARY

Year	2016	2017	Total
Project Phase	Planning/Design	Construction	Project
Expenditure Budget	$50,000	$447,200	$497,200
Revenue Budget	$0	$0	$0
Net County Cost	$50,000	$447,200	$497,200

COST DOCUMENTATION		**REVENUE**	
Planning/Design	$50,000		
Construction - Building	$300,000		
Construction - Site Work	$130,000		
Contingency	$17,200		
Total Project Cost	$497,200	Total Revenue	$0
EXPENDITURE BUDGET	$497,200	**REVENUE BUDGET**	$0

Project Scope & Description

This project is for the construction of a new restroom and shelter at picnic area 3 at Minooka Park. The new restroom and shelter would be consistent with the park system standard design, similar to the new restrooms and shelters at Naga-Waukee, Minooka, Muskego, Nashotah and Mukwonago parks. The features include; restrooms and an open shelter, and grilling area. This project was originally identified as a part of Capital Improvement Plan Project 200505, Park Restroom Renovations. In 2016, this project is being introduced as a separate project so that the former multi-year project can be closed. This proposed project will offer sufficient space to accommodate larger groups to serve the area's multi-purpose field regularly used for sporting events and activities.

Location

Shelter 3 at Minooka Park: 1927 E Sunset Drive, Waukesha, WI 53186

Analysis of Need

The original shelter was constructed in the 1960's, the existing concrete is failing and does not meet current standards or codes. The Department of Parks and Land Use is proposing a new pavilion be constructed to meet the needs of the park patrons. Minooka Park has been a success and there exists a demand to add a reserve pavilion in Picnic Area 3. The location would take advantage of the current infrastructure of the existing parking lot.

Alternatives

Do not construct a new shelter or delay construction. However, there would be more opportunities to rent the shelter, which would increase revenue for the park.

Ongoing Operating Costs

Currently on the site there is a pit toilet and open shelter. Operation of the proposed building would be similar in costs to the existing facilities. However, revenue based on rental reservation and park entrance fees are projected to increase.

Previous Action

Formerly part of Restroom Project number 200505. Minooka Pavilion Bathroom is now a new project and 200505 is being closed out.

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Project Title:	Menomonee Park Beach House Renovation	**Project #:**	201605
Department:	Parks & Land Use	**Project Type:**	Renovation/Upgrade
Phase:	Formation	**Sponsor:**	
Budget Action:	New	**Manager:**	Dale Shaver, PLU Director
Date:	August 27, 2015		

CAPITAL BUDGET SUMMARY

Year	2016	2017	2018	2019	2020	Total
Project Phase		Design/Engineering	Construction			Project
Expenditure Budget	$0	$54,000	$903,000	$0	$0	$957,000
Revenue Budget	$0	$0	$300,000	$0	$0	$300,000
Net County Cost	$0	$54,000	$603,000	$0	$0	$657,000

COST DOCUMENTATION		**REVENUE**	
Design	$54,000		
Construction	$836,000	Donations	$300,000
Contingency	$67,000		
Total Project Cost	$957,000	Total Revenue	$300,000
EXPENDITURE BUDGET	**$957,000**	**REVENUE BUDGET**	**$300,000**

Project Scope & Description

The existing Menomonee Park beach house was built in the mid 1970's as a bath house and shelter building. This project proposes remodeling of the beach house to replace the original mechanical systems, lighting, windows, and doors/frames while updating ADA accessibility to current code compliance. The lifeguard room will move to the front of the building facing the beach to improve safety. With the previous demolition of the recreation building at Menomonee Park, the project proposes to improve the former changing rooms, add more functional activity space, and partially enclose the previous open shelter areas of the beach house for increased seasonal rentals in response to increasing popular demand for day and overnight facility rentals in a park setting near a major metropolitan area. Storage areas will be incorporated into the remodeled building to benefit ARCh and the Camp Pow Wow beach programming. Proposed building renovation costs are estimated at $581,000 and the required utility and site improvements estimated at $255,000. Donations are included in the project revenue to reflect potential partnerships. The current proposed project scope is contingent upon these donations, and the scope will be modified if these revenues do not materialize.

Location

Menomonee Park is located in the northeastern section of Waukesha County in the Villages of Lannon and Menomonee Falls.

Analysis of Need

The existing beach house has exhibited signs of deterioration, and increased use and programming has resulted in the need for expansion. These renovations are recommended to extend the life of the building for another 30 years by improving rentability, increase building safety, accessibility and functionality for year round rentability, beach concessions and lifeguard program. Enclosing sections of the building will facilitate increased facility rental and separating access to restroom/showers for campers, beach users and facility rental clients. It should be noted that required utility updates have higher costs due to the high bed rock. Site improvements will be completed to increase accessibility and usability of beach and picnic area for the public and Camp Pow Wow program participants through paved walking paths around the facility, replace stairs with accessible ramp, and provide a beach foot wash station with separation of Pow Wow beach use area from the public. This project will provide improvements to the reduction of parking lot runoff into the lake through a bioswale retention area, thereby helping to maintain water quality in the beach area.

Alternatives

1. Remodel the structure to address mechanical, window, doorway, and lighting replacement.
2. Demolish the existing building and rebuild new. This would provide opportunity to maximize functionality and energy efficiency, but would add another estimated $500,000 to $750,000 to the cost.
3. Remodel the existing building and bring the building up to current codes plus maximize functionality of usable space and achieve revenue potential for rentals or beach user and campground entrance fees.

