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Mission

To provide comprehensive planning and analysis of the long-range capital needs of Waukesha County. This process contributes to the fiscal review and prioritization of such capital projects as facility development (new construction and improvements), infrastructure maintenance, technology, major equipment and systems installations.

Policy

A capital project is defined as an active or proposed non-recurrent expenditure in one or more specified plan years of an amount usually in excess of $100,000 for a permanent fixed asset (building, land, improvement, or equipment or technology installation) which has a useful life or extends the useful life of an existing fixed asset, usually in excess of seven years.

This budget maintains the emphasis on planning and funding for infrastructure and capital improvements projects, as they are needed rather than reacting to crisis situations. Most new projects are to be requested in the last year of the five-year plan, unless circumstances require a more immediate time frame. County Code Section 7-16 (c) requires design and implementation for larger projects to be, at a minimum, in separate calendar years. Justification of projects includes costs vs. benefits, return on investment analysis and project need.

A long range goal to managing overall debt service is to use annual cash balances from tax levy and governmental fund balance to fund capital projects at a minimum of 20 percent of net capital expenditures. This "down payment," reduces the need to borrow additional funds and manages debt service growth in relationship to the operating budget to accommodate the policy for debt service of less than 10% of operating budget.

In this section, under "2017 Capital Projects and Operational Impact," is a summary of operational impacts resulting from implementation of the capital improvement program. Also, in this section are individual capital project sheets, which detail operational impacts. Impacts associated with new facility operations are included in planning for future funding needs for County operations (See individual project pages), but are only included in operating department budgets in the year they will be incurred; however, the County's five-year operating budget projection considers these impacts in the appropriate years.

Financial Summary

	2015 Budget	2016 Budget	2017 Budget	Change from 2016
Expenditures	$16,141,400	$20,782,800	$16,863,400	($3,919,400)
Revenues-Project Specific	$767,500	$3,353,000	$1,406,400	($1,946,600)
Enterprise Fund Balance (a)	$745,000	$637,800	$110,000	($527,800)
Internal Service Fund Balance	$360,000	$0	$0	$0
Restricted Special Rev Fund Bal (b)	$195,500	$0	$465,000	$465,000
Net Expenditures	$14,073,400	$16,792,000	$14,882,000	($1,910,000)
Other Financing Sources:				
Investment Earnings	$300,000	$275,000	$300,000	$25,000
Debt Issue Proceeds (c)	$10,000,000	$11,500,000	$10,000,000	($1,500,000)
Cash Balances from				
Governmental Fund Balance (c)(d)	$1,223,400	$2,570,000	$2,085,000	($485,000)
Revenues-General	$700,000	$700,000	$750,000	$50,000
Tax Levy	**$1,850,000**	**$1,747,000**	**$1,747,000**	**$0**
Total Cash Balances	$3,773,400	$4,517,000	$4,582,000	$65,000
Est. Use of Cash Balances as % Of Net Expenditures	27%	27%	31%	

(a) 2017 budget use of enterprise fund balance consists of $110,000 of Airport Fund Balance for a related project.

(b) 2017 budget use of restricted special revenue fund balance consists of $465,000 of Tarmann Parkland Acquisition Fund balance budgeted for Parks and Land Use capital projects (Wanaki Golf Course Bridge replacement project #201309), in accordance with enrolled ordinance 170-87.

(c) The 2016 budget was modified to appropriate $500,000 of Tarmann Parkland Acquisition Fund Balance for Parks and Land Use capital projects, thereby reducing the need for debt issue proceeds from $12,000,000 to $11,500,000 (enrolled ordinance 170-87).

(d) 2017 budget use of governmental fund balance of $2,085,000 includes General Fund Balance of $1,160,000, Capital Projects Fund Balance of $570,000 and Tarmann Park Land Acquisition Fund Balance of $355,000 for Parks and Land Use capital projects. The fund balance use will permit a reduction of planned borrowing from $11 million to $10 million.

	2015 Budget	2016 Budget (a)	2017 Budget	16-17 Budget Change
EXPENDITURES				
Justice and Public Safety	$265,000	$2,634,000	$4,183,000	$1,549,000
Health and Human Services	$0	$0	$0	$0
Parks, Env, Edu & Land Use	$1,589,900	$1,531,800	$2,372,400	$840,600
Public Works	$12,811,500	$16,297,000	$9,758,000	($6,539,000)
County Wide Technology Projects	$1,360,000	$190,000	$400,000	$210,000
Est. Financing Costs	$115,000	$130,000	$150,000	$20,000
Total Gross Capital Expenditures	$16,141,400	$20,782,800	$16,863,400	($3,919,400)
REVENUES-Project Specific				
Municipal Cost Share - Communication Center Expansion	$0	$0	$708,400	$708,400
Federal Transportation Alternatives Program (TAP) Grant	$427,500	$0	$0	$0
County Highway Improvement Program (CHIP)	$330,000	$300,000	$300,000	$0
CHIP-Discretionary	$0	$844,000	$300,000	($544,000)
Donation Revenue	$10,000	$0	$0	$0
Highway Local Reimbursement	$0	$1,959,000	$0	($1,959,000)
Other State/Federal Highway Funding	$0	$200,000	$0	($200,000)
Park Trail Local Reimbursement	$0	$50,000		($50,000)
State Dept of Natural Resources Stewardship Grant			$98,000	$98,000
Subtotal Revenues-Project Specific	$767,500	$3,353,000	$1,406,400	($1,946,600)
REVENUES-General				
State Shared Revenue/Utility Payment	$100,000	$100,000	$150,000	$50,000
State Computer Equipment Exemption	$600,000	$600,000	$600,000	$0
Subtotal Revenues-General	$700,000	$700,000	$750,000	$50,000
FUND BALANCE APPROPRIATIONS:				
Airport Fund	$670,000	$0	$110,000	$110,000
Radio Services Fund	$0	$0	$0	$0
Material Recycling Fund Balance	$0	$356,000	$0	($356,000)
Golf Course Fund	$75,000	$65,000	$0	($65,000)
Ice Arena Fund	$0	$216,800	$0	($216,800)
Subtotal: Enterprise Funds	$745,000	$637,800	$110,000	($527,800)
End User Technology Fund Balance	$360,000	$0	$0	$0
Telecommunications Fund Balance	$0	$0	$0	$0
Health Insurance Fund Balance	$0	$0	$0	$0
Subtotal: Internal Service Funds	$360,000	$0	$0	$0
Land Information Systems Fund Balance	$195,000	$0	$0	$0
Tarmann Parkland Acquisition Fund Balance	$0	$0	$465,000	$465,000
Special Rev Fund Bal: Land Info. System Fund Balance	$195,000	$0	$465,000	$465,000
General Fund	$0	$230,000	$1,160,000	$930,000
Gen Fund - Assigned: Jail Assessment Revenue Reserves	$220,000	$55,000	$0	($55,000)
Capital Project Funds Assigned	$1,003,400	$1,785,000	$570,000	($1,215,000)
Tarmann Parkland Acquisition Fund Balance (a)	$0	$500,000	$355,000	($145,000)
Subtotal: Cash Balances from Governmental Fund Balance	$1,223,400	$2,570,000	$2,085,000	($485,000)
Total Fund Balance Uses For Capital Projects	$2,523,400	$3,207,800	$2,660,000	($547,800)
Investment Earnings	$300,000	$275,000	$300,000	$25,000
Debt Proceeds (a)	$10,000,000	$11,500,000	$10,000,000	($1,500,000)
Tax Levy	$1,850,000	$1,747,000	$1,747,000	$0

(a) The 2016 budget was modified to appropriate $500,000 for Parks and Land Use capital projects, thereby reducing the need for debt issue proceeds from $12,000,000 to $11,500,000 (enrolled ordinance 170-87).

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Pg #	PROJECT TITLE	Project Number	2017 Project Budget	Fund Balance & Revenue Applied		Net $'s Needed After Revenues Applied
	PUBLIC WORKS - AIRPORT					
478	AIRPORT RAMP EXPANSION	201621	$110,000	$110,000	(a)	$0
	EMERGENCY PREPAREDNESS - BUILDINGS					
480	COMMUNICATIONS CENTER EXPANSION	200808	$3,483,000	$708,400	(b)	$2,774,600
	PUBLIC WORKS - BUILDINGS					
481	MHC ROOF REPLACEMENT	201412	$15,000			$15,000
482	DEMOLISH FORMER HHS BUILDING	201503	$320,000		(c)	$320,000
483	HIGHWAY SUBSTATION HVAC UPGRADES	201109	$200,000			$200,000
484	HWY OPS-FLEET HVAC UPGRADES	201206	$847,000			$847,000
485	COURTHOUSE PROJ-SECURE COURTROOM CONSTRUCT	201418	$700,000			$700,000
	PUBLIC WORKS - HIGHWAYS					
487	CTH Q OCON RIVER BRIDGE	201201	$22,000			$22,000
488	CTH YY, UNDERWOOD CREEK STRUCTURE	201302	$170,000			$170,000
489	CTH Y, PILAK CREEK TRIBUTARY BRIDGE REPLACEMENT	201304	$90,000			$90,000
490	CTH O & I INTERSECTION RECONSTRUCTION	201603	$45,000			$45,000
491	WEST WAUKESHA BYPASS	200917	$660,000			$660,000
493	CTH I, CTH ES TO CTH O REHAB	201005	$381,000			$381,000
494	CTH M, CALHOUN RD TO EAST COUNTY LINE	201008	$2,132,000			$2,132,000
495	CTH D, CALHOUN ROAD TO 124TH ST REHAB	201706	$66,000			$66,000
496	BRIDGE AID PROGRAM THRU 2017	9131	$100,000			$100,000
497	CULVERT REPLACEMENT PROGRAM THRU 2017	9817	$100,000			$100,000
498	REPAVING PROGRAM 2013-2017	200911	$3,250,000	$600,000	(d)	$2,650,000
499	SIGNAL/SAFETY IMPROVEMENTS	200427	$1,250,000			$1,250,000

(a) Airport Fund Balance.
(b) Cost share fee for municipalities joining Countywide dispatch.
(c) Capital Project Fund Balance is budgeted to cover this project (see footnote (j) on next page).
(d) Includes County Highway Improvement Program (CHIP) funding of $300,000 and discretionary (CHIP - D) funding of $300,000.

