CITY OF ames™

CITY OF AMES, IOWA

CAPITAL IMPROVEMENTS PLAN

2017-2022

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Ranked No. 4 Best Small City to Make a Living (MoneyGeek, 2016)
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July, 2017

Mayor and Members of the Ames City Council:

Attached is the approved Capital Improvements Plan (CIP) for Fiscal Years 2017/18 through 2021/22. This five-year plan will invest $184,981,974 from various private, City, State, and Federal funding sources in the projects reflected herein. While the annual program/operating budget details the numerous services that will be provided to our citizens, the CIP highlights the "bricks and mortar" projects related to infrastructure improvements that are planned over the next five years.

The projects included in a CIP typically fall into one or more of three categories. The first category includes projects that are not highly visible but are critical to sustaining the lives of our residents, such as developing a new water well field or repairing our power plant boiler tubes. The second group of projects is needed to provide health and safety to our citizens, for example, installing new traffic signals and an outdoor storm warning system. The final category includes projects that improve the overall quality of life for our customers, including constructing a new spray pool in a park and expanding our shared-use path system. Fortunately, because of the City's healthy economic status, we are able to address all three of these categories in the CIP.

In the following paragraphs, I have attempted to highlight the major projects that are included in this Capital Improvements Plan.

PUBLIC SAFETY - $1,718,000

This year, all traffic-related projects have been shifted from the Public Safety section to the Transportation section in order to be grouped with more similar initiatives. Therefore, the projects that remain in this five-year plan are a number of interior and exterior repairs to our three fire stations, along with a new system to automatically secure the stations when the firefighters respond to an incident. The most significant project in this category is the **Fire Apparatus Replacement** project (page 14), in which our current Ladder Truck will be replaced with a new front line apparatus and then refurbished to serve as a reserve unit. In addition, funds have

been earmarked in the **Outdoor Storm Warning System** (page 16) to fill in any gaps in coverage as the city boundaries continue to expand.

UTILITIES - $91,808,000

ELECTRIC SERVICES - $32,425,000

With the completion of the Power Plant conversion from a coal-fired to gas-fired facility, it is now time to move on to other improvements to this utility. Over the next five years, we plan to devote $5,270,000 to upgrade our transmission system, $4,855,000 to improve the distribution system, and $16,300,000 to renovate equipment in the Power Plant. In keeping with the City Council's commitment to sustainability, $1,500,000 will be spent for **LED Street Light-Maintenance Retrofits** (page 25) over the next five years to replace the existing high pressure sodium and mercury vapor street light fixtures with LED fixtures. This change in fixtures will lower maintenance costs, reduce energy usage, and decrease our carbon footprint.

While the CIP focuses mainly on projects to accommodate the increasing electric capacity needs, the highly successful **Demand Side Management Program** (page 21) will receive the infusion of an additional $1,000,000, bringing the five year total to $6,000,000 of incentives that will lessen or significantly delay the need to finance a very costly expansion in our generating capacity. To date, this program has resulted in a 17 MW reduction in peak demand and saved 32,500 Mwh of energy savings.

The Electric staff will be working in FY 2017/18 to develop a **Community Solar Project** in an effort to further diversify our energy sources. In order to take advantage of federal tax credits not available to cities, the staff will be seeking a private entity to build and operate this solar project. Therefore, even though a significant amount of staff time will be devoted to facilitating this project, it will not be reflected in the City's CIP.

WATER - $18,592,500

As we prepare to open the new Water Treatment Plant in the spring of 2017, emphasis will shift to other priorities for this utility. As promised, the **Ada Hayden Water Quality Study** (page 48) will allow us to monitor this critical community water resource as development continues around it. **Water Supply Expansion** (page 49), **Wellhead Rehabilitation** (page 50), and **Well Field Standby Power** (page 51) will help assure a reliable water supply sufficient to accommodate our growing population. As our water consumption continues to grow, so does our need for the **Lime Lagoon Expansion** project (page 53) that will make it easier to operate and clean out the cells within the lagoon.

An exciting project, the **Low Head Dam Modification** (page 45), has been included in this CIP. When first included in the plan several years ago, this project focused mainly on efforts to improve safety surrounding a low-head dam near North River Valley Park. An opportunity now exists to expand the project to enhance recreational opportunities for canoe, kayak, and fishing enthusiasts. The success of this revamped $845,000 project is contingent on the necessary amount of private contributions and State grants being secured.

In order to decrease rusty water issues and improve fire-fighting capacity in older neighborhoods, 4 inch supply lines will be replaced with the $6,500,000 earmarked in the **Water Systems Improvements** program (page 64).

SANITARY SEWER - $31,761,000

The City Council is aware that the next significant project in the Sanitary Sewer utility deals with **Nutrient Reduction Modifications** (page 56) required by the Iowa Department of Natural Resources. The CIP reflects expenditures of $3,235,000 over the next five years for a project that could ultimately cost $36,000,000. In the coming years it is hoped that the nutrient standards will be altered or that less costly watershed-based solutions can be identified before this construction project is needed.

The **Sanitary Sewer System Improvements** program (page 67) will continue over the life of this CIP, with nearly $20,000,000 directed to the reconstruction of deficient sewers and manholes. The goal of this initiative is to reduce inflow/infiltration of clean water into the sewer system. This water does not need to be treated and, therefore, adds to unnecessary operational costs and backups in the system.

The Water Pollution Control plant is almost 27 years old and is in need of updating in order to maintain its functionality. Consequently, the following projects have been included in the CIP to address this need: **Digester Improvements** (page 57), **Cogeneration System Maintenance** (page 58), **Clarifier Maintenance** (page 60), and **Structural Maintenance** (page 61).

STORM SEWER - $7,517,000

Because localized flash flooding has occurred at various locations around the city during high rainfall events, the **Storm Water System Analysis** (page 73) is a critical addition to the CIP. The commitment of $720,000 over the next five years will result in an accurate mapping of the system and hydraulic modeling of the network. Information gathered from this analysis will help identify corrective projects in the future to alleviate localized flooding in our neighborhoods. These projects could then be added into the **Storm Water Erosion Control** (page 70), **Low Point Drainage Improvements** (page 71), **Storm Water Improvements** (page 72), **Storm Water Facility Rehabilitation** (page 74), and **Storm Water Quality Improvements** (page 75) programs.

RESOURCE RECOVERY - $1,512,500

As is the case with our other utility facilities, our Resource Recovery Plant is in need of upgrading. To accomplish this goal, the **Resource Recovery System Improvements** program (page 77) will devote $1,482,500 to the purchase of replacement components and equipment. In addition, preventative maintenance will be performed on the rotary disc screen rollers and conveyor belt. Following up on the waste audit financed through an Iowa Department of Natural Resources grant received in FY 2016/17, the **Waste Diversion Enhancements** project (page 78) will allow us to implement recommendations derived from this analysis designed to reduce the amount of waste processed at the plant.

TRANSPORTATION - $85,935,974

STREET ENGINEERING - $61,621,000

The one project that I receive the most questions about is the **Grand Avenue Extension** project (page 83). Starting in FY 2013/14 and continuing through FY 2016/17, the focus of this project was the completion of the environmental analysis for the proposed route. The engineering/design, land acquisition, roadway/bridge construction, and intersection improvements are scheduled to be accomplished in FY 2017/18 through FY 2018/19. Spurred by a proposed development along South Duff Avenue, south of Highway 30, the new **South Duff Avenue Improvements** project (page 84) is being introduced into the CIP. This project will result in widening of South Duff to three lanes through Ken Maril Road, installing a traffic signal at Crystal Street, and extending a shared use path to the City's southernmost boundary at Ken Maril Road.

SHARED USE PATHS - $7,420,800

The CIP adheres to the recent directive from the City Council to significantly increase spending on our shared use path/bike route system to an average of $1,200,000 per year in an effort to offer more multi-modal opportunities to the citizens of Ames. In fact, the CIP includes $7,420,000 over the next five years to achieve this goal. Of this total, $3,556,800 will be spent on the **Shared Use Path System Expansion** program (page 96), $728,000 on **Multi-Modal Roadway Improvements** (page 97), and $625,000 on **Share Use Path Maintenance** (page 98). The remaining $2,511,000 devoted to this multi-modal initiative is reflected in various Street Engineering and Traffic projects that incorporate new bike facilities into their design.

TRAFFIC - $6,072,000

In response to neighborhood concerns regarding traffic safety issues, the **Traffic Calming** program (page 105) was included in the CIP. Now that additional locations have been identified for attention, additional funding is reflected in this program. The **Accessibility Enhancement Program** (page 102) remains a priority in this plan as we work to install new ADA sidewalk ramp improvements at street intersections, to retrofit existing traffic control devices with audible and vibrotactile push buttons, and to upgrade parking stalls to current accessibility standards. Finally, to promote safe traffic movement throughout the community, the **Traffic Signal** program (page 101) and the **Intelligent Transportation System** program (page 107) will assure the replacement of outdated signals, the installation of signals at new locations where warranted, and the optimization of traffic and pedestrian flow through signalized intersections.

STREETS MAINTENANCE - $3,795,000

The **Main Street Sidewalk Paver Replacement** program (page 110) is a new $715,000 initiative that is being added to the CIP. The pavers along Main Street were installed in 1999 as an aesthetic upgrade to traditional concrete sidewalks. Over time, these pavers have deteriorated and are difficult to maintain. It is planned that all of the pavers will be replaced in five years.

We are fortunate that our **Bridge Rehabilitation** program (page 114) calls for relatively minor repairs on the 6th Street bridge over the Union Pacific Railroad, the Minnesota Avenue bridge, the South 4th bridge over Squaw Creek, and the Lincoln Way bridge over Squaw Creek. Over the next five years, $870,000 will be earmarked for these repairs.

The **Neighborhood Curb Replacement** program (page 113) signals our continuing commitment to enhance our neighborhoods. Because of an increasing number of areas that would benefit from new curbs, the funding has been increased by over 90% from previous plans.

TRANSIT - $8,874,174

Once again, **CyRide Vehicle Replacement** (page 116) will be a priority, with $5,264,174 being earmarked to purchase eight new buses, six new minibuses, and 22 used buses over the next five years. At 32 years old, our bus storage facility is need of repair. Therefore, the **CyRide Expansion & Modernization** program (page 117) will allow us to replace bus hoists, rehabilitate the bus wash, replace sections of the deteriorated concrete floor, purchase a new HVAC system, and obtain a high speed fueling system. In each of the next five years, three new bus shelters will be installed as part of our **Bus Stop Improvements** program (page 119). This program is in response to our customers' most frequently requested service upgrade. The **CyRide Technology Improvements**

program (page 120) will lead to better service, promote safety, and assure compliance with federal regulations with the planned upgrade to the building security camera system, human resources tracking software, automatic passenger counter system, asset management software, and the NextBus GPS tracking software.

AIRPORT - $664,000

Now that the construction of our new Airport terminal is underway, we are turning our attention in the **Airport Improvements** program (page 122) to demolishing the old terminal building and performing an environmental assessment for the next runway expansion.

COMMUNITY ENRICHMENT - $5,520,000

PARKS & RECREATION - $4,255,000

Almost $2,000,000 is planned to be spent over the next five years in the **Park System/Facility Improvements** program (page 126). No doubt, one of the most popular improvements will be the demolition of our old wading pool in Brookside Park and the addition of a more modern and larger spray pad at a site to be determined. This new facility will allow our residents to enjoy water features even if they don't prefer to swim. In addition, to assure that the limited active green space in our park system is playable and safe, we plan to irrigate the sports fields at North River Valley Park and Emma McCarthy Lee Park. The old Carr Pool bath house will be replaced with a new shelter to serve the trailhead into Nutty Woods.

We have big plans for renovating the **Homewood Golf Course** (page 128). The current clubhouse was moved onto the site in the 1970s. It is not energy efficient and lacks adequate storage. Therefore, we have included a project in the CIP to remove the outdated building and replace it with a larger structure. This new building will not only meet the needs of Homewood, but will also serve as a year round facility that can host private weddings, family gatherings, and company outings.

One notable change from the previous CIP is evident in the **Furman Aquatic Center** program (page 127) where a new major feature was scheduled to be installed. However, after reviewing the situation in greater detail, it became obvious that an additional large feature would necessitate the removal of coveted sun bathing space at the facility. Therefore, as an alternative, funds will be expended for smaller portable features that still generate excitement for our customers.

NEIGHBORHOODS, BUSINESS DISTRICTS, HUMAN SERVICE AGENCIES - $950,000

In addition to improving the municipal infrastructure, the City Council is committed to providing community betterment opportunities for other key components of our city. Towards this end, the highly successful **Neighborhood Improvement Program** (page 140) will provide $250,000 in grants that will accomplish physical improvements of importance to individual neighborhood residents as well as encourage a bonding experience designed to develop lasting relationships among neighbors. Our two major commercial areas, the Downtown and Campustown business districts, will benefit from the $500,000 that has been earmarked in this plan for the **Downtown Façade Improvement Program** (page 143) and the **Campustown Façade Improvement Program** (page 144). I think everyone can agree that the positive impact of these two programs over the years has been quite impressive. Finally, for the first time this CIP includes the **Human Service Agency Capital Improvement** program (page 141). In addition to the operating funds that the City Council provides each year, this new program will make one-time funds available to human service agencies in the community for capital improvement projects that meet the yet-to-be-determined grant criteria.

PROJECTS NOT YET INCLUDED IN THE CIP

As in the past, I am highlighting projects in this message that still require a significant amount of information to be generated before they are included in the CIP.

Healthy Life Center

In accordance with the City Council goals, the staff has been working with a steering committee to develop a concept for the multi-generational, comprehensive healthy life center. The next steps include the identification of a preferred site, completion of a feasibility study, and finalization of a funding strategy for the one-time capital costs and the ongoing operational costs.

Emergency Response Facility

When the current Land Use Policy Plan (LUPP) was completed, a three fire station scenario was developed to facilitate emergency response to the community as envisioned in the long range planning document. The City Council hopes to initiate an update to the LUPP within this year. Once the LUPP update is complete, it will be the appropriate time to update our fire station location model to coincide with the anticipated growth areas of the city. This new model could call for the relocation of an existing fire station, adding a new full-service station, or establishing a smaller emergency response facility to handle the ever increasing number of emergency medical calls.

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The projects reflected in this document represent the collective vision of a number of dedicated staff members. Therefore, I want to thank the members of our Executive Leadership Team along with their management staff members for their input. In addition, Duane Pitcher, Finance Director; Nancy Masteller, Budget Officer; Emily Johnson, Finance Department Secretary; Derek Zarn, Printing Services Technician; Bob Kindred, Assistant City Manager; and Brian Phillips, Assistant City Manager, should be recognized for the important roles they played in creating the CIP.

Sincerely,

Steven L. Schainker
City Manager

CITY OF AMES, IOWA

FIVE-YEAR CAPITAL IMPROVEMENTS PLAN
2017-2022

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HOW TO USE THE C.I.P. DOCUMENT

The 2017-2022 Capital Improvements Plan for the City of Ames is organized according to the City's program structure of services. This format allows decision makers to consider proposed improvements in much the same manner as the annual operating budget. First-year portions of these projects can also be identified in the annual operating program budget.

1. The **Description/Justification** section outlines the basic work to be done and the intended outcome or result of the project, outlines the reasons behind the proposal of the project, and also the advantages to the City of undertaking the project. The section may also describe the disadvantages to the City of either waiting to do the project, or of disapproving it altogether.

2. The **Comments** section outlines any additional information related to the project, including status changes from a previous year, its relationship to other projects or future developments, impacts on operating budgets and others.

3. The **Location** section will list a street location or various locations for each project. Specific locations for Public Works projects can also be found on the City of Ames website at cityofames.org/amescipmap.

In addition to the above information, the bottom of each page lists the types of costs (planning, construction, etc.) which will be associated with the project for each year of the present C.I.P. Below that is shown the source of financing for the project in each year.

INDEX TO 2017-2022 CAPITAL IMPROVEMENTS PLAN

CITY OF AMES, IOWA

UTILITIES - continued

UTILITIES - continued

TRANSPORTATION:

TRANSPORTATION - continued

COMMUNITY ENRICHMENT / INTERNAL SERVICES:

COMMUNITY ENRICHMENT / INTERNAL SERVICES - continued

PROJECTION OF DEBT CAPACITY

	2015/16 ACTUAL	2016/17 BUDGETED	2017/18 PROJECTED	2018/19 PROJECTED	2019/20 PROJECTED	2020/21 PROJECTED	2021/22 PROJECTED
1. Total Actual Valuation	3,789,598,226	4,052,418,330	4,180,898,134	4,306,325,078	4,435,514,830	4,568,580,275	4,705,637,683
2. State Mandated Debt Limit	189,479,911	202,620,917	209,044,907	215,316,254	221,775,742	228,429,014	235,281,884
3. City Reserve (25% of Limit)	47,369,978	50,655,229	52,261,227	53,829,064	55,443,936	57,107,254	58,820,471
Un-Reserved Debt Capacity	142,109,933	151,965,688	156,783,680	161,487,190	166,331,806	171,321,760	176,461,413
4. Outstanding Debt	68,825,000	69,610,000	59,925,000	50,580,000	42,590,000	35,185,000	28,950,000
5. Proposed Issues	-	-	7,521,000	7,804,000	8,495,000	9,835,000	12,225,000
6. Balance of Proposed Issues	-	-	-	6,991,055	13,699,326	20,467,149	27,830,163
Total Debt Subject to Limit	68,825,000	69,610,000	67,446,000	65,375,055	64,784,326	65,487,149	69,005,163
7. Available Un-Reserved Debt Capacity ($)	73,284,933	82,355,688	89,337,680	96,112,135	101,547,480	105,834,611	107,456,250
8. Available Un-Reserved Debt Capacity (%)	51.57%	54.19%	56.98%	59.52%	61.05%	61.78%	60.90%
9. Total Debt Capacity ($)	120,654,911	133,010,917	141,598,907	149,941,199	156,991,416	162,941,865	166,276,721
10. Total Debt Capacity (%)	63.68%	65.65%	67.74%	69.64%	70.79%	71.33%	70.67%

Notes:

1. *Total assessed valuation plus utility valuation growth assumption is 3.0% per year.*
2. *State of Iowa statutory debt limit is 5% of total actual valuation.*
3. *City Policy reserves 25% percent of available debt capacity.*
4. *Current outstanding debt subject to limit at Fiscal Year End includes all debt in which property taxes are pledged.*
5. *Debt issues subject to limit proposed are part of Capital Improvement Plan.*
6. *Debt Balance on Issues in Capital Improvement Plan.*
7. *Debt capacity available after deducting the reserved capacity.*
8. *Percentage of debt capacity available after deducting the reserved capacity.*
9. *Debt capacity available prior to deducting the reserved capacity.*
10. *Percentage of Debt capacity available prior to deducting the reserved capacity.*

SUMMARY OF MAJOR BOND ISSUES

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2017/18:				
STREETS ENGINEERING		6,946,000		
Grand Avenue Extension	4,000,000		52%	MPO/STP Funds/Grants
South Duff Avenue Improvements	276,000		14%	Previously Issued Bonds/Grants
Arterial Street Pavement Improvements (13th Street)	620,000		37%	MPO/STP Funds
Collector Street Pavement Improvements (Meadowlane)	950,000		95%	Electric Utility Fund
Asphalt Street Pavement Improvements	850,000		100%	
Downtown Street Improvements (Main Street Alley)	250,000		83%	Electric Utility Fund
TRAFFIC ENGINEERING		575,000		
Accessibility Enhancement Program	125,000		46%	Road Use Tax/Local Option Tax
West Lincoln Way Intersection Improvements	450,000		100%	
2017/18 TOTAL		**7,521,000**		
2018/19:				
STORM WATER		654,000		
Storm Water Erosion Control Program	654,000		65%	SRF Grant Funds
STREETS ENGINEERING		7,150,000		
Grand Avenue Extension	3,700,000		48%	MPO/STP Funds/Grants
Collector Street Pavement Improvements (Hickory Drive)	1,750,000		97%	Electric Utility Fund
Asphalt Street Pavement Improvements	1,400,000		100%	
Downtown Pavement Improvements (Market Avenue)	300,000		100%	
2018/19 TOTAL		**7,804,000**		

SUMMARY OF MAJOR BOND ISSUES, continued

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2019/20:				
UTILITIES		1,000,000		
Campustown Public Improvements	1,000,000		63%	Water/Sewer Electric
STREETS ENGINEERING		7,375,000		
Arterial Street Pavement Improvements (North Dakota)	600,000		40%	MPO/STP Funds/Grants
Collector Street Pavement Improvements (E 20th Street)	1,200,000		96%	Electric Utility Fund
Asphalt Street Pavement Improvements	1,000,000		100%	
Downtown Pavement Improvements (Lincoln Way Alley)	475,000		100%	
Seal Coat Pavement Improvements	750,000		100%	
Cherry Avenue Extension	300,000		100%	
Concrete Pavement Improvements	2,450,000		94%	Road Use Tax/Electric
CyRide Route Pavement Improvements (9th Street)	600,000		100%	
STREET MAINTENANCE		120,000		
Bridge Rehabilitation Program (6th Street; Minnesota Ave)	120,000		100%	
2019/20 TOTAL		**8,495,000**		

SUMMARY OF MAJOR BOND ISSUES, continued

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2020/21:				
STREETS ENGINEERING		9,735,000		
Arterial Street Pavement Improvements (13th Street)	900,000		36%	Grants
Collector Street Pavement Improvements (Hoover Avenue)	2,400,000		96%	Road Use Tax
Asphalt Street Pavement Improvements	1,400,000		100%	
Downtown Pavement Improvements Kellogg Avenue Alley)	125,000		100%	
Seal Coat Pavement Improvements	750,000		100%	
Cherry Avenue Extension	510,000		20%	Grants/Electric Utility
Concrete Pavement Improvements	3,650,000		97%	Road Use Tax
STREET MAINTENANCE		100,000		
Bridge Rehabilitation Program (Lincoln Way)	100,000			
2020/21 TOTAL		**9,835,000**		

SUMMARY OF MAJOR BOND ISSUES, continued

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2021/22:				
FIRE SAFETY		1,375,000		
Fire Apparatus Replacement	1,375,000		100%	
STREETS ENGINEERING		10,200,000		
Arterial Street Pavement Improvements (East Lincoln Way)	1,250,000		93%	Electric Utility Fund
Collector Street Pavement Improvements (Woodland Street)	1,500,000		90%	Road Use Tax
Asphalt Street Pavement Improvements	3,200,000		100%	
Seal Coat Pavement Improvements	750,000		100%	
Concrete Pavement Improvements	3,500,000		68%	Road Use Tax/Electric
STREET MAINTENANCE		650,000		
Bridge Rehabilitation Program (South 4th Street)	650,000			
2021/22 TOTAL		**12,225,000**		
GRAND TOTAL GENERAL OBLIGATION BONDS		**45,880,000**		

City-Wide Program Summary

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One of the Happiest Small Pl

TOTAL CAPITAL IMPROVEMENTS PLAN EXPENDITURES AND FUNDING SOURCES

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22	Page
EXPENDITURES BY PROGRAM:							
Public Safety	1,718,000	50,000	124,000	89,000	40,000	1,415,000	7
Utilities	91,808,000	20,179,350	20,984,600	20,016,100	14,834,100	15,793,850	17
Transportation	85,935,974	20,383,720	17,494,000	13,102,400	17,746,934	17,208,920	79
Community Enrichment	5,520,000	1,145,000	1,240,000	880,000	970,000	1,285,000	123
TOTAL EXPENDITURES	**184,981,974**	**41,758,070**	**39,842,600**	**34,087,500**	**33,591,034**	**35,702,770**	
FUNDING SOURCES:							
Debt	68,799,000	11,281,000	11,374,000	13,410,000	13,637,000	19,097,000	
City	88,167,335	21,101,394	21,805,000	17,532,980	14,725,887	13,002,074	
Other	28,015,639	9,375,676	6,663,600	3,144,520	5,228,147	3,603,696	
TOTAL FUNDING SOURCES	**184,981,974**	**41,758,070**	**39,842,600**	**34,087,500**	**33,591,034**	**35,702,770**	