Ongoing Operating Costs

Expected operating costs would be equivalent to current conditions with some utility savings due to upgrading HVAC and lighting to more efficient equipment and fixtures. Increased revenue would result due to ability to rent year-round separated portions of the building, even during beach season.

Previous Action: None

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Project Title:	Retzer Nature Center Remodeling	**Project #:**	201606
Department:	Parks & Land Use	**Project Type:**	Renovation/Upgrade
Phase:	One-Year Project	**Sponsor:**	
Budget Action:	New	**Manager:**	Dale Shaver, PLU Director
Date:	August 13, 2015		

CAPITAL BUDGET SUMMARY

Year Project Phase	2015 Planning	2016 Design	2016 Construction	Total Project
Expenditure Budget	$0	$35,000	$321,000	$356,000
Revenue Budget	$0	$35,000	$321,000	$356,000
Net County Cost	$0	$0	$0	$0

COST DOCUMENTATION		REVENUE	
Planning/Design	$35,000		
Building Remodeling	$297,000		
Contingency	$24,000		
Total Project Cost	$356,000	MRF Fund Balance	$356,000
EXPENDITURE BUDGET	$356,000	**REVENUE BUDGET**	$356,000

Project Scope & Description

This project is a remodeling of an original section of the existing Retzer Nature Center Learning Center to incorporate classroom and exhibit space for Waukesha County recycling education program that was displaced when the Material Recycling Facility was moved to the City of Milwaukee. The project would include remodeling an older meeting room to accommodate both classroom and meeting functions, moving the nature center supervisor's office to create an exhibit space, improving the existing storage space to be more efficient and remodeling or relocating the staff lunchroom and kitchen for event use. The remodeling project would include live video feed to the joint recycling facility and the environmental education focus to be incorporated into the activities and programming at the Nature Center. Since this is a one-year project, funds for construction will not be spent until a standing committee of the County Board approves the request for proposal process.

Location

Retzer Nature Center, S14 W28167 Madison St., Waukesha, WI 53188. This remodeling would be in the original section of the Nature Center and does not affect the 2005 addition.

Analysis of Need

In 2014, Waukesha County recycling function was moved to Milwaukee through an intergovernmental agreement with the City of Milwaukee. The Waukesha County-owned MRF is currently unoccupied and is in process of being sold. The new combined facility with the City of Milwaukee does not have a classroom or exhibit space.

Alternatives

1. Do not have an exhibit space and continue to rent space from Retzer for programing as it available.
2. Rent space from Keep Milwaukee Beautiful, the adjacent building to the MRF in Milwaukee.

Ongoing Operating Costs

This project calls for reallocation of existing space with operating costs project to remain the same. Utility costs are expected to decrease with more energy effective appliances in the kitchen and lighting.

Previous Action

None

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Project Title:	Lake Country Trail STH 67 Underpass	**Project #:**	201607
Department:	Parks & Land Use	**Project Type:**	Trail System
Phase:	Preliminary Design	**Sponsor:**	
Budget Action:	New	**Manager:**	Dale Shaver, PLU Director
Date:	August 30, 2015		

CAPITAL BUDGET SUMMARY

Year	2015	2016	2017	Total
Program Project	Design/ Engineering		Construction	Project
Expenditure Budget	$0	$229,000	$962,000	$1,191,000
Revenue Budget	$0	$50,000	$914,000	$964,000
Net County Cost	$0	$179,000	$48,000	$227,000

COST DOCUMENTATION		**REVENUE**	
2015 WisDOT Underpass Box - **In State Budget**	$500,000	Not in County Budget	
2015 Half of Utility Relocation Costs - **In Ocon. Budget**	$129,000	WisDOT Underpass Box	$500,000
2016 Half of Utility Relocation Costs - **In County Budget**	$129,000	Ocon. Share of Utility Relocation	$129,000
2016 Design and Engineering - **In County Budget**	$100,000		
2017 Construction - **In County Budget**	$962,000	Budgeted by County	
		80% Fed/State WisDOT Grant	$770,000
		10% State WDNR Grant	$96,000
		Ocon. Share of Engineering/Constru	$98,000
Total Project Cost	$1,820,000	Total Revenue	$1,593,000
EXPENDITURE BUDGET	**$1,191,000**	**REVENUE BUDGET**	**$964,000**

Project Scope & Description

The south side of the City of Oconomowoc is seeing considerable growth as new residential, commercial and retail development in and around the Pabst Farms area continues to move forward. It is projected that as the growth continues, use will increase on the popular multi-use Lake Country Trail. As a component of the growth in the area, the major north-south connection from the City of Oconomowoc to Interstate 94, State Trunk Highway 67, is being improved and widened to three lanes in each direction to accommodate increased traffic. In order to create a safe crossing of this major roadway for trail users, a box tunnel will be installed by WisDOT in 2015 as part of the STH 67 construction project, for future conversion into a trail underpass.

Waukesha County Department of Parks & Land Use (PLU) will collaborate with the City of Oconomowoc to construct appropriate entrances and exits to the box tunnel installed by WisDOT for an underpass for the Lake Country Trail. Funding will be secured from multiple sources. It is anticipated that 80% of the project construction costs will be funded through the Federal Transportation Alternatives Program (TAP) and 50% of remaining costs funded by the State Stewardship Grant program. Remaining costs for construction, utility relocation and engineering are anticipated to be split 50/50 with the City of Oconomowoc The County was able to take advantage of a significant cost savings opportunity when The Wisconsin Department of Transportation agreed to contribute up to $500,000 up front in order to install the box tunnel during the STH 67 construction project. The collaboration with the City of Oconomowoc will also help to realize additional cost savings because the underpass project can be bid as a component of the City's annual road reconstruction bid package.