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Pg #	PROJECT TITLE	Project Number	2017 Project Budget	Fund Balance & Revenue Applied		Net $'s Needed After Revenues Applied
	PARKS AND LAND USE					
501	ENERGY EFFICIENCY IMPROVEMENTS	201208	$260,000		(e)	$260,000
502	WANAKI GOLF COURSE BRIDGE REPLACEMENT	201309	$465,000	$465,000	(f)	$0
503	MINOOKA RESTROOM SHELTER	201602	$674,000	$40,000	(f)	$634,000
504	MEN. PARK BEACH HOUSE EXPAN. & RENOVATION	201605	$93,000			$93,000
505	LAKE COUNTRY TRAIL STH 67 UNDERPASS	201607	$98,000	$98,000	(g)	$0
506	UWW INFRASTRUCTURE SITE IMPROVEMENTS	201703	$182,400			$182,400
507	PAVEMENT MANAGEMENT 2013 - 2017	200824	$600,000	$315,000	(f)	$285,000
	COUNTYWIDE TECHNOLOGY PROJECTS					
508	PAYROLL/HUMAN RESOURCES INFORMATION SYSTEM	201617	$400,000		(h)	$400,000
	EST. FINANCING (Includes Arb Rebate/Discount)	999999	$150,000	$0		$150,000
	TOTAL EXPENDITURES/Fund Balance Applied/Net $ Needed		$16,863,400	$2,336,400		$14,527,000

ADDITIONAL REVENUES & FUND BALANCE-GENERALLY APPLIED			
STATE COMPUTER EQUIPMENT EXEMPTION	$600,000		
STATE SHARED REVENUE/UTILITY PAYMENT	$150,000		
GENERAL FUND BALANCE	$1,160,000	(i)	
CAPITAL PROJECT FUND BALANCE	$570,000	(j)	
DEBT ISSUE PROCEEDS	$10,000,000		
INVESTMENT INCOME EARNED ON DEBT ISSUE	$300,000		
TOTAL FROM OTHER FUNDING SOURCES			$12,780,000
TAX LEVY			$1,747,000

(e) Project is funded with $260,000 of General Fund Balance (see footnote (i)).
(f) Tarmann Parkland Acquisition Fund Balance.
(g) State Department of Natural Resources Stewardship Funding.
(h) Project is funded with $400,000 of General Fund Balance (see footnote (i)).
(i) General Fund Balance includes $660,000 budgeted for specific capital projects (see footnotes (e) and (h)).
(j) Capital Project Fund Balance includes $320,000 is budgeted for the demolition of the former Health and Human Services Building (see footnote (c) on previous page).

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GENERAL SUMMARY
Capital project expenditures in 2017 decrease $3,919,400 from the 2016 Adopted Budget to about $16.9 million. Changes are identified by functional areas below.

Justice and Public Safety
Projects in this functional area total about $4.2 million, which is an increase of about $1.5 million from the prior year budget. The 2017 Budget includes $3.5 million for expansion of the Waukesha County Communications Center (WCC), which will allow new municipal partners to join County dispatch and provide needed space to manage large-scale emergency events. The budget also includes $700,000 for design for the first phase of a two-phase project to modernize and expand the courthouse. This first phase entails the construction of eight new secure courtrooms to be located adjacent to jail facilities and will feature improved security, prisoner transport and public access. Construction is planned for 2018-2022.

Parks, Environment, Education and Land Use
Projects in this functional area total about $2.4 million, an increase of about $840,000 from the 2016 budget. Maintenance of existing facilities includes $600,000 for the Parks pavement management plan; $465,000 for replacement of the bridges at Wanaki Golf Course, which will improve safety and golf course playability, while reducing ongoing structure maintenance; and $260,000 for energy-saving lighting upgrades at County park facilities.

Other projects budgeted in 2017 includes $674,000 for the construction of a new restroom and shelter at Minooka Park and $98,000 to continue the design phase for the creation of an underpass for the Lake County Trail as it crosses State Highway 67 in Oconomowoc (construction planned in 2019). A new multi-year project begins in 2017 about $182,000 to replace and repair sidewalks, exterior stairways and parking lots at the University of Wisconsin – Waukesha Campus.

Public Works
Project expenditures in the Public Works functional area total $9.8 million, a decrease of $6.5 million from the 2016 budget. Projects include buildings, highways and the airport as follows:

Buildings
Building infrastructure improvements total about $1.4 million. The 2017 budget includes $1,047,000 to upgrade HVAC systems at the highway substations and Highway Operations/Fleet building. Also, $320,000 is budgeted to complete a project demolishing the former health and human services building. The design phase for the roof replacement at the Mental Health Center is budgeted at $15,000 in 2017.

Highways
The 2017 capital budget for roadways continues priorities established in four categories and includes projects in all categories to provide a balanced plan. Projects and funding priorities are identified below.

Repaving
A funding level of $3.25 million is budgeted for the annual County Trunk Highway (CTH) repaving program with a goal of covering approximately 20 lane miles of road. In addition, $381,000 is budgeted to rehabilitate CTH I (Beloit Road), from CTH ES (National Avenue) to CTH O (Moorland Road), in the City of New Berlin. The design phase for rehabilitation of CTH D (Cleveland Avenue), from Calhoun Road to East County Line (124th Street) is budgeted at $66,000 in 2017.

Bridges/Culverts
The existing culvert replacement program continues with an appropriation of $100,000. Bridge rehabilitation and reconstruction projects include preliminary design work of $170,000 for the CTH YY Underwood Creek bridge structure and $90,000 for the CTH Y Pilak Creek Tributary Bridge. Land acquisition related to the CTH Q Oconomowoc River Bridge replacement is budgeted at $22,000 in 2017. 2017 budget includes $100,000 for the bridge aid program, which covers half the cost of municipal bridge reconstruction and repair.

Signal & Safety Improvements
Project costs of $1,250,000 million are budgeted in 2017 to address intersection improvement including traffic signals and turn lanes at the top-rated locations over the next two years (2017-18). Ratings are based on safety, traffic congestion and roadway safety audits to identify the use of lower-cost remediation strategies. Current and future construction costs are expected to be mostly covered with federal Highway Safety Improvement Program (HSIP) funding, totaling about $4.0 million (not included in County budget). Design for a separate intersection project, CTH O (Moorland Road) and CTH I (Beloit Road), is budgeted in 2017 at $45,000.

Priority Corridors
The 2017 budget includes $2.1 million for land acquisition for the widening of CTH M (North Avenue) from two to four lanes, between Calhoun Road and East County Line, along the City of Brookfield and Village of Elm Grove. Construction is planned for 2020. Construction of Waukesha County's portion of the Waukesha West Bypass (USH 18 to Northview Road) is planned for 2017 with additional funding in the budget of $660,000. This is a collaborative project with the City of Waukesha and the Wisconsin Department of Transportation to relieve congestion on nearby roads that has resulted from the continued growth and development in the area. Construction of the City's (Northview Road to I-94) and State's (STH 59 to USH 18) portions are anticipated to begin in 2017 and 2018.

Airport
The 2017 budget in includes $110,000 for the second year of a three-year project expand the south and west terminal ramp space. The project is expected to improve capacity and safety at the airport, while generating additional revenues through new land lease agreements and increasing fuel sales.

County Wide Technology Investments
Replacement of the County's human resources and payroll information systems begins in 2017 with $400,000. The existing system is nearing the end of its useful life and the vendor is no longer providing enhancements for it. The new system is expected to improve processes, provide greater functionality integrate existing systems and assist with mandated reporting needs (e.g., Affordable Care Act.)

Project Revenue Funding
Revenues and various fund balance appropriations for project funding decrease by about $2.5 million to $5 million for the 2017 Budget.

Project specific revenues increase by $1,946,600 to $1,406,400, primarily due to about $2 million in municipal contributions for highway projects budgeted in 2016 that are not repeated in 2017. Budgeted revenues include $708,400 in contributions for the Waukesha County Communication Center expansion project from municipalities joining County dispatch. Highway repavement projects are partially funded with $600,000 of federal/state County Highway Improvement Program (CHIP) revenues. The 2017 budget also includes $98,000 in anticipated State Department of Natural Resources Stewardship Grant funding to cover a portion the project to construct an underpass along the Lake Country Trail where it crosses State Highway 67.

Revenues also include State payments received for personal property tax exemption for technology equipment of $600,000 and State shared revenue payments allocated to Capital Projects budget estimated at $150,000.

Current Funding Sources
Use of Fund Balances in 2017 totals $2,660,000, which is a decrease of $547,800 from 2016. This includes $1,160,000 of **General Fund Balance**, of which project-specific uses include $400,000 for replacement of the human resources and payroll information system and $260,000 for energy efficiency lighting upgrades at non-enterprise County parks. **Capital Project Fund Balance** is budgeted at $570,000, of which $320,000 is specifically budgeted for the completion of the project to demolish the former health and human services building. **Tarmann Parkland Acquisition Fund Balance** is budgeted at $820,000, which is budgeted for Parks and Land Use capital projects ($465,000 for Wanaki Golf Course bridge replacement, $315,000 for pavement management and $40,000 for construction of a restroom shelter at Minooka Park) in accordance with enrolled ordinance 170-87. **Airport Fund Balance** of $110,000 is budgeted for a project to expand the south and west terminal ramps.

Borrowed funds are budgeted at $10 million, which is $1 million less than the previously adopted capital plan estimated for 2017 and $1.5 million less than 2016. Investment income is budgeted at $300,000, an increase of $25,000 from the 2016 budget. Property tax levy funding remains at the 2016 budgeted level of $1,747,000. Tax levy and the use of governmental fund cash balance and other revenues maintains the County's "down payment" at 31% of net capital expenditures, well above the policy target of 20%.

OPERATING IMPACTS BY FUNCTIONAL AREA

Justice and Public Safety
The expansion of the Waukesha County Communications Center (WCC) will accommodate additional staffing and equipment needs as new municipal police and fire agencies join County dispatch. Future municipal members should experience net savings from the economies of the WCC. On the County side, the additional staffing and equipment will increase personnel and maintenance costs as new municipal agencies join County dispatch. The additional square footage of the building would also likely result in increased utility expenses.

A study and staff research conducted for the Jail video visitation system replacement project has identified the potential for a revenue sharing arrangement that may cover vendor operating costs and potentially yield net revenue to the County.

Park, Environment, Education and Land Use
An energy conservation project to install LED lighting at parks facilities is expected to reduce energy costs with a return on investment of approximately five years.