CAPITAL IMPROVEMENTS PLAN EXPENDITURE SUMMARY BY PROGRAM

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22	Page
EXPENDITURES BY PROGRAM:							
Public Safety:							
Fire Safety	1,678,000	50,000	124,000	89,000	40,000	1,375,000	8
Outdoor Storm Warning System	40,000	-	-	-	-	40,000	15
Total Public Safety	**1,718,000**	**50,000**	**124,000**	**89,000**	**40,000**	**1,415,000**	
Utilities:							
Electric Services	32,425,000	10,285,000	8,755,000	6,960,000	3,655,000	2,770,000	19
Water Production/Treatment	10,342,500	1,428,000	1,164,500	2,209,000	2,618,000	2,923,000	43
Water Pollution Control	11,848,000	1,856,000	3,567,000	2,158,000	1,317,000	2,950,000	55
Water Distribution	8,250,000	1,350,000	1,400,000	2,900,000	1,300,000	1,300,000	63
Sanitary Sewer System	19,913,000	3,735,000	3,845,000	3,959,000	4,077,000	4,297,000	66
Storm Water Management	7,517,000	1,105,000	1,880,000	1,680,000	1,510,000	1,342,000	69
Resource Recovery	1,512,500	420,350	373,100	150,100	357,100	211,850	76
Total Utilities	**91,808,000**	**20,179,350**	**20,984,600**	**20,016,100**	**14,834,100**	**15,793,850**	

CAPITAL IMPROVEMENTS PLAN EXPENDITURE SUMMARY BY PROGRAM, continued

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22	Page
EXPENDITURES, continued:							
Transportation:							
Streets Engineering	61,621,000	14,356,000	12,150,000	8,800,000	13,850,000	12,465,000	81
Shared Use Path System	4,909,800	1,030,000	735,000	1,266,000	943,000	935,800	94
Traffic Engineering	6,072,000	1,235,000	1,941,000	939,000	903,000	1,054,000	99
Street Maintenance	3,795,000	591,000	601,000	810,000	618,000	1,175,000	109
Transit	8,874,174	3,005,720	2,067,000	1,287,400	1,036,934	1,477,120	115
Airport	664,000	166,000	-	-	396,000	102,000	121
Total Transportation	**85,935,974**	**20,383,720**	**17,494,000**	**13,102,400**	**17,746,934**	**17,208,920**	
Community Enrichment/Internal Services:							
Parks and Recreation	4,255,000	745,000	1,025,000	680,000	720,000	1,085,000	124
Cemetery	15,000	-	15,000	-	-	-	137
City Manager	450,000	250,000	50,000	50,000	50,000	50,000	139
Planning and Housing	500,000	100,000	100,000	100,000	100,000	100,000	142
Facilities/Internal Services	300,000	50,000	50,000	50,000	100,000	50,000	145
Total Community Enrichment	**5,520,000**	**1,145,000**	**1,240,000**	**880,000**	**970,000**	**1,285,000**	
TOTAL EXPENDITURES	**184,981,974**	**41,758,070**	**39,842,600**	**34,087,500**	**33,591,034**	**35,702,770**	

CAPITAL IMPROVEMENTS PLAN FUNDING SOURCE SUMMARY

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
Debt:						
G.O. Bonds	45,880,000	7,521,000	7,804,000	8,495,000	9,835,000	12,225,000
G.O. Bonds (previously issued)	300,000	300,000	-	-	-	-
State Revolving Fund Loans	22,619,000	3,460,000	3,570,000	4,915,000	3,802,000	6,872,000
Total Debt Funding	**68,799,000**	**11,281,000**	**11,374,000**	**13,410,000**	**13,637,000**	**19,097,000**
City:						
Road Use Tax	9,353,400	2,041,000	2,605,200	1,302,400	1,737,000	1,667,800
Local Option Sales Tax	9,058,800	1,845,000	1,655,000	2,141,000	1,571,000	1,846,800
Electric Utility Fund	32,273,900	10,295,500	8,641,200	6,989,400	3,571,400	2,776,400
Water Utility Fund	15,816,500	1,968,000	2,539,500	3,353,000	3,993,000	3,963,000
Sewer Utility Fund	9,977,000	2,206,000	3,917,000	1,402,000	1,667,000	785,000
Storm Sewer Utility Fund	5,627,000	1,155,000	930,000	1,362,000	1,180,000	1,000,000
Resource Recovery Fund	1,512,500	420,350	373,100	150,100	357,100	211,850
Transit Capital Reserve Fund	3,866,835	973,944	1,019,000	823,080	509,787	541,024
Airport Construction Fund	66,400	16,600	-	-	39,600	10,200
Park Development Fund	320,000	120,000	-	-	-	200,000
Ice Arena Capital Reserve	295,000	60,000	125,000	10,000	100,000	-
Total City Funding	**88,167,335**	**21,101,394**	**21,805,000**	**17,532,980**	**14,725,887**	**13,002,074**

CAPITAL IMPROVEMENTS PLAN FUNDING SOURCE SUMMARY, continued

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
Other:						
MPO/STP Funds	7,236,000	3,220,000	2,859,000	839,000	159,000	159,000
Federal/State Grants	17,105,376	5,766,776	3,207,800	1,725,600	4,042,000	2,363,200
Federal Transit Administration	2,215,563	-	408,000	424,320	487,147	896,096
Federal Aviation Administration	597,600	149,400	-	-	356,400	91,800
Iowa State University	716,100	154,500	163,800	120,600	183,600	93,600
Ames Community School District	50,000	25,000	25,000	-	-	-
Private Funds	35,000	-	-	35,000	-	-
In-Kind Donations	60,000	60,000	-	-	-	-
Total Other Funding	**28,015,639**	**9,375,676**	**6,663,600**	**3,144,520**	**5,228,147**	**3,603,696**
TOTAL FUNDING SOURCES	**184,981,974**	**41,758,070**	**39,842,600**	**34,087,500**	**33,591,034**	**35,702,770**

Public Safety

Bloomberg, 2015)
U.S. City with the Lowest Unemployment Rate (Forbes, 2016)
Ranked No. 4 Best Small City to Make a Living (MoneyGeek, 2016)
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PUBLIC SAFETY

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22	Page
EXPENDITURES:							
Fire Safety	1,678,000	50,000	124,000	89,000	40,000	1,375,000	8
Outdoor Storm Warning System	40,000	-	-	-	-	40,000	15
TOTAL EXPENDITURES	**1,718,000**	**50,000**	**124,000**	**89,000**	**40,000**	**1,415,000**	
FUNDING SOURCES:							
Debt:							
G.O. Bonds	1,375,000	-	-	-	-	1,375,000	
City:							
Local Option Sales Tax	343,000	50,000	124,000	89,000	40,000	40,000	
TOTAL FUNDING SOURCES	**1,718,000**	**50,000**	**124,000**	**89,000**	**40,000**	**1,415,000**	

PUBLIC SAFETY - FIRE

PROJECT/FUNDING SOURCE	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22	Page
PROJECT:							
Fire Station #2 Restroom	50,000	50,000	-	-	-	-	9
Fire Station #1 Concrete Replacement	124,000	-	124,000	-	-	-	10
Fire Station #1 Emergency Generator	50,000	-	-	50,000	-	-	11
Fire Station Keyless Entry System	39,000	-	-	39,000	-	-	12
Fire Station #3 Concrete Patching	40,000	-	-	-	40,000	-	13
Fire Apparatus Replacement	1,375,000	-	-	-	-	1,375,000	14
TOTAL PROJECT EXPENDITURES	**1,678,000**	**50,000**	**124,000**	**89,000**	**40,000**	**1,375,000**	
FUNDING SOURCES							
Debt:							
G.O. Bonds	1,375,000	-	-	-	-	1,375,000	
City:							
Local Option Sales Tax	303,000	50,000	124,000	89,000	40,000	-	
TOTAL FUNDING SOURCES	**1,678,000**	**50,000**	**124,000**	**89,000**	**40,000**	**1,375,000**	

FIRE STATION #2 RESTROOM **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION
Fire Station #2 is approximately 49 years old. The building was designed during a time when no consideration was given to accommodate female firefighters. The current fire station has two restrooms; the main one is equipped with two showers, a stool and a urinal. The second one is located next to the truck room and is considered a half-bath (stool and lavatory).

This project calls for adding an additional 3/4 restroom (stool, lavatory, and shower), to better accommodate female firefighters and conform to ADA requirements. Fire Station #2 restrooms are often used by firefighters, the public, and other City/County/ISU agencies, especially during events.

The construction of the additional restroom requires relocation of an existing storage closet that is used to store firefighting gear and maintenance equipment. To help offset the loss of this storage space, an additional $5,387 to purchase storage and gear racks has been added.

COMMENTS
A plan will be developed by an architect working with the Inspections Division to ensure the addition is code compliant. Estimates will be updated as needed.

NOTE: Ultimately a decision to rebuild or relocate Station #2 may need to occur, but the necessity of this addition justifies moving ahead with the project.

LOCATION
Fire Station #2, 132 Welch Ave.

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Construction		50,000	50,000				
	TOTAL	**50,000**	**50,000**				
FINANCING:							
Local Option Sales Tax		50,000	50,000				
	TOTAL	**50,000**	**50,000**				

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Public Safety – Fire	Fire	030-2252-429

FIRE STATION # 1 CONCRETE REPLACEMENT **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION – Fire Station #1 was constructed in 1979. Underground fuel tanks were originally installed underneath the rear drive. The tanks were removed and the void was filled, but settling of the pavement has occurred, causing accelerated damage. Public Works engineers evaluated the concrete in 2012 and agreed the concrete will need to be replaced within five years, estimated at $124,000.

LOCATION
Fire Station #1, 1300 Burnett Ave.

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Construction		124,000		124,000			
	TOTAL	**124,000**		**124,000**			
FINANCING:							
Local Option Sales Tax		124,000		124,000			
	TOTAL	**124,000**		**124,000**			

PROGRAM – ACTIVITY: Public Safety – Fire

DEPARTMENT: Fire

ACCOUNT NO.

FIRE STATION # 1 EMERGENCY GENERATOR **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION – Fire Station #1 was constructed in 1979, and the current emergency generator was installed at that time. As problems have arisen with this equipment, parts have become hard to acquire. There is an increasing need to upgrade this obsolete emergency facility generator originally installed at this station to provide backup power during times of electrical outages.

COMMENTS
This project includes the purchase of a fixed emergency power generator, applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure at Station #1. Though the generator is housed inside the station, the $50,000 requested also includes a sound attenuated, industrial grade enclosure that reduces noise levels to below industry standards.

LOCATION
Fire Station #1, 1300 Burnett Ave.

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Equipment and installation		50,000			50,000		
	TOTAL	**50,000**			**50,000**		
FINANCING:							
Local Option Sales Tax		50,000			50,000		
	TOTAL	**50,000**			**50,000**		

PROGRAM – ACTIVITY: Public Safety – Fire
DEPARTMENT: Fire
ACCOUNT NO.

KEYLESS ENTRY SYSTEM **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

In the days after the terrorist attacks of 9/11, increased physical security concerns led many fire departments to a heightened level of security. As part of the Patriot Act, Fire Stations providing emergency response have been defined as "critical infrastructure," and house significantly expensive apparatus and equipment. In addition, many highly confidential documents can be accessed on site as well (e.g. EMS reports, personnel files, KNOX Box keys, etc.). When turnover occurs, efforts are taken to have all station keys returned to Administration, yet the ease of key duplication is always a concern, thereby necessitating a request to install a more sophisticated card access system at all three fire stations.

COMMENTS

This project includes the installation of a new card access system to the perimeter doors of all three fire station facilities, based on the current open architecture hardware and the corresponding required software to function. The new system would include:

- Control panels with power supply and enclosures
- 2-portal reader interfaces
- Access software with server
- Web client for remote access
- Wall mount card readers (some with keypads)
- Electric strikes and dead latches with exit paddles installed
- Cabling, software, installation, programming, and necessary training

LOCATION

Fire Station #1, 1300 Burnett Ave.
Fire Station #2, 132 Welch Ave.
Fire Station #3, 2400 S. Duff Ave.

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Equipment and Installation		39,000			39,000		
	TOTAL	**39,000**			**39,000**		
FINANCING:							
Local Option Sales Tax		39,000			39,000		
	TOTAL	**39,000**			**39,000**		

PROGRAM – ACTIVITY: Public Safety – Fire

DEPARTMENT: Fire

ACCOUNT NO.

FIRE STATION # 3 CONCRETE PATCHING **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION – Fire Station #3 was constructed in 2002. Since its construction, the concrete driveway has continued to deteriorate around the structure. Public Works engineers have evaluated the driveway and recommended several options ranging from patching to a complete reconstruction. Based on further input from Public Works, the project includes an initial patching option, rather than complete tear out and replacement at this time.

COMMENTS
The engineers have cautioned that there is a strong likelihood that the joint deterioration will spread from the patching, however they believe that it should last long enough that the rest of the concrete ages to a point where complete reconstruction makes more sense.

LOCATION
Fire Station #3, 2400 S. Duff Ave.

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Construction		40,000				40,000	
	TOTAL	**40,000**				**40,000**	
FINANCING:							
Local Option Sales Tax		40,000				40,000	
	TOTAL	**40,000**				**40,000**	

PROGRAM – ACTIVITY: Public Safety – Fire
DEPARTMENT: Fire
ACCOUNT NO.

FIRE APPARATUS REPLACEMENT **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
Fire apparatus are essential for structural firefighting. The Fire Apparatus Replacement Program ensures replacement of fire apparatus at the end of their operational life. The City maintains its current fleet very well, which facilitates keeping the three front line fire apparatus for a maximum of 20 years, after which our goal is to retain it as a reserve apparatus for an additional 10-15 years. However, sometimes parts availability, metal fatigue, and corrosion will take apparatus out of service, making continued use impractical. Before being placed in reserve status, fire apparatus are typically refurbished.

The City maintains one frontline ladder truck, Truck 3, which is nearing 20 years of age (purchased new in 2002). In addition to Truck 3, the City has two frontline fire engines (Engine 1 and Engine 2), and Fire Stations #1 and #3 each house a reserve engine as well.

COMMENTS
Currently housed at Station #3, Truck 3 is the City's only aerial firefighting apparatus. When out-of-service, a neighboring volunteer Fire Department is typically called to place its ladder truck on stand-by. Thus, at 20 years of age, Truck 3 is due for replacement, and retaining this Truck as a reserve would limit the necessity to call other agencies for unit stand-by.

Replace Truck 3 (801) at a cost of $1,250,000, including new equipment
Reserve Engine 3 (purchased new in 1989) will be disposed of/sold and Truck 3 will be refurbished to serve as a reserve truck. Estimated cost is $125,000.

LOCATION
Fire Station #3, 2400 S. Duff Ave.

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Replace Truck 3		1,250,000					1,250,000
Refurbish Truck 3 for Reserve Status		125,000					125,000
	TOTAL	**1,375,000**					**1,375,000**
FINANCING:							
G.O. Bonds		1,375,000					1,375,000
	TOTAL	**1,375,000**					**1,375,000**

PROGRAM – ACTIVITY: Public Safety – Fire
DEPARTMENT: Fire
ACCOUNT NO.

PUBLIC SAFETY - STORM WARNING SYSTEM

PROJECT/FUNDING SOURCE	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22	Page
PROJECT:							
Outdoor Storm Warning System	40,000	-	-	-	-	40,000	16
TOTAL PROJECT EXPENDITURES	**40,000**	**-**	**-**	**-**	**-**	**40,000**	
FUNDING SOURCES:							
City:							
Local Option Sales Tax	40,000	-	-	-	-	40,000	
TOTAL FUNDING SOURCES	**40,000**	**-**	**-**	**-**	**-**	**40,000**	

OUTDOOR STORM WARNING SYSTEM **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION

The City's outdoor storm warning system is made up of a central controller in the Police Department dispatch center and 18 radio-controlled individual storm sirens. This program allows the City to fill in gap areas and acquire new, larger sirens to augment and eventually replace the smaller, older sirens.

LOCATION

The location for the siren being purchased in FY 2021/22 will be determined at the time of purchase.

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Equipment and Installation		40,000					40,000
	TOTAL	**40,000**					**40,000**
FINANCING:							
Local Option Sales Tax		40,000					40,000
	TOTAL	**40,000**					**40,000**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Public Safety – Electric	Electric Services	030-4802-429

Utilities

Bloomberg, 2015)
U.S. City with the Lowest Unemployment Rate (Forbes, 2016)
Ranked No. 4 Best Small City to Make a Living (MoneyGeek, 2016)
Ranked No. 35 in Top 100 Best Places to Live
Unemployment Rate (Forbes, 2016)
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UTILITIES

EXPENDITURES:	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22	Page
Electric Services	32,425,000	10,285,000	8,755,000	6,960,000	3,655,000	2,770,000	19
Water Production/Treatment	10,342,500	1,428,000	1,164,500	2,209,000	2,618,000	2,923,000	43
Water Pollution Control	11,848,000	1,856,000	3,567,000	2,158,000	1,317,000	2,950,000	55
Water Distribution	8,250,000	1,350,000	1,400,000	2,900,000	1,300,000	1,300,000	63
Sanitary Sewer System	19,913,000	3,735,000	3,845,000	3,959,000	4,077,000	4,297,000	66
Storm Water Management	7,517,000	1,105,000	1,880,000	1,680,000	1,510,000	1,342,000	69
Resource Recovery	1,512,500	420,350	373,100	150,100	357,100	211,850	76
TOTAL EXPENDITURES	**91,808,000**	**20,179,350**	**20,984,600**	**20,016,100**	**14,834,100**	**15,793,850**	

FUNDING SOURCES:

Debt:						
G.O. Bonds	1,654,000	-	654,000	1,000,000	-	-
State Revolving Fund Loans	22,619,000	3,460,000	3,570,000	4,915,000	3,802,000	6,872,000
Total Debt Funding	24,273,000	3,460,000	4,224,000	5,915,000	3,802,000	6,872,000

UTILITIES, CONTINUED

PROJECT/FUNDING SOURCE	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
FUNDING SOURCES, continued:						
City:						
Electric Utility Fund	31,823,900	10,195,500	8,591,200	6,889,400	3,471,400	2,676,400
Water Utility Fund	15,441,500	1,893,000	2,464,500	3,278,000	3,918,000	3,888,000
Sewer Utility Fund	9,602,000	2,131,000	3,842,000	1,327,000	1,592,000	710,000
Storm Sewer Utility Fund	5,377,000	1,105,000	880,000	1,312,000	1,130,000	950,000
Resource Recovery Fund	1,512,500	420,350	373,100	150,100	357,100	211,850
Road Use Tax	150,000	50,000	100,000	-	-	-
Local Option Sales Tax	60,000	60,000	-	-	-	-
Park Development Fund	40,000	40,000	-	-	-	-
Total City Funding	64,006,900	15,894,850	16,250,800	12,956,500	10,468,500	8,436,250
Other:						
Iowa State University	716,100	154,500	163,800	120,600	183,600	93,600
Federal/State Grants	2,752,000	610,000	346,000	1,024,000	380,000	392,000
In-Kind Donations	60,000	60,000	-	-	-	-
Total Other Funding	3,528,100	824,500	509,800	1,144,600	563,600	485,600
Total Funding Sources	**91,808,000**	**20,179,350**	**20,984,600**	**20,016,100**	**14,834,100**	**15,793,850**

UTILITIES - ELECTRIC SERVICES

PROJECT/FUNDING SOURCE	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22	Page
PROJECT:							
Electric Services:							
Demand Side Management Program	6,000,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	21
Transmission:							
Top-O-Hollow Substation Expansion	1,950,000	1,950,000	-	-	-	-	22
Ontario Substation 69 kV Breaker Addition	1,500,000	200,000	1,300,000	-	-	-	23
69 kV Transmission Reconstruction	1,820,000	-	260,000	520,000	520,000	520,000	24
Distribution:							
Street Light LED Retrofits	1,500,000	300,000	300,000	300,000	300,000	300,000	25
Electric Distribution Parking Lot	185,000	185,000	-	-	-	-	26
Dayton Avenue Substation Upgrade	1,150,000	-	200,000	950,000	-	-	27
Mortensen Road Feeder Reconstruction	520,000	-	520,000	-	-	-	28
Mortensen Road Transformer Protection	650,000	-	-	150,000	500,000	-	29
Vet Med Substation Switchgear Upgrade	850,000	-	-	-	100,000	750,000	30
Power Plant Capital:							
Power Plant Relay/Control Replacement	250,000	-	125,000	125,000	-	-	31

UTILITIES - ELECTRIC SERVICES, continued

PROJECT/FUNDING SOURCE	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22	Page
PROJECT, continued:							
Power Plant Maintenance:							
Unit #7 Boiler Tube Repair	1,800,000	1,800,000	-	-	-	-	32
Unit #7 Turbine Generator Overhaul	2,300,000	500,000	1,800,000	-	-	-	33
Ash Pond	1,000,000	1,000,000	-	-	-	-	34
RDF Bin Work	2,800,000	2,800,000	-	-	-	-	35
Power Plant Building Modifications	1,450,000	350,000	300,000	500,000	300,000	-	36
Power Plant Fire Protection System	250,000	-	250,000	-	-	-	37
Unit #8 Turbine Generator Overhaul	4,000,000	-	2,500,000	1,500,000	-	-	38
Unit #8 Precipitator Reconstruction	1,000,000	-	-	1,000,000	-	-	39
Combustion Turbine #2 Controls Upgrade	700,000	-	-	700,000	-	-	40
Underground Storage Tanks	250,000	-	-	15,000	235,000	-	41
Coal Yard Reclamation	500,000	-	-	-	500,000	-	42
TOTAL PROJECT EXPENDITURES	**32,425,000**	**10,285,000**	**8,755,000**	**6,960,000**	**3,655,000**	**2,770,000**	
FUNDING SOURCES:							
City:							
Electric Utility Fund	31,708,900	10,130,500	8,591,200	6,839,400	3,471,400	2,676,400	
Other:							
Iowa State University	716,100	154,500	163,800	120,600	183,600	93,600	
TOTAL FUNDING SOURCES	**32,425,000**	**10,285,000**	**8,755,000**	**6,960,000**	**3,655,000**	**2,770,000**	

DEMAND SIDE MANAGEMENT (DSM)
ENERGY CONSERVATION PROGRAMS

PROJECT STATUS: Cost Increase

DESCRIPTION/JUSTIFICATION

This project is to develop and administer programs aimed at reducing demand for electricity. Reductions in the demand for electricity positively impact future energy production/supply costs. Demand Side Management (DSM) programs are utility programs aimed at reducing consumer use of energy through conservation or efficiency measures. Ongoing programs are:

- Residential energy audits
- Residential high efficiency air conditioner rebates
- Residential low income weatherization
- Residential high efficiency lighting rebates
- Residential and commercial efficient appliance rebates
- Commercial custom rebates
- Solar installation rebates
- Residential new construction rebates
- Commercial high efficiency lighting rebates
- Commercial audits
- Power Watch education
- Green Choices alternative energy contribution
- Commercial/industrial power factor correction rebates

With rebates for solar panel installations gaining momentum and a strong interest in appliance rebates, the budget for this program is being increased from $1,000,000 per year to $1,200,000 for the next five years.

Load Management (LM) programs control energy consumption at any instant through the use of mechanical or electronic devices. Ongoing programs are:

- Prime Time Power air conditioner load control

New Demand Side Management (DSM) program changes are:

- Added a rebate for air conditioner tune up, a rebate for WiFi thermostats, and raised the minimum rating on qualifying air conditioners to 15 SEER in the High Efficiency Air Conditioner Rebate program
- Removed compact fluorescent lamps (CFL) from Residential Efficient Lighting Rebate program and removed the electronic ballast T8 rebate in new construction situations in both the residential and commercial lighting rebate programs
- Added a rebate for Energy Star qualified dehumidifiers and electric dryers to the Appliance Rebate program

New Load Management programs under consideration are:

- Interruptible rates for industrial customers
- Time of use (TOU) rates – Beginning June, 2015 we are conducting a TOU rate pilot for Amcor Rigid Plastics

LOCATION

Electric Administration

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/2022
COST:						
Program development and administration	6,000,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
TOTAL	**6,000,000**	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
FINANCING:						
Electric Utility Fund	6,000,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
TOTAL	**6,000,000**	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Administration	Electric Services	530-4815-489

TOP-O-HOLLOW SUBSTATION EXPANSION AND BREAKER ADDITION

PROJECT STATUS: No Change

DESCRIPTION/JUSTIFICATION

This project will convert the existing direct-buried underground 69kV transmission tap connection at the Top-O-Hollow substation to a more reliable dual-source overhead transmission connection, including the necessary relaying and breakers for high-speed/selective line and transformer protection. The scope of this project includes the replacement and expansion of the existing 13.8kV metalclad switchgear to provide the addition of a main breaker, upgrade of obsolete air-blast breakers and electromechanical relays with vacuum interrupter breakers and microprocessor based relaying equipment, and expansion of the battery and charger system to replace undersized batteries. The addition of the dual 69 KV transmission source and upgraded 69kV and 13.8 kV relay protection will improve reliability of the 69kV transmission system, improve service to the customers served by this substation, improve worker safety, and provide improved protection to electrical assets from fault damage. The land for this project has been purchased previously to allow for the expansion of the existing substation. Use of breakers for transmission line, transformer, and 13.8kV main breaker protection is consistent with recommended engineering practices in the electric utility industry.