Location

Lake Country Trail intersection with State Trunk Highway 67 in the City of Oconomowoc.

Analysis of Need

The underpass will provide a safe and unimpeded crossing of the major roadway for trail users. It will also help to maintain efficient traffic flow by reducing congestion and time delays for motorists caused by substantial pedestrian and bicyclist clearance times when trail users are crossing the roadway.

Alternatives

A. Construct in early 2017 to coincide with the completion of the STH 67 construction project.
B. Construct in 3-5 years.
C. Maintain as an at-grade crossing, but would be across six lanes of traffic, which is a safety issue.

Ongoing Operating Costs

The project will required maintenance for a new tunnel underpass along the Lake Country Trail. The maintenance will include the removal of debris, cleanup of vandalism, and monitoring of the operational condition of light fixtures. The underpass facility will be maintained by the City of Oconomowoc. Current staff at Naga-Waukee Park who maintain the Lake Country Trail will maintain the trail approaches and signage.

Previous Action

None.

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Project Title:	Naga-Waukee Park Ice Arena Dasher Board Replacement Project	**Project #:**	201608
Department:	Parks & Land Use	**Project Type:**	Equipment Replacement
Phase:	One-Year Project	**Sponsor:**	
Budget Action:	New	**Manager:**	Dale Shaver, P&LU Director
Date:	August 30, 2015		

CAPITAL BUDGET SUMMARY						
Year	2016	2017	2018	2019	2020	Total
Phase	Installation					Project
Expenditure Budget	$216,800	$0	$0	$0	$0	$216,800
Revenue Budget	$216,800	$0	$0	$0	$0	$216,800
Net County Cost	$0	$0	$0	$0	$0	$0

COST DOCUMENTATION		REVENUE	
Removal of Existing System	$5,000	Ice Arena Fund Balance	$216,800
Dasher Board System Furnish/Insta	$195,800		
Contingency	$16,000		
Total Project Cost	$216,800	Total Revenue	$216,800
EXPENDITURE BUDGET	$216,800	**REVENUE BUDGET**	$216,800

Project Scope & Description

The Naga-Waukee Park Ice Arena, constructed in 1996, serves approximately 150,000 users each year. The ice arena perimeter dasher boards are original to the building, and are exhibiting signs of deterioration and failure in approximately 75% of the sections. Several sections of the existing dasher boards have been patched or repaired to extend their useful life. Typical useful life of dasher boards in this type of setting is 20 to 25 years. The dasher boards also include safety glass panel to protect spectators and protective netting. The proposed project will be to remove the existing dasher board system, and install new galvanized steel dasher boards and polyethylene dasher facing panels. New tempered glass protective panels and safety netting will be installed. The old metal dasher boards and damaged glass and plexi-glass sections will be removed and the materials recycled. Since this is a one-year project, project funds for installation will not be spent until a standing committee of the County Board approves the request for proposal process for this project.

Location

Naga-Waukee Park Ice Arena is located at 2699 Golf Road in the City of Delafield.

Analysis of Need

Approximately 50, or 75%, of the total number of dasher board sections have been patched or repaired. The dasher boards are nearing the end of their useful life. Dasher boards that are not smooth, have holes or irregularities in the surface can create a safety issue for the players. Some of the sections of 1/2-inch thick tempered glass do not meet the new standards for glass thickness, which is now a 5/8-inch thickness requirement.

Alternatives

Delay replacement and continue to extend the life of the existing dasher board sections by patching and spot-repairing.

Ongoing Operating Costs

Staff perform repair work on the deteriorating panels on an on-going basis. A new system of dasher boards will reduce this repair time and cost. No additional operational costs are anticipated with the installation of a new dasher board system.

Previous Action

None

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Project Title:	2020 Orthophotography	**Project #:**	201609
Department:	Parks & Land Use	**Project Type:**	Orthophotography
Phase:	Program Project	**Sponsor:**	
Budget Action:	New	**Manager:**	Dale Shaver, PLU Director
Date:	August 13, 2015		

CAPITAL BUDGET SUMMARY		
Year	2020	Total
Project Phase	Project Work	Project
Expenditure Budget	$195,500	$195,500
Revenue Budget	$195,500	$195,500
Net County Cost	$0	$0

COST DOCUMENTATION		REVENUE	
Contract Costs	$195,500	Land Information System	
Contingency	$0	Fund Balance	$195,500
Total Project Cost	$195,500		
EXPENDITURE BUDGET	$195,500	**REVENUE BUDGET**	$195,500

Project Scope & Description

Aerial images were acquired for Waukesha County in 1963, 1970, 1975, 1980, 1985, and 1990 under programs administered by the Southeastern Wisconsin Regional Planning commission (SEWRPC). Higher precision Orthophotography (images that have been "ortho-rectified" to correct for distortion caused by the changes in terrain) were acquired in 1995, 2000, 2005, 2010 and 2015.