The remaining three Wanaki Golf Course bridges are planned to be replaced in 2017. The number of bridges will be reduced to avoid future maintenance costs. The project is also expected to improve river flow and reduce flooding which may help limit golf course closures and loss of revenue.

Public Works - Buildings
The capital plan includes two projects to replace aging HVAC equipment with more energy-efficient technology, resulting in lower utility costs, including at the Highway Operations/Fleet building and the Highway substations.

Public Works - Airport
The project to expand the south and west terminal ramp is expected to correspond with commitments from aeronautical service providers to build new corporate hangars, which are estimated to generate approximately $84,000 in additional land lease revenues plus additional fuel sales revenue from more based aircraft (County receives $0.10 for every gallon sold at the Airport.) The new ramp space will result in additional ongoing costs for snow removal and pavement maintenance. As part of their future lease agreements, the hangar owners will pay for portions of the new pavement for which they are leasing (adjacent to their hangar lots). Ongoing maintenance for the remaining pavement will be paid for by County, estimated at $8,000 annually for snow removal and $2,000 for pavement repairs (after about five years when the new pavement will start needing repair).

Public Works - Highways
Annual operating costs for additional lane miles are estimated at approximately $7,000 per lane mile. The County's goal is to maintain or improve the current overall pavement condition index (1-100 scale), which was estimated at 62 in 2015. The County follows Wisconsin Department of Transportation guidelines for bridge replacement. Structure rehabilitation is warranted when the sufficiency number drops below 80, and a structure replacement is warranted when the sufficiency number drops below 50. The Highway Engineering division continues to work to maintain an average sufficiency index rating of 80 or higher for all county bridges. The overall bridge sufficiency index for 2015 was 84.7.

Technology Projects
The capital budget includes a project to implement a new human resources and payroll information system and is expected to include annual software licensing and maintenance costs, but will likely be partially offset by savings from automating a number of processes that are currently performed manually.

Project Title:	Airport Ramp Expansion Project	**Project #:**	201621
Department:	Public Works - Airport	**Project Type:**	Airport
Phase:	Preliminary Design	**Sponsor:**	Kurt Stanich – Airport Manager
Budget Action:	As Planned	**Manager:**	Allison Bussler – DPW Director
Date:	November 22, 2016		

CAPITAL BUDGET SUMMARY

Year	2016	2017	2018	2019	2020	Total
Project Phase	Design & Construction	Construction	Construction			Project
Expenditure Budget	$325,000	$110,000	$190,000	$0	$0	$625,000
Revenue Budget (Airport Fund Balance)	$325,000	$110,000	$190,000	$0	$0	$625,000
Net County Cost	$0	$0	$0	$0	$0	$0

COST DOCUMENTATION		**REVENUE**	
Design & Engineering	$1,610,000	Federal Aviation Administration	$8,430,000
Construction	$7,670,000	Wisconsin Bureau of Aeronautics	$625,000
Contingency	$400,000	County Airport Fund Balance	$625,000
Total Project Cost	$9,680,000	Total Revenue	$9,680,000
EXPENDITURE BUDGET	$625,000	**REVENUE BUDGET**	$625,000

Project Scope & Description

This project will expand the South and West Airport Terminal Ramps to accommodate requests by Aeronautical Service Providers to construct corporate aircraft hangars. The grass islands that currently divide the main terminal ramp will be filled in with concrete creating more parking for transient aircraft and improve ramp operations. Additionally, the west terminal ramp will connect to the west corporate hangar area significantly increasing safety as well as improving timely delivery of fuel service to corporate customers.

The new design includes 37,700 square yards of new pavement on the West Terminal Ramp, 6,600 square yards on the Main Terminal Ramp, and 9,000 square yards on the South Ramp. Work also includes improvements to storm water management, airfield lighting and signage. All of these improvements have been identified in the Airport Master Plan and the Airport Layout Plan.

Location

Waukesha County Airport Terminal Ramp

Analysis of Need

The current extent of the terminal ramp was constructed with the Airport Terminal in 1997. It was designed to meet the projected demand for aeronautical service providers with the intent of expanding the ramp once demand for the available hangar lots was met. The current west terminal ramp can only accommodate one additional hangar building. Both Fixed Base Operators (FBO's), Atlantic Aviation and Stein's Aircraft Services, LLC., and one Aeronautical Service Provider, Spring City Aviation, Inc., have submitted conceptual plans for large corporate hangar buildings on the West and South Terminal Ramps. This proposed activity consumes all of the remaining lots on the west and south ramps and necessitates expanding both areas in order to realize the revenue from these hangar developments. As a condition of new FBO operating agreements with Stein's Aircraft Services and Atlantic Aviation (pending approval) and an Aeronautical Service Provider Agreement with Spring City Aviation, each are required to build an additional hangar in the terminal ramp area. Without this ramp expansion, these companies will be unable to operate out of their new facilities.

Currently, the west corporate hangar area can only be accessed by driving fuel trucks and airport service vehicles onto aircraft movement areas causing a safety hazard as identified by the Federal Aviation Administration's (FAA) Runway Safety Action Team (RSAT). Connecting these two areas will eliminate vehicles from the Aircraft Movement Areas and from the airport's busiest taxiway. Service to corporate flight operations like Flight for Life will become more timely providing great benefit to their critical operations.

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Project Title:	Airport Ramp Expansion Project	**Project #:**	201621
Department:	Public Works - Airport	**Project Type:**	Airport
Phase:	Preliminary Design	**Sponsor:**	Kurt Stanich – Airport Manager
Budget Action:	As Planned	**Manager:**	Allison Bussler – DPW Director
Date:	November 22, 2016		

The Main Terminal Ramp is divided by three grass islands. These were put in place during the 1997 construction to divide the main ramp from both the adjacent Taxiway and from the South Terminal Ramp. Changes in airport design, aircraft size and maneuverability, and increased demand for aircraft parking necessitate filling in these islands to make one contiguous ramp.

The three additional hangar lots and ability to handle more transient traffic will significantly increase revenues received (discussed below under ongoing operating costs) and assist the airport in reducing its reliance on County Tax Levy.

Alternatives

A smaller extension of the existing of the west ramp and south ramps would only accommodate the proposed hangar developments. The proposed project scope with a larger ramp expansion is expected to provide additional operational efficiencies and safety improvements.

Ongoing Operating Revenues/Costs

New hangar construction is expected to occur over three years (2016 – 2018) and estimated to result in approximately $84,000 in land lease revenues paid to the Airport. The new hangars will also support additional based aircraft at the Airport, increasing fuel revenues paid to the County (receive $0.10/gallon sold).

The new ramp space will result in additional ongoing costs for snow removal and pavement maintenance. As part of their future lease agreements, the hangar owners will pay for portions of the new pavement for which they are leasing (adjacent to their hangar lots). Ongoing costs for the remaining pavement will be paid for by the County, estimated at $8,000 annually for snow removal and $2,000 for pavement repairs and maintenance about five years after construction (first few years should need minimal repair).

Previous Action

- South and West terminal ramp expansion previously included in capital project #201311.
- Approved as a new project in Ordinance 171-030.

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:	As Planned	**Manager:**	Allison Bussler, DPW Director
Date:	November 22, 2016		

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, a garage, 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.

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. 2016-2020 capital plan: scope and cost update.

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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:	November 22, 2016		

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		
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 22 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
2016-2020 capital plan: approved as planned

Project Title:	Demolish Former Health & Human Services Building	**Project #:**	201503
Department:	Public Works - Buildings	**Project Type:**	Demolition
Phase:	Demolition	**Sponsor:**	Public Works
Budget Action:	As Planned	**Manager:**	Allison Bussler, DPW Director
Date:	November 22, 2016		

CAPITAL BUDGET SUMMARY

Year	2015	2016	2017	Total
Project Phase	Design/Demolition	Demolition	Parking Const	Project
Expenditure Budget	$1,515,000	$1,785,000	$320,000	$3,620,000
Revenue Budget	$0	$0	$0	$0
Net County Cost	$1,515,000	$1,785,000	$320,000	$3,620,000

COST DOCUMENTATION		**REVENUE**	
Design*	$100,000	Most of project will be funded with	
Demolition/Parking	$3,220,000	appropriated Capital Project Fund Balance.	
Contingency	$300,000		
Total Project Cost	$3,620,000	Total Revenue	$0
EXPENDITURE BUDGET	$3,620,000	**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 it would not have been a 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.

An extensive consulting report on survey/sampling during September/October 2015 identified higher levels of hazardous materials (e.g., asbestos, lead and mercury) than the initial estimate. More asbestos was found through this method of sampling (e.g., cutting holes in multiple wall and floor layers).

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.
- 2016-2020 capital plan: scope and cost update

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:	Highway Substations HVAC Upgrades	**Project #:**	201109
Department:	Public Works - Buildings	**Project Type:**	Mechanicals/Bldg Systems
Phase:	Construction	**Sponsor:**	Public Works
Budget Action:	C - $ Update	**Manager:**	Allison Bussler, DPW Director
Date:	November 22, 2016		

CAPITAL BUDGET SUMMARY

Year	2014	2016	2017	Total
Project Phase	Budget & Concept Design	Construction	Construction	Project
Expenditure Budget	$36,000	$200,000	$200,000	$436,000
Revenue Budget	$0	$0	$0	$0
Net County Cost	$36,000	$200,000	$200,000	$436,000

COST DOCUMENTATION		**REVENUE**	
Architect	$36,000		
Construction	$368,000		
Contingency	$32,000		
Total Project Cost	$436,000	Total Revenue	$0
EXPENDITURE BUDGET	$436,000	**REVENUE BUDGET**	$0

Project Scope & Description

This project upgrades HVAC equipment controls at the four Highway Division substations. The project was bid in 2016 with the bids coming in over the consultants cost estimate for the project. The materials and labor were significantly higher than the consultant anticipated resulting in a budget increase for 2017.

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 (44 years ago), New Berlin 1950 (66 years ago), North Prairie 1988 (28 years ago) and Sussex 1965 (51 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
- 2016-2020 capital plan: approved with 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:	C - $ Update	**Manager:**	Allison Bussler, DPW Director
Date:	November 22, 2016		

CAPITAL BUDGET SUMMARY

Year	2015	2017	Total
Project Phase	Budget & Concept Design	Construction	Project
Expenditure Budget	$45,000	$847,000	$892,000
Revenue Budget	$0	$0	$0
Net County Cost	$45,000	$847,000	$892,000

COST DOCUMENTATION		**REVENUE**	
Design	$45,000		
Construction	$782,000		
Contingency	$65,000		
Total Project Cost	$892,000	Total Revenue	$0
EXPENDITURE BUDGET	$892,000	**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. Construction costs are updated based on budget and concept developed in 2016.