COMMENTS

Iowa State University's (ISU) share of the project is based on a load-ratio-share at the time of implementation. For budgetary purposes, staff is assuming the ISU load ratio share to be 7% of the total project cost (18% of the 69kV portion of this project, which is estimated to be approximately 40% of the total project cost).

FY 2008/09	Land Purchase	24,883
FY 2015/16	Engineering	8,920
FY 2016/17	Engineering	366,080
FY 2017/18	Construction	1,950,000
	Total	$ 2,349,883

LOCATION

Top-O-Hollow Road west of Calhoun Avenue

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Construction		1,950,000	1,950,000				
	TOTAL	**1,950,000**	**1,950,000**				
FINANCING:							
Electric Utility Fund		1,813,500	1,813,500				
Iowa State University		136,500	136,500				
	TOTAL	**1,950,000**	**1,950,000**				

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Transmission	Electric Services	530-4882-489

ONTARIO SUBSTATION 69KV BREAKER ADDITION **PROJECT STATUS:** Cost Increase

DESCRIPTION/JUSTIFICATION

This project will add 69kV line and transformer breakers, replace the existing 13.8kV switchgear, replace all 13.8 kV and 69kV relaying and controls, upgrade station service and feeders, replace obsolete 69kV bus PTs and fusing and Lightning Arresters, and upgrade grounding and shielding to the Ontario Road Substation.

The addition of 69kV line and transformer breakers, 13.8kV main breaker, and replacement of obsolete relays and deteriorated lightning arrestors, PTs, and related equipment at Ontario Substation will improve the reliability of transmission service to the substation. This will also improve service provided to customers served by this substation by shortening the duration of outages which may occur.

The use of breakers for 69kV transmission service and for switchgear main breakers for distribution substations is consistent with recommended electric utility industry engineering practices.

COMMENTS

Cost change to the estimated ISU share of this project.

Iowa State University's (ISU) share of the project is based on a load-ratio-share at the time of implementation. ISU's load-ratio-share decreases as the City's load increases, so the City will likely pay a larger share as the project is delayed. For budgetary purposes, staff is assuming the ISU load-ratio-share to be 9% (based on an 18% share of 69kV facilities, which are estimated to be 50% of the cost of this project).

LOCATION

Ontario Substation, Delaware Avenue and Utah Drive

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering		200,000	200,000				
Construction		1,300,000		1,300,000			
	TOTAL	**1,500,000**	**200,000**	**1,300,000**			
FINANCING:							
Electric Utility Fund		1,365,000	182,000	1,183,000			
Iowa State University		135,000	18,000	117,000			
	TOTAL	**1,500,000**	**200,000**	**1,300,000**			

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Transmission	Electric Services	530-4821-489

69KV TRANSMISSION RECONSTRUCTION **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION

This is a multi-year project which will reconstruct the older, deteriorated portions of 69kV pole lines in project increments of between one and two line-miles of 69kV transmission line per year. The actual length and cost per mile will vary by terrain, accessibility, and attachments. Candidate portions of line include the original MidAmerican 69kV tie line that connects the Ames Plant Switchyard to MidAmerican's 69kV source point south of Ames on Highway 69, the Ames Plant to Top-O-Hollow line, the Top-O-Hollow to Stange Road Substation Line, and the Vet Med to Mortensen Road Substation line. The total project will require at least five years and will reconstruct approximately 11 miles of deteriorated 69kV line. Related work will include the reconstruction of those portions of distribution line that are underbuilt on existing transmission lines and/or new distribution underbuild that are needed for capacity and/or reliability improvements and are a logical part of construction along the same line route.

COMMENTS

Iowa State University's (ISU) share of the project is based on a load-ratio-share at the time of implementation. For budgetary purposes, staff is assuming the ISU load-ratio-share to be 18%.

LOCATION

Various

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering		245,000		35,000	70,000	70,000	70,000
Construction		1,575,000		225,000	450,000	450,000	450,000
	TOTAL	**1,820,000**		**260,000**	**520,000**	**520,000**	**520,000**
FINANCING:							
Electric Utility Fund		1,492,400		213,200	426,400	426,400	426,400
Iowa State University		327,600		46,800	93,600	93,600	93,600
	TOTAL	**1,820,000**		**260,000**	**520,000**	**520,000**	**520,000**

PROGRAM – ACTIVITY: Utilities – Electric Transmission

DEPARTMENT: Electric Services

ACCOUNT NO.

STREET LIGHT LED RETROFITS **PROJECT STATUS:** Cost Decrease

DESCRIPTION/JUSTIFICATION

This project will provide for the replacement of nearly all existing High Pressure Sodium (HPS) and Mercury Vapor (MV) Street Light fixtures with Light Emitting Diode (LED) fixtures during routine maintenance activities. This project is expected to replace approximately 7,500 roadway and security lights over a 5-year period, which includes all lights within the City of Ames electric system. LED lights have a longer life and use significantly less energy than existing HPS and MV fixtures. They are instantly on, resulting in lower ongoing maintenance costs, reduced energy usage, a decrease in the City's carbon footprint, contribute to a more sustainable Ames, and direct light downward to avoid light contamination of the night sky while reducing the glare that can negatively affect drivers. By performing retrofits during routine maintenance activities, this effort is expected to generate a return on investment within 10 years, based on projected energy and maintenance savings. LED fixtures have an expected life of at least 20 years compared to between 5 and 10 years for HPS fixtures.

COMMENTS

The purpose of this project is to allow the existing street light maintenance workers to retrofit LED lights during routine maintenance on HPS and MV lights in order to minimize retrofit labor costs. Since this effort will be routine-maintenance-based, it will not target specific streets or areas.

FY 2016/17	Material	400,000
FY 2017/18	Material	300,000
FY 2018/19	Material	300,000
FY 2019/20	Material	300,000
FY 2020/21	Material	300,000
FY 2021/22	Material	300,000
	Total	$1,900,000

LOCATION

City of Ames & Ames Electric Service Territory

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Materials		1,500,000	300,000	300,000	300,000	300,000	300,000
	TOTAL	**1,500,000**	**300,000**	**300,000**	**300,000**	**300,000**	**300,000**
FINANCING:							
Electric Utility Fund		1,500,000	300,000	300,000	300,000	300,000	300,000
	TOTAL	**1,500,000**	**300,000**	**300,000**	**300,000**	**300,000**	**300,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities- Electric Distribution	Electric Services	530-4844-489

ELECTRIC DISTRIBUTION PARKING LOT **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
The parking area and walkways, including the loading dock drive at Electric Distribution, are beginning to show advanced deterioration. These areas are subject to a large amount of heavy truck traffic and need to be repaired before driving through becomes a problem.

COMMENTS
Approximately 10 years ago, the drive was resurfaced and minor repairs have been made since, but these repairs are beginning to fail. The walkways are falling apart due to freezing/thawing cycles. The retaining wall at the south end of the area is beginning to rot away and should be replaced with stone or concrete.

LOCATION
Electric Distribution, 2208 Edison Street

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering		5,000	5,000				
Construction		180,000	180,000				
	TOTAL	**185,000**	**185,000**				
FINANCING:							
Electric Utility Fund		185,000	185,000				
	TOTAL	**185,000**	**185,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Distribution	Electric Services	530-4845-489

DAYTON AVE SUBSTATION SWITCHGEAR UPGRADES **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION

This project will upgrade two existing 13.8 kV distribution metal clad switchgear lineups at the Dayton Avenue Substation. The oldest switchgear has obsolete air blast breakers, no main breaker, and electro-mechanical relays. This switchgear needs to be replaced with all new switchgear with vacuum interrupter breakers, a main breaker, and microprocessor relays. The second switchgear has vacuum interrupter feeder breakers, which do not need to be replaced, but it has no main breaker and uses older style relays. This project will provide for the addition of a main breaker and replacement of existing distribution relays with modern microprocessor-based relays.

The addition of a main breaker will improve safety for workers and improve system reliability through the use of low maintenance breakers and relays.

These upgrades are consistent with recommended electric utility industry engineering practices.

LOCATION

Dayton Avenue Substation, Pullman Street

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering		200,000		200,000			
Construction		950,000			950,000		
	TOTAL	**1,150,000**		**200,000**	**950,000**		
FINANCING:							
Electric Utility Fund		1,150,000		200,000	950,000		
	TOTAL	**1,150,000**		**200,000**	**950,000**		

PROGRAM – ACTIVITY: Utilities – Electric Distribution

DEPARTMENT: Electric Services

ACCOUNT NO.

FEEDER RELOCATE AND EXTENSION (MORTENSEN ROAD AND STATE AVENUE)

PROJECT STATUS: Delayed

DESCRIPTION/JUSTIFICATION

This project will extend a 13.8kV double-circuit overhead pole line approximately ½ mile north of Mortensen Road along the west side of State Avenue and approximately ¼ mile east to connect to two existing feeders. Construction will also include approximately ¼ mile of underground 13.8kV feeder west of State Avenue along Tripp Street to provide service to a new development, and to connect to an existing 13.8kV line that exists on Tripp Street west of the planned new development. The developer will offset the excess costs of the underground portion of this feeder by installing the substructures for the necessary feeder extension through its development. This overhead route effectively relocates approximately 0.4 miles of a double circuit overhead line that currently runs north from Mortensen Road through the Iowa State University (ISU) athletic fields. ISU has requested that these lines be relocated in conjunction with this new construction in order to avoid redundant overhead lines in close proximity to each other.

ISU will provide the necessary easement for crossing its property along the west side of State Avenue, north of Mortensen Road, and for the relocated portion of line east of State Avenue to reconnect the existing feeders. Additionally, this project will reconstruct approximately ½ mile of deteriorated overhead distribution line along the north side of Mortensen Road between State Avenue and Welch Avenue. The Substation feeder exits are currently deteriorated, direct-buried underground cables that have experienced failures; these will all be replaced and rerouted as part of the new construction plans for these feeder projects. This will include the addition of padmounted switchgear to create necessary feeder ties to facilitate emergency and planned outage switching.

COMMENTS

FY 2016/17	Engineering	140,000
FY 2016/17	Construction	520,000
FY 2018/19	Construction	520,000
	Total	$1,180,000

LOCATION

3040 Mortensen Road

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Construction		520,000		520,000			
	TOTAL	**520,000**		**520,000**			
FINANCING:							
Electric Utility Fund		520,000		520,000			
	TOTAL	**520,000**		**520,000**			

PROGRAM - ACTIVITY: Utilities – Electric Distribution

DEPARTMENT: Electric Services

ACCOUNT NO.

MORTENSEN ROAD SUBSTATION 69KV TRANSFORMER PROTECTION

PROJECT STATUS: Delayed

DESCRIPTION/JUSTIFICATION

This project is for the addition of a 69kV breaker, relays, and controls to replace the fuse protection on the distribution transformer. This project also includes replacement of two obsolete oil circuit breakers with low-maintenance SF6 gas breakers.

COMMENTS

Use of breakers for transformer protection is consistent with recommended engineering practice in the electric utility industry and will minimize damage to the transformer and surrounding facilities and provide better worker safety in the event of a fault. Oil circuit breakers are obsolete and require increased maintenance; the use of SF6 gas breakers represents best current practices for utility substations for reduced maintenance and fast, reliable operation.

FY 2019/20	Engineering	150,000
FY 2020/21	Construction	500,000
	Total	$ 650,000

LOCATION

Mortensen Road Substation, 3040 Mortensen Road

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Engineering	150,000			150,000		
Construction	500,000				500,000	
TOTAL	**650,000**			**150,000**	**500,000**	
FINANCING:						
Electric Utility Fund	533,000			123,000	410,000	
Iowa State University	117,000			27,000	90,000	
TOTAL	**650,000**			**150,000**	**500,000**	

PROGRAM - ACTIVITY: Utilities – Electric Distribution

DEPARTMENT: Electric Services

ACCOUNT NO.

VET MED SUBSTATION SWITCHGEAR UPGRADE **PROJECT STATUS:** Cost Increase Delayed

DESCRIPTION/JUSTIFICATION

This project will replace the original 13.8 kV distribution metalclad switchgear at Vet Med Substation. The cost increase from last year's CIP is due to the change from an "upgrade" of the switchgear to a "replacement" of the switchgear. The Vet Med expansion in 2011 installed two new transformers and switchgear, but the existing metalclad switchgear was not upgraded at that time. This project upgrades the metalclad switchgear to add a main breaker and replace older existing relays to current standards. The addition of a main breaker will improve safety for workers and improve system reliability, since the use of low maintenance breakers and relays provide protection that operates more quickly and selectively.

These upgrades are consistent with electric utility industry engineering practices.

FY 2020/21	Engineering	100,000
FY 2021/22	Construction	750,000
	Total	$ 850,000

LOCATION

Vet Med Substation, South Riverside Drive

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering		100,000				100,000	
Construction		750,000					750,000
	TOTAL	**100,000**				**100,000**	**750,000**
FINANCING:							
Electric Utility Fund		750,000				100,000	750,000
	TOTAL	**850,000**				**100,000**	**750,000**

PROGRAM – ACTIVITY: Utilities – Electric Distribution

DEPARTMENT: Electric Services

ACCOUNT NO.

POWER PLANT RELAY/CONTROL REPLACEMENT **PROJECT STATUS:** Delayed Cost Decrease

DESCRIPTION/JUSTIFICATION

This project will replace existing electro-mechanical 13.8kV feeders and 4160kv bus differential relays in the Power Plant. The existing relays are obsolete electro-mechanical devices which are becoming difficult to maintain and repair, as replacement parts are no longer manufactured. By installing modern, programmable relays and updated controls in this location, long-term reliability can be improved by eliminating the obsolete and maintenance-intensive electro-mechanical relays. This project will likely take three to four years to complete.

These upgrades are consistent with recommended electric utility industry engineering practices.

COMMENTS

2016/17	Engineering, Materials and Labor (estimated)	175,000
2018/19	Materials and Labor (estimated)	125,000
2019/20	Materials and Labor (estimated)	125,000
		$ 425,000

LOCATION

Power Plant, 200 East 5th Street

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Construction		250,000		125,000	125,000		
	TOTAL	**250,000**		**125,000**	**125,000**		
FINANCING:							
Electric Utility Fund		250,000		125,000	125,000		
	TOTAL	**250,000**		**125,000**	**125,000**		

PROGRAM – ACTIVITY: Utilities – Electric Production

DEPARTMENT: Electric Services

ACCOUNT NO.

UNIT #7 BOILER TUBE REPAIR **PROJECT STATUS:** Delayed Cost Increase Scope Change

DESCRIPTION/JUSTIFICATION

The Unit #7 boiler is 40 years old and in need of tube repairs. Staff has devised a long-term plan to maintain the operation of the unit through maintenance, engineering, and re-tubing of the boiler. The cost estimates include labor and materials. A cost increase to this Capital Improvement Project is now expected so that a "widening" of the floor can be accomplished. A larger floor will increase the capability to burn 15% more Refuse-Derived Fuel (RDF) if sufficient combustion air is available. The bottom throat of the boiler also needs to be enlarged to allow for more efficient burning of RDF.

COMMENTS

2014/15	Engineering		50,000
2016/17	Materials/labor		3,850,000
2017/18	Bottom throat enlargement		1,800,000
		Total	$ 5,700,000

LOCATION

Power Plant, 200 East 5th Street

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Materials and Installation		1,800,000	1,800,000				
	TOTAL	**1,800,000**	**1,800,000**				
FINANCING:							
Electric Utility Fund		1,800,000	1,800,000				
	TOTAL	**1,800,000**	**1,800,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Production	Electric Services	530-4873-489

UNIT #7 TURBINE GENERATOR OVERHAUL **PROJECT STATUS:** Cost Increase Advanced

DESCRIPTION/JUSTIFICATION

The Unit #7 turbine generator will be disassembled and necessary repairs made after 20,000 hours of operation. An inspection was last done in 2007 and the unit is now due for an overhaul in FY 2017/18. However, work is being delayed by an additional year to reduce financial impacts in FY 2017/18.

COMMENTS

This work is required to inspect the turbine and generator for repairs that may be needed to avoid catastrophic failure of equipment. This overhaul is recommended by boiler and machinery insurance carriers and follows accepted industry standards. Repairs and replacement of worn parts will be done as problems are located during the inspection. The budget covers the inspection process and normal repair/replacement work that should be expected after 20,000 hours of operation. The cost increase is due to a change from a minor overhaul to a major overhaul which requires the physical opening of the turbine housing.

FY 2016/17	Engineering/Parts	250,000
FY 2017/18	Parts	500,000
FY 2018/19	Labor	1,500,000
FY 2018/19	GE Tech Support	300,000
	Total	$ 2,550,000

LOCATION

Power Plant, 200 East 5th Street

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Turbine Overhaul		1,500,000		1,500,00			
Parts		500,000	500,000				
GE Tech Support		300,000		300,000			
	TOTAL	**2,300,000**	**500,000**	**1,800,000**			
FINANCING:							
Electric Utility Fund		2,300,000	500,000	1,800,000			
	TOTAL	**2,300,000**	**500,000**	**1,800,000**			

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Production	Electric Services	530-4874-489

ASH POND MODIFICATIONS **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

The Power Plant ash pond needs to be modified so that it can continue to separate the bottom ash that is generated after burning Refuse-Derived Fuel (RDF). The current bag system, which is very expensive both in materials and labor, can be replaced with a much more economical system. Two more cells will be installed on the east side of the pond area to create a four-cell settling system that will separate out the ash and non-burnt RDF and make the water reusable. This will also increase the current water capacity at the pond, which will allow for more options when diverting cooling tower blowdown away from the storm sewer.

First, the large area pond currently located on the east side of the site will be dredged to 14 feet. Dredging will not only increase capacity in the pond, but also remove the coal ash residue currently in the pond. Removal of the coal ash residue is necessary in order to comply with the Environmental Protection Agency Coal Combustion Residual rule. Additionally, "non-coal ash" berms will be installed, one on the north side of the newly-dredged area and another to divide it into two cells. The new berms will have special drain pipes installed to help the segregation of ash and water between cells. A new bottom ash line will also be installed, which will bring the bottom ash to the new cells.

LOCATION

Ash Pond, 13th Street

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering		100,000	100,000				
Construction		900,000	900,000				
	TOTAL	**1,000,000**	**1,000,000**				
FINANCING:							
Electric Utility Fund		1,000,000	1,000,000				
	TOTAL	**1,000,000**	**1,000,000**				

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Production	Electric Services	530-4879-489

RDF BIN RENOVATION **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

This project is to repair and/or replace the entire "skin" of the RDF bin and replace or protect a majority of the structural beams that provide support to the structure of the RDF bin. The entire RDF bin is composed of Cor-ten steel. The Cor-ten steel was used as a cheaper steel option that would be able to stand up to harsh environments. It does this by rusting on the surface, drying out, and then essentially using the rust layer to protect the remaining good steel. This has proven to be a poor choice in the RDF bin. The bin is continually subject to a very harsh, moist environment. This environment has caused the Cor-ten steel to remain wet for long periods, continually rust, and never stop. The steel that is exposed to the RDF has degraded to the point where the walls and roof are very thin and are even showing holes in numerous places ranging from a pin hole to a square foot in size. The structure beams have shown significant deterioration and need to be protected, or in some cases, replaced. These areas are currently being patched but now require almost constant attention.

COMMENTS

Staff expects the frequency of these repairs to increase throughout the current year. Since it is difficult to coordinate outages where there isn't conflict with the Resource Recovery Plant, staff plans to perform the work in such a way that will allow for one side of the bin to be in operation while the other is being repaired and have minimum downtime of both bins.

LOCATION

Power Plant, 200 East 5th Street

		TOTAL	2017/18	2018/19	2019/20	2020/2021	2021/2022
COST:							
Engineering		300,000	300,000				
Construction		2,500,000	2,500,000				
	TOTAL	**2,800,000**	**2,800,000**				
FINANCING:							
Electric Utility Fund		2,800,000	2,800,000				
	TOTAL	**2,800,000**	**2,800,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Production	Electric Services	530-4809-489

POWER PLANT BUILDING MODIFICATIONS **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

This project will bring much needed improvements to the Power Plant. The Power Plant is a City building that has gone through several changes over the last 50 years. This project is a multi-year effort to make the building more energy efficient, meet current building requirements, and install security features.

FY 2017/18	Repair/replace block windows and paint turbine deck	350,000
FY 2018/19	HVAC replacement for old relay room	300,000
FY 2019/20	Office, design, and build new entrance; ADA compliant	500,000
FY 2020/21	Install card reader security system	300,000
	Total	$ 1,450,000

LOCATION

Power Plant, 200 East 5th Street

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering		100,000	50,000		50,000		
Construction		1,350,000	300,000	300,000	450,000	300,000	
	TOTAL	**1,450,000**	**350,000**	**300,000**	**500,000**	**300,000**	
FINANCING:							
Electric Utility Fund		1,450,000	350,000	300,000	500,000	300,000	
	TOTAL	**1,450,000**	**350,000**	**300,000**	**500,000**	**300,000**	

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Production	Electric Services	530-4870-489

POWER PLANT FIRE PROTECTION SYSTEM **PROJECT STATUS:** Delayed Project Change

DESCRIPTION/JUSTIFICATION

The City's insurance carrier has made several loss prevention recommendations for the Power Plant. These recommendations are for fire suppression systems for the coal conveying equipment, coal pulverizers, and related coal processing and conveyor equipment. The cost and schedule for installation of the recommendations is as follows:

FY 2004/05	Upgrading City Water Service (in plant)	475,000
FY 2008/09	Coal Handling Sprinkler System Phase 1	650,000
FY 2011/12	Engineering for Plant Fire Plan	30,000
FY 2014/15	Gas Turbine 2	45,997
FY 2015/16	Gas Turbine 1	204,003
FY 2016/17	GT Fire Protection	782,005
FY 2018/19	Turbine Generator #8	250,000
		$ 2,671,000

COMMENTS

A serious fire in any one of the systems can force the outage of either Unit #7 or #8 or the entire Power Plant. Replacement power during an extended period of time can be very expensive.

LOCATION

Power Plant, 200 East 5th Street

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Construction		250,000		250,000			
	TOTAL	**250,000**		**250,000**			
FINANCING:							
Electric Utility Fund		250,000		250,000			
	TOTAL	**250,000**		**250,000**			

PROGRAM - ACTIVITY: Utilities – Electric Production

DEPARTMENT: Electric Services

ACCOUNT NO.

UNIT #8 TURBINE GENERATOR OVERHAUL **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

The Unit #8 turbine generator will be disassembled and inspected after 20,000 hours of operation. An overhaul/inspection was done in FY 2012/13 and is due again in FY 2018/19. This work is required to replace worn parts and inspect the turbine and generator for repairs that may be needed to avoid catastrophic failure of equipment. This overhaul is recommended by boiler and machinery insurance carriers and follows accepted industry standards.

COMMENTS

During the last overhaul/inspection of the unit in FY 2012/13, the contractor was able to repair or rebuild most of the worn parts, but noted that some of these will need to be replaced during the next overhaul. Turbine generator parts have long lead delivery times and need to be ordered well in advance of the generator repair process to prevent unnecessary delays in the assembly of the unit. This project involves procuring parts for the Unit #8 turbine generator overhaul, and then installing them in the following fiscal year. Parts to be ordered include a first stage nozzle, several blading stages, and one diaphragm. Other parts to be procured will include a pilot valve and cylinder, main operating valve, shaft and piston, speed relay valve shaft, cylinder and linkage, shaft packing sets, shaft and thrust bearings, and hydrogen seals.