Orthophotography requires that a Digital Terrain Model (DTM) be created to allow the ortho-rectification process to be completed. The DTM can also be used to develop traditional contour line data files that display elevation as well as be input to computer models for developing construction design documents and computing such variables as slopes and erosion. The year 2015 capital project created a new DTM that supported the creation of a one-foot contour base file. That DTM was developed using a Light Detection and Ranging (LIDAR) data set captured as part of the capital project to increase the accuracy of the contour data.

This project will fund the acquisition of new Orthophotography in 2020 to continue the series and provide high quality imagery to support a variety of user needs including real estate analysis, development projects, property history analysis, research projects, emergency management, public infrastructure documentation and regulatory and planning activities in the County. In addition, a new LIDAR data set will be acquired. Beyond creating an updated elevation dataset, the new LIDAR dataset will allow data users to automatically detect areas of elevation change that occurred since the capture of the 2015 dataset.

Location

Parks and Land Use Department, 515 W. Moreland Boulevard, Waukesha, WI 53188

Analysis of Need

The orthophotography images, topographic maps and underlying DTM are used by the planning, parks, land conservation and transportation divisions for planning and development. Without current consistent information, inaccurate assumptions could be made resulting in costly changes in planned activities.

Alternatives

Do not create data.

Ongoing Operating Costs

None

Previous Action

- 2000 capital project ROD 9900.
- 2005 capital project 200508.
- 2006 capital project 200614.
- 2011/2015 capital project 201119

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Project Title:	Pavement Management Plan 2013-2017	Project #:	200824
Department:	Parks & Land Use	Project Type:	Repaving
Phase:	Program Project	Sponsor:	
Budget Action:	C - $ Update	Manager:	Dale Shaver, PLU Director
Date:	August 27, 2015		

CAPITAL BUDGET SUMMARY

Year	2013	2014	2015	2016	2017	Total
Program Project						Project
Expenditure Budget	$0	$500,000	$800,000	$500,000	$600,000	$2,400,000
Revenue Budget	$0	$0	$0	$0	$0	$0
Net County Cost	$0	$500,000	$800,000	$500,000	$600,000	$2,400,000

COST DOCUMENTATION		REVENUE	
2013	$0		
2014	$500,000		
2015	$800,000		
2016	$500,000		
2017	$600,000		
Total Project Cost	$2,400,000	Total Revenue	$0
EXPENDITURE BUDGET '16	$500,000	**REVENUE BUDGET**	$0

Project Scope & Description

In cooperation with the Public Works Department, retained consultant services to update the Pavement Management Plan, originally done for the Parks System in 1995. The Plan establishes a uniform procedure for pavement maintenance by establishing a Pavement Condition Index (PCI). The PCI is a rated scale of 1-100 based on the state of the asphalt. Pavement repairs are scheduled based on rating. A PCI rating of 86-100 is good and 71-85 satisfactory; pavements with these ratings need routine maintenance or repairs. A rating of 56-70 is fair and 41-55 poor, needing routine maintenance, repairs, major repairs or overall reconstruction. A rating of 26-40 is very poor needing major repairs or overall reconstruction. A rating of 11-25 is serious and 0-10 failed, needing overall reconstruction. The goal is to maintain an average pavement PCI rating of 70 ("satisfactory"). The Expo center is not included in the current scope for major project or PCI calculation pending the completion of the Expo master plan. Money may be allocated at the Expo Center for minor repairs as necessary.

In 2015 the pavement management plan increases from $500,000 to a budget of $800,000. The larger increase in 2015 is to address accelerated deterioration as a result of winter conditions in 2013-14. Many of the pavement segments of the government center are of a similar age where more significant repair or reconstruction, including drainage and stormwater management is required.

Location

The Waukesha County Department of Parks and Land Use is responsible for the pavement management of the Government Center Complex, Expo, Parks, Ice Arenas, Golf Courses, Boat Launches and various other Waukesha County Facilities. The Department maintains 21 miles of road, 40 miles of paved trails, and 421,000 square yards of parking area.

Analysis of Need

In 1995 the Waukesha County Department of Parks and Land Use (PLU) retained consulting services to provide a Pavement Management Plan to assist in cost-effectively managing the pavement assets for the 6 largest parks. At that time there were 6 park facilities with 243,000 square yards of paved surface. Currently PLU maintains 876,498 square yards of paved surface around the Government Center, remote County facilities and the major parks. This represents approximately 3.6 times more pavement. In 2007 the Department changed from the PASER rating to the PAVER system in an effort to coordinate pavement condition analysis and project bidding with the Department of Public Works to save program cost. The PAVER rating process included field surveys of pavement conditions, development of deterioration models, and preparation of a multi-year pavement management plan.

Approximately 80% of the budget will be used for major rehabilitation on sections selected with a PCI below 40. The remaining budget allocation is first utilized for preventative maintenance on sections with a PCI between 67 and 75, selected on best-first basis, concrete repairs and consulting. The goal of these practices is to maintain an average PCI of 70. The priority for major projects in 2016 include, but are not limited to, Minooka area 5, Landsburg Center and Muskego Campground. Anticipated projects may be adjusted due to project coordination efficiencies or accelerated deterioration.

Alternatives

Spot repair with asphalt base patching or sealing road surface has been performed to maintain some function of the roadway or parking area. This could be continued on an annual basis, but will not achieve the desired surface performance or overall PCI rating goal. Reconstruction will be required sooner and risk issues would be more likely to occur.