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, 2016-2020 capital plan: approved as planned.

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Project Title:	Courthouse Project – Secure 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:	November 22, 2016		

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), 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. 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, project #201705), 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 secure courtrooms addressed in Step 1. 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 offsite relocation of Courthouse personnel.

Project Title:	Courthouse Project – Secure 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:	November 22, 2016		

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. In 2013, Zimmerman Architectural Studios estimated the full courthouse remodel to cost approximately $95 million (in 2019 dollars), including $36.4 million for step 1 (in this project) and $58.6 million for step 2 (after adjusting design/construction management and contingency factors to County standards). However, many factors could impact that estimate including, but not limited to, incorporating additional operations to the courthouse space, 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 Secure Courtroom Construction project (Step 1). This cost estimate is subject to change as a result of the factors mentioned above.

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: 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
- 2016-2020 capital plan: approved as planned

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:	November 22, 2016		

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 and 2016-2020 capital plans.

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Project Title:	CTH YY, Underwood Creek Structure	**Project #:**	201302
Department:	Public Works - Highways	**Project Type:**	Bridge
Phase:	Preliminary Design	**Road Name:**	Pilgrim Road
Budget Action:	As Planned	**Manager:**	Allison Bussler, DPW Director
Date:	November 22, 2016		

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 2015 was 13,175 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.
- Approved as planned in the 2016-2020 capital plan.

Project Title:	CTH Y, Pilak Creek Tributary Bridge Rplc	**Project #:**	201304
Department:	Public Works - Highways	**Project Type:**	Bridge
Phase:	Preliminary Design	**Road Name:**	Racine Avenue
Budget Action:	As Planned	**Manager:**	Allison Bussler, DPW Director
Date:	November 22, 2016		

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 2014 traffic volume on CTH Y was 11,517 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.
- Approved as planned in the 2016-2020 capital plan.

Project Title:	CTH O & I Intersection Reconstruction	**Project #:**	201603
Department:	Public Works - Highways	**Project Type:**	Rehabilitation
Phase:	Preliminary Design	**Road Name:**	Moorland Road
Budget Action:	As Planned	**Manager:**	Allison Bussler, DPW Director
Date:	November 22, 2016		

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 Road and Beloit Road. Left turn lanes on Moorland Road will be turned into double left turn lanes; right turn islands will be added; Beloit Road will be restriped to provide two lanes in each direction; failing pavement on Moorland Road 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 funding would disrupt traffic patterns less and cause less potential safety problems than a series of small incremental projects. The project has been approved for $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

Project approved as new in 2016-2020 capital plan

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:	Delay, C - $ Update	**Manager:**	Allison Bussler, DPW Director
Date:	November 22, 2016		

CAPITAL BUDGET SUMMARY

Year	2009	2010	2011	2012	2013	2016*	2017	Total
Project Phase	Design	Design	Right of Way	Right of Way	Construction	Construction	Construction	Project
Expenditure Budget	$250,000	$1,750,000	$2,000,000	$3,600,000	$1,220,000	$2,137,000	$660,000	$11,617,000
Revenue Budget*	$250,000	$0	$1,400,000	$3,600,000	$0	$200,000	$0	$5,450,000
Net County Cost	$0	$1,750,000	$600,000	$0	$1,220,000	$1,937,000	$660,000	$6,167,000

COST DOCUMENTATION		**REVENUE**	
Design	$3,382,000	Surface Transportation Program (STP)- (not budgeted)	$3,200,000
		STP - (Right of Way Acq.) budgeted State	$2,600,000
Land Acquisition	$5,600,000	ROW reimbursement	(State 100%)
Construction	$5,080,000	STP - (Right of Way Acq.) budgeted	$2,400,000
Construction Management	$508,000	County ROW reimbursement	(Cty 80%)
Contingency	$247,000	Capital project fund balance	$250,000
		WisDOT Reimbursement*	$200,000
Total Project Cost	$14,817,000	Total Revenue	$5,450,000
EXPENDITURE BUDGET	$11,617,000	**REVENUE BUDGET**	$5,250,000

*The County was notified that it will not be provided $200,000 by the Wisconsin Department of Transportation, which was budgeted in 2016 to cover the cost of designing the intersection of USH 18 and the Waukesha West Bypass. As a result, related expenditure appropriations of $200,000 will be decreased at year-end 2016.

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 Road 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.

Final design and real estate acquisition is now complete for the portion of the project from USH to Northview. Construction was due to begin in 2016 but was delayed due to difficulties in obtaining US Army Corps of Engineers permits. Construction for Waukesha County's portion of the project is now scheduled for 2017 and for the WisDOT portion of the project in 2018. Cost increases of $660,000 reflect inflation, higher costs for traffic control, and redesign costs related to the area around Sunset drive to completely avoid a fen. Avoidance of this fen saved significant cost for fen and upland mitigation (which would have been included in this cost update) and provided the impetus for Corps of Engineers to proceed with issuing permits.

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:	Delay, C - $ Update	**Manager:**	Allison Bussler, DPW Director
Date:	November 22, 2016		

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. 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. Approved with cost and revenue updates in the 2012-2016 capital plan. Approved with cost updates in 2013-2017 capital plan. Approved with cost updates in 2015-2019 capital plan. Approved with cost, revenue and scope updates in 2016-2020 capital plan.

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:	C - $ Update	**Manager:**	Allison Bussler, DPW Director
Date:	November 22, 2016		

Year Project Phase	2015 Design	2016 Land	2017 Construction	2018 Construction	Total Project
Expenditure Budget	$353,000	$1,164,000	$381,000	$0	$1,898,000
Revenue Budget	$0	$0	$0	$0	$0
Net County Cost	$353,000	$1,164,000	$381,000	$0	$1,898,000

COST DOCUMENTATION		**REVENUE**	
Design	$293,000	Surface Transportation Program -	$2,726,000
WisDOT Plan Review	$60,000		
Land Acquisition	$864,000		
Construction	$2,989,000		
Construction Management	$299,000		
Contingency	$119,000		
Total Project Cost	$4,624,000	Total Revenue	$2,726,000
EXPENDITURE BUDGET	$1,898,000	**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. Land acquisition costs are reduced due to a reduction in right of way width from 100 feet to 80 feet between CTH ES and Calhoun Road.

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, 2016-2020 Capital Plans: project approved as planned

Project Title:	CTH M, Calhoun Road to East County Line	**Project #:**	201008
Department:	Public Works - Highways	**Project Type:**	Priority Corridor
Phase:	Preliminary Design	**Road Name:**	North Avenue
Budget Action:	Delay, C-Scope, $ & Rev Update	**Manager:**	Allison Bussler, DPW Director
Date:	November 22, 2016		

Year	2015	2016	2017	2020	2021	Total
Project Phase	Design	Design/Land	Land	Const	Const	Project
Expenditure Budget	$1,098,000	$1,524,000	$2,132,000	$3,642,000	$1,300,000	$9,696,000
Revenue Budget	$0	$0	$0	$445,000	$0	$445,000
Net County Cost	$1,098,000	$1,524,000	$2,132,000	$3,197,000	$1,300,000	$9,251,000

COST DOCUMENTATION		**REVENUE**	
Design	$1,769,000	Federal Surface Transportation	$16,110,000
WisDOT Design Review	$362,000	Program - STP Funding	
Land Acquisition	$3,200,000	(Per State Municipal Agreements)	
Construction	$17,831,000		
Construction Management	$1,752,000	Local Municipality	$445,000
Contingency	$892,000		
Total Project Cost	$25,806,000	Total Revenue	$16,555,000
EXPENDITURE BUDGET	$9,696,000	**REVENUE BUDGET**	$445,000

Project Scope & Description

This project involves the reconstruction and widening of about 3.0 miles of CTH M (North Avenue) from Calhoun 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 as may be required.

Due to some anticipated high construction costs at or near Pilgrim Road, this project has been combined with project 201202 (CTH M, Calhoun Road to CTH YY) to form a single project to construct CTH M from Calhoun Rd to 124th St. To keep approved federal funding, the Wisconsin Department of Transportation needed to move all construction funding to 2020-21.

Total project costs remain approximately the same. Land acquisition costs are reduced about $1.3 million because less land will need to be acquired from the roadway center line (60 feet instead of 65 feet) than originally anticipated. Cost savings are offset by cost increases for anticipated inflation associated with moving construction work to 2020-21 and additional design cost for traffic studies and WisDOT review fees.

However, total net County costs (after applying revenues) decrease by about $780,000 due to an increase in estimated federal funding ($625,000), which was approved in two state municipal agreements, and capped at $16,110,000. In addition, approximately $445,000 of revenue from the City of Brookfield and Elm Grove is anticipated as the local share for sidewalks and other amenities, an increase of $155,000.

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 14,400 vehicles per day (VPD) at Calhoun 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 required level of Service or 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 $42,500 per annum for the additional lane miles after the 2020 construction phase is completed.

Previous Action

2010 -2014 capital plan: approved as a new project. 2011-2015, 2012-2016, 2013-2017, 2014-2018, 2016-2020 capital plans: approved with a cost update. 2014-2018, 2015-2019 capital plans: approved as planned.

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Project Title:	CTH D, Calhoun Road to 124th Street Rehab	**Project #:**	201706
Department:	Public Works - Highways	**Project Type:**	Rehabilitation
Phase:	Formation	**Road Name:**	Cleveland Avenue
Budget Action:	New	**Manager:**	Allison Bussler, DPW Director
Date:	November 22, 2016		

CAPITAL BUDGET SUMMARY

Year	2017	2018	2019	2020	2021	Total
Project Phase	Design	Design	Design/Land	Land	Const	Project
Expenditure Budget	$66,000	$50,000	$506,000	$0	$0	$622,000
Revenue Budget	$0	$0	$0	$0	$0	$0
Net County Cost	$66,000	$50,000	$506,000	$0	$0	$622,000

COST DOCUMENTATION		REVENUE	
Design	$258,000	Federal Surface Transportation Program (STP) Funding	$2,287,000
WisDOT Design Review	$68,000		
Land Acquisition	$50,000		
Construction	$2,174,000		
Construction Management	$250,000		
Contingency	$109,000		
Total Project Cost	$2,909,000	Total Revenue	$2,287,000
EXPENDITURE BUDGET	$622,000	REVENUE BUDGET	$0

Project Scope & Description

This project is a rehabilitation of CTH D between Calhoun Rd and 124th Street and the rehabilitation of the culverts at Deer Creek. The roadway will be rehabilitated with minor shoulder and intersection improvements. The anticipated scope for the culverts includes culvert lining and grouting, headwall reconstruction, and approach ditch re-grading. Structure rehabilitation will effectively extend the life of the culvert 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. The acquisition of temporary easements is anticipated to construct this project.