2018/19	Material/Parts	2,500,000
2019/20	Construction	1,500,000
	Total	$ 4,000,000

LOCATION

Power Plant, 200 East 5th Street

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Material/Parts		2,500,000		2,500,000			
Construction		1,500,000			1,500,000		
	TOTAL	**4,000,000**		**2,500,000**	**1,500,000**		
FINANCING:							
Electric Utility Fund		4,000,000		2,500,000	1,500,000		
	TOTAL	**4,000,000**		**2,500,000**	**1,500,000**		

PROGRAM - ACTIVITY: Utilities – Electric Production

DEPARTMENT: Electric Services

ACCOUNT NO.

UNIT #8 PRECIPITATOR RECONSTRUCTION **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This project will provide for the replacement of the lagging, insulation and support steel of a 33-year-old precipitator. There have been numerous repairs done over the years, but the outer lagging and insulation are now in need of a complete replacement. Over time, the support steel has failed due to rusting and fatigue with the breaking of attachment tabs. Due to the precipitator's height of approximately 155 to 210 feet in the air and approximately 20,000 square feet, it will require scaffolding and be costly to repair. Failure to repair all four sides from top to bottom could result in a catastrophic failure. If the lagging were to let go, the "skin" could fall on people, equipment, or the railroad track.

COMMENTS

The entire lagging, insulation, and some support steel need to be replaced for the safe, continued operation of the precipitator.

LOCATION

Power Plant, 200 East 5th Street

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering		45,000			45,000		
Materials and Labor		955,000			955,000		
	TOTAL	**1,000,000**			**1,000,000**		
FINANCING:							
Electric Utility Fund		1,000,000			1,000,000		
	TOTAL	1,000,000			**1,000,000**		

PROGRAM - ACTIVITY: Utilities - Electric Production

DEPARTMENT: Electric

ACCOUNT NO.

COMBUSTION TURBINE 2 CONTROLS UPGRADE **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

This project is to replace the current outdated controls on Combustion Turbine 2 (CT2) with updated controls. The current control hardware and software is over 11 years old and is no longer supported by GE. This project will also integrate the Balance of Plant (BOP) control system that is currently run on a separate system. The BOP control system is a unique system that was created specifically for the Ames site when CT2 was built. It is used to operate all of the balance of plant equipment on the Combustion Turbine. It is also used to remotely run the Combustion Turbine by allowing the Operator to control it from the Power Plant control room. The BOP system does not allow the Operator to see all the Combustion Turbine controls and is supported by a system that is not able to be run on new computers.

This project will replace the BOP system software and hardware, replace the outdated Combustion Turbine control software and hardware, and allow for remote run from the Power Plant control room through a reliable connection with full view of all controls.

COMMENTS

LOCATION

Power Plant, 200 East 5th Street

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering/Design/Construction		700,000			700,000		
	TOTAL	**700,000**			**700,000**		
FINANCING:							
Electric Utility Fund		700,000			700,000		
	TOTAL	**700,000**			**700,000**		

PROGRAM - ACTIVITY: Utilities – Electric Production

DEPARTMENT: Electric Services

ACCOUNT NO.

UNDERGROUND STORAGE TANK REMOVAL **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
There are two 42,000 gallon underground tanks in service that store #2 fuel oil for units #7 and #8. These are original tanks installed during the construction of Unit #8. They have been in the ground for 30 years and are functional with no operational issues at this time. Testing completed in 2011 indicated that there are no problems. However, due to the age of these tanks (30 years is the expected safe life), it is very possible that an oil leak could occur, causing expensive cleanup. They are no longer needed now that the plant has been converted to natural gas.

COMMENTS
It is prudent to plan to remove these tanks rather than leave them in the ground.

LOCATION
Power Plant, 200 East 5th Street

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Engineering	15,000			15,000		
Equipment and Labor	235,000				235,000	
TOTAL	**250,000**			**15,000**	**235,000**	
FINANCING:						
Electric Utility Fund	250,000			15,000	235,000	
TOTAL	**250,000**			**15,000**	**235,000**	

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Production	Electric Services	530-4860-489

COAL YARD RECLAMATION **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
In the spring of 2016, the Power Plant was converted from coal-fired to natural gas-fired. This project is to perform activities to reclaim the area used for coal storage, and turn it into a green space.

COMMENTS

LOCATION
Power Plant, 200 East 5th Street

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering		50,000				50,000	
Construction		500,000				450,000	
	TOTAL	**500,000**				**500,000**	
FINANCING:							
Electric Utility Fund		500,000				500,000	
	TOTAL	**500,000**				**500,000**	

PROGRAM - ACTIVITY: Utilities – Electric Production

DEPARTMENT: Electric Services

ACCOUNT NO.

UTILITIES - WATER PRODUCTION/TREATMENT

PROJECT/FUNDING SOURCE	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22	Page
PROJECT:							
Low-Head Dam Modifications	845,000	845,000	-	-	-	-	45
Advanced Metering Infrastructure	1,021,000	191,000	197,000	204,000	211,000	218,000	46
Water Plant Facility Improvements	1,022,000	352,000	-	-	-	670,000	47
Ada Hayden Water Quality Study	60,000	40,000	20,000	-	-	-	48
Water Supply Expansion	577,500	-	577,500	-	-	-	49
Wellhead Rehabilitation	370,000	-	370,000	-	-	-	50
Well Field Standby Power	875,000	-	-	875,000	-	-	51
Old Water Treatment Plant Demolition	3,520,000	-	-	1,020,000	1,450,000	1,050,000	52
Lime Lagoon Expansion	1,067,000	-	-	110,000	957,000	-	53
Distribution System Monitoring Network	985,000	-	-	-	-	985,000	54
TOTAL PROJECT EXPENDITURES	**10,342,500**	**1,428,000**	**1,164,500**	**2,209,000**	**2,618,000**	**2,923,000**	
FUNDING SOURCES:							
City:							
Water Utility Fund	8,516,500	593,000	1,164,500	1,553,000	2,618,000	2,588,000	
Sewer Utility Fund	335,000	-	-	-	-	335,000	
Electric Utility Fund	65,000	65,000	-	-	-	-	
Local Option Sales Tax	60,000	60,000	-	-	-	-	
Park Development Fund	40,000	40,000	-	-	-	-	
Total City Funding	9,016,500	758,000	1,164,500	1,553,000	2,618,000	2,923,000	

UTILITIES - WATER PRODUCTION/TREATMENT, continued

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
FUNDING SOURCES, continued						
Other:						
Low Head Dam Hazard Mitigation Grant	160,000	160,000	-	-	-	-
FEMA Hazard Mitigation Grant	656,000	-	-	656,000	-	-
Other Grant Funds	450,000	450,000	-	-	-	-
In-Kind Donations	60,000	60,000	-	-	-	-
Total Other Funding	1,326,000	670,000	-	656,000	-	-
TOTAL FUNDING SOURCES	**10,342,500**	**1,428,000**	**1,164,500**	**2,209,000**	**2,618,000**	**2,923,000**

LOW-HEAD DAM MODIFICATIONS **PROJECT STATUS:** Delayed Cost Change Scope Change

DESCRIPTION/JUSTIFICATION
This project will modify the low-head dam in North River Valley Park. The primary purpose is to reduce the risk of drowning due to a hydraulic recirculation downstream of the dam. Additional benefits of the improvements include: increasing the recreational opportunities for paddlers and kayakers; creating an opportunity for fish migration upstream past the dam; and new bank-side park amenities in the immediate vicinity of the dam.

COMMENTS
The low-head dam in River Valley Park serves an essential function during periods of sustained drought by pooling water in the primary recharge zone for the Water Plant's Downtown Well Field. This type of dam has the potential to create a dangerous hydraulic recirculation downstream of the dam that can trap a person below the surface, potentially resulting in drowning in just a few feet of water. In 2016, a consultant was hired to formalize the conceptual design with significant input from a large number of private stakeholders.

The project was last shown in the FY 2013/14 CIP at an estimated cost of $225,000. The scope at that time was almost entirely safety-related, with only a nominal budget for recreational amenities. The consultants developed three different conceptual options for the project. The largest, most complete concept has an estimated cost of $845,000 – far more than the current budget. City staff has already secured $160,000 in grant funding through the state's Low-Head Dam Hazard Mitigation Grant program. Another grant application through the Iowa Federal Trails program has been submitted, and an additional round of grant funds is expected to become available through the Low-Head Dam Hazard Mitigation Grant in the early spring. The final scope of the project will be dependent upon the success of these grant opportunities and any private cash or in-kind donations received. While staff is optimistic, it is possible that funding for the full concept may not be achievable. Construction is now anticipated for fall 2017, dependent upon weather and river levels.

LOCATION
North River Valley Park, E 13th Street

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Engineering (Design and Construction Mgmt.)	207,000	207,000				
Construction	638,000	638,000				
TOTAL	**845,000**	**845,000**				
FINANCING:						
Water Utility Fund	75,000	75,000				
Local Option Sales Tax	60,000	60,000				
Park Development Fund	40,000	40,000				
Low Head Dam Hazard Mitigation Grant	160,000	160,000				
Additional Grant Funds	450,000	450,000				
In-kind Donations	60,000	60,000				
TOTAL	**845,000**	**845,000**				

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities – Water Fund	Water and Pollution Control	530-3938-489
Community Enrichment	Parks and Recreation	030-4970-459
		340-4970-459

ADVANCED METERING INFRASTRUCTURE **PROJECT STATUS:** Cost Change Schedule Change

DESCRIPTION/JUSTIFICATION
This is a multi-year project to convert the water meter reading system from the existing generator/remote technology to the current industry standard of Automated Meter Reading / Advanced Metering Infrastructure (AMR/AMI). While the project includes water meter reading only, the system that will be implemented will accommodate electric meters as well, should that be desired in the future.

COMMENTS
The water meter reading system installed prior to 2015 was a mechanical system that transmits the meter reading from the water meter (located inside the property) to a remote register on the outside of the property using a low-voltage cable. This technology is obsolete and is no longer available. A cross-departmental team evaluated multiple technology platforms utilizing various combinations of "walk-by" or "drive-by" reads, radio reads, cellular reads, and other methods of obtaining meter readings. The team concluded that an AMR walk-by or drive-by system would be the most cost-effective, short term solution to replace the old technology. The City has entered into a contract with Itron, Inc. to provide the radio read system, reading equipment and software; and Badger Meter, Inc. to provide water meters for this project. This system is capable of being upgraded to a more sophisticated AMI system in the future that could provide more detailed data collection and could allow meter reading from the office without the need to send a meter reader out into the field.

The replacement program began in FY 2014/15, focusing initially on meter locations that were problematic for the Meter Readers to access. Much of the next two years focused on replacing meters in areas that are not served by the Ames Municipal Electric System, which, as a result, are locations that are more expensive to read on a per-meter basis. The final years will pick up the balance of the meter inventory.

The cost to replace 1,400 meters per year is budgeted in the Water Meter Division's operating budget (400 for new construction, and 1,000 for routine meter replacement). The cost for an additional 1,100 replacements is included annually as a part of this CIP project. This is an increase of 400 meters per year from what was shown in last year's CIP; however, this year's update now reflects the entire installation being performed by City staff instead of contracted labor, resulting in a lower dollar amount per year. The implementation schedule will still be accomplished in approximately eight years depending on the Meter Division's workload from new construction.

LOCATION
City-wide

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Equipment		1,021,000	191,000	197,000	204,000	211,000	218,000
	TOTAL	**1,021,000**	**191,000**	**197,000**	**204,000**	**211,000**	**218,000**
FINANCING:							
Water Utility Fund		1,021,000	191,000	197,000	204,000	211,000	218,000
	TOTAL	**1,021,000**	**191,000**	**197,000**	**204,000**	**211,000**	**218,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Water Meter	Water & Pollution Control	510-3947-489

WATER PLANT FACILITY IMPROVEMENTS **PROJECT STATUS:** Scope Change Cost Change

DESCRIPTION/JUSTIFICATION

This project involves annual equipment repairs, major maintenance activities, replacement, and upgrades at the Water Treatment Plant, Technical Services Complex (TSC), and associated remote facilities such as wells, elevated tanks, and booster pump stations.

COMMENTS

The schedule for these improvements is as follows:

2017/18	$ 141,000	Construct maintenance building at new treatment plant site
	31,000	Technical Services Complex (TSC) HVAC controls upgrade
	80,000	Lime/Ash Pond fencing (split with Electric)
	50,000	Land for East Industrial water tower
	50,000	Temporary paving patches @ TSC (split with Electric)
2021/22	670,000	TSC improvements (split with WPC)
Total	$1,022,000	

Because of the planned replacement of the Water Treatment Plant, no major facility improvements are planned for the existing plant. Only necessary maintenance and repairs are being performed to keep the facility operational until the new plant comes online in less than a year. The projects identified are stand-alone improvements separate from the treatment plant. Additional improvements may be identified in future years. The schedule may change in response to impending failures, regulatory agency requirements, etc.

The Maintenance Building at the new treatment plant site will provide storage for lubricating grease and oils separate from the main building, reducing the potential for a large dollar value loss due to fire. Additionally, it will house the facility's tractor and mowers. The TSC HVAC controls are outdated and no longer being supported by the manufacturer, therefore repair parts are no longer available. Fencing of the ash and lime ponds has emerged as a high priority need due to the addition of the bike trail. While the timing of a water tower in the new eastern industrial area is still to be determined, acquisition of land should be accomplished ahead of development plans in the area. The temporary paving patches will maintain the existing drives through the utility complex until permanent repaving is completed after demolition of the old water plant. The TSC Improvements will provide heated storage bays, new garage stalls for laboratory equipment and vehicles, and the addition of an elevator to the building.

LOCATION

Technical Services Complex, 300 E 5th Street

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Construction		1,022,000	352,000				670,000
	TOTAL	**1,022,000**	**352,000**				**670,000**
FINANCING:							
Water Utility Fund		622,000	287,000				335,000
Electric Utility Fund		65,000	65,000				
Sewer Utility Fund		335,000					335,000
	TOTAL	**1,022,000**	**352,000**				**670,000**

PROGRAM - ACTIVITY: Utilities - Water Treatment

DEPARTMENT: Water & Pollution Control

ACCOUNT NO. Various

ADA HAYDEN WATER QUALITY STUDY **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
Since the mid-1970's, the lakes at Ada Hayden Park have been used by the Ames Water Plant as a source for augmenting alluvial groundwater recharge during periods of low flows in the South Skunk River. In addition to the drinking water use, the lakes are a defining feature of Ada Hayden Heritage Park, providing a wide array of water-based recreational opportunities for the community. This project is part of an on-going effort to monitor the health of the lakes as development occurs in and around the lake's watershed. In addition to being a valuable tool for City staff, the continued monitoring of the lakes is of interest to many members of the community as well.

COMMENTS
A preliminary water quality evaluation was made in 2000 as part of the City's 'due diligence' effort prior to purchasing the former Hallet's Quarry property. This evaluation focused primarily on potential contamination of the lakes that could have resulted from the former industrial use of the property. Follow-up investigations were performed in 2004-2005 and again in 2009-2010. These latter investigations were focused on the overall "health" and water quality in the lakes, looking at parameters such as: dissolved oxygen; nitrogen and phosphorus; algae and microcystins; suspended solids and turbidity; and bacteria.

As the watershed has developed, the City has made efforts to encourage land use practices that will not have a negative impact on the water quality in the lakes. The long-term intent behind the monitoring effort has been to periodically recheck the lakes to determine if the existing land practices have been effective in preserving the in-lake water quality. The repeat monitoring is intended to recur at intervals of five to seven years.

The project is proposed as a two-year monitoring effort that would take place during the summers of 2017 and 2018 at an estimated cost of $40,000 per summer. The current year (FY 2016/17) CIP includes $20,000.

LOCATION
Ada Hayden Heritage Park

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Contracted Monitoring		60,000	40,000	20,000			
	TOTAL	**60,000**	**40,000**	**20,000**			
FINANCING:							
Water Utility Fund		60,000	40,000	20,000			
	TOTAL	**60,000**	**40,000**	**20,000**			

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Water Production	Water & Pollution Control	510-3901-489

WATER SUPPLY EXPANSION **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
As old wells fail and need to be replaced and as demand for treated water increases, additional wells must be drilled. This project will provide new and replacement source water capacity. The current developed water supply is adequate to meet normal demands until at least 2030. Under drought conditions, however, the yield of the aquifer is reduced, requiring additional wells to achieve the same source water capacity.

COMMENTS
The oldest well field still in use was developed in the 1950s and 1960s. Many of these wells are losing capacity, and the effectiveness of rehabilitating them is decreasing. Site separation constraints make it impossible to re-drill replacement wells in the same well field. Source water capacity is currently being increased in conjunction with the increased treatment capacity that will be available in the new Water Plant. While development of the next incremental capacity increase is projected to be approximately 10 years away, this project will proactively seek to secure land rights now.

The Water Utility currently owns land east of Interstate 35 just north of the South Skunk River. This project would seek to secure land at a location somewhere between the existing Youth Sports Complex Well Field and the I-35 Well Field. The exact location is yet to be determined, and will be dictated by both surface and underground features as well as finding a landowner interested in selling the land. The budget is based on a 50 acre site. The actual cost will depend on the particular site that is selected.

LOCATION
South Skunk River Valley south of Ames

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Appraisals, Legal, Administrative		27,500		27,500			
Land Acquisition		550,000		550,000			
	TOTAL	**577,500**		**577,500**			
FINANCING:							
Water Utility Fund		577,500		577,500			
	TOTAL	**577,500**		**577,500**			

PROGRAM - ACTIVITY: Utilities - Water Production
DEPARTMENT: Water & Pollution Control
ACCOUNT NO.

WELLHEAD REHABILITATION **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
This project involves the rehabilitation of the above-ground components of seven existing municipal supply wells.

COMMENTS
Each year the Water Plant's operating budget includes funds to rehabilitate four or five of the twenty-two wells. The routine well rehabilitation focuses on the below-ground portions of the wells such as the screens, casings, and pumps. In general, it does not address the condition of the above-ground parts of a well.

This project will focus primarily on replacing and updating the well controls in seven wells. It will involve replacing the existing control panels with two panels for each well, separating the high voltage power from the low voltage controls. It will also replace the outdated programmable logic controllers (PLC's) that are obsolete and no longer have replacements available. The project will also sandblast and repaint the above-ground discharge heads of 10 wells, preventing corrosion that could lead to contamination and a premature well failure.

LOCATION
Southeast Well Field and Hunziker Youth Sports Complex

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Construction – Controls		286,000		286,000			
Construction - Painting		84,000		84,000			
	TOTAL	**370,000**		**370,000**			
FINANCING:							
Water Utility Fund		370,000		370,000			
	TOTAL	**370,000**		**370,000**			

PROGRAM - ACTIVITY: Utilities – Water Production

DEPARTMENT: Water & Pollution Control

ACCOUNT NO.

WELL FIELD STANDBY POWER **PROJECT STATUS:** Delayed Cost Change

DESCRIPTION/JUSTIFICATION
This project will provide standby electrical power to select wells located in the Hunziker Youth Sports Complex.

COMMENTS
Iowa's Water Supply Design Standards require that a water system have redundant electrical power available. Redundancy may be provided either through "connection to at least two independent public power sources" or by "portable or in-place internal-combustion engines." Redundant power is provided at the Water Treatment Plant and in the High Service Pump Station. Currently, however, none of the City wells are connected to a redundant power supply. Installing standby power was one of the recommendations contained in the utility's 2005 Vulnerability Assessment and Emergency Response Plan. Now that immediate priority recommendations in those documents have been addressed, standby power is now being proposed.

The wells located in the Hunziker Youth Sports Complex are among the highest capacity wells in the City's inventory. Installing standby power to at least some of these five wells would allow the water utility to continue to produce treated water, at a reduced capacity, in the event of a prolonged power outage. As future well fields are developed, standby power will become a standard design element.

The most recent update to the Story County Hazard Mitigation Plan specifically included the need for standby power for existing wells. This makes the project eligible for Pre-Hazard Mitigation Grants. The funding source has been changed from Drinking Water SRF loans to a FEMA Hazard Mitigation Grant with a 25% local match from the Water Utility Fund. The project may be accelerated should grant funding become available sooner. The cost change in the project is solely the inflationary cost increase from delaying the project by one year.

LOCATION
300 E 5th Street

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Engineering	105,000			105,000		
Construction	770,000			770,000		
TOTAL	**875,000**			**875,000**		
FINANCING:						
Water Utility Fund	219,000			219,000		
FEMA Hazard Mitigation Grant	656,000			656,000		
TOTAL	**875,000**			**875,000**		

PROGRAM - ACTIVITY: Utilities - Water Production
DEPARTMENT: Water & Pollution Control
ACCOUNT NO.

DEMOLITION OF OLD WATER TREATMENT PLANT

PROJECT STATUS: No Change

DESCRIPTION/JUSTIFICATION
This project will demolish the treatment structures at the old Water Treatment Plant site.

COMMENTS
The timeline for the new Water Treatment Plant anticipates the facility beginning operation during the summer of 2017. Once the facility has been fully commissioned and is performing reliably, the treatment structures at the old plant can be torn down. This project will demolish the filter building, chemical feed building, external treatment basins, administrative offices, and ¾ million gallon ground storage reservoir. The two-story Technical Services Complex that houses the department's Water Meter and Laboratory Services Divisions will remain. Demolition will take place over a period of three years beginning in FY 2019/20.

FY 2019/20	$ 1,020,000	Demolish ¾ million gallon reservoir, maintenance building, and cold storage buildings
FY 2020/21	1,450,000	Demolish clarifiers, mix tanks, recarbonation tanks, lime feed, CO_2 feed, pipe galleries
FY 2021/22	1,050,000	Demolish treatment building
Total	$ 3,520,000	

LOCATION
300 E. 5th Street

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering / Admin		382,000			110,000	157,000	115,000
Construction		3,138,000			910,000	1,293,000	935,000
	TOTAL	**3,520,000**			**1,020,000**	**1,450,000**	**1,050,000**
FINANCING:							
Water Utility Fund		3,520,000			1,020,000	1,450,000	1,050,000
	TOTAL	**3,520,000**			**1,020,000**	**1,450,000**	**1,050,000**

PROGRAM - ACTIVITY: Utilities - Water Treatment

DEPARTMENT: Water & Pollution Control

ACCOUNT NO.

LIME LAGOON EXPANSION **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This project will construct a new lime sludge storage cell inside the existing large Cell 4. The timing for constructing additional cells is staggered over time to match growth in demand.

COMMENTS
As a part of the conceptual design for the new Water Treatment Plant, a reconfiguration of the large Cell 4 was proposed. This reconfiguration will sub-divide the large cell into a series of smaller cells that are easier to operate and clean out. A total of five smaller interior cells was originally proposed. Later in the design process, the timeline for constructing the smaller cells was altered to include only the first cell as part of the construction of the new treatment facility. The additional cells will be added at five to seven year intervals; keeping pace with anticipated growth in demand.

This project includes: the construction of a new interior berm; underdrains; a decant/drain structure; inlet, outlet, and telescoping valves; and the associated engineering activities. The project does not include the necessary lime removal from the existing large cell; funding for lime removal will be included in the operating budget with the annual lime disposal activities.

LOCATION
Water Plant lime lagoons south of East 13th Street west of the Skunk River

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering		110,000			110,000		
Construction		957,000				957,000	
	TOTAL	**1,067,000**			**110,000**	**957,000**	
FINANCING:							
Water Utility Fund		1,067,000			110,000	957,000	
	TOTAL	**1,067,000**			**110,000**	**957,000**	

PROGRAM - ACTIVITY: Utilities – Water Treatment
DEPARTMENT: Water & Pollution Control
ACCOUNT NO.

DISTRIBUTION SYSTEM MONITORING NETWORK **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
This project will install a network of sensors in the drinking water distribution system to monitor pressure fluctuations in real time. The sensors will be connected to the Water Plant's Supervisory Control and Data Acquisition (SCADA) network, allowing both treatment plant staff and distribution system staff access to the information.

COMMENTS
Pressure management in distribution systems is fundamental to providing safe drinking water. The loss of pressure can potentially allow ground water to contaminate the system. Pressure fluctuations can negatively impact the physical integrity of the pipes and result in water main breaks. When a water main breaks, it causes a pressure wave that is carried through the pipe network by the water. These sudden pressure changes, or transients, can be detected by pressure sensing instruments inserted into a water main. By installing and continuously monitoring a network of sensors, treatment plant operators and field crews can pinpoint the location of a water main break much more easily and quickly, improving the response time to isolate and repair a break. It also will provide better real-time information to better determine if a boil water advisory is needed and to better delineate the areas that should be covered by a boil advisory.