Ongoing Operating Costs

Maintenance of the existing road conditions requires frequent patching and chip and seal applications in order to provide usable conditions. Operating costs within the next five years will be minimal with the proposed pavement improvements.

Previous Action

Approved as a new program project in the 1997-2001 Capital Plan, continued in the 1998-2002 Plan and 1999-2003 Capital Plan. Approved with a change in scope to include additional pavement in the 2000-2004 plan. Approved as planned in the 2001-2005 plan, 2002-2006 plan, 2003-2007 plan, 2004-2008 plan, 2005-2009 plan, 2006-2010 plan, 2007-2011 plan, and the 2008-2012 plan. Cost update in the 2009-2013 plan. Cost update in the 2010-2014 and 2012-2016 plan. Approved as planned in the 2013-2017 and 2014-2018 plans. Approved with cost update in the 2015-2019 plan.

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Project Title:	Pavement Management Plan 2018-2022	Project #:	201406
Department:	Parks & Land Use	Project Type:	Repaving
Phase:	Program Project	Sponsor:	
Budget Action:	As Planned	Manager:	Dale Shaver, PLU Director
Date:	August 27, 2015		

CAPITAL BUDGET SUMMARY

Year	2018	2019	2020	2021	2022	Total
Program Project						Project
Expenditure Budget	$700,000	$700,000	$700,000	$700,000	$700,000	$3,500,000
Revenue Budget	$0	$0	$0	$0	$0	$0
Net County Cost	$700,000	$700,000	$700,000	$700,000	$700,000	$3,500,000

COST DOCUMENTATION		REVENUE	
2018	$700,000		
2019	$700,000		
2020	$700,000		
2021	$700,000		
2022	$700,000		
Total Project Cost	$3,500,000	Total Revenue	$0
		REVENUE BUDGET	$0

Project Scope & Description

In cooperation with the Public Works Department, retained consultant services to update the Pavement Management Plan, originally done for the Parks System in 1995. The Plan establishes a uniform procedure for pavement maintenance by establishing a Pavement Condition Index (PCI). The PCI is a rated scale of 1-100 based on the state of the asphalt. Pavement repairs are scheduled based on rating. A PCI rating of 86-100 is good and 71-85 satisfactory; pavements with these ratings need routine maintenance or repairs. A rating of 56-70 is fair and 41-55 poor, needing routine maintenance, repairs, major repairs or overall reconstruction. A rating of 26-40 is very poor needing major repairs or overall reconstruction. A rating of 11-25 is serious and 0-10 failed, needing overall reconstruction. The goal is to maintain an average pavement PCI rating of 70 ("satisfactory"). The increase to $700,000 for 2018-2022 is needed to ensure an average PCI of 70 is maintained. The Expo center is not included in the current scope for major project or PCI calculation pending the completion of the Expo master plan. Money may be allocated at the Expo Center for minor repairs as necessary.

Location

The Waukesha County Department of Parks and Land Use is responsible for the pavement management of the Government Center Complex, Expo, Parks, Ice Arenas, Golf Courses, Boat Launches and various other Waukesha County Facilities. The Department maintains 21 miles of road, 40 miles of paved trails, and 421,000 square yards of parking area.

Analysis of Need

In 1995 the Waukesha County Department of Parks and Land Use (PLU) retained consulting services to provide a Pavement Management Plan to assist in cost-effectively managing the pavement assets for the 6 largest parks. At that time there were 6 park facilities with 243,000 square yards of paved surface. Currently PLU maintains 876,498 square yards of paved surface around the Government Center, remote County facilities and the major parks. This represents approximately 3.6 times more pavement. In 2007 the Department changed from the PASER rating, to the PAVER system in an effort to coordinate pavement condition analysis and project bidding with the Department of Public Works to save program cost. The PAVER rating process included field surveys of pavement conditions, development of deterioration models, and preparation of a multi-year pavement management plan.

Approximately 80% of the budget will be used for major rehabilitation on sections selected with a PCI below 40. The remaining budget allocation is first utilized for preventative maintenance on sections with a PCI between 67 and 75, selected on best-first basis, concrete replacement and consulting. The goal of these practices is to maintain an average PCI of 70. Anticipated projects may be adjusted due to project coordination efficiencies or accelerated deterioration.

Alternatives

Spot repair with asphalt base patching or sealing road surface has been performed to maintain some function of the roadway or parking area. This could be continued on an annual basis, but will not achieve the desired surface performance or overall PCI rating goal. Reconstruction will be required sooner and risk issues would be more likely to occur.

Ongoing Operating Costs

Maintenance of the existing road conditions requires frequent patching and seal applications in order to provide usable conditions and extend pavement life. Operating costs within the next 5 years will be minimal with the proposed pavement improvements.

Previous Action

Pavement management prior to 2018 covered in project 200824.
Approved as a new project in 2014-2018 plan.
Approved with cost update in the 2015-2019 capital plan.