Culvert rehabilitation was originally proposed in capital project #201303, CTH D, Deer Creek Bridge, but federal bridge aid funding was not available. However, federal Surface Transportation Program funding is available for structure rehabilitation under this broader road rehabilitation project. Waukesha County has been approved for $2,287,000 in Federal Aid to help fund the project.

Location

City of New Berlin

Analysis of Need

The pavement along this 3-mile long portion of CTH D is in poor condition and requires reconditioning. In 2013 the pavement inspection conducted along CTH D found that the Overall Condition Index for the pavement varies between 21 and 43, which is the poor to fair range. Shoulders are paved and relatively wide. Intersections have turn lanes although some minor grading may be needed to extend turn lanes.

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 33.1, which indicates that structure replacement or rehabilitation is warranted according to WisDOT guidelines. The 2013 traffic volume on CTH D was 16,995 vehicles per day.

Alternatives

- Reconstruct the existing bridge
- Reconstruct the pavement

Ongoing Operating Costs

Initial maintenance costs may be reduced following construction.

Previous Action

Bridge rehabilitation portion originally proposed as a separate capital project #201303 (CTH D, Deer Creek Bridge).

Project Title:	Bridge Aid Program – Through 2017	**Project #:**	9131
Department:	Public Works - Highways	**Project Type:**	Bridge
Phase:	Program Project	**Road Name:**	
Budget Action:	As Planned	**Manager:**	Allison Bussler, Director DPW
Date:	November 22, 2016		

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.
- Approved as planned in the 2016-2020 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:	November 22, 2016		

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		
		Village of Pewaukee	
2016 Appropriation	$100,000	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**

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. A culvert on CTH N over the Scuppernong River in the Town of Eagle is scheduled for replacement in 2017.

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.
- Approved as planned in the 2016-2020 capital plan.

Project Title:	Repaving Program 2013-2017	**Project #:**	200911
Department:	Public Works - Highways	**Project Type:**	Repaving
Phase:	Program Project	**Road Name:**	
Budget Action:	C - $ Update	**Manager:**	Allison Bussler, DPW Director
Date:	November 22, 2016		

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	$3,250,000	$12,450,000
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	$2,650,000	$10,590,000

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	$0	$3,200,000
Total Project Cost	$240,000	$200,000	$12,010,000
EXPENDITURE BUDGET			$12,450,000

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 lane 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, and parking lots at the Department's substation facilities. Beginning in 2017, about $50,000 budgeted annually for pavement work at the UW-Waukesha (UWW) Campus is transferred from this project to the UWW infrastructure improvement project (#201703).

Inflation and a reduced number of highway capital projects have caused a gradual reduction in the number of lane miles paved and hence we have seen our average pavement condition rating decline. An additional $300,000 is added in 2017 to reflect additional funding needed to maintain pavement condition at its current level.

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 Pavement Condition Index (PCI) of asphaltic pavements in 2015 was 62. It is the intention of this project to continue to maintain and improve current pavement conditions. Resurfacing projects take into consideration the PCI of existing pavements and classification of the road. The PCI 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. 2016-2020 Capital plan approved with revenue changes.

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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:	As Planned	**Manager:**	Allison Bussler, DPW Director
Date:	November 22, 2016		

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		
		Federal HSIP (Highway Safety Improvement Program)	$4,003,000
Total Project Cost	$4,292,400	Total Revenue	$4,003,000
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 Ehr DR and Point Dr: realign roadway to remove substandard curve (Revised increase of $84,000).	Town of Vernon	Design in 2016, Construction in 2017	$184,000	$1,092,000	$1,276,000
CTH YY and Burleigh Rd - Intersection: Upgrade existing signals and improve turn lanes and approaches (Revised increase of $140,000).	City of Brookfield	Design in 2014/16, Construction in 2017	$1,759,000	$0	$1,759,000
CTH V V, CTH E Intersection: Install roundabout to reduce crashes.	Town of Merton	Design in 2015/17, Complete construction in 2018	$316,000	$1,043,000	$1,359,000
CTH CI, County line to STH 67, safety project to improve signing, marking, improve lateral clearances (Revised increase of $19,000).	Towns of Eagle and, Ottawa	Design in 2016 & 2017, Construction in 2018	$49,000	$292,000	$341,000
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 2015/17, Construction in 2018	$200,000	$860,000	$1,060,000

Project Title:	Signals & Safety Improvements	**Project #:**	200427
Department:	Public Works - Highways	**Project Type:**	Spot Improvement
Phase:	Program Project	**Road Name:**	
Budget Action:	As Planned	**Manager:**	Allison Bussler, DPW Director
Date:	November 22, 2016		

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
- 2016-2020 capital plan: add new projects, revenue update

Project Title:	Energy Efficiency Improvements	**Project #:**	201208
Department:	Parks & Land Use	**Project Type:**	Renovation/Upgrade
Phase:	Program Project	**Sponsor:**	
Budget Action:	As Planned	**Manager:**	Dale Shaver, PLU Director
Date:	November 22, 2016		

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 in 2017 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. 2016-2020 capital plan: accelerated with a change in scope and revenue update.

Project Title:	Wanaki Golf Course Bridge Replacement	**Project #:**	201309
Department:	Parks & Land Use	**Project Type:**	Bridge
Phase:	Construction	**Sponsor:**	
Budget Action:	Accelerate, C - $ Update, C – Rev Update	**Manager:**	Dale Shaver, PLU Director
Date:	November 22, 2016		

CAPITAL BUDGET SUMMARY

Year	2013	2014	2016	2017	2018	2019	Total
Program Project	Design	Construction	Construction	Construction	Construction	Construction	Project
Expenditure Budget	$50,000	$160,000	$202,000	$465,000	$0	$0	$877,000
Revenue Budget	$50,000	$160,000	$202,000	$465,000	$0	$0	$877,000
Net County Cost	$0	$0	$0	$0	$0	$0	$0

COST DOCUMENTATION	Cost	**REVENUE**	
Design/Engineering	$80,000		
Bridge 4 Construction	$320,000	Golf Course Fund Balance	$412,000
Crossing 3B Removal	$14,000		
Bridge 3 Construction	$127,000	Tarmann Parkland Acquisition	
Crossing 3A Removal	$12,000	Fund Balance	$465,000
Crossing 2A Removal	$12,000		
Bridge 2 Construction	$124,500		
Bridge 1 Construction	$124,500		
Contingency	$63,000		
Total Project Cost	$877,000	Total Revenue	$877,000
EXPENDITURE BUDGET	**$877,000**	**REVENUE BUDGET**	**$877,000**

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 precast concrete structure will be designed and rated to accommodate heavy loads of golf course maintenance equipment, while the other smaller steel truss structures will be rated for pedestrian/golf cart loads. Costs are updated to reflect higher-than-anticipated replacement costs for the bridge that will accommodate heavier equipment loads, based on project alterations needed to satisfy permitting requirement and construction market conditions. Bridge construction was originally planned for both 2017 and 2018, but is moved up to 2017 to help obtain more competitive project bids. Bridge replacement in 2017 will be funded with Tarmann Parkland Acquisition Fund Balance, in accordance with the policy adopted in enrolled ordinance 170-87.

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, minimize disruption to play on the golf course, 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. Delayed and approved with a cost update in the 2016-2020 plan. Approved with a cost update through enrolled ordinance 170-96.

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Project Title:	Minooka Restroom Shelter	**Project #:**	201602
Department:	Parks & Land Use	**Project Type:**	New Building
Phase:	Preliminary Design	**Sponsor:**	
Budget Action:	C - $ Update, C – Scope, C - Rev Update	**Manager:**	Dale Shaver, PLU Director
Date:	November 22, 2016		

CAPITAL BUDGET SUMMARY			
Year	2016	2017	Total
Project Phase	Planning/Design	Construction	Project
Expenditure Budget	$50,000	$674,000	$724,000
Revenue Budget	$0	$40,000	$40,000
Net County Cost	$50,000	$634,000	$684,000

COST DOCUMENTATION		**REVENUE**	
Planning/Design	$55,000		
Construction - Building	$442,500	Tarmann Park and Open Space	
Construction - Site Work	$192,000	Land Acquisition Fund Balance	$40,000
Contingency	$34,500		
Total Project Cost	$724,000	Total Revenue	$40,000
EXPENDITURE BUDGET	$724,000	**REVENUE BUDGET**	$40,000

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 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.

The cost update for the project is based on final design work completed in 2016, which identified additional cost for required site work and utilities. In addition, project expenditures are increased $40,000 for the construction of a family restroom and is funded with $40,000 of appropriated Tarmann Park and Open Space Land Acquisition Fund Balance.

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 # 200505. The Minooka Restroom Shelter project was introduced as a new project in the 2016-2020 capital plan, with a delay and cost update, and project 200505 was 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:	C - $ Update, C - Rev Update	**Manager:**	Dale Shaver, PLU Director
Date:	November 22, 2016		

CAPITAL BUDGET SUMMARY

Year	2016	2017	2018	2019	2020	Total
Project Phase		Design/Engineering	Construction			Project
Expenditure Budget	$0	$93,000	$919,600	$0	$0	$1,012,600
Revenue Budget	$0	$0	$300,000	$0	$0	$300,000
Net County Cost	$0	$93,000	$619,600	$0	$0	$712,600

COST DOCUMENTATION		**REVENUE**	
Design	$93,000	WI DNR Stewardship	
Construction	$836,000	Grant Funding	$300,000
Contingency	$83,600		
Total Project Cost	$1,012,600	Total Revenue	$300,000
EXPENDITURE BUDGET	**$1,012,600**	**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. Cost update includes additional design services for utility and site improvements. Project revenues include approximately $300,000 in WI Department of Natural Resources (DNR) Stewardship grant funding. The current proposed project scope is contingent upon award of grants.