Currently, pressure monitoring is done only at a very small number of locations that are connected to the Water Plant's SCADA system, such as pump stations and elevated tanks. This project includes the addition of up to 25 monitoring nodes installed at key locations in the distribution system. The data would be monitored by the Water Plant Supervisory Control and Data Acquisition (SCADA) system, serving as an extension of the system into the distribution system.

LOCATION
Various locations

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Design		105,000					105,000
Equipment/Installation		880,000					880,000
	TOTAL	**985,000**					**985,000**
FINANCING:							
Water Utility Fund		985,000					985,000
	TOTAL	**985,000**					**985,000**

PROGRAM - ACTIVITY: Utilities – Water Treatment
DEPARTMENT: Water & Pollution Control
ACCOUNT NO.

UTILITIES - WATER POLLUTION CONTROL

PROJECT/FUNDING SOURCE	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22	Page
PROJECT:							
Nutrient Reduction Modifications	3,235,000	285,000	-	-	-	2,950,000	56
Digester Improvements	2,617,000	696,000	1,744,000	177,000	-	-	57
Cogeneration System Maintenance	1,275,000	525,000	-	750,000	-	-	58
WPC Plant Facility Improvements	550,000	350,000	200,000	-	-	-	59
Clarifier Maintenance	510,000	-	510,000	-	-	-	60
Structural Rehabilitation	2,430,000	-	1,113,000	-	1,317,000	-	61
Flow Equalization Expansion	1,231,000	-	-	1,231,000	-	-	62
TOTAL PROJECT EXPENDITURES	**11,848,000**	**1,856,000**	**3,567,000**	**2,158,000**	**1,317,000**	**2,950,000**	
FUNDING SOURCES:							
Debt:							
State Revolving Fund Loans	4,181,000	-	-	1,231,000	-	2,950,000	
City:							
Sewer Utility Fund	7,667,000	1,856,000	3,567,000	927,000	1,317,000	-	
TOTAL FUNDING SOURCES	**11,848,000**	**1,856,000**	**3,567,000**	**2,158,000**	**1,317,000**	**2,950,000**	

NUTRIENT REDUCTION MODIFICATIONS **PROJECT STATUS:** Delayed Cost Change

DESCRIPTION/JUSTIFICATION

In early 2013, the Iowa Department of Natural Resources (IDNR) released the Iowa Nutrient Reduction Strategy. This strategy will require the State's 102 largest municipal wastewater facilities to install "technically and economically feasible process changes for nutrient removal." This project would convert the WPC facility to a "Simultaneous Nitrification/Denitrification" treatment scheme to achieve the new numeric nutrient limits.

COMMENTS

The Iowa Nutrient Reduction Strategy lays out a schedule for point source discharges based on the National Pollutant Discharge Elimination System (NPDES) permit renewal cycle for each facility. The current NPDES permit for Ames has expired, but remains in effect until a new permit is issued. According to the draft permit, Ames must submit to IDNR a preliminary engineering report that evaluates the cost and feasibility of installing nutrient reduction at the facility. The facility will then receive a compliance schedule requiring the construction of nutrient reduction facilities during the term of the following NPDES permit.

2017/18	$ 285,000	Preliminary Engineering Report
2021/22 – 2024/25	4,600,000	Final Design & Construction Phase Services
2022/23 – 2024/25	31,220,000	Construction
Total	$ 36,105,000	

The IDNR has temporarily placed the renewal of the Ames NPDES permit on hold. The engineering design work for this project is still anticipated to begin in FY 2021/22. Due to the delay in the permit issuance, however, the anticipated timeline for construction has been delayed one year from what was shown in previous year's CIP. The cost change is due to the delay.

In addition, construction of the nutrient removal facility will achieve compliance with an anticipated reduction in ammonia limits, and will also eliminate the need for a substantial rehabilitation of the trickling filters. If the project is not needed due to changes in nutrient standards or other alternative watershed-based solutions, then some of the funds set aside for this project will need to be diverted to other plant modifications, such as an Integrated Fixed-film Activated Sludge (IFAS) modification to the solids contact units to achieve the lower ammonia limits ($3,160,000) and a trickling filter media replacement ($8,130,000).

LOCATION

WPC Facility; four miles south of Highway 30, east of I-35

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering		3,235,000	285,000				2,950,000
	TOTAL	**3,235,000**	**285,000**				**2,950,000**
FINANCING:							
Clean Water State Revolving Fund		2,950,000					2,950,000
Sewer Utility Fund		285,000	285,000				
	TOTAL	**3,235,000**	**285,000**				**2,950,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – WPC Plant	Water & Pollution Control	520-3420-489

DIGESTER IMPROVEMENTS **PROJECT STATUS:** Schedule Change Cost Change

DESCRIPTION/JUSTIFICATION

The WPC Facility uses anaerobic digestion as a core treatment process for wastewater solids. The digestion process stabilizes the waste, reduces the volume of the solids, and provides a measure of pathogen destruction. The process also generates methane gas as a by-product. This gas is captured and used as a fuel source for on-site electrical generation.

Recent process evaluations (Residuals Handling Study, 2010; Long-Range Facility Plan, 2012) identified a series of maintenance needs and improvements to the digesters to maintain the facility's solids handling capacity over the next 20 years. These activities include replacing pumping, piping, valves, and gas safety equipment.

The individual components were reprioritized from the schedule shown in last year's CIP. The five primary digested sludge pumps and the two secondary digested sludge pumps have been accelerated to FY 2017/18. Repainting of the pump room has been delayed until FY 2018/19, and the three waste activated sludge pumps have been postponed until FY 2019/20.

COMMENTS

The anticipated project schedule and budget are as follows:

2017/18	$ 696,000	Replace five primary digested sludge pumps ($360,000); Replace 2 secondary digested sludge pumps ($336,000)
2018/19	1,744,000	Replace methane gas piping and safety equipment ($1,404,000); Repaint pump room ($340,000)
2019/20	177,000	Replace three waste activated sludge pumps ($177,000)
Total	$ 2,617,000	

LOCATION

WPC Facility; four miles south of Highway 30, east of I-35

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering & Administration		164,000	41,000	101,000	22,000		
Construction & Equipment		2,453,000	655,000	1,643,000	155,000		
	TOTAL	**2,617,000**	**696,000**	**1,744,000**	**177,000**		
FINANCING:							
Sewer Utility Fund		2,617,000	696,000	1,744,000	177,000		
	TOTAL	**2,617,000**	**696,000**	**1,744,000**	**177,000**		

PROGRAM - ACTIVITY: Utilities – WPC Plant

DEPARTMENT: Water & Pollution Control

ACCOUNT NO. 520-3450-489

COGENERATION SYSTEM MAINTENANCE **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION
The WPC Facility uses anaerobic digestion as a core treatment process for wastewater solids. The digestion process stabilizes the waste, reduces the volume of the solids, and provides a measure of pathogen destruction. The process also generates methane "bio-gas" as a by-product. This gas is captured and used as a fuel source for on-site electrical generation. The facility has three gas-fired engines capable of operating on either the bio-gas or natural gas. Each engine drives a dedicated electric generator. A heat recovery system on the engines uses the waste heat to warm the digesters.

COMMENTS
This project plans for the regular repair and replacement of the cogeneration system. An engineering study is ongoing to ensure the continued cost-effectiveness of the methane generator (MG) system prior to undertaking significant maintenance and equipment replacement costs in the upcoming years.

Routine maintenance on the engines is planned for in the operating budget. The engines require major overhauls on a somewhat routine basis approximately every 25,000 hours of run time; roughly every five to seven years. MG #3 is scheduled for a major overhaul in FY 17/18. MG #2 is scheduled for replacement in FY 2019/20 based on the projected end of its useful life. The replacement of MG #1 with a gas-fired boiler is being delayed from the current year (FY 2016/17) to FY 2017/18 due to staff workload constraints.

The anticipated schedule of activities is as shown below.

2017/18	$ 525,000	Replace MG #1 with boiler ($290,000); Overhaul MG #3 ($235,000)
2019/20	750,000	Replace MG #2 ($750,000)
Total	$ 1,275,000	

LOCATION
WPC Facility; four miles south of Highway 30, east of I-35

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering		120,000	40,000		80,000		
Construction		1,155,000	485,000		670,000		
	TOTAL	**1,275,000**	**525,000**		**750,000**		
FINANCING:							
Sewer Utility Fund		1,275,000	525,000		750,000		
	TOTAL	**1,275,000**	**525,000**		**750,000**		

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities – WPC Plant	Water & Pollution Control	520-3444-489 520-3447-489

WPC PLANT FACILITY IMPROVEMENTS **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION

It is necessary to plan for the orderly repair, replacement, and upgrade of the Water Pollution Control Facility equipment in order to continue high-quality treatment and comply with environmental regulations. This project involves annual equipment repairs, maintenance, replacement, and upgrades at the plant. This facility became fully operational in November 1989. Life expectancies for plant equipment vary from five to six years to more than ten years.

COMMENTS

The schedule for these improvements is as follows.

2017/18	$ 350,000	Security Camera Replacement ($50,000); Grease Receiving Station ($300,000)
2018/19	200,000	Screw Pump Drives ($200,000)
Total	$ 550,000	

The Grease Receiving Station is being delayed from the current year (FY 2016/17) until FY 2017/18 to allow the completion of a Biogas Utilization Study, currently under way. The results of the study will help determine the sizing of the new receiving station.

The security improvements replace the outdated and failing cameras, camera controllers, and video recorders. Replacing the drives on the screw pumps completes a multi-year rehabilitation of these unique pumps.

LOCATION

WPC Plant; four miles south of Highway 30, east of I-35

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering		38,000	38,000				
Construction and Equipment		512,000	312,000	200,000			
	TOTAL	**550,000**	**350,000**	**200,000**			
FINANCING:							
Sewer Utility Fund		550,000	350,000	200,000			
	TOTAL	**550,000**	**350,000**	**200,000**			

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - WPC Plant	Water & Pollution Control	Various account numbers

WPC CLARIFIER MAINTENANCE **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This project includes major structural and mechanical maintenance activities for the eight clarifiers at the WPC facility.

COMMENTS
The clarifier drives and mechanisms were inspected in 2012. No significant structural concerns were identified with the metal mechanisms, and total replacement is not believed to be needed at this time. Replacement of the drives began in FY 2016/17, with priority given to the intermediate and final clarifiers. When the drives are replaced, the mechanisms will be re-evaluated and a replacement schedule prepared, if appropriate.

This is the final year of a multi-year rehabilitation of the clarifiers. A listing of all elements of the project, including prior years, is as shown below.

2015/16	$ 125,000	Replace one intermediate and one final clarifier drive
2016/17	659,000	Replace one intermediate and one final clarifier drive; Remove the primary clarifier coatings ($534,000)
2018/19	510,000	Replace four primary clarifier drives
	$ 1,294,000	

LOCATION
WPC Facility; four miles south of Highway 30, east of I-35

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Replace Primary Clarifier Drives		510,000		510,000			
	TOTAL	**510,000**		**510,000**			
FINANCING:							
Sewer Utility Fund		510,000		510,000			
	TOTAL	**510,000**		**510,000**			

PROGRAM - ACTIVITY: Utilities – WPC Plant
DEPARTMENT: Water & Pollution Control
ACCOUNT NO.

STRUCTURAL REHABILITATION **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
In order to preserve the significant investment in infrastructure at the Water Pollution Control Facility, periodic structural rehabilitation of buildings and structures is necessary. Because of the value and significance of the structures identified in this project, it is essential that rehabilitation be made prior to a structural failure.

COMMENTS
A comprehensive evaluation of the structural condition of the buildings and structures was performed in 2012. Based on that assessment, the facility is generally in good condition; however, the facility is now 27 years old and is showing signs of age-related deterioration. As a part of the condition assessment, a schedule for structural rehabilitation was developed. The drivers for the schedule are the estimated remaining useful life in each structure and coordination with future improvements to the facility.

2018/19	$ 1,113,000	Repairs to the Administration Building entrance slab ($184,000); repairs to joints in precast wall panels (all structures except trickling filters) ($450,000); stair support and sidewalk at SW clarifier stair ($18,000); repair drainage and moisture issues around multiple structures ($461,000)
2020/21	$ 1,317,000	Repairs to the precast and concrete masonry at the Raw Water Pump Station Building ($1,317,000)

LOCATION
WPC Facility; four miles south of Highway 30, east of I-35

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering		316,500		119,000		197,500	
Construction		2,113,500		994,000		1,119,500	
	TOTAL	**2,430,000**		**1,113,000**		**1,317,000**	
FINANCING:							
Sewer Utility Fund		2,430,000		1,113,000		1,317,000	
	TOTAL	**2,430,000**		**1,113,000**		**1,317,000**	

PROGRAM - ACTIVITY: Utilities – WPC Plant
DEPARTMENT: Water & Pollution Control
ACCOUNT NO.

FLOW EQUALIZATION EXPANSION **PROJECT STATUS:** Delayed Cost Change

DESCRIPTION/JUSTIFICATION

The Ames WPC Facility uses an advanced secondary (i.e. biological) treatment process. The biological processes are designed to operate within a range of flow rates. If the flows increase too high or too rapidly, the biomass can be washed out of the treatment basins, negatively impacting the treatment effectiveness for several days or weeks to follow. Facilities like Ames' are commonly constructed with flow equalization basins. Ames currently has an effective flow equalization storage capacity of 4.4 million gallons.

When flows coming in to the plant exceed the hydraulic capacity of the biological process, the excess flow is diverted to the equalization basins and is later brought back through the treatment process, once the incoming flow rate drops below the capacity of the plant. On those rare occasions when the basins are completely filled and the influent flow rate has not yet dropped below capacity, the equalization basins begin a controlled overflow. The overflow is recombined with the treated plant effluent prior to discharge to the receiving stream, with the combined flow meeting all numeric discharge limits in the NPDES permit.

COMMENTS

The 2012 Long-Range Facility Plan evaluated the wet-weather flow handling capability of the WPC Facility. It concluded that, in conjunction with the recommendations from the Sanitary Sewer System Evaluation for increased sewer rehabilitation, a flow equalization capacity increase of six million gallons at the treatment plant would be needed to achieve the performance required by the Iowa Department of Natural Resources (IDNR). Staff had timed this project to take place after the reissuance of the facility's National Pollutant Discharge Elimination System (NPDES) permit. The City has now been informed that IDNR has placed the reissuance of the Ames permit on hold, pending the development of a more formal wet weather policy statewide. This project has been delayed by two years to allow the IDNR's policy time to be finalized and a new permit to be issued. The cost has been adjusted due to the delay.

LOCATION

WPC Plant; four miles south of Highway 30, east of I-35

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering		101,000			101,000		
Construction		1,130,000			1,130,000		
	TOTAL	**1,231,000**			**1,231,000**		
FINANCING:							
Clean Water State Revolving Fund		1,231,000			1,231,000		
	TOTAL	**1,231,000**			**1,231,000**		

PROGRAM - ACTIVITY: Utilities - WPC Plant

DEPARTMENT: Water and Pollution Control

ACCOUNT NO.

UTILITIES - WATER DISTRIBUTION

PROJECT/FUNDING SOURCE	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22	Page
PROJECT:							
Water System Improvements	6,500,000	1,300,000	1,300,000	1,300,000	1,300,000	1,300,000	64
Campustown Public Improvements	1,750,000	50,000	100,000	1,600,000	-	-	65
TOTAL PROJECT EXPENDITURES	**8,250,000**	**1,350,000**	**1,400,000**	**2,900,000**	**1,300,000**	**1,300,000**	
FUNDING SOURCES:							
Debt:							
G.O. Bonds	1,000,000	-	-	1,000,000	-	-	
City:							
Road Use Tax	150,000	50,000	100,000	-	-	-	
Water Utility Fund	6,925,000	1,300,000	1,300,000	1,725,000	1,300,000	1,300,000	
Sewer Utility Fund	125,000	-	-	125,000	-	-	
Electric Utility Fund	50,000	-	-	50,000	-	-	
Total City Funding	7,250,000	1,350,000	1,400,000	1,900,000	1,300,000	1,300,000	
TOTAL FUNDING SOURCES	**8,250,000**	**1,350,000**	**1,400,000**	**2,900,000**	**1,300,000**	**1,300,000**	

WATER SYSTEM IMPROVEMENTS **PROJECT STATUS:** No change

DESCRIPTION/JUSTIFICATION

This program provides for replacing water mains in areas that experience rusty water problems. It also provides for installing larger distribution mains in areas that have 4" supply lines, transferring water services from 4" water mains in streets where larger water mains exist, and abandoning 4" water mains. Eliminating duplicate water mains, where possible, improves water flow and helps reduce rusty water. Installing larger distribution lines in areas that have a high concentration of 4" supply lines and less than desirable fire-fighting capacity (predominantly in the older areas of the community) provides larger supply quantities in relation to the current and proposed land uses, in accordance with the Land Use Policy Plan. This program may also include the replacement of leaking valves on larger water mains along major roadways where the complexity of the project encourages replacement by a contractor.

COMMENTS

Water system improvements and water service transfers will be completed at various locations in the community. Project locations will be coordinated with upcoming roadway improvement projects to minimize construction impacts to neighborhoods.

Rusty water complaints highlight the continuing need to replace the 4" water mains in order to provide fire-fighting capacity and improved water quality in the system. The system currently has 11.7 miles of active 4" water main. Improvements to these water mains will result in reduced maintenance costs.

LOCATION

2017/18 Water Main Replacement:
Harding Avenue (13th Street - 16th Street), Kellogg Avenue (7th Street - 13th Street), Kellogg Avenue (26th Street - 28th Street), and 18th Street (Clark Avenue – Burnett Avenue) and various other locations to be determined

2017/18 Water Service Transfer:
10th Street (Grand Avenue – Roosevelt Avenue) and various other locations to be determined

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering		925,000	185,000	185,000	185,000	185,000	185,000
Construction		5,575,000	1,115,000	1,115,000	1,115,000	1,115,000	1,115,000
	TOTAL	**6,500,000**	**1,300,000**	**1,300,000**	**1,300,000**	**1,300,000**	**1,300,000**
FINANCING:							
Water Utility Fund		6,500,000	1,300,000	1,300,000	1,300,000	1,300,000	1,300,000
	TOTAL	**6,500,000**	**1,300,000**	**1,300,000**	**1,300,000**	**1,300,000**	**1,300,000**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Water Distribution	Public Works	510-8461-489

CAMPUSTOWN PUBLIC IMPROVEMENTS **PROJECT STATUS:** Cost Change Revenue Change

DESCRIPTION/JUSTIFICATION
This project identifies public improvements that will complement the current revitalization projects in Campustown.

COMMENTS
The water mains, storm sewers, and sanitary sewers along a portion of Welch Avenue (Lincoln Way to Hunt Street) date back to the early 1900s. Water mains along Lincoln Way (Hayward Avenue to Welch Avenue) also date back to the early 1900s, so this program also includes improvements at this location. Considering the age of the infrastructure as well as the increased demand from redevelopment, updated water, storm, and sanitary mains will be constructed. These improvements will be coupled with new pavement improvements on Welch Avenue.

LOCATION
Welch Avenue (Lincoln Way to Knapp Street) and Lincoln Way (Hayward Avenue to Welch Avenue)

The Cost Change is a result of updating cost estimates for the utility work as part of this project and coordinating with Iowa State University (ISU). ISU has plans to improve Welch Avenue/Union Drive on its campus, which will consider several modes of transportation. Planning funds have been added to this project in 2017/18 to coordinate outreach/stakeholder input for the City's project concurrently with ISU's project. Design will commence in 2018/19 with the City's construction following in 2019/20. ISU is planning 2018 construction of its project.

The Revenue Change is due to Road Use Tax funds being introduced as the financing source for the planning activities in 2017/18.

Bicycle facilities as part of this project (ON 16 Welch Ave. on-street treatment from Mortensen Road to Union Drive) are estimated to cost $120,000.

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering		310,000	50,000	100,000	160,000		
Construction		1,390,000			1,390,000		
Electric		50,000			50,000		
	TOTAL	**1,750,000**	**50,000**	**100,000**	**1,600,000**		
FINANCING:							
Road Use Tax		150,000	50,000	100,000			
G.O. Bonds		1,000,000			1,000,000		
Water Utility Fund		425,000			425,000		
Sewer Utility Fund		125,000			125,000		
Electric Utility Fund		50,000			50,000		
	TOTAL	**1,750,000**	**50,000**	**100,000**	**1,600,000**		

PROGRAM - ACTIVITY: Utilities – Water Distribution, Storm Sewer, and Sanitary Sewer
DEPARTMENT: Public Works
ACCOUNT NO. 060-8401-489

UTILITIES - SANITARY SEWER SYSTEM

PROJECT/FUNDING SOURCE	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22	Page
PROJECT:							
Sanitary Sewer System Improvements	19,788,000	3,710,000	3,820,000	3,934,000	4,052,000	4,272,000	67
Clear Water Diversion	125,000	25,000	25,000	25,000	25,000	25,000	68
TOTAL PROJECT EXPENDITURES	**19,913,000**	**3,735,000**	**3,845,000**	**3,959,000**	**4,077,000**	**4,297,000**	
FUNDING SOURCES:							
Debt:							
State Revolving Fund Loans	18,438,000	3,460,000	3,570,000	3,684,000	3,802,000	3,922,000	
City:							
Sewer Utility Fund	1,475,000	275,000	275,000	275,000	275,000	375,000	
TOTAL FUNDING SOURCES	**19,913,000**	**3,735,000**	**3,845,000**	**3,959,000**	**4,077,000**	**4,297,000**	

SANITARY SEWER SYSTEM IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This is the annual program for rehabilitation/reconstruction of deficient sanitary sewers and deteriorated manholes at various locations throughout the city. Most of the problem areas are in sewers that can be bundled into a construction package for cost efficiency, or in problem areas deeper than City crews are equipped to handle. This program, therefore, provides for those repairs by outside firms. The goal of the Sanitary Sewer System Evaluation (SSSE) is to identify and remove major sources of inflow/infiltration as a means of lowering the peak wet weather flow at the treatment plant.

COMMENTS

System improvement locations have been identified through the SSSE field investigation completed over the last several years. Through manhole inspections, smoke testing, and televising, severe structural defects (ratings of 4 or 5) have been identified as priorities within this program. It is highly recommended by national standards to fix structural defects with ratings of "5" within 12 months. According to national standards, structural defects with ratings of "4" are necessary to be fixed within five years. It is estimated that there are $25.7 million in improvements to be made in the system. It is estimated that improvements may take 10 years to complete, which commenced in 2014/15. This program does not reflect any capacity issues that may be identified. Suggested work activities include rehabilitating or replacing manholes, repairing or lining pipe, and similar work. City maintenance crews are continuing to also complete projects identified by the SSSE, as equipment and staffing enables.

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering		3,420,000	684,000	684,000	684,000	684,000	684,000
Construction		16,368,000	3,026,000	3,136,000	3,250,000	3,368,000	3,588,000
	TOTAL	**19,788,000**	**3,710,000**	**3,820,000**	**3,934,000**	**4,052,000**	**4,272,000**
FINANCING:							
Sewer Utility Fund		1,350,000	250,000	250,000	250,000	250,000	350,000
State Revolving Fund (SRF)		18,438,000	3,460,000	3,570,000	3,684,000	3,802,000	3,922,000
	TOTAL	**19,788,000**	**3,710,000**	**3,820,000**	**3,934,000**	**4,052,000**	**4,272,000**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Sanitary Sewer	Public Works	520-8542-489
		522-8542-489

CLEAR WATER DIVERSION **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This is the annual program providing for diversion of footing drain discharge from sanitary sewers to storm sewers.

Clear water from footing drains causes overloading and backups in the sanitary sewer as well as increases in the volume of clean water that is treated at the sewage treatment facility. The Clear Water Diversion program historically involved diverting footing drain discharge from sanitary sewers to storm sewers. This diversion results in lower volumes of clean water needing treatment at the sewage treatment facility, thereby decreasing operating and maintenance costs of that facility. In addition, customers should experience fewer, less severe sewer backups.