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DELETE PROJECT

Project #	201410	**Project Title**:	Security Electronics Replacement--Jail
Department:	Sheriff's Department	**Sponsor:**	Sheriff's Department
Phase:	Formation	**Manager:**	
Budget Action:	Delete	**Date:**	August 24, 2015

CAPITAL BUDGET SUMMARY

Year Project Phase	2017 Analysis	2018 Installation	Total Project
Expenditure Budget	$25,000	$151,000	$176,000
Revenue Budget	$25,000	$151,000	$176,000
Net County Cost	$0	$0	$0

COST DOCUMENTATION		**REVENUE**	
Analysis	$25,000		
Matrix Replacement	$116,000	Jail Assessment	
Network Cabling	$35,000	Fund Balance	$176,000
Total project cost	$176,000		
EXPENDITURE BUDGET	**$176,000**	**Revenue Budget**	**$176,000**

Project Scope & Description

The Waukesha County Jail has a security electronics system that includes:

- approximately 320 analog cameras which send images through coaxial cable to master control and other staff monitoring stations;
- 20 DVRs (digital video recorders) which record and store camera images for approximately 30 days so staff can access video following an event;
- 175 intercoms; and
- 1 matrix which connects all off these devices so they can be utilized by staff to monitor the jail.

The current security electronics system was installed in 2005 when the jail was constructed so the technology that is utilized by corrections staff 24 hours a day is approximately nine years old. One of the major components of the security electronics system is a matrix, which is used by staff to switch the camera views from one camera location to another camera location. The camera switching ability is extremely important as individuals are allowed to move throughout the jail or into and out of the jail by master control's view and their release of doors, elevators, etc. Given the vital nature of this equipment to the jail operation, the manufacturer's discontinuation of the product, and its constant use, the matrix equipment will need to be replaced in the near future so the Sheriff's Department is submitting a capital request for the replacement of this equipment.

As noted above, the camera system installed in the jail is analog. Analog systems are becoming more and more difficult to support because digital systems are becoming the security electronics industry standard. Recognizing a total replacement of the current analog system with a digital system is cost prohibitive, the Sheriff's Department is taking steps towards upgrading the current system with equipment that can function with analog and digital cameras so the Department can slowly transition into the newer technology. For example, in 2013 the Sheriff's Department utilized approximately $100,000 in jail assessment money to replace the DVR system as the equipment was requiring significant repairs due to its age and the constant use. The Sheriff's Department worked with the security electronics vendor to purchase DVR equipment that can work with both analog and digital cameras. The DVR equipment can also function as an encoder to convert analog signals to digital signals once that becomes necessary.

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DELETE PROJECT

Project #	201410	**Project Title**:	Security Electronics Replacement--Jail
Department:	Sheriff's Department	**Sponsor:**	Sheriff's Department
Phase:	Formation	**Manager:**	
Budget Action:	Delete	**Date:**	August 24, 2015

The current analog system has one matrix connected with coaxial cable to all of the cameras and monitors. The proposed replacement matrix will consist of 14 virtual matrix displays connected with either CAT 5 or CAT 6 cable to network switches, which is essentially a connection point for data from DVR equipment and cameras. This option allows the Department to continue to use the existing camera equipment, the DVR equipment, and does not require the department to re-wire each individual camera with the CAT 5 or CAT 6 cable. It does, however, provide the Department with the ability to utilize digital cameras if analog cameras are no longer available to be purchased.

Location
Waukesha County Jail

Analysis of Need

The security electronics system is vital to the daily operations of the jail. Without the security electronics system, additional staff would be required to monitor movement into, out of and throughout the jail in order to ensure that only authorized individuals are in the facility. This would result in significant additional personnel costs to provide necessary levels of operational security.

Alternatives

Replacement is critical to operations: The Waukesha County Jail currently has approximately 320 cameras that are used by staff to monitor doors, elevators, halls, pods, kitchen, inmate medical area, etc. The camera system is so vital to the daily operation of the jail that when portions of the system are down, additional staff are often brought in to replace the monitoring ability the cameras provide. If the matrix fails and staff cannot monitor the jail via the camera system, additional staff will be needed until it can be repaired. Given the age of the current equipment, the security electronics vendor may not be able to get replacement parts if it fails.

Replace the entire camera system with a digital system instead of the hybrid analog/digital system. Installing a digital camera system would be substantially more expensive. The jail security system is wired with coaxial cable. For digital cameras to work, the jail security system would need to be re-wired with CAT 5 or CAT 6 cable or technology would need to progress to a point where the rewiring work would not be necessary (ex. wireless cameras). Digital camera systems also have significant on-going costs such as server support costs, software costs, and the equipment costs are more expensive than current analog equipment. The Sheriff's Department recognizes there may be a time when the current analog system will not be supported so the Department might not have an alternative to the digital technology in the future.

Ongoing Operating Costs

There are no additional on going costs associated with the replacement of the matrix with an analog/digital hybrid until the Department acquires digital cameras. At that point, the department will need to pay a one-time software licensing costs for each camera that is installed in the security electronics system.

Previous Action

Approved as a new project in the 2014-2018 capital plan.

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Project Title:	Security System Recording & Display Equipment Replacement & Video Visitation Study	**Project #:**	201615
Department:	Sheriff's Department	**Project Type:**	Equipment Replacement
Phase:	Formation	**Sponsor:**	Sheriff's Department
Budget Action:	New	**Manager:**	Mike Biagioli, IT Manager
Date:	August 28, 2015		

Year	2016	2017	2018	2019	2020	Total
Project Phase	Design/Analysis			Implementation		Project
Expenditure Budget	$55,000	$0	$0	$246,000	$0	$301,000
Revenue Budget	$55,000	$0	$0	$246,000	$0	$301,000
Net County Cost	$0	$0	$0	$0	$0	$0

COST DOCUMENTATION		**REVENUE**	
Software			
Hardware	$182,500	Jail Assessment Fund Balance Reserves	$301,000
Installation	$44,000		
Training	$0		
Licenses	$0		
Consulting/Implementation	$55,000		
Contingency	$19,500		
Total Project Cost	$301,000	Total Revenue	$301,000
EXPENDITURE BUDGET	$301,000	**REVENUE BUDGET**	$301,000

Project Scope & Description

The Waukesha County Jail has a security electronics system that includes:

- Approximately 320 analog cameras which, send camera images through coaxial cable to master control and other staff monitoring stations.
- 20 DVRs (digital video recorders) which, record and store camera images for approximately 30 days so that staff can access video following an event.
- 1 virtual matrix which connects all of these devices so that they can be utilized by staff to monitor the jail.