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: Approved as new project in 2016-2020 Capital Plan.

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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:	Delay, C - $ Update	**Manager:**	Dale Shaver, PLU Director
Date:	November 22, 2016		

CAPITAL BUDGET SUMMARY

Year	2015	2016	2017	2018	2019	Total
Phase	Design/ Engineering		Utility/Design		Construction	Project
Expenditure Budget	$0	$229,000	$98,000	$0	$780,000	$1,107,000
Revenue Budget	$0	$50,000	$98,000	$0	$780,000	$928,000
Net County Cost	$0	$179,000	$0	$0	$0	$179,000

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**	$108,000	WisDOT Underpass Box	$500,000
2016/2017 Half of Utility Relocation Costs - **In County Budg**	$108,000	Ocon. Share of Utility Relocation	$108,000
2016/2017 Design and Engineering - **In County Budget**	$219,000		
2019 Construction - **In County Budget**	$780,000	Budgeted by County	
		80% Fed/State WisDOT Grant	$780,000
		10% State WDNR Grant	$98,000
		Ocon. Share of Engineering/Construct.	$50,000
Total Project Cost	$1,715,000	Total Revenue	$1,536,000
EXPENDITURE BUDGET	**$1,107,000**	**REVENUE BUDGET**	**$928,000**

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 was 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 and design 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. Project costs and schedule have been updated to reflect TAP requirements for design and construction. This project is being delayed to accommodate the TAP funding timeline.

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.

A. Construct in 3-5 years.
B. 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 require 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

Approved as a new project in the 2016-2020 Capital plan.

Project Title:	University of Wisconsin Waukesha Site Infrastructure Improvements	**Project #:**	201703
Department:	Parks & Land Use	**Project Type:**	Concrete/Repaving
Phase:	Formation	**Sponsor:**	Parks and Land Use
Budget Action:	New	**Manager:**	Dale Shaver, PLU Director
Date:	November 22, 2016		

CAPITAL BUDGET SUMMARY

Year	2017	2018	2019	2020	Total Project
Project Phase	Design/Constr.	Design/Constr.	Design/Constr.	Design/Constr.	
Expenditure Budget	$182,400	$179,000	$379,000	$491,000	$1,231,400
Revenue Budget	$0	$0	$0	$0	$0
Net County Cost	$182,400	$179,000	$379,000	$491,000	$1,231,400

COST DOCUMENTATION		**REVENUE**	
Design/Engineering	$171,000		
Construction	$902,000		
Contingency	$158,400		
Total Project Cost	$1,231,400	Total Revenue	$0
EXPENDITURE BUDGET	$1,231,400	**REVENUE BUDGET**	$0

Project Scope & Description

Waukesha County owns the land and buildings, which serve as the University of Wisconsin - Waukesha campus. Waukesha County and the Regents of the University of Wisconsin entered into a Partnership Agreement on June 11, 1965 and later amended on July 1, 1970 and January 1, 2000 to detail County and University responsibilities related to the property. The Partnership Agreement details County responsibilities for maintenance items such as infrastructure, HVAC, plumbing, sidewalks, parking lots and landscaping. The Partnership Agreement terminates on June 30, 2040.

The proposed project will repair and replace existing deteriorating concrete walks, terraces, stairways, asphalt parking lots and update the conditions for ADA code compliance, safety, stormwater management, and improved ease of maintenance and campus function. All concrete projects will include erosion and sediment control, site preparation, drainage improvements, excavation, demolition, pavement installation and vegetative restoration. The project also includes consideration for reducing or eliminating concrete to save future operations and maintenance costs.

Location

The UWW campus is located on University Drive, south of Northview Road, and north of Summit Avenue in the City of Waukesha.

Analysis of Need

In 2015, an assessment of need and condition evaluation report was completed to review the existing conditions, identify improvements, and prioritize concrete walk, terrace and stairway segments for improvements. Priority segments are identified as areas that have failed or are in poor condition.

Alternatives

1. Continue to repair failed or poor condition areas as series of small projects.
2. Repair and replace site infrastructure over a shorter or longer period of time.

Ongoing Operating Costs

The proposed projects will help to reduce on-going operating costs for UWW involving maintenance, walk closures and potential risk areas. Reduction of total concrete square footage on campus will help to reduce future concrete replacement costs for the County.

Previous Action

None

Project Title:	Pavement Management Plan 2013-2017	**Project #:**	200824
Department:	Parks & Land Use	**Project Type:**	Repaving
Phase:	Program Project	**Sponsor:**	
Budget Action:	C - Rev Update	**Manager:**	Dale Shaver, PLU Director
Date:	November 22, 2016		

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	$500,000	$315,000	$815,000
Net County Cost	$0	$500,000	$800,000	$0	$285,000	$1,585,000

COST DOCUMENTATION		**REVENUE**	
2013	$0	Tarmann Parkland Acquisition	
2014	$500,000	Fund Balance	$815,000
2015	$800,000		
2016	$500,000		
2017	$600,000		
Total Project Cost	$2,400,000	Total Revenue	$815,000
EXPENDITURE BUDGET '17	$500,000	**REVENUE BUDGET**	$815,000

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 over 70 is satisfactory, and pavement ratings improve up to a scale maximum of 100. The goal is to maintain an average pavement PCI rating of 70 ("satisfactory") or better. 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. This project is partially funded with Tarmann Parkland Acquisition Fund Balance, in accordance with the policy adopted in enrolled ordinance 170-87.

In 2017, the major projects include the Muskego Park entrance road and campground road, and Retzer Nature Center roadway.

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 as much pavement to maintain. 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. 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. Approved with cost update in the 2016-2020 plan. Approved with a revenue update in enrolled ordinance 170-87.

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Project Title:	HRIS / Payroll System Implementation	**Project #:**	201617
Department:	DOA - Information Technology	**Project Type:**	Information Technology
Phase:	Preliminary Design	**Sponsor:**	HR Mgr. Jim Richter & Accounting Services Mgr. Larry Dahl
Budget Action:	C - $ Update, C - Rev Update	**Manager:**	Mike Biagioli, IT Manager
Date:	November 22, 2016		

CAPITAL BUDGET SUMMARY

Year	2016	2017	2018	
Project Phase	Analysis Design	Software Selection/ Implementation	Implementation	Total Project
Expenditure Budget	$75,000	$400,000	$952,000	$1,427,000
Revenue Budget	$0	$0	$0	$0
Net County Cost	$75,000	$400,000	$952,000	$1,427,000

COST DOCUMENTATION		**REVENUE**	
Software	$320,000	EUTF & General Fund Balance	$1,352,000
Vendor Implementation	$300,000		
Consulting/Implementation	$552,000		
Training	$30,000		
Contingency	$225,000		
Total Project Cost	$1,427,000		
EXPENDITURE BUDGET	$1,427,000		

Project Scope & Description

This project addresses the procurement and replacement of the human resource and payroll system. Based on a 2016 study in the first year of this project, it has been determined that the current system is near the end of its life cycle. The current vendor is no longer providing enhancements, which does not provide the opportunity to create efficiencies and effective workflows and processes. The second year of the project funds the services of a consultant to assist in the assessment and selection of the appropriate software vendor. Project funds in the second year are also budgeted to begin implementation after vendor selection.

The new system will allow for process improvements in the area of integration between existing systems, a centralized database, the minimization of shadow systems, ability to establish electronic vs manual workflows and processes, more effective communications with management and employees, streamlined payroll processing, management query and reporting tools, and more cost effective software delivery by using cloud based systems. Specific HR and Payroll areas to be improved include 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, management reporting, and dashboards.

Location

All County departments.

Analysis of Need

The current payroll system has been in use since 2004, and will need to be replaced at some point in the next few years. The current vendor no longer provides enhancements which will enable the County to meet its regulatory reporting requirements. New system functionality will replace functionality that is now done through a variety of manual tasks. This project will also transition payroll and HR information systems from self-hosted applications to a cloud-based solution, freeing up internal IT resources and eliminating the server infrastructure environment supporting the current in-house systems.

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

Approved as a new project in the 2016-2020 capital plan.

Capital Projects Plan

Each year, the County Executive submits a capital budget and an updated five-year Capital Plan to the County Board. After review and modification, the County Board adopts the plan by resolution. The plan represents the prioritization of long-range capital infrastructure needs linked to the County's strategic plan.

Justice and Public Safety projects total $41.8 million or 42% of the plan. This includes a $36.4 million project for the first phase of a two-phase project to upgrade the courthouse to meet the County's future needs. This phase will include the construction of a new secure courtroom facility. The second phase of this project begins in the last year of the plan with $1.2 million to begin design for renovation of the remainder of the courthouse. In addition, $3.5 million is planned in 2017 for the expansion of the Waukesha County Communication Center (WCC) to accommodate additional, anticipated municipal partners joining County dispatch. The expansion will also allow for additional space for the County's Emergency Operations Center, needed to handle large-scale emergency events.

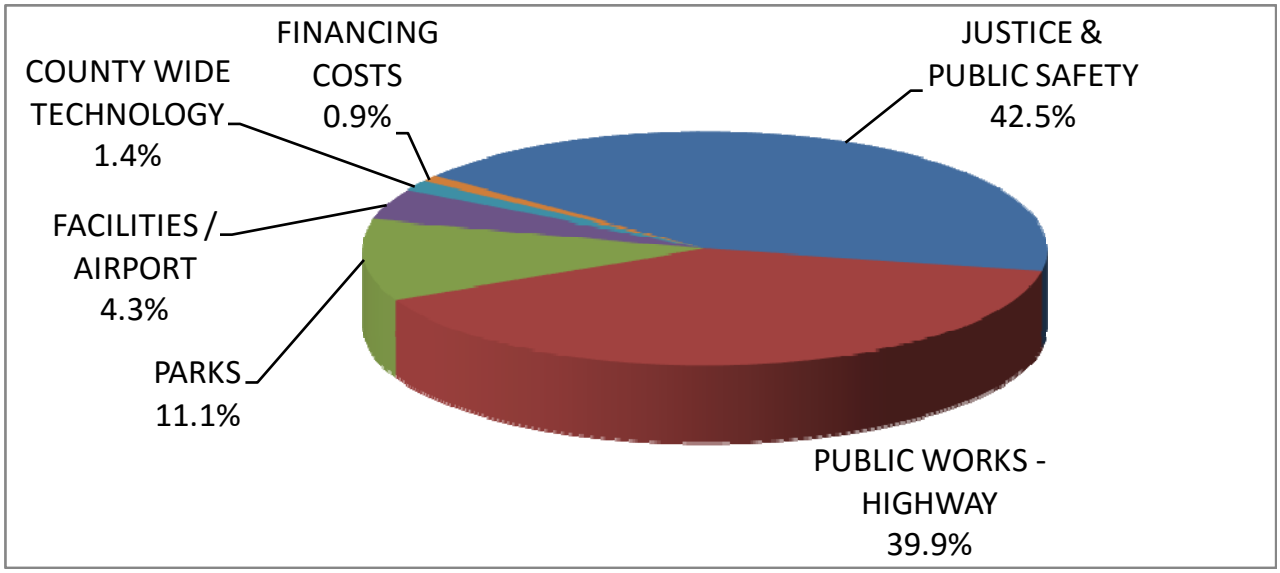
Public Works–Highway projects are about 40% of the plan at $39.3 million. In addition, Federal funds of $46 million are planned to be used for a number of highway projects. The federal funding is not included in the County Budget since it is managed and accounted for by the Wisconsin Department of Transportation.