COMMENTS
The Inflow and Infiltration Study, undertaken in 1995, showed that in order for clear water diversion to be cost effective, an individual sump pump must discharge in excess of 1,000 gallons per day. To encourage participation in the footing drain grant program, City Council authorized grants to participating property owners. In all, 2,334 footing drain grants were paid to property owners under this program through July 1, 2011, when the grant program was suspended.

After 2010/11, **the footing drain grant portion of this program was suspended and construction of collector lines to eliminate icing on streets has been reduced**. Through completion of the Sanitary Sewer System Evaluation, the future need of the footing drain grant program will be analyzed.

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Construction		125,000	25,000	25,000	25,000	25,000	25,000
	TOTAL	**125,000**	**25,000**	**25,000**	**25,000**	**25,000**	**25,000**
FINANCING:							
Sewer Utility Fund		125,000	25,000	25,000	25,000	25,000	25,000
	TOTAL	**125,000**	**25,000**	**25,000**	**25,000**	**25,000**	**25,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Sanitary Sewer	Public Works	520-8585-489

UTILITIES - STORM WATER

PROJECT/FUNDING SOURCE	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22	Page
PROJECT:							
Storm Water Erosion Control Program	3,547,000	475,000	1,000,000	800,000	630,000	642,000	70
Low Point Drainage Improvements	1,000,000	200,000	200,000	200,000	200,000	200,000	71
Storm Water Improvement Program	1,250,000	250,000	250,000	250,000	250,000	250,000	72
Storm Water System Analysis	720,000	180,000	180,000	180,000	180,000	-	73
Storm Water Facility Rehabilitation	600,000	-	150,000	150,000	150,000	150,000	74
Storm Water Quality Improvements	400,000	-	100,000	100,000	100,000	100,000	75
TOTAL PROJECT EXPENDITURES	**7,517,000**	**1,105,000**	**1,880,000**	**1,680,000**	**1,510,000**	**1,342,000**	
FUNDING SOURCES:							
Debt:							
G.O. Bonds	654,000	-	654,000	-	-	-	
City:							
Storm Water Utility Fund	5,377,000	1,105,000	880,000	1,312,000	1,130,000	950,000	
Other:							
Grant Funds	1,486,000	-	346,000	368,000	380,000	392,000	
TOTAL FUNDING SOURCES	**7,517,000**	**1,105,000**	**1,880,000**	**1,680,000**	**1,510,000**	**1,342,000**	

STORM WATER EROSION CONTROL PROGRAM **PROJECT STATUS:** Advanced Delayed Cost Change Revenue Change

DESCRIPTION/JUSTIFICATION

This annual program provides for stabilization of areas that have become eroded in streams, channels, swales, gullies, or drainage ways that are part of the storm water system. This program provides a more permanent control of the erosion and will reduce recurring maintenance costs in these areas.

COMMENTS

An inventory of drainage ways within the city has been established based on National Pollution Discharge Elimination System (NPDES) Phase II requirements. Following the floods of 2010, an Urban Stream Assessment was updated, which rated the stream banks of each tributary of Ada Hayden, College Creek, Clear Creek, Onion Creek, Worle Creek, Squaw Creek, and the South Skunk River. This assessment identified areas where stabilization is a priority. As monitoring activities associated with the NPDES permit requirements continue, further locations for future improvements will be identified.

LOCATION

2017/18: Creek bank stabilization (Kinyon-Clark Subdivision south of Kinyon Circle)
2018/19: South Skunk River bank stabilization (Southeast 16th Street to East Lincoln Way)
2019/20: Squaw Creek (various locations from 6th Street to 13th Street) (coordinated with Parks & Recreation)
2020/21: Clear Creek bank stabilization (north of Oakland Street) (coordinated with Parks & Recreation)
2021/22: Waterway north of Bloomington Townhomes (Eisenhower Lane)

The changes noted above are due to the project (South Skunk River bank stabilization) having been delayed from 2017/18 in the previous CIP due to coordinating a pedestrian bridge relocation from the Grand Avenue Extension area to the Skunk River Trail project location in 2018/19. The 2018/19 South Skunk River bank stabilization project will still be coordinated with construction of a segment of the Skunk River Trail (Shared Use Path System Expansion). The South Skunk River continues to erode toward the existing raw well line on the east side of the river. The new trail is being planned on the west side of the river which is also continuing to meander/erode rapidly during high flow events.

The creek bank stabilization (Kinyon-Clark Subdivision) has been advanced as a priority project in 2017/18.

The State Revolving Fund (SRF) Sponsored Project funding for this program is a grant connected with SRF funding for the Sanitary Sewer Rehabilitation Program (page 50).

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Engineering	667,000	67,000	200,000	160,000	120,000	120,000
Construction	2,880,000	408,000	800,000	640,000	510,000	522,000
TOTAL	**3,547,000**	**475,000**	**1,000,000**	**800,000**	**630,000**	**642,000**
FINANCING:						
Storm Sewer Utility Fund	2,061,000	475,000	654,000	432,000	250,000	250,000
State Revolving Fund Grant Program	1,486,000		346,000	368,000	380,000	392,000
TOTAL	**3,547,000**	**475,000**	**1,000,000**	**800,000**	**630,000**	**642,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Utilities - Storm Water	Public Works	560-8633-489

LOW POINT DRAINAGE IMPROVEMENTS **PROJECT STATUS:** Site Change

DESCRIPTION/JUSTIFICATION

This is the annual program for drainage improvements to decrease flooding at low points. Low point drainage improvements are not only focused on residential street locations, but specifically on those locations most in need of the improvements as affected by standing water, flooding, and insufficient pipe capacity. The program identifies core locations for improvements each year. In addition, improvements are made at miscellaneous locations identified throughout the year.

During heavy rain, some areas become flooded, and damage to private property occasionally occurs. This program provides for installation of drainage improvements to decrease this flooding at low points. In 1994, the following criteria were established for evaluating and prioritizing drainage situations: 1) Potential damage from storm runoff; 2) Emergency vehicle access limitations created by runoff; 3) Number of people affected; 4) Number of structures affected; 5) Street classification; 6) Land use; and 7) Benefits of a project to adjacent areas. Based on these criteria, target areas for improvements are established. These improvements may include construction of detention areas, new pipe systems, and replacement systems to increase the ability to control the runoff so it can be carried by downstream systems.

COMMENTS

Addressing these drainage issues will reduce flooding problems on both public and private property. The amount of time spent setting out barricades in areas that flood during heavy rains will also be reduced.

The site change is due to removing the Crystal Street (200 block) project from this program, which is able to be completed as part of the Storm Water Improvement Program. The site change is also due to removing Freel Drive as previously shown in 2020/21. The Freel Drive area has been analyzed and drainage in the area is dependent on the roadway (currently a gravel roadway not included in the CIP to be paved). The other locations already identified for improvements as part of this program, in addition to new complaints received over the past year, have been prioritized as shown below.

LOCATION

2017/18	Northridge Parkway Subdivision 17th Addition (Valley View Road/Ridge Top Road/Almond Road/ GW Carver) and 18th Addition (GW Carver/Bloomington Road/Almond Road), Kent Avenue/Bristol Drive
2018/19	Airport Road and South Riverside Drive area
2019/20	Top O Hollow Road (1100 block), 28th Street (1100 block), and Kennedy Street (1100 block)
2020/21	McKinley Dr (1400/1500 block), Barr Dr, Jensen Ave (2100/2200 block), Stonebrook Rd/Harrison Rd area, and Fletcher Blvd (3700 block)
2021/22	Ferndale Avenue/Hunziker Drive area and Northridge Lane

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering		200,000	40,000	40,000	40,000	40,000	40,000
Construction		800,000	160,000	160,000	160,000	160,000	160,000
	TOTAL	**1,000,000**	**200,000**	**200,000**	**200,000**	**200,000**	**200,000**
FINANCING:							
Storm Sewer Utility Fund		1,000,000	200,000	200,000	200,000	200,000	200,000
	TOTAL	**1,000,000**	**200,000**	**200,000**	**200,000**	**200,000**	**200,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Storm Water	Public Works	560-8656-489

STORM WATER IMPROVEMENT PROGRAM **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This annual program is to repair or replace deteriorated storm sewer pipes and intakes. Areas of concentration for storm sewer repairs will be those locations programmed for street improvements and those areas where structural deficiencies are identified.

Many intakes are brick or concrete and have experienced repeated “freeze/thaw” conditions during winters and springs. This repeated freeze/thaw action causes bricks and mortar to deteriorate, resulting in collapsed intakes. This program provides for a proactive response by contractually repairing/replacing intakes on a scheduled basis. In addition to the contractual work provided in this program, City crews provide immediate repair of those intakes that pose an immediate concern for life, health, or safety.

COMMENTS

Maintenance crews, through citizen inquiries and/or storm sewer inspections, have identified storm sewer structural deficiencies within the system. These include areas where the pipe has cracked or is missing sections or pieces of pipe. This program will provide funding to correct these deficiencies.

Completion of the Storm Water System Analysis may identify the need for additional improvements as part of the program.

LOCATIONS

2017/18: Various locations as determined

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering		175,000	35,000	35,000	35,000	35,000	35,000
Construction		1,075,000	215,000	215,000	215,000	215,000	215,000
	TOTAL	**1,250,000**	**250,000**	**250,000**	**250,000**	**250,000**	**250,000**
FINANCING:							
Storm Sewer Utility Fund		1,250,000	250,000	250,000	250,000	250,000	250,000
	TOTAL	**1,250,000**	**250,000**	**250,000**	**250,000**	**250,000**	**250,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Storm Water	Public Works	560-8642-489

STORM WATER SYSTEM ANALYSIS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

In recent years, localized flash flooding has occurred at various locations around the city of Ames during high rainfall events. The City does not currently have an accurate mapping of the storm sewer system within the Geographic Information System (GIS) as it does with other utility systems. As the Sanitary Sewer System Evaluation highlighted, the sanitary sewer system to remove infiltration/inflow. Removing clean water from the sanitary sewer system can cause additional pressure to the storm sewer system. Localized flooding could potentially increase. Therefore, this project includes establishment of an accurate GIS storm sewer system and hydraulic modeling of the network.

COMMENTS

This analysis will aid in identifying deficient storm water capacity and future improvements. The length of this program will be updated based on progress being made for the whole system being analyzed.

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering		720,000	180,000	180,000	180,000	180,000	
	TOTAL	**720,000**	**180,000**	**180,000**	**180,000**	**180,000**	
FINANCING:							
Storm Sewer Utility Fund		720,000	180,000	180,000	180,000	180,000	
	TOTAL	**720,000**	**180,000**	**180,000**	**180,000**	**180,000**	

PROGRAM - ACTIVITY: Utilities – Storm Water

DEPARTMENT: Public Works

ACCOUNT NO.

STORM WATER FACILITY REHABILITATION PROGRAM **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION

In accordance with *Municipal Code*, new developments within the community are required to provide storm water management quantity control. This means maintaining storm water runoff discharge at pre-developed conditions through use of extended detention and/or retention. Through establishment of developers' agreements, the City of Ames has accepted responsibility for the long-term maintenance of many of these facilities in residential areas. As these facilities age, sediment accumulates, volunteer vegetation becomes more prevalent, erosion occurs, and structures need to be improved. This annual program addresses those concerns.

COMMENTS

As part of the new post-construction storm water management ordinance adopted in April 2014, commercial and industrial land owners are responsible to maintain their own storm water facilities. This ordinance also outlines that the homeowner's association/owner for residential development will maintain all water quality features. However, the City is responsible for long-term maintenance of the regional detention facilities providing water quantity control.

LOCATION

2017/18	Pete Cooper's Subdivision (SE 5th Street/South Dayton Avenue) (construction and design)
2018/19	Little Bluestem Court (Gateway Hills Lots W, X, Y, and Z as owned by the City of Ames)
2019/20	Bloomington Heights West Subdivision (west of Hyde Avenue)
2020/21	Northridge Heights Subdivision (near GW Carver)

The cost change is due to updated project estimates, as prioritized, that reflect current construction costs.

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Engineering	120,000		30,000	30,000	30,000	30,000
Construction	480,000		120,000	120,000	120,000	120,000
TOTAL	**600,000**		**150,000**	**150,000**	**150,000**	**150,000**
FINANCING:						
Storm Sewer Utility Fund	600,000		150,000	150,000	150,000	150,000
TOTAL	**600,000**		**150,000**	**150,000**	**150,000**	**150,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Storm Water	Public Works	560-8623-489

STORM WATER QUALITY IMPROVEMENTS **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION

Improvement/treatment of water quality for new development and re-development in the Ames community has been incorporated into the newly adopted Post Construction Stormwater Management Ordinance. This addresses removal of sediment and nutrients before they enter waterways such as Squaw Creek and South Skunk River. This program includes treatment of the water quality volume from public impervious areas (e.g. streets and parking lots).

COMMENTS

This program includes installation of bioretention cells, vegetated swales, native landscape, and rain gardens, soil quality restoration, and other approved best management practices at various locations in the community. These best management practices may be combined with a street improvement project, where the neighborhood/adjacent land owners agree to help with day-to-day maintenance.

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Engineering	60,000		15,000	15,000	15,000	15,000
Construction	340,000		85,000	85,000	85,000	85,000
TOTAL	**400,000**		**100,000**	**100,000**	**100,000**	**100,000**
FINANCING:						
Storm Sewer Utility Fund	400,000		100,000	100,000	100,000	100,000
TOTAL	**400,000**		**100,000**	**100,000**	**100,000**	**100,000**

PROGRAM - ACTIVITY: Utilities – Storm Water

DEPARTMENT: Public Works

ACCOUNT NO.

UTILITIES - RESOURCE RECOVERY

PROJECT/FUNDING SOURCE	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22	Page
PROJECT:							
Resource Recovery System Improvements	1,482,500	390,350	373,100	150,100	357,100	211,850	77
Waste Diversion Enhancements	30,000	30,000	-	-	-	-	78
TOTAL PROJECT EXPENDITURES	**1,512,500**	**420,350**	**373,100**	**150,100**	**357,100**	**211,850**	
FUNDING SOURCES:							
City:							
Resource Recovery Fund	1,512,500	420,350	373,100	150,100	357,100	211,850	
TOTAL FUNDING SOURCES	**1,512,500**	**420,350**	**373,100**	**150,100**	**357,100**	**211,850**	

RESOURCE RECOVERY SYSTEM IMPROVEMENTS **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION

This program is to purchase new and replacement components and equipment at the Resource Recovery Plant. Also included is funding for materials for two annual preventive maintenance projects (replacement of the rotary disc screen rollers (RDS) and chains, and rebuilding C-1 conveyor). Resource Recovery personnel perform the work to complete the preventive maintenance projects.

COMMENTS

Proposed projects:

2017/18 Preventive Maintenance materials for the replacement of the RDS rollers and chains ($35,000); rebuild C-1 conveyor ($10,550); #1 mill armored teeth and combs ($39,300); fire system air compressor ($15,000); #1 mill replacement hydraulic pumps ($50,000); #1 mill replacement rotor ($55,000); #1 mill planetary gear/drum bearing ($100,000); scale software upgrade ($20,500); baler room siding and roof ($35,000); C-5A replacement ($30,000)

2018/19 Preventive Maintenance materials for the replacement of the RDS rollers and chains ($46,250); rebuild C-1 conveyor ($19,550); and #1 mill armored teeth and combs ($39,300); #1 mill planetary motor/drum motor ($25,000); locker room remodel ($20,000); replace spark detection system/fire suppression system ($37,000); process area roof replacement ($115,000); maintenance/inventory control software ($18,000); #2 mill grates ($29,000); replace C-2 belt ($24,000)

2019/20 Preventive Maintenance materials for the replacement of the RDS rollers and chains ($46,250); rebuild C-1 conveyor ($19,550); #1 mill armored teeth and combs ($39,300); #1 mill synchronous motor/engine assembly group ($30,000); replace in-plant air knives ($8,000), replacement conveyor belts ($7,000)

2020/21 Preventive Maintenance materials for the replacement of the RDS rollers and chains ($46,250); rebuild C-1 conveyor ($19,550); #1 mill armored teeth and combs ($39,300); dust pipe replacement ($200,000); conveyor chutes ($20,000); replace C-7 belt ($32,000)

2021/22 Preventive Maintenance materials for the replacement of the RDS rollers and chains ($75,000); rebuild C-1 conveyor ($19,550); #1 mill armored teeth and combs ($39,300); DPH Circuit Breaker to Starter Conversion ($78,000)

LOCATION

Arnold O. Chantland Resource Recovery Plant, 110 Center Avenue

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
System Improvements		1,482,500	390,350	373,100	150,100	357,100	211,850
	TOTAL	**1,482,500**	**390,350**	**373,100**	**150,100**	**357,100**	**211,850**
FINANCING:							
Resource Recovery Fund		1,482,500	390,350	373,100	150,100	357,100	211,850
	TOTAL	**1,482,500**	**390,350**	**373,100**	**150,100**	**357,100**	**211,850**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Resource Recovery	Public Works	590-9003-489

WASTE DIVERSION ENHANCEMENTS **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
Resource Recovery applied for and received a Solid Waste Alternatives Program (SWAP) grant from the Department of Natural Resources (DNR) in FY 2016/17 for Increasing and Enhancing Waste Diversion. A waste audit was performed, and surveys were sent out to Ames and Story County residents. A consultant was engaged to provide recommendations based on the information obtained from the audit and surveys.

COMMENTS
The study conducted in FY 2016/17 will generate suggestions for waste diversion. The funds allocated in FY 2017/18 will be utilized to begin the implementation of some of the suggestions.

2016/17 $25,000 Waste Diversion Study
2017/18 $30,000 Waste Diversion Enhancements

LOCATION
Arnold O. Chantland Resource Recovery Plant, 110 Center Avenue

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Consultant SWAP Recommendations		30,000	30,000				
	TOTAL	**30,000**	**30,000**				
FINANCING:							
Resource Recovery Fund		30,000	30,000				
	TOTAL	**30,000**	**30,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Resource Recovery	Public Works	590-9016-489

Transportation

Bloomberg, 2015)
U.S. City with the Lowest Unemployment Rate (Forbes, 2016)
Ranked No. 4 Best Small City to Make a Living (MoneyGeek, 2016)
Ranked No. 35 in Top 100 Best Places to Live
Unemployment Rate (Forbes, 2016)
Ranked No. 8 in Best Towns for Millennials in America (Niche)
One of the 7 Top Tech Hubs Among America's Small College Towns (The SpareFoot Blog)
Named one of the 15 Cities
small cities overall out of 421 MSAs for Best Cities for Job Growth (NewGeography, 2015)
p 25 nationally for Best Places for STEM Grads (Nerdwallet, 2015)
One of the Happiest Small
a to Get a Job in 2015 (Business Insider)
Best College Town in 2014 (Livability.com)
016)
One of the Best-Performing Small Cities (Milken Institute, 2015)
Ranked No. 8 Best Places to Live in
agazine, 2014)
One of the Healthiest Cities in the US (24/7 W
n (Bloomberg, 2015)
U.S. City with the Lowest Unemployment Rate (Forbes,
anked No. 4 Best Small City to Make a Living (MoneyGeek, 2016)
Ranked No. 35 in Top 100 Best Place
ployment Rate (Forbes, 2016)
Ranked No. 8 in Best Towns for Millennials in America (Niche Rankin
he 7 Top Tech Hubs Among America's Small College Towns (The SpareFoot Blog)
Named one of the 15 Cities Tha
overall out of 421 MSAs for Best Cities for Job Growth (NewGeography, 2015)
tionally for Best Places for STEM Grads (Nerdwallet, 2015)
One of the Happiest Small Places
a Job in 2015 (Business Insider)
Best College Town in 2014 (Livability.com)
Ra
One of the Best-Performing Small Cities (Milken Institute, 2015)
Ranked No. 8 Best Places to Live in America (M
, 2014)
One of The Happiest Small Places in Am
oomberg, 2016)
U.S. City with the Lowest Unemployment Rate (Forbes, 2016)
Be
lo. 4 Best Small City to Make a Living (MoneyGeek, 2016)
Ranked No. 35 in Top 100 Best Places to Liv
Unemployment Rate (Forbes, 2016)
Ranked No. 8 in Best Towns for Millennials in America (Niche R
One of the 7 Top Tech Hubs Among America's Small College Towns (The SpareFoot Blog)
Named one of the 15 Cities
all cities overall out of 421 MSAs for Best Cities for Job Growth (NewGeography, 2015)
25 nationally for Best Places for STEM Grads (Nerdwallet, 2015)
One of the Happiest Small Pl

TRANSPORTATION

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22	Page
EXPENDITURES:							
Streets Engineering	61,621,000	14,356,000	12,150,000	8,800,000	13,850,000	12,465,000	81
Shared Use Path System	4,909,800	1,030,000	735,000	1,266,000	943,000	935,800	94
Traffic Engineering	6,072,000	1,235,000	1,941,000	939,000	903,000	1,054,000	99
Street Maintenance	3,795,000	591,000	601,000	810,000	618,000	1,175,000	109
Transit	8,874,174	3,005,720	2,067,000	1,287,400	1,036,934	1,477,120	115
Airport	664,000	166,000	-	-	396,000	102,000	121
TOTAL EXPENDITURES	**85,935,974**	**20,383,720**	**17,494,000**	**13,102,400**	**17,746,934**	**17,208,920**	
FUNDING SOURCES:							
Debt:							
G.O. Bonds	42,851,000	7,521,000	7,150,000	7,495,000	9,835,000	10,850,000	
G.O. Bonds (previously issued)	300,000	300,000	-	-	-	-	
Total Debt Funding	43,151,000	7,821,000	7,150,000	7,495,000	9,835,000	10,850,000	
City:							
Road Use Tax	9,203,400	1,991,000	2,505,200	1,302,400	1,737,000	1,667,800	
Local Option Sales Tax	3,760,800	755,000	441,000	1,182,000	661,000	721,800	
Electric Utility Fund	450,000	100,000	50,000	100,000	100,000	100,000	
Water Utility Fund	375,000	75,000	75,000	75,000	75,000	75,000	
Sewer Utility Fund	375,000	75,000	75,000	75,000	75,000	75,000	
Storm Water Utility Fund	250,000	50,000	50,000	50,000	50,000	50,000	
Transit Fund	3,866,835	973,944	1,019,000	823,080	509,787	541,024	
Airport Construction Fund	66,400	16,600	-	-	39,600	10,200	
Total City Funding	18,347,435	4,036,544	4,215,200	3,607,480	3,247,387	3,240,824	

TRANSPORTATION, continued

	TOTAL	2016/17	2017/18	2018/19	2019/20	2020/21
FUNDING SOURCES, continued						
Other:						
MPO/STP Funds	7,236,000	3,220,000	2,859,000	839,000	159,000	159,000
Federal/State Grants	14,353,376	5,156,776	2,861,800	701,600	3,662,000	1,971,200
Private Funds	35,000	-	-	35,000	-	-
Federal Transit Administration	2,215,563	-	408,000	424,320	487,147	896,096
Federal Aviation Administration	597,600	149,400	-	-	356,400	91,800
Total Other Funding	24,437,539	8,526,176	6,128,800	1,999,920	4,664,547	3,118,096
TOTAL FUNDING SOURCES	**85,935,974**	**20,383,720**	**17,494,000**	**13,102,400**	**17,746,934**	**17,208,920**

TRANSPORTATION - STREET ENGINEERING

PROJECT/FUNDING SOURCE	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22	Page
PROJECT:							
Grand Avenue Extension	15,450,000	7,725,000	7,725,000	-	-	-	83
South Duff Avenue Improvements	1,976,000	1,976,000	-	-	-	-	84
Arterial Street Pavement Improvements	7,030,000	1,680,000	-	1,500,000	2,500,000	1,350,000	85
Collector Street Pavement Improvements	8,210,000	1,000,000	1,800,000	1,250,000	2,500,000	1,660,000	86
Asphalt Street Pavement Improvements	7,850,000	850,000	1,400,000	1,000,000	1,400,000	3,200,000	87
Downtown Street Pavement Improvements	1,200,000	300,000	300,000	475,000	125,000	-	88
Seal Coat Pavement Improvements	3,250,000	500,000	500,000	750,000	750,000	750,000	89
Right-of-Way Restoration	1,625,000	325,000	325,000	325,000	325,000	325,000	90
Cherry Avenue Extension	2,900,000	-	100,000	300,000	2,500,000	-	91
Concrete Pavement Improvements	11,530,000	-	-	2,600,000	3,750,000	5,180,000	92
CyRide Route Pavement Improvements	600,000	-	-	600,000	-	-	93
TOTAL PROJECT EXPENDITURES	**61,621,000**	**14,356,000**	**12,150,000**	**8,800,000**	**13,850,000**	**12,465,000**	

TRANSPORTATION - STREET ENGINEERING, continued

PROJECT/FUNDING SOURCE	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
FUNDING SOURCES:						
Debt:						
G.O. Bonds	41,406,000	6,946,000	7,150,000	7,375,000	9,735,000	10,200,000
G.O. Bonds (previously issued)	300,000	300,000	-	-	-	-
Total Debt Funding	41,706,000	7,246,000	7,150,000	7,375,000	9,735,000	10,200,000
City:						
Road Use Tax	2,265,000	625,000	725,000	225,000	325,000	365,000
Electric Utility Fund	450,000	100,000	50,000	100,000	100,000	100,000
Water Utility Fund	375,000	75,000	75,000	75,000	75,000	75,000
Sewer Utility Fund	375,000	75,000	75,000	75,000	75,000	75,000
Storm Water Utility Fund	250,000	50,000	50,000	50,000	50,000	50,000
Total City Funding	3,715,000	925,000	975,000	525,000	625,000	665,000
Other:						
MPO/STP Funds	6,040,000	3,060,000	2,300,000	680,000	-	-
Federal/State Grants	10,160,000	3,125,000	1,725,000	220,000	3,490,000	1,600,000
Total Other Funding	16,200,000	6,185,000	4,025,000	900,000	3,490,000	1,600,000
TOTAL FUNDING SOURCES	**61,621,000**	**14,356,000**	**12,150,000**	**8,800,000**	**13,850,000**	**12,465,000**

GRAND AVENUE EXTENSION **PROJECT STATUS:** Advanced

DESCRIPTION/JUSTIFICATION

This project is for the extension of Grand Avenue from Lincoln Way to South 16th Street. Included is South 5th Street (Grand Avenue to South Duff Avenue) as well as improvement to the South Duff Avenue (US Highway 69)/South 16th Street intersection. Extending Grand Avenue to South 16th Street will divert traffic from the US Highway 69 corridor (Grand Avenue to Lincoln Way to South Duff Avenue) to the new extension. It will help alleviate the existing congestion and allow for easier access to businesses along US Highway 69. In addition, through traffic on the Grand Avenue extension will also encounter less traffic congestion.