The security electronics system was installed in 2005 when the jail was constructed. Portions of the system have been replaced as they have failed including:

- the DVR equipment in 2013,
- the analog matrix switcher was replaced in 2015 to convert the analog matrix to a virtual matrix, and
- analog camera replacements which are funded through the jail equipment replacement plan.

The system is utilized 24 hours a day and is a vital component of the jail's safety and security monitoring ability. It is clear the system has a defined life span so the Sheriff's Department is requesting that portions of the system be replaced prior to failure. Per the current security electronics vendor, a seven year life (2013-2019) on the DVR equipment is appropriate as it is utilized 24-hours-a-day.

With this project, the Sheriff's Department is requesting to replace the current DVR system with a server based recording system. The current DVR system is utilized to record approximately 320 cameras and store those recordings for approximately 30 days. When staff require recordings of incidents or events, the system allows staff to review the recording to identify the desired event and save that event recording electronically or on a disk for future review. The system records over prior recordings so if a request is made for an incident that is older than the 30 day period, the recording is likely not available.

The server based system provides fail safe recording capabilities so if one portion of the system goes down, the live view and recordings of all the cameras are still maintained. The server based recording system will be supported longer than the current DVR system because it is going to support the most recent versions of Microsoft and will continue to allow the jail to continue to transition to a fully digital security electronics system. It should be noted that as long as the current cameras are analog cameras, they system will continue to be a digital/analog hybrid system.

This project also includes $30,000 to complete a study to review available alternatives for the replacement of the current video visitation system. The current video visitation equipment is ten years old. The vendor that maintains the equipment indicates that, due to the age of the equipment, that it is nearing its useful life and that the Sheriff's Department should begin the process to plan its replacement. Since there are number of different replacement options that the Department could consider, funds to complete a study to identify replacement options, with the best return on investment, are being requested.

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Project Title:	Security System Recording & Display Equipment Replacement & Video Visitation Study	**Project #:**	201615
Department:	Sheriff's Department	**Project Type:**	Equipment Replacement
Phase:	Formation	**Sponsor:**	Sheriff's Department
Budget Action:	New	**Manager:**	Mike Biagioli, IT Manager
Date:	August 28, 2015		

Location
Waukesha County Jail

Analysis of Need
The security electronics system is vital to the daily operations of the jail. Without the security electronics system, additional staff would be required to monitor movement into, out of, and throughout the jail in order to ensure that only authorized individuals are in the facility. This would result in significant additional personnel costs to provide necessary levels of operational and facility security.

Alternatives
The security electronics system is critical to the operation of the jail. As previously noted there are over 320 cameras in the jail to monitor doors, elevators, halls, pods, medical services, kitchen, laundry, program areas, etc.

Utilize overtime to monitor the building. The camera system is so vital to the daily operation of the jail that when portions of the system are down, additional staff are brought in on overtime to provide the monitoring ability that the cameras provide until the system is operational. Monitoring using personnel is extremely cost prohibitive. A correctional officer currently costs about $45 per hour of overtime on average (including WRS and Social Security) so the money budgeted for this project would only purchase about 6,000 hours of overtime, which would not even be enough funding for one person to monitor one post for an entire year so it is the option of last resort.

Replace the current DVR system with another DVR system. When the jail security electronics system was installed in 2005, digital security electronic systems were not the norm in the corrections field. Now, digital systems are becoming the industry standard. Although the current DVR equipment can accept both digital and analog camera equipment, when these replacement projects become necessary, it makes financial sense to upgrade the equipment so that it will be supported for the rest of the life of the equipment. The concern is that if the Department were to just replace the current DVR equipment with the same DVR equipment in 2019, the equipment might not be supported through the full useful life of the equipment or the Department might not be able to purchase replacement parts if the DVR equipment breaks.

Ongoing Operating Costs
The studies conducted in 2016 will help determine on-going costs associated with the security system recording equipment replacement as well as the replacement of the video visitation system. It should be noted that if the Department were to acquire digital cameras in the jail facility, the Department would need to pay a one-time software licensing cost for each camera that is installed in the security electronics system.

Previous Action
None

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Project Title:	County Boardroom Technology Upgrade Project	**Project #:**	201619
Department:	DOA - Information Technology	**Project Type:**	Information Technology
Phase:	One-Year Project	**Sponsor:**	Paul Decker, County Board Chair & Kathleen Novack, County Clerk
Budget Action:	New	**Manager:**	Mike Biagioli, Information Technology Manager
Date:	August 27, 2015		

PROJECT BUDGET SUMMARY

Year Project Phase	2016 Design & Implementation	Project Total
Expenditure Budget	$115,000	$115,000
Revenue Budget	$0	$0
Net County Cost	**$115,000**	**$115,000**

Cost Documentation		Revenue	
Hardware	$60,000		
Software Licenses	$40,000	General	$115,000
Contingency	$15,000	Fund Balance	
EXPENDITURE BUDGET	**$115,000**		

Project Scope & Description

With this capital project, the Waukesha County boardroom technology environment will be upgraded to better support supervisor vote tracking on agenda items, audio transmission of floor debates, and visual presentation of vote tallies as well as visual presentation of supporting documents and public presentations.