The Parks and Land Use functional area includes $10.9 million or about 11% of the plan, of which $2.3 million is for park building projects, and about $6.4 million is for trails and parks pavement improvements. Trail project costs are partially funded with Federal, State and local dollars of about $3.9 million. The plan also includes $1.2 million for replacement of sidewalks, exterior stairways and parking lots at the University of Wisconsin–Waukesha (UWW) campus.

Public Works–Facilities/Airport projects total about $4.2 million or 4% of the plan. This includes $2.9 million for County facilities and $1 million for UWW campus buildings. Airport projects include $300,000 for ramp expansion.

County-wide technology initiatives include $1.4 million or 1% of the plan to implement a new human resources and payroll system, beginning in 2017.

General Administration totals $850,000 for financing costs over the five years.



FUNCTIONAL AREA FOR TOTAL PLAN 2017-2021

FUNCTIONAL AREA	TOTAL 2017-2021	% OF TOTAL
JUSTICE & PUBLIC SAFETY	$41,779,000	42.5%
PUBLIC WORKS - HIGHWAY	$39,266,800	39.9%
PARKS	$10,906,900	11.1%
FACILITIES / AIRPORT	$4,233,200	4.3%
COUNTY WIDE TECHNOLOGY	$1,352,000	1.4%
FINANCING COSTS	$850,000	0.9%
TOTAL PLAN EXPENDITURES	$98,387,900	100.1%

WAUKESHA COUNTY 2017-2021 CAPITAL PROJECT PLAN SUMMARY

FUNCTIONAL AREA:	2017 BUDGET	2018 PLAN	2019 PLAN	2020 PLAN	2021 PLAN	TOTAL FIVE-YEAR PLAN
JUSTICE & PUBLIC SAFETY						
Facility Projects	$4,183,000	$8,000,000	$14,000,000	$13,700,000	$1,200,000	$41,083,000
System Projects	$0	$450,000	$246,000	$0	$0	$696,000
Subtotal	$4,183,000	$8,450,000	$14,246,000	$13,700,000	$1,200,000	$41,779,000
PARKS, ENVIRONMENT, EDUCATION & LAND USE						
Parks, Facilities, Pavement, System Projects*	$2,372,400	$3,893,400	$1,859,000	$2,082,100	$700,000	$10,906,900
PUBLIC WORKS						
Highways	$3,566,000	$438,100	$3,470,000	$4,939,700	$4,353,000	$16,766,800
Highways/Major Maintenance	$4,700,000	$4,650,000	$2,750,000	$3,900,000	$6,500,000	$22,500,000
Subtotal Highways	$8,266,000	$5,088,100	$6,220,000	$8,839,700	$10,853,000	$39,266,800
Facilities	$1,382,000	$951,200	$200,000	$200,000	$200,000	$2,933,200
UW-Waukesha	$0	$1,000,000	$0	$0	$0	$1,000,000
Airport	$110,000	$190,000	$0	$0	$0	$300,000
Subtotal Public Works	$9,758,000	$7,229,300	$6,420,000	$9,039,700	$11,053,000	$43,500,000
GENERAL ADMINISTRATION COUNTY WIDE						
TECHNOLOGY PROJECTS	$400,000	$952,000	$0	$0	$0	$1,352,000
FINANCING	$150,000	$175,000	$175,000	$175,000	$175,000	$850,000
Subtotal	$550,000	$1,127,000	$175,000	$175,000	$175,000	$2,202,000
TOTAL GROSS EXPENDITURES	$16,863,400	$20,699,700	$22,700,000	$24,996,800	$13,128,000	$98,387,900
LESS PROJECT SPECIFIC REVENUES	($1,406,400)	($2,216,800)	($1,196,500)	($820,000)	$0	($5,639,700)
NET EXPENDITURES	$15,457,000	$18,482,900	$21,503,500	$24,176,800	$13,128,000	$92,748,200
Cash Balances Excluding Property Tax Levy	($3,410,000)	($1,592,000)	($1,046,000)	($695,500)	$0	($6,743,500)
NET EXPENDITURES BEFORE TAXES, DEBT BORROWING AND INTEREST APPLIED	$12,047,000	$16,890,900	$20,457,500	$23,481,300	$13,128,000	$86,004,700

*Category includes concrete sidewalk, stairway and parking lot improvements for UW-Waukesha Campus

The 2017-2021 Capital Plan identifies 48 projects at an estimated total cost of $98.4 million over the five-year period. Projects in the first year of the plan represent the 2017 Budget. Major projects for future years are briefly explained in the following narrative. A project listing all projects in the plan is shown on the following pages.

JUSTICE AND PUBLIC SAFETY

Justice and Public Safety projects total $41.8 million. This includes $36.4 million for the first phase of a two-phase project to modernize and expand the courthouse (constructed in 1959) to meet current and future needs. The first phase is to construct a new secure courtroom facility to be located adjacent to jail facilities and will feature improved security, prisoner transport and public access. Design for this phase begins in 2017, with construction from 2018 through 2020. The second phase is expected to begin in the last year of the plan, and will renovate the existing courthouse in order to replace aging mechanical systems, enhance business operations through a more efficient office layout and improve public access. The second phase is estimated to cost $58.6 million, with design in 2021 and construction in 2022-2025.

The plan also includes $3.5 million in 2017 for the expansion of the Waukesha County Communication Center (WCC, which is home to the County's emergency 9-1-1 operations and houses the Emergency Operation Center (EOC). The expansion will allow new municipal partners to join countywide dispatch and provided needed space for the EOC to manage large-scale emergency events. Jail-related projects include $450,000 to replace the visitor visitation system in 2018 and $246,000 to replace the security recording and display equipment in 2019.

PARKS AND LAND USE

Projects in this functional area total $10.9 million, and includes $3.5 million for park roadway maintenance improvements. The plan includes $2 million in 2018 for phase one in the creation of a north-south connector trail in the Waukesha County Bike/Pedestrian Plan. It will re-use an abandoned railroad corridor to create a section of trail to connect Brookfield's Mitchell Park to Waukesha's Frame Park, with federal, state and municipal revenues covering about 95% of project costs. The trail will serve an estimated 120,000 people per year, and would create economic benefits by connecting business and employment centers. The Plan also includes $878,000 between 2017 and 2019 to construct an underpass for the Lake Country Trail where it crosses State Highway 67 in the City of Oconomowoc. Growth in that area, along with increased traffic, has necessitated the need for a safer way to cross the highway. This project is a cost-sharing collaboration with the City and State, with the County's share of costs estimated at $179,000.

Other Parks and Land Use projects in the Plan include about $1.2 million to repair and replace existing sidewalks, exterior stairways and parking lots; $1 million to expand and renovate the beach house at Menomonee Park; nearly $700,000 to expand the Camp Pow Wow lodge at Menomonee Park, which is used through partnership with the Association for the Rights of Citizens with Handicaps (ARCh), to provide recreational activities for adults and children with disabilities; $674,000 for a new park shelter and restroom at Minooka Park; $465,000 for bridge replacements at Wanaki Golf Course, which will improve safety and golf course playability, while reducing ongoing structure maintenance; $260,000 for energy-saving investments at County park facilities (i.e., lighting upgrades); and nearly $200,000 for orthophotography to update digitized maps for Land Information (GIS) Systems.

PUBLIC WORKS

Public works projects for highways and facilities combined are estimated at $43.5 million and represent 44% of the total plan. This includes road projects totaling $39.3 million. New and expanded road capacity construction is identified in priority corridors and includes about $7.1 million for Waukesha County's share of project costs to widen about three miles of CTH M (North Avenue), from Calhoun Road to East County Line (124th Street). The project is estimated to total $25.8 million, with Federal aid covering $16.1 million and the City of Brookfield and Village of Elm Grove contributing $445,000 for local street amenities, for a County cost share of $9.3 million over the life of the project.

The plan includes a collaborative project to construct the West Waukesha Bypass to relieve congestion on nearby roads that has resulted from the continued growth and development in the area. Costs are shared between the Federal Government, the Wisconsin Department of Transportation (WisDOT), the City of Waukesha, and the County. Construction of Waukesha County's portion (between USH 18 and Northview Road) is planned for 2017 with additional funding of $660,000 budgeted. Construction of the City of Waukesha's portion (Northview Road to I-94) is also planned for 2017 and the State's portion (STH 59 to USH 18) in 2018.

Road projects include $24.7 million for major maintenance and roadway rehabilitation; $3.4 million for bridge improvements; and several spot safety improvements at an estimated cost of $3.4 million, primarily for intersection and signal work.

Facility/Airport projects totaling $4.2 million include $1 million for roofing upgrades at the UW-Waukesha (UWW) campus (in addition to about $2.2 million already appropriated in previous budgets). HVAC upgrades for the highway substations and the Highway Operations/Fleet building are planned in 2017 for about $1 million. For 2017, $320,000 is planned to complete a project demolishing the former health and human services building. The plan includes about $313,000 for replacement of a brinemaker and construction of a canopy roof at the Highway Operations/Fleet building. Roof replacement at the Mental Health Center is estimated to cost $253,000, with design in 2017 and construction in 2018. Beginning in 2018, the plan includes $1,000,000 over several years for fuel tank replacements, with $500,000 planned for out-years, for a total project cost of $1.5 million.