COMMENTS

This roadway will include turn lanes, a bridge over Squaw Creek, a golf cart underpass at Coldwater Golf Course, and a bike path along the west side of the roadway. Street lighting has also been included in the project costs.

LOCATION

2013/14	South Grand Avenue (Squaw Creek Drive to S 16th St) and S 5th St (S Grand Ave to S Duff Ave) (Planning and NEPA Phase I) ($423,000)
2015/16	South Grand Avenue (Squaw Creek Drive to S 16th St) and S 5th St (S Grand Ave to S Duff Ave) (NEPA Phase II) ($280,000)
2016/17	South Grand Avenue (Squaw Creek Drive to S 16th St) and S 5th St (S Grand Ave to S Duff Ave) (NEPA Phase II, planning, engineering, and land acquisition)
2017/18	South Grand Avenue (Squaw Creek Drive to S 16th St) and S 5th St (S Grand Ave to S Duff Ave) (engineering, grading, bridge, and box culverts/golf cart passage) and S Duff Ave (S 16th St intersection improvements)
2018/19	South Grand Avenue (Squaw Creek Drive to S 16th St) and S 5th St (S Grand Ave to S Duff Ave) (engineering and paving)

A Transportation Funding Study in 2012/13 identified federal and state grants that may be available for funding this project.

The status change (advanced) is due to S Duff Ave (S 16th St intersection improvements) being moved to 2017/18 due to receipt of grant funds for these improvements.

Bicycle facilities as part of this project (off-street 10-ft wide shared use path) are estimated to cost $775,000 including related bridge infrastructure.

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering		1,450,000	725,000	725,000			
Construction		14,000,000	7,000,000	7,000,000			
	TOTAL	**15,450,000**	**7,725,000**	**7,725,000**			
FINANCING:							
G. O. Bonds		7,700,000	4,000,000	3,700,000			
Federal/State Grants		3,450,000	1,725,000	1,725,000			
MPO/STP Funds		4,300,000	2,000,000	2,300,000			
	TOTAL	**15,450,000**	**7,725,000**	**7,725,000**			

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Street Engineering	Public Works	320-8181-439
		378-8181-439

SOUTH DUFF AVENUE IMPROVEMENTS **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

This project involves transportation improvements along S. Duff Avenue (US Highway 69) between Iowa DNR State Forest Nursery and Ken Maril Road. These improvements will address existing safety issues in the corridor as well as meet the requirements associated with the Contract Rezoning Agreement of Bricke Town Development at 3115, 3119, 3301, 3325, 3409, and 3413 South Duff Avenue. As part of the agreement, the developer is responsible for stormwater management for the site (typical of development in accordance with Municipal Code Chapter 5B) as well as additional detention and conveyance as recommended in the Teagarden Drainage Improvement Report. The City is responsible for transportation improvements through Ken Maril Road. The Iowa DOT is contributing funds to rehabilitate the existing pavement of US Hwy 69 through the project corridor.

COMMENTS

This project will include widening of S. Duff Avenue/US Hwy 69 to three lanes through Ken Maril Road, installation of a traffic signal at Crystal Street, and extension of a shared use path to Ken Maril Road (project OFF 17 in the Long Range Transportation Plan with estimated cost of $376,000).

LOCATION

S. Duff Avenue (Kitty Hawk Drive/State Forest Nursery to Ken Maril Road)

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering		350,000	350,000				
Construction		1,626,000	1,626,000				
	TOTAL	**1,976,000**	**1,976,000**				
FINANCING:							
G.O. Bonds		276,000	276,000				
G.O. Bonds (previously issued)		300,000	300,000				
State Grants/Funds		1,400,000	1,400,000				
	TOTAL	**1,976,000**	**1,976,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Street Engineering	Public Works	320-8185-439
		373-8185-439
		378-8185-439

ARTERIAL STREET PAVEMENT IMPROVEMENTS **PROJECT STATUS:** Revenue Change Site Change Cost Change Delayed

DESCRIPTION/JUSTIFICATION

This annual program utilizes current repair and reconstruction techniques to improve arterial streets with asphalt or concrete. These pavement improvements are needed to restore structural integrity, serviceability, and rideability. Targeted streets are reaching a point of accelerated deterioration. By improving these streets prior to excessive problems, the service life will be extended.

COMMENTS

2017/18	13th Street (UPRR to Harding Avenue)
2018/19	No project
2019/20	North Dakota Avenue (UPRR to Ontario Street) and Ontario Street (North Dakota Avenue to Woodstock Avenue)
2020/21	13th Street (Duff Avenue to Meadowlane Avenue)
2021/22	East Lincoln Way (South Duff Avenue to Skunk River)

Improving these streets will reduce maintenance costs. This reduction will allow for additional and earlier maintenance of other streets.

The revenue status change is due to the award of MPO/STP funds for the North Dakota Avenue project in 2019/20.

The site change and cost change are due to the addition of Ontario Street (North Dakota Avenue to Woodstock Avenue) in 2019/20, a new location being included in 2020/21, and updated construction cost estimates.

East Lincoln Way (South Duff Avenue to Skunk River) has been delayed until 2021/22 due to other arterial street pavement conditions being of higher priority.

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Engineering	1,155,000	300,000		250,000	425,000	180,000
Construction	5,775,000	1,380,000		1,250,000	2,075,000	1,070,000
Street Lighting	100,000					100,000
TOTAL	**7,030,000**	**1,680,000**		**1,500,000**	**2,500,000**	**1,350,000**
FINANCING:						
G. O. Bonds	3,370,000	620,000		600,000	900,000	1,250,000
Electric Utility Fund	100,000					100,000
MPO/STP Funds	1,740,000	1,060,000		680,000		
Federal/State Grants	1,820,000			220,000	1,600,000	
TOTAL	**7,030,000**	**1,680,000**		**1,500,000**	**2,500,000**	**1,350,000**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Street Engineering	Public Works	320-8149-439 378-8149-439

COLLECTOR STREET PAVEMENT IMPROVEMENTS **PROJECT STATUS:** Cost Change Site Change

DESCRIPTION/JUSTIFICATION

This is the annual program for reconstruction or rehabilitation of collector streets. Locations are chosen in accordance with the most current street condition inventory.

COMMENTS

2017/18	Meadowlane Avenue (Carr Drive to East 20th Street)
2018/19	Hickory Drive (Westbrook Drive to Woodland Street)
2019/20	East 20th Street (Duff Avenue to Meadowlane Avenue)
2020/21	Hoover Avenue (24th Street to Top-O-Hollow Road)
2021/22	Woodland Street (Hickory Drive to Forest Glen)

Collector street pavement improvements should result in lower street maintenance costs.

The cost change and site change is due to updated project estimates and extending the limits of the Hoover Avenue project to Top-O-Hollow Road in 2020/21.

The Hoover Avenue project in 2020/21 will include Long Range Transportation Plan projects ON 4 (on-street bike treatment with estimated cost of $80,000) and OFF 23 (on-street bike treatment with estimated cost of $20,000).

The Woodland Street project in 2021/22 will include the City's portion of Long Range Transportation Plan project ON 21 (on-street bike treatment with estimated cost of $160,000)

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Engineering	1,265,000	140,000	250,000	150,000	425,000	300,000
Construction	6,795,000	810,000	1,500,000	1,050,000	2,075,000	1,360,000
Street Lighting	150,000	50,000	50,000	50,000		
TOTAL	**8,210,000**	**1,260,000**	**1,800,000**	**1,250,000**	**2,500,000**	**1,660,000**
FINANCING:						
G. O. Bonds	7,800,000	950,000	1,750,000	1,200,000	2,400,000	1,500,000
Road Use Tax	260,000				100,000	160,000
Electric Utility Fund	150,000	50,000	50,000	50,000		
TOTAL	**8,210,000**	**1,000,000**	**1,800,000**	**1,250,000**	**2,500,000**	**1,660,000**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Street Engineering	Public Works	378-8136-439
		530-8136-439

ASPHALT STREET PAVEMENT IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This is the annual program for reconstruction and resurfacing (rehabilitation) asphalt streets, typically located within residential neighborhoods. Streets within residential subdivisions have been installed using full-depth asphalt pavement since mid-1970. Full-depth replacement of these streets has become necessary due to structural pavement failure. Rehabilitation of existing asphalt streets is possible where the base asphalt layer is solid, but the surface course has failed. This program was created in accordance with City Council's goal of strengthening our neighborhoods.

COMMENTS

2017/18	Pierce Avenue; Pierce Circle; and Tyler Avenue
2018/19	Reliable Street (Florida Avenue to North Dakota Avenue); Florida Avenue (Ontario Street to Reliable Street); Delaware Avenue (Ontario Street to Reliable Street); and Hutchison Street (Georgia Avenue to Florida Avenue)
2019/20	14th Street (Burnett Avenue to Duff Avenue); and 15th Street (Clark Avenue to Duff Avenue)
2020/21	McKinley Drive (Hayes to Northwestern Avenue); Jensen Drive (24th Street to Luther Drive); and Luther Drive (Kellogg Avenue to 28th Street)
2021/22	Opal Drive (Jewel Drive to Crystal Street); Opal Circle; Harcourt Drive (Garnet Drive to Jewel Drive); Turquoise Circle; Oakwood Road (State Avenue to University Boulevard); and Top-O-Hollow Road (Bloomington Road to Dawes Drive)

Reconstructing these streets will reduce maintenance costs.

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Engineering	1,075,000	125,000	200,000	150,000	200,000	400,000
Construction	6,775,000	725,000	1,200,000	850,000	1,200,000	2,800,000
TOTAL	**7,850,000**	**850,000**	**1,400,000**	**1,000,000**	**1,400,000**	**3,200,000**
FINANCING:						
G.O. Bonds	7,850,000	850,000	1,400,000	1,000,000	1,400,000	3,200,000
TOTAL	**7,850,000**	**850,000**	**1,400,000**	**1,000,000**	**1,400,000**	**3,200,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation – Street Engineering	Public Works	378-8111-439

DOWNTOWN STREET PAVEMENT IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This annual program is for the rehabilitation/reconstruction of streets and alleys within the downtown area (Lincoln Way to 7th Street and Grand Avenue to Duff Avenue). These projects involve pavement reconstruction, rehabilitation of storm and sanitary sewers, and streetscapes. This program will meet the recommendations of the Downtown Improvements Study for the side streets in the downtown area.

COMMENTS

Improvements to the streets in the downtown area will enhance the Main Street Cultural District.

LOCATION

2017/18	Main Street Alley (Duff Avenue to Douglas Avenue); and Main Street Alley (Kellogg Avenue to Burnett Avenue)
2018/19	Market Avenue
2019/20	Lincoln Way Alley (Duff Avenue to Kellogg Avenue)
2020/21	Kellogg Avenue Alley (Gilchrist to Lincoln Way)
2021/22	No project

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Engineering	160,000	35,000	45,000	65,000	15,000	
Construction	990,000	215,000	255,000	410,000	110,000	
Electric	50,000	50,000				
TOTAL	**1,200,000**	**300,000**	**300,000**	**475,000**	**125,000**	
FINANCING:						
G. O. Bonds	1,150,000	250,000	300,000	475,000	125,000	
Electric Utility Fund	50,000	50,000				
TOTAL	**1,200,000**	**300,000**	**300,000**	**475,000**	**125,000**	

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Street Engineering	Public Works	378-8151-439
		530-8151-439

SEAL COAT STREET PAVEMENT IMPROVEMENTS **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION

This is the annual program for removal of built-up seal coat from streets with asphalt surface. This program restores surface texture, corrects structural deficiencies, removes built-up seal coat, and prevents deterioration of various streets. This resurfacing process results in better riding surfaces, increased safety with improved surface texture, and increased life expectancy of streets. Built-up seal coat on streets causes excess crown which results in vehicles dragging at driveway entrances. Complete removal of this built-up seal coat allows for repair to curb and gutter and placement of 4 inches of asphalt surface.

COMMENTS

The areas to be resurfaced are chosen each spring based on the current street condition inventory and funding availability. Funding for this program varies from year to year in order to maintain a consistent overall bond issue each year over five years. Cost estimates include funding for concrete curb and gutter repairs that need to be made prior to street asphalt being placed and also include pedestrian improvements to meet the most recent state and federal accessibility requirements.

Street maintenance operation costs for patching will be reduced for the streets involved in this program.

The cost change is due to updated cost estimates and use of G.O. Bonds for the various pavement improvement projects.

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Engineering	487,500	75,000	75,000	112,500	112,500	112,500
Construction	2,762,500	425,000	425,000	637,500	637,500	637,500
TOTAL	**3,250,000**	**500,000**	**500,000**	**750,000**	**750,000**	**750,000**
FINANCING:						
G.O. Bonds	2,250,000			750,000	750,000	750,000
Road Use Tax	1,000,000	500,000	500,000			
TOTAL	**3,250,000**	**500,000**	**500,000**	**750,000**	**750,000**	**750,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Street Engineering	Public Works	060-8101-439

RIGHT-OF-WAY RESTORATION **PROJECT STATUS:** Revenue Change

DESCRIPTION/JUSTIFICATION

In recent years, staff has continued to observe and analyze restoration of the Right-of-Way areas associated with CIP projects. Some areas have been restored with sod, while other areas have been restored using seed or dormant seed. Restoration appears to depend on the weather at the time of installation. In areas where vegetation is not anticipated to be successful, other forms of restoration have been used (such as pervious pavement or standard concrete). This program will enable better restoration through a separate contract with a contractor specializing in vegetation establishment (instead of having this as a subcontract in each CIP contract as has been past practice).

COMMENTS

Conditions for each restoration area will be considered independently to select the appropriate and sustainable alternative. Restoration examples include sod, native turf, and pervious and standard colored/stained concrete. Learning from the first implemented contract under this new approach, the cost and respective Road Use Tax funding has been increased for additional bid items such as surface preparation, stabilization, and weed control.

The revenue change is due to adding the Sewer Utility Fund as a funding source.

LOCATION

Various locations (coordinated with Public Works streets and utility projects)

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Engineering	200,000	40,000	40,000	40,000	40,000	40,000
Construction	1,425,000	285,000	285,000	285,000	285,000	285,000
TOTAL	**1,625,000**	**325,000**	**325,000**	**325,000**	**325,000**	**325,000**
FINANCING:						
Road Use Tax	625,000	125,000	125,000	125,000	125,000	125,000
Water Utility Fund	375,000	75,000	75,000	75,000	75,000	75,000
Sewer Utility Fund	375,000	75,000	75,000	75,000	75,000	75,000
Storm Sewer Utility Fund	250,000	50,000	50,000	50,000	50,000	50,000
TOTAL	**1,625,000**	**325,000**	**325,000**	**325,000**	**325,000**	**325,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Street Engineering	Public Works	060-8194-439 510-8194-439 520-8194-439 560-8194-439

CHERRY AVENUE EXTENSION **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

The Long Range Transportation Plan identifies the extension of Cherry Avenue south of East Lincoln Way as an important transportation connection for the community. By extending Cherry Avenue south and connecting both Southeast 3rd Street and Southeast 5th Street, traffic congestion is further relieved from the South Duff Avenue corridor. This project may open opportunities for multi-modal transportation connections to the South Duff Avenue commercial district.

COMMENTS

A Transportation Funding Study in 2012/13 identified federal and state grants that may be available for funding this project.

The addition of this street extension will result in increased snow removal and ice control costs.

2018/19 Cherry Avenue (Southeast 5th Street to East Lincoln Way) and Southeast 3rd Street and Southeast 5th Street (Cherry Avenue west to end) (planning and environmental analysis)

2019/20 Cherry Avenue (Southeast 5th Street to East Lincoln Way) and Southeast 3rd Street and Southeast 5th Street (Cherry Avenue west to end) (land acquisition and engineering)

2020/21 Cherry Avenue (Southeast 5th Street to East Lincoln Way) and Southeast 3rd Street and Southeast 5th Street (Cherry Avenue west to end) (engineering and construction)

Bicycle facilities as part of this project (off-street 10-ft wide shared use path) are estimated to cost $250,000.

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Planning	100,000		100,000			
Land Acquisition	150,000			150,000		
Engineering	350,000			150,000	200,000	
Construction	2,200,000				2,200,000	
Electric	100,000				100,000	
TOTAL	**2,900,000**		**100,000**	**300,000**	**2,500,000**	
FINANCING:						
G.O. Bonds	810,000			300,000	510,000	
Road Use Tax	100,000		100,000			
Electric Utility Fund	100,000				100,000	
Federal/State Grants	1,890,000				1,890,000	
TOTAL	**2,900,000**		**100,000**	**300,000**	**2,500,000**	

PROGRAM - ACTIVITY: Transportation - Street Engineering

DEPARTMENT: Public Works

ACCOUNT NO.

CONCRETE PAVEMENT IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This annual program is to rehabilitate or reconstruct concrete street sections that have deteriorated in order to prevent premature breakdown of the pavement. This work will provide enhanced rideability to residents and visitors.

COMMENTS

2017/18: No project

2018/19: No project

2019/20: Des Moines Avenue (Lincoln Way to East 3rd Street); Center Avenue (Lincoln Way to East 2nd Street); East 3rd Street (Duff Avenue to East Avenue); East 2nd Street (Duff Avenue to Center Avenue); 5th Street (Northwestern Avenue to Allan Drive); Douglas Avenue (7th Street to 10th Street); Gaskill Drive (250 feet south of Friley Road to Country Club Boulevard); and Crawford Avenue (end to East 9th Street)

2020/21: S 17th Street (S Kellogg Avenue to end); S Kellogg Avenue (S 17th Street to S 16th Street); 8th Street (Northwestern Avenue to Duff Avenue); Ford Street (South Dayton Avenue to Bell Avenue); and Bell Avenue (East Lincoln Way to Ford Street)

2021/22: N. 2nd Street (Maple Avenue to Elm Avenue)($650,000 G.O. Bonds); S Kellogg Avenue (S 2nd Street to S 3rd Street)($250,000 G.O. Bonds and $80,000 Road Use Tax); and 24th Street (Stange Road to UPRR) and Stange Road (Blankenburg Drive to 24th Street) ($2,700,000 G.O. Bonds and $1,500,000 Federal/State Grant)

Repair of these streets will reduce maintenance and repairs needed for them.

The S Kellogg Avenue project in 2021/22 will include the Long Range Transportation Plan project ON 29 (on-street bike treatment with estimated cost of $80,000).

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering		1,845,000			300,000	545,000	1,000,000
Construction		9,635,000			2,250,000	3,205,000	4,180,000
Electric Relocation		50,000			50,000		
	TOTAL	**11,530,000**			**2,600,000**	**3,750,000**	**5,180,000**
FINANCING:							
G.O. Bonds		9,600,000			2,450,000	3,650,000	3,500,000
Road Use Tax		280,000			100,000	100,000	80,000
Electric Utility Fund		50,000			50,000		
Federal/State Grant		1,600,000					1,600,000
	TOTAL	**11,530,000**			**2,600,000**	**3,750,000**	**5,180,000**

PROGRAM – ACTIVITY: Transportation - Street Engineering

DEPARTMENT: Public Works

ACCOUNT NO.

CYRIDE ROUTE PAVEMENT IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This is the annual program for pavement improvements to streets that are or were bus routes.

These streets were designed and built for light residential traffic. With these streets now designated as bus routes, accelerated deterioration of the street surface has occurred. Pavement improvements will restore street sections that will carry higher traffic volumes.

COMMENTS

2019/20 9th Street (Grand Avenue to Clark Avenue)

Improving these streets will reduce maintenance needs for them. This reduction will allow for additional and earlier maintenance of other streets, which will prolong their useful life.

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering		85,000			85,000		
Construction		515,000			515,000		
	TOTAL	**600,000**			**600,000**		
FINANCING:							
G. O. Bonds		600,000			600,000		
	TOTAL	**600,000**			**600,000**		

PROGRAM - ACTIVITY: Transportation - Street Engineering
DEPARTMENT: Public Works
ACCOUNT NO.

TRANSPORTATION - SHARED USE PATHS

PROJECT/FUNDING SOURCE	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22	Page
PROJECT:							
Shared Use Path System Expansion	3,556,800	715,000	400,000	1,141,000	620,000	680,800	96
Multi-Modal Roadway Improvements	728,000	190,000	210,000	-	198,000	130,000	97
Shared Use Path Maintenance	625,000	125,000	125,000	125,000	125,000	125,000	98
TOTAL PROJECT EXPENDITURES	**4,909,800**	**1,030,000**	**735,000**	**1,266,000**	**943,000**	**935,800**	
FUNDING SOURCES:							
City:							
Local Option Sales Tax	3,385,800	680,000	366,000	1,107,000	586,000	646,800	
Road Use Tax	728,000	190,000	210,000	-	198,000	130,000	
Total City Funding	4,113,800	870,000	576,000	1,107,000	784,000	776,800	
Other:							
MPO/STP Funds	796,000	160,000	159,000	159,000	159,000	159,000	
TOTAL FUNDING SOURCES	**4,909,800**	**1,030,000**	**735,000**	**1,266,000**	**943,000**	**935,800**	

TRANSPORTATION - SHARED USE PATH SUMMARY

PROJECT BY ACTIVITY	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22	Page
WATER DISTRIBUTION:							
Campustown Public Improvements	120,000	-	-	120,000	-	-	65
STREET ENGINEERING:							
Grand Avenue Extension	775,000	-	775,000	-	-	-	83
South Duff Avenue Improvements	376,000	376,000	-	-	-	-	84
Collector Street Improvements	260,000	-	-	-	100,000	160,000	86
Cherry Avenue Extension	250,000	-	-	-	250,000	-	91
Concrete Pavement Improvements	80,000	-	-	-	-	80,000	92
Total Street Engineering Projects	1,741,000	376,000	775,000	-	350,000	240,000	
SHARED USE PATH SYSTEM:							
Shared Use Path System Expansion	3,556,800	715,000	400,000	1,141,000	620,000	680,800	96
Multi-Modal Roadway Improvements	728,000	190,000	210,000	-	198,000	130,000	97
Shared Use Path Maintenance	625,000	125,000	125,000	125,000	125,000	125,000	98
Total Shared Use Path Projects	4,909,800	1,030,000	735,000	1,266,000	943,000	935,800	
STREET MAINTENANCE:							
Bridge Rehabilitation Program	650,000	-	-	-	-	650,000	114
TOTAL SHARED USE PATH PROJECTS	**7,420,800**	**1,406,000**	**1,510,000**	**1,386,000**	**1,293,000**	**1,825,800**	
AVERAGE EXPENDITURE/FISCAL YEAR	**1,484,160**						

SHARED USE PATH SYSTEM EXPANSION **PROJECT STATUS:** Cost Change Advanced Delayed Site Change

DESCRIPTION/JUSTIFICATION

This program provides for construction of shared use paths on street rights-of-way, adjacent to streets, and through greenbelts. The Long Range Transportation Plan (LRTP) identifies those paths that separate bicycle traffic from higher-speed automobile traffic.