The intent of the project is to replace the current vote tally board with a wireless voting system that will digitally present the supervisor vote selections, and digitally recording those vote selections. The current dot matrix printer, used to generate the physical tabulation of vote results, needs to be replaced. The printer, which is approximately 25-years-old, is rapidly becoming unserviceable and is a major priority for replacement. The current wired microphone environment will be replaced with an upgraded digital microphone system that will allow for the digital recording of the audio portion of the board meetings, and allow for a digital archive of the audio, making the audio available to the public for an appropriate period of time via the Internet. Live Internet audio transmission as well as Internet retrieval of archived meeting audio will also be accommodated by the system.

The wireless environment within the boardroom will be evaluated and upgraded to accommodate all required wireless access. An analysis of the best method for visual presentation will be conducted and the optimum solution will be installed (e.g., high-definition projections onto screens or flat surfaces).

All equipment purchased for this project will be modular in nature, making it portable in the event that the boardroom is relocated. The current vote tally board will be removed and replaced with a flat wall painted white for projection. The insert area on the south side of the chamber will be removed and the space filled with a matching white wall. Two ceiling-mounted projectors will be installed for projection of images to these two areas. All current microphone assemblies will be removed and the top panel will be replaced with a curved laminate strip. The new assemblies for the wireless microphones will be installed. The current cabinet holding the dot matrix printer will be removed and the laser printer will be installed where designated by the County Clerk. Since this is a one-year project, project funds for implementation will not be spent until an updated project plan is reviewed and approved by the County Board Executive Committee.

Location

County Boardroom

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Project Title:	County Boardroom Technology Upgrade Project	**Project #:**	201619
Department:	DOA - Information Technology	**Project Type:**	Information Technology
Phase:	One-Year Project	**Sponsor:**	Paul Decker, County Board Chair & Kathleen Novack, County Clerk
Budget Action:	New	**Manager:**	Mike Biagioli, Information Technology Manager
Date:	August 27, 2015		

Analysis of Need

Although adequate for actual board meetings, the current technology does not lend itself well to the requirements of the digital age of the Internet. The current dot matrix printer, has reached the end of its useful life and replacement parts are becoming increasingly unavailable. The current master control panel, for chair recognition of speakers from the floor is difficult to maintain for the same reason. The current audio microphone system produces a grainy sound track, does not lend itself to portability, and it is a distraction to anyone listening to the meetings over the Internet.

Alternatives

The current layout and technology used for the boardroom chambers could remain in place until the elements become unserviceable.

Ongoing Operating Costs

When the upgrade is completed, there will be operational budget impacts related to the server and software license maintenance, estimated at an annual cost of $4,000 to $6,000.

Previous Action

None

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Project Title:	Payroll/Human Resources Information System Study	**Project #:**	201617
Department:	DOA - Information Technology	**Project Type:**	Information Technology
Phase:	Preliminary Design	**Sponsor:**	HR Mgr, J. Richter & Accounting Services Mgr, L. Dahl
Budget Action:	New	**Manager:**	
Date:	August 13, 2015		

CAPITAL BUDGET SUMMARY						
Year	2016	2017	2018	2019	2020	
Project Phase	Analysis Design	Implementation	Implementation	Implementation	Implementation	Total Project
Expenditure Budget	$75,000					$75,000
Revenue Budget	$0					$0
Net County Cost	$75,000	$0	$0	$0	$0	$75,000

COST DOCUMENTATION		REVENUE
Software		
Hardware		
Interfaces		
Training		
Licenses		
Consulting/Implementation	$75,000	
Contingency		
Total Project Cost	$75,000	
EXPENDITURE BUDGET	$75,000	

Project Scope & Description

This project funds a consultant study that will facilitate planning for and acquiring an upgraded Payroll System with improved payroll functionality, and an expanded Human Resources Information System with new capabilities for benefits administration (including interfaces with third-party benefit providers), HR Administration, Affordable Care Act management, new hire reporting to meet Federal requirements, recruiting, employee self-service, document management, performance management and dashboards.

The study will include a review of existing and required new functionality, development of a business and technical system requirements document, a market review of product solutions of potential candidate systems, assistance with the development of a project plan and budget, assistance with the development of a Request for Proposals and assistance with evaluating proposals received.

Location

All County departments.

Analysis of Need

The current version of the payroll system has been in use since 2004, and will need to be replaced at some point in the next few years. The primary reason for undertaking this project is to acquire a broad range of current and anticipated Human Resource information system functionality in an integrated package that is now done through a variety of manual and automated processes. This project will also transition payroll and HR information systems from self-hosted applications to a cloud-based solution, freeing up internal IT resources.

Alternatives

Continue with the current payroll system until replacement is required. Pursue the needed Human Resources functionality in a number of separate projects.

Ongoing Operating Costs

Ongoing cost impacts are expected to include annual software licensing and maintenance charges, partially offset by savings from operating efficiencies.

Previous Action

None

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