A multi-phase project to expand the south and west terminal ramp space at the Airport continues in 2017-2018 with $300,000. The project is expected to improve capacity and safety at the airport, while generating additional revenues through new land lease agreements and increasing fuel sales. The County budgets only its share of Airport projects, which is estimated at 6.5%, with the Federal Aviation Administration (FAA) and State Bureau of Aeronautics (BOA) funding the remainder. The BOA manages these projects and bills the County for its share.

GENERAL ADMINISTRATION – COUNTYWIDE TECHNOLGY PROJECTS

Funding for replacement of the County's Human Resources and Payroll information systems is planned for 2017 through 2018, with $1,352,000. The existing system is nearing the end of its useful life, and the vendor is no longer providing enhancements for it. The new system is expected improve processes, provider greater functionality, integrate existing systems and assist with mandated reporting needs (e.g., Affordable Care Act.)

DEBT FINANCING COSTS

Debt financing related costs on planned borrowing of $71.5 million over the five-year plan include promissory note discounts and is currently estimated at $850,000 over the five-year plan period.

PROJECT TITLE	NO.	CURRENT APPROP.	2017 PLAN	2018 PLAN	2019 PLAN	2020 PLAN	2021 PLAN	TOTAL FIVE-YEAR PLAN
PUBLIC WORKS AIRPORT								
AIRPORT RAMP EXPANSION	201621	$325,000	$110,000	$190,000				$300,000
PUBLIC WORKS - FLEET & HIGHWAY OPS								
REPLACE BRINE MAKER\CONSTR CANOPY ROOF	201401	$10,500		$313,200				$313,200
FUEL TANK REPLACEMENT AND INFRASTRUCTURE	201415	$0		$400,000	$200,000	$200,000	$200,000	$1,000,000
EMERGENCY PREPAREDNESS - BUILDINGS								
COMMUNICATIONS CENTER EXPANSION	200808	$248,000	$3,483,000					$3,483,000
PUBLIC WORKS - FACILITIES								
MHC ROOF REPLACEMENT	201412	$0	$15,000	$238,000				$253,000
DEMOLISH FORMER HHS BUILDING	201503	$3,300,000	$320,000					$320,000
HIGHWAY SUBSTATION HVAC UPGRADES	201109	$236,000	$200,000					$200,000
HWY OPS-FLEET HVAC UPGRADES	201206	$45,000	$847,000					$847,000
COURTHOUSE PROJ-SECURE COURTROOM CONSTRUCT	201418	$0	$700,000	$8,000,000	$14,000,000	$13,700,000		$36,400,000
COURTHOUSE PROJ STEP 2-COURTHOUSE RENOVATION	201705	$0					$1,200,000	$1,200,000
UW - WAUKESHA								
UWW ROOFING UPGRADES	201210	$2,209,000		$1,000,000				$1,000,000
PUBLIC WORKS - HIGHWAYS								
CTH Q OCON RIVER BRIDGE	201201	$119,000	$22,000	$112,000				$134,000
CTH YY, UNDERWOOD CREEK STRUCTURE	201302	$0	$170,000	$179,000	$1,017,000			$1,366,000
CTH Y, PILAK CREEK TRIBUTARY BRIDGE REPLACEMENT	201304	$0	$90,000	$24,000	$520,000			$634,000
CTH I, FOX RIVER BRIDGE	201601	$6,000				$79,000	$96,000	$175,000
CTH O & I INTERSECTION RECONSTRUCTION	201603	$0	$45,000	$50,000	$414,000			$509,000
CTH D, MORAINE HILLS DRIVE INTERSECTION	201613	$0			$62,000	$365,000	$683,000	$1,110,000
CTH E, WOODLAND DRIVE INTERSECTION	201614	$0				$75,000	$116,000	$191,000
WEST WAUKESHA BYPASS	200917	$10,957,000	$660,000					$660,000
CTH I, CTH ES TO CTH O REHAB	201005	$1,517,000	$381,000					$381,000
CTH M, CALHOUN RD TO EAST COUNTY LINE	201008	$2,622,000	$2,132,000	$0		$3,642,000	$1,300,000	$7,074,000
CTH XX, PEBBLE BROOK CREEK BRIDGE	201402	$5,000	$0	$0	$55,000	$11,000	$47,000	$113,000
CTH O, I-94 TO USH 18	201502	$0			$100,000	$500,000	$1,150,000	$1,750,000
CTH O, CTH I TO CTH ES	201610	$0				$185,000	$961,000	$1,146,000
CTH C, HASSLINGER DRIVE INTERSECTION	201611	$0		$18,100	$214,000	$82,700		$314,800
CTH V V, HICKORY ST TO CTH F	201620	$0	$0	$5,000	$582,000			$587,000
CTH D, CALHOUN ROAD TO 124TH ST REHAB	201706	$0	$66,000	$50,000	$506,000			$622,000
BRIDGE AID PROGRAM THRU 2017	9131	$280,000	$100,000					$100,000
BRIDGE AID PROGRAM 2018 - 2022	201701	$0		$100,000	$100,000	$100,000	$100,000	$400,000
CULVERT REPLACEMENT PROGRAM THRU 2017	9817	$520,000	$100,000					$100,000
CULVERT REPLACEMENT PROGRAM 2018-2022	201618	$0		$100,000	$100,000	$100,000	$100,000	$400,000
REPAVING PROGRAM 2013-2017	200911	$9,200,000	$3,250,000					$3,250,000
REPAVING PROGRAM 2018-2022	201416	$0		$4,450,000	$2,550,000	$3,700,000	$6,300,000	$17,000,000
SIGNAL/SAFETY IMPROVEMENTS	200427	$4,692,400	$1,250,000					$1,250,000

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PROJECT TITLE	NO.	CURRENT APPROP.	2017 PLAN	2018 PLAN	2019 PLAN	2020 PLAN	2021 PLAN	TOTAL FIVE-YEAR PLAN
PARKS AND LAND USE								
ENERGY EFFICIENCY IMPROVEMENTS	201208	$1,175,200	$260,000					$260,000
CAMP POW WOW EXPANSION	201504	$54,400				$695,600		$695,600
2020 ORTHOPHOTOGRAPHY	201609	$0				$195,500		$195,500
WANAKI GOLF COURSE BRIDGE REPLACEMENT	201309	$412,000	$465,000					$465,000
WAUKESHA-BROOKFIELD MULTI-USE TRAIL	201407	$500,000		$1,994,800				$1,994,800
MINOOKA RESTROOM SHELTER	201602	$50,000	$674,000					$674,000
MEN. PARK BEACH HOUSE EXPAN. & RENOVATION	201605	$0	$93,000	$919,600				$1,012,600
LAKE COUNTRY TRAIL STH 67 UNDERPASS	201607	$229,000	$98,000		$780,000			$878,000
UWW INFRASTRUCTURE SITE IMPROVEMENTS	201703	$0	$182,400	$179,000	$379,000	$491,000		$1,231,400
PAVEMENT MANAGEMENT PLAN 2013 - 2017	200824	$2,800,000	$600,000					$600,000
PAVEMENT MANAGEMENT PLAN 2018 - 2022	201406	$0		$800,000	$700,000	$700,000	$700,000	$2,900,000
IT - SHERIFF								
SECURITY SYSTEM RECORDING/DISPLAY EQUIP RPLCMNT	201615	$55,000			$246,000			$246,000
JAIL VIDEO VISITATION SYSTEM REPLACEMENT	201702	$0		$450,000				$450,000
IT - COUNTYWIDE								
PAYROLL/HR INFORMATION SYSTEM	201617	$75,000	$400,000	$952,000				$1,352,000
EST. FINANCING (Includes Arb Rebate/Discount)	999999	$0	$150,000	$175,000	$175,000	$175,000	$175,000	$850,000
GROSS EXPENDITURES			**$16,863,400**	**$20,699,700**	**$22,700,000**	**$24,996,800**	**$13,128,000**	**$98,387,900**
REVENUES								
Airport Fund Balance - #201624 Airport Ramp Expansion			$110,000	$190,000				$300,000
LIS Fund Balance #201609 Orthophotography						$195,500		$195,500
Tarmann Fund Balance - #201309 Wanaki Bridge Rplcmnt			$465,000					$465,000
Municipal Cost Share for Communications Center #200808 Comm Center Expansion			$708,400					$708,400
Local Revenue - #201008 CTH M, Calhoun Rd to East County Line						$445,000		$445,000
Developer Cost-Share - #201603 CTH O & I Intersection					$125,500			$125,500
CHIP D Revenue - #200911 Repaving Program 2013-2017			$300,000					$300,000
CHIP Revenue - #200911 Repaving Program 2013-2017			$300,000					$300,000
CHIP D Revenue - #201620 CTH VV, Hickory Street to CTH F					$291,000			$291,000
Revenue - #201407 Waukesha-Brookfield Multi-Use Trail				$1,916,800				$1,916,800
Partner (ARCh) share for #201504 Camp Pow Wow Expansion						$375,000		$375,000
Revenue for #201605 Menomonee Park Beach House Renovation				$300,000				$300,000
Revenue - #201607 Lake Country Trail STH 67 Underpass			$98,000		$780,000			$878,000
Subtotal Revenue, Proprietary and Restricted Sepecial Rev Fund Balance			**$1,981,400**	**$2,406,800**	**$1,196,500**	**$1,015,500**	**$0**	**$6,600,200**
Net Expenditures			**$14,882,000**	**$18,292,900**	**$21,503,500**	**$23,981,300**	**$13,128,000**	**$91,787,700**
State Shared Revenue/Utility Payment			$150,000					$150,000
Personal Property Replacement - State Aid			$600,000					$600,000
Tarmann Fund Bal - #200824 Pvmnt Mgmt/#201602 Minooka Restroom			$355,000					$355,000
General Fund and Capital Project Fund Balance			$1,730,000	$1,402,000	$1,046,000	$500,000	$0	$4,678,000
Subtotal			**$2,835,000**	**$1,402,000**	**$1,046,000**	**$500,000**	**$0**	**$5,783,000**
EXPENDITURES BEFORE TAXES, DEBT BORROWING AND INTEREST			**$12,047,000**	**$16,890,900**	**$20,457,500**	**$23,481,300**	**$13,128,000**	**$86,004,700**

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