COMMENTS

The projects included in this program are subject to acquiring voluntary easements from property owners. Construction of the 2017/18, 2018/19, 2019/20, and 2021/22 segments are contingent upon acquisition of land.

Shared use path maintenance costs will increase due to new shared use path construction.

2017/18 Mortensen Road (shared use path paving) (portion of OFF 42 through Crane Farm Subdivision) ($285,000); Trail Connection south of Lincoln Way (Beedle Drive to Intermodal Facility) (OFF 5) (planning, land acquisition, and engineering) ($180,000); and West Lincoln Way (Sunset Ridge Subdivision to North Dakota Avenue) (portion of OFF 1) ($250,000)

2018/19 Trail Connection south of Lincoln Way (Beedle Drive to Intermodal Facility) (OFF 5 from Long Range Transportation Plan) (construction) ($400,000)

2019/20 Skunk River Trail (Southeast 16th Street to East Lincoln Way) (trail paving) ($521,000) and Vet Med Trail (S 16th Street to ISU Research Park ($620,000) trail paving

2020/21 Vet Med Trail (South 16th Street to South Grand Avenue) ($620,000) trail paving

2021/22 Squaw Creek (South Skunk River to South Duff Avenue) ($680,800)

The Skunk River Trail (Southeast 16th Street to East Lincoln Way) trail paving project has been delayed to enable use of the existing pedestrian bridge over Squaw Creek from the S. Grand Avenue area to be moved to this location once the Grand Avenue Extension project is under construction. This trail project will be coordinated with the Storm Water Erosion Control Program in year 2018/19 (also delayed). The Vet Med Trail project has been coordinated with the S. Grand Avenue Extension project that includes the bridge infrastructure as part of this trail alignment (estimated to be completed in 2018/19).

The site change includes the addition of Mortensen Road shared use path along the south side of the roadway as agreed upon to be the City's responsibility in the development agreement for Crane Farm Subdivision.

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Engineering	633,000	100,000		295,000	120,000	118,000
Land Acquisition	173,800	85,000				88,800
Construction	2,750,000	530,000	400,000	846,000	500,000	474,000
TOTAL	**3,556,800**	**715,000**	**400,000**	**1,141,000**	**620,000**	**680,800**
FINANCING:						
Local Option Sales Tax	2,760,800	555,000	241,000	982,000	461,000	521,800
MPO/STP Funds	796,000	160,000	159,000	159,000	159,000	159,000
TOTAL	**3,556,800**	**715,000**	**400,000**	**1,141,000**	**620,000**	**680,800**

PROGRAM – ACTIVITY: Transportation – Shared Use Paths

DEPARTMENT: Public Works

ACCOUNT NO. Various

MULTI-MODAL ROADWAY IMPROVEMENTS **PROJECT STATUS:** Site Change Delayed Cost Change

DESCRIPTION/JUSTIFICATION

Multi-modal transportation refers to the various modes used by Ames residents to travel around the transport system. The modes specifically addressed in this program include bicycling and automobiles. This program is aimed at improving the roadway to create a safer interaction between these modes using alternatives such as improved crossing visibility at intersections, bike detection, and on-street facilities (e.g. bike lanes, sharrows). Bike lanes consist of a portion of the roadway designated by striping, signing, and pavement markings for the preferential or exclusive use of bicyclists. Sharrows, also known as shared lane markings, are markings used in lanes shared by bicycles and motor vehicles when a travel lane is too narrow to provide a standard width bike lane. Bike detection improvements include retrofitting signalized intersections to radar detection to facilitate the movement of bicycles. These improvements retrofit the existing street to provide a useful and appropriate route of travel for these popular modes used by Ames residents. The proposed locations and treatments are identified in the Long-Range Transportation Plan (LRTP) and the noted project numbers (e.g. ON15) are from the LRTP.

LOCATIONS

2017/18 **On-Street:** Northwestern Avenue (6th Street to 30th Street) ($80,000), **Enhanced Intersection Crossing**: Clark Avenue/13th Street (CR: improve crossing visibility) ($110,000)

2018/19 **On-Street:** 16th Street & Meadowlane Avenue (ON24: Ridgewood Avenue to E. 13th Street) ($210,000)

2020/21 **On-Street:** Clark Avenue/S. Walnut Avenue (ON15: S. 3rd Street to 6th Street) ($138,000) and Wilder Avenue (ON20: Mortensen Road to Lincoln Way) ($60,000)

2021/22 **Enhanced Intersection Crossing:** Intersection Grand Avenue/6th Street (CR5: improve crossing visibility) ($130,000)

As of October 12, 2015, the new Ames Area LRTP went into effect. The plan update has changed the naming of projects to either on-street (ON), off-street (OFF), or enhanced intersection crossing (CR) improvements. This allows for greater flexibility to work with stakeholders during the design stage for incorporation of specific treatments that are appropriate to the project corridor.

The status changes are due to prioritizing improvements and coordinating locations with pavement improvement projects. No project is included in 2019/20 due to higher expenditures in the Shared Use Path Expansion program during that fiscal year.

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering		100,000	25,000	25,000		25,000	25,000
Construction		628,000	165,000	185,000		173,000	105,000
	TOTAL	**728,000**	**190,000**	**210,000**		**198,000**	**130,000**
FINANCING:							
Road Use Tax		728,000	190,000	210,000		198,000	130,000
	TOTAL	**728,000**	**190,000**	**210,000**		**198,000**	**130,000**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Shared Use Paths	Public Works	060-8821-439

SHARED USE PATH MAINTENANCE **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
The shared use path recreational and transportation system has continued to expand throughout the community. The shared use paths have typically been constructed with five inches of asphalt or concrete pavement. Structural failure, drainage problems, and vegetation infringement are several causes for the need to improve the pavement. This annual program provides for those improvements.

COMMENTS
The pavement management system for shared use paths is being updated in FY 2016/17 to guide maintenance activities to segments of the shared use path system that are in need of repair. This inventory aids in prioritizing those segments throughout the community.

Spot repairs that are identified will be prioritized by severity of the repair that is needed and then addressed in the operations budget.

Improvement to the shared use path pavement will enhance the safety and usability of the transportation/recreational system and improve the aesthetics of the right-of-way.

LOCATIONS
Various locations throughout Ames

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Engineering	90,000	18,000	18,000	18,000	18,000	18,000
Construction	535,000	107,000	107,000	107,000	107,000	107,000
TOTAL	**625,000**	**125,000**	**125,000**	**125,000**	**125,000**	**125,000**
FINANCING:						
Local Option Sales Tax	625,000	125,000	125,000	125,000	125,000	125,000
TOTAL	**625,000**	**125,000**	**125,000**	**125,000**	**125,000**	**125,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Shared Use Paths	Public Works	030-8811-439

TRANSPORTATION - TRAFFIC ENGINEERING

PROJECT/FUNDING SOURCE	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22	Page
PROJECT:							
Traffic Signal Program	1,722,000	375,000	380,000	150,000	402,000	415,000	101
Accessibility Enhancements Program	875,000	275,000	150,000	150,000	150,000	150,000	102
W Lincoln Way Intersection Improvements	450,000	450,000	-	-	-	-	103
Regional Transportation Count Program	250,000	50,000	50,000	50,000	50,000	50,000	104
Traffic Calming Program	132,000	60,000	60,000	12,000	-	-	105
Traffic Engineering Studies	600,000	25,000	500,000	25,000	25,000	25,000	106
Intelligent Transportation System Program	1,863,000	-	621,000	552,000	276,000	414,000	107
U.S. Highway 69 Improvements	180,000	-	180,000	-	-	-	108
TOTAL PROJECT EXPENDITURES	**6,072,000**	**1,235,000**	**1,941,000**	**939,000**	**903,000**	**1,054,000**	
FUNDING SOURCES:							
Debt:							
G.O. Bonds	575,000	575,000	-	-	-	-	
City:							
Road Use Tax	3,320,400	585,000	969,200	422,400	696,000	647,800	
Local Option Sales Tax	375,000	75,000	75,000	75,000	75,000	75,000	
Total City Funding	3,695,400	660,000	1,044,200	497,400	771,000	722,800	

TRANSPORTATION - TRAFFIC, continued

PROJECT/FUNDING SOURCE	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
FUNDING SOURCES, continued:						
Other:						
MPO/STP Funds	400,000	-	400,000	-	-	-
Federal/State Grants	1,401,600	-	496,800	441,600	132,000	331,200
Total Other Funding	1,801,600	-	896,800	441,600	132,000	331,200
TOTAL FUNDING SOURCES	**6,072,000**	**1,235,000**	**1,941,000**	**939,000**	**903,000**	**1,054,000**

DESCRIPTION/JUSTIFICATION

The Traffic Signal Program is the annual program that provides for replacing older traffic signals and for constructing new traffic signals in the City. This program will result in improved visibility, reliability, and appearance of signals. Although recent advances in technology have elongated the normal, useful life for traffic signal installations well past the previously expected 25 years, some of the older-generation traffic signals still in use exceed their functional age. Components at those installations (including conduits, wiring, signal heads, and poles) need to be completely replaced. This program also provides funding for those maintenance needs. Also, this program provides for the necessary upgrading of the traffic signal system as technology continues to change. In recent years, traffic signal replacements have included radar detection systems instead of in-pavement loop detection systems that had previously been used (and that were frequently the point of vehicle detection failure). Another advantage of the radar detection system is that it detects bicycles in addition to vehicles.

LOCATIONS

2017/18	Lincoln Way/Hyland Avenue signal replacement
2018/19	Dayton Avenue/East Lincoln Way signal replacement
2019/20	Various Equipment Upgrades (Modernization) at existing signal locations
2020/21	Lincoln Way/Beach Avenue signal replacement
2021/22	S. Duff Avenue/Chestnut Street signal replacement

A continued trend in increasing material costs (specifically for copper wiring and steel for the poles and mast arms) and additional Federal design requirements (such as additional ADA facilities) have resulted in an increased cost of a standard traffic signal. The cost for signalized intersection replacements has been increasing by approximately 3% per year based upon historical bid pricing. Staff tracks this trend and will adjust projected funding for this program each annual CIP cycle. When a full replacement is not necessary, staff will identify equipment within existing signal locations that can be replaced to achieve similar operational improvements to a major reconstruction.

Locations for this program shown in previous CIP years have been delayed by one year to coordinate with a major redevelopment project along Lincoln Way located between Hyland Avenue and Sheldon Avenue that would affect the Lincoln Way and Hyland Avenue intersection. The funding identified in 2016/17 will be used to advance the 6th Street and Hazel Avenue intersection, which was found to have functionally deteriorated faster than expected.

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Engineering	191,000	50,000	45,000		47,000	49,000
Construction	1,531,000	325,000	335,000	150,000	355,000	366,000
TOTAL	**1,722,000**	**375,000**	**380,000**	**150,000**	**402,000**	**415,000**
FINANCING:						
Road Use Tax	1,722,000	375,000	380,000	150,000	402,000	415,000
TOTAL	**1,722,000**	**375,000**	**380,000**	**150,000**	**402,000**	**415,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Traffic	Public Works	060-7566-439

ACCESSIBILITY ENHANCEMENT PROGRAM **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This annual program combines sidewalk and ADA ramp improvements with additional accessibility upgrades at traffic signals and other publicly owned parking facilities. This program will provide for removing and replacing sidewalk intersection crosswalk panels and handicap ramps at locations that fail to meet the Americans with Disabilities Act (ADA) requirements to have truncated dome warning panels installed. It also includes retrofitting existing signalized traffic control devices with audible and vibrotactile push-buttons, and upgrading parking stalls to current accessible standards in any on-street location or parking lot owned by the City of Ames. This program may be combined with and used in conjunction with roadway, traffic signal replacement, or shared use path improvement projects for pedestrian ramp reconstruction.

This program provides safer pedestrian facilities and limits the City's liability for injury to residents using public sidewalks that are in a deteriorated condition. The program also improves ADA accessibility at municipal facilities.

COMMENTS

In 2015/16, the City Manager's Office facilitated a survey of individuals who are affected by some sort of visual impairment to help prioritize the retrofitting of existing traffic signals that currently do not have audible and vibrotactile operation. These locations will be prioritized along with other ADA improvement needs that are identified throughout the year.

2017/2018 Airport Road Sidewalk (Ames Municipal Airport frontage); Various other locations

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Engineering	165,000	45,000	30,000	30,000	30,000	30,000
Construction	710,000	230,000	120,000	120,000	120,000	120,000
TOTAL	**875,000**	**275,000**	**150,000**	**150,000**	**150,000**	**150,000**
FINANCING:						
G.O. Bonds	125,000	125,000				
Road Use Tax	375,000	75,000	75,000	75,000	75,000	75,000
Local Option Sales Tax	375,000	75,000	75,000	75,000	75,000	75,000
TOTAL	**875,000**	**275,000**	**150,000**	**150,000**	**150,000**	**150,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Streets Engineering	Public Works	030-7510-439
		060-7510-439
		378-7510-439

WEST LINCOLN WAY INTERSECTION IMPROVEMENTS **PROJECT STATUS:** Scope change

DESCRIPTION/JUSTIFICATION

This project is for constructing turn lanes and installing traffic signals at the Franklin Avenue/Lincoln Way intersection. A traffic impact report for South Fork Subdivision justified these improvements. Increased traffic flow from South Fork Subdivision necessitated left-turn lanes at the Lincoln Way approaches to both the Franklin Avenue and the Dotson Drive intersections to accommodate heavy turning movements. Turn lanes and a new traffic signal system were added at the Dotson Drive/Lincoln Way intersection in 2014.

As a result of the traffic impact study for Aspen Heights Subdivision (Breckenridge) (property located at 205 S. Wilmoth Avenue), extension of a center turn lane was required along Lincoln Way between S. Wilmoth Avenue and Franklin Avenue. The developer is financially responsible for all costs associated with this construction and engineering that are being incorporated into the City's public improvement project. The estimated cost of the developer's portion is $610,000.

Once the project limits were extended to the east along Lincoln Way, staff recognized that the only remaining portion of four-lane roadway in this area would be between Marshall Avenue and Franklin Avenue. This project, to construct this portion into a five-lane section, is estimated to cost $450,000.

Additional turn lanes and replacement of the signals at the Franklin Avenue/Lincoln Way intersection are planned to be constructed during summer 2017. Turn lanes on Lincoln Way will mitigate left-turning, rear-end, and right-angle traffic accidents. Improvements will also support traffic coordination along Lincoln Way. An existing agreement requires the developer of South Fork Subdivision and the City to share equally in the construction cost of these improvements.

COMMENTS

2014/15	Franklin Avenue/Lincoln Way (planning and land acquisition) ($125,000 Road Use Tax)
2015/16	Franklin Avenue/Lincoln Way (engineering and construction) ($450,000 G.O. Bonds, $500,000 Safety Grant, $250,000 (est.) Developer)
2017/18	Franklin Avenue/Lincoln Way (engineering and construction) ($450,000 G.O. Bonds)

The street widening for turn lanes will increase street maintenance and snow removal activities.

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Construction		450,000	450,000				
	TOTAL	**450,000**	**450,000**				
FINANCING:							
G.O. Bonds		450,000	450,000				
	TOTAL	**450,000**	**450,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Traffic	Public Works	378-7550-439

REGIONAL TRANSPORTATION COUNT PROGRAM **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This program is the result of an ongoing need for transportation-related data in the Ames regional area. This program will be for the collection and management of travel demand data from all transportation modes: walking, biking, and various forms of motorized travel. Data from this program will be used to track critical transportation system performance measures which are used to analyze and forecast transportation system needs and priorities. Each year consists of an annual base for data collections services. Additional data collection hardware will be identified on a year-by-year basis.

COMMENTS

2017/18	Data collection base ($50,000)
2018/19	Data collection base ($50,000)
2019/20	Data collection base ($50,000)
2020/21	Data collection base ($50,000)
2021/22	Data collection base ($50,000)

The data collectors continuously record traffic volumes, speeds, and classification on arterial and collector streets throughout the network. This data supports Long Range Transportation Planning and Modeling efforts, as well as Pavement Management, Safety Analysis, and other system performance measures as needed.

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Engineering	250,000	50,000	50,000	50,000	50,000	50,000
TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**
FINANCING:						
Road Use Tax	250,000	50,000	50,000	50,000	50,000	50,000
TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation – Traffic	Public Works	060-7515-439

TRAFFIC CALMING PROGRAM **PROJECT STATUS:** Cost Change Site Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION

This program is the result of completing the Neighborhood Traffic Calming Handbook. This handbook is meant to serve as a technical guide, compiling nationally recognized best practices in the field of traffic calming, and then modifying those methods and their application to fit the context of the Ames community.

LOCATIONS

2017/18 Various Locations in the area of the College Creek/Old Ames Middle School Neighborhood
2018/19 Traffic Calming in the S. Hazel Avenue area (Lincoln Way to S. 4th Street)
2019/20 Traffic Calming in the Burnett Avenue area (near Meeker Elementary School)

The 2017/18 location is part of a City Council referral of a request by the neighborhoods to evaluate traffic safety in response to development on the Old Ames Middle School properties in southwest Ames.

The 2018/19 location is in response to a City Council referral related to potential traffic impacts from the Stadium View Apartments located at S.4th Street and S. Hazel Avenue.

The 2019/20 location is in response to a request from the Burnett Avenue neighborhood located near Meeker Elementary School.

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Engineering	21,000	10,000	10,000	1,000		
Construction	111,000	50,000	50,000	11,000		
TOTAL	**132,000**	**60,000**	**60,000**	**12,000**		
FINANCING:						
Road Use Tax	132,000	60,000	60,000	12,000		
TOTAL	**132,000**	**60,000**	**60,000**	**12,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Traffic	Public Works	060-7512-439

TRAFFIC ENGINEERING STUDIES **PROJECT STATUS:** Scope Change Cost Change

DESCRIPTION/JUSTIFICATION

The studies planned for this annual program will focus on examining the traffic signal system, shared use path system, and accident data to provide traffic information used for planning future capital improvement projects. These studies will identify those projects that will improve the efficiency, effectiveness, and safety of those systems.

COMMENTS

2017/18	Traffic Engineering Base ($25,000)
2018/19	2045 Long Range Transportation Plan Update
2019/20	Traffic Engineering Base ($25,000)
2020/21	Traffic Engineering Base ($25,000)
2021/22	Traffic Engineering Base ($25,000)

The project shown in 2018/19 will be an update to the Long Range Transportation Plan (LRTP) for the Ames region. Typically an update to the LRTP takes approximately 24 months to complete. The LRTP is federally required to be updated every five years, and therefore the latest date for approving this update is October 12, 2020.

Included in this program is a new initiative to provide flexibility to staff to be more responsive to requests for studies by the public. A base amount has been established to hire outside traffic engineering firms as needed that can augment staff's ability to answer public concerns in a timely manner while maintaining current workloads.

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Engineering	600,000	25,000	500,000	25,000	25,000	25,000
TOTAL	**600,000**	**25,000**	**500,000**	**25,000**	**25,000**	**2550,000**
FINANCING:						
Road Use Tax	200,000	25,000	100,000	25,000	25,000	25,000
MPO Planning Funds	400,000		400,000			
TOTAL	**600,000**	**25,000**	**500,000**	**25,000**	**25,000**	**25,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation - Traffic	Public Works	060-7530-439

INTELLIGENT TRANSPORTATION SYSTEM PROGRAM **PROJECT STATUS:** Delay Cost Change

DESCRIPTION/JUSTIFICATION

The 2040 Ames Area Long Range Transportation Plan (LRTP), which is effective starting October 12, 2015, identifies a wide range of transportation improvements including those projects that utilize technology that is referred to as Intelligent Transportation Systems (ITS) projects. In the 2040 LRTP, one of the highest priority corridors for installing traffic adaptive signal systems is along S. Duff Avenue and Lincoln Way arterial corridors respectively.

COMMENTS

2017/18	No Project
2018/19	Traffic Adaptive System (S. Duff Avenue – S 3rd Street to Airport Road) (LRTP Project 66)
2019/20	Traffic Adaptive System (Lincoln Way – Beach Avenue to Hyland Avenue) (LRTP Project 65)
2020/21	Traffic Adaptive System (Lincoln Way – Grand Avenue to Duff Avenue) (LRTP Project 69)
2021/22	Traffic Adaptive System (University Blvd – Lincoln Way to US Highway 30) (LRTP Project 67)

In preparation for these projects, there needs to be an evaluation of the current traffic communication network. Therefore, 2016/17 included a traffic network master plan that will create a detailed inventory and evaluation of the communication network used along the City's signalized corridors. The plan will then identify the upgrades necessary to support the modern technologies used to manage transportation. Also, included in 2016/17 was a Systems Engineering Analysis for Traffic Adaptive Signal Systems that will establish needs and functional requirements for traffic adaptive corridors throughout Ames. The analysis creates standards and specifications along with evaluation criteria for the various traffic adaptive systems that are currently available on the market. This process is following the FHWA guide for conducting systems engineering evaluation.

Traffic Adaptive Systems are a form of Intelligent Transportation System (ITS) infrastructure that conducts real-time optimization of traffic and pedestrian flow at signalized intersections. Traffic adaptive systems provide a significant improvement in efficiency and will provide reliable travel times during all times of the day. The delay is caused due to coordination with the Iowa DOT to take advantage of potential funding for design. The Cost change is due to an additional intersection that will be included as part of development along the S. Duff Avenue corridor.

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Engineering	243,000		81,000	72,000	36,000	54,000
Construction	1,620,000		540,000	480,000	240,000	360,000
TOTAL	**1,863,000**		**621,000**	**552,000**	**276,000**	**414,000**
FINANCING:						
Road Use Tax	461,400		124,200	110,400	144,000	82,800
Federal/State Grants	1,401,600		496,800	441,600	132,000	331,200
TOTAL	**1,863,000**		**621,000**	**552,000**	**276,000**	**414,000**

PROGRAM - ACTIVITY: Transportation - Traffic

DEPARTMENT: Public Works

ACCOUNT NO.

US HIGHWAY 69 IMPROVEMENTS **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
Intersection improvement projects along US Highway 69 within and just outside the City limits are targeted to alleviate congestion and reduce accidents.

LOCATIONS

2018/19 Intersection Improvements and Traffic Signal (S. Duff Avenue and US Hwy 30 EB Off-Ramp)

As part of a traffic impact study for a proposed residential development along S. Duff Avenue, east of the Ames Airport property, unacceptable delays were identified at the eastbound off-ramp of US Highway 30 and S. Duff Avenue. Queuing on the ramp may be a significant safety issue on S. Duff Avenue and on US Highway 30 alike. Therefore, an engineering analysis ($100,000 Road Use Tax) was programmed in 2016/17 to look at realigning Billy Sunday Road with the ramp/signal improvements.

The 2018/19 project will be to conduct preliminary design, generate a detailed cost estimate, and identify funding sources including potential Federal and State grants. Construction of improvements would be programmed in a later CIP along with anticipated funding sources.

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Engineering	180,000		180,000			
TOTAL	180,000		**180,000**			
FINANCING:						
Road Use Tax	180,000		180,000			
TOTAL	180,000		**180,000**			

PROGRAM – ACTIVITY: Transportation – Traffic

DEPARTMENT: Public Works

ACCOUNT NO.

TRANSPORTATION - STREET MAINTENANCE

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22	Page
PROJECT:							
Main Street Sidewalk Paver Replacement	715,000	171,000	171,000	190,000	88,000	95,000	110
Pavement Restoration	1,250,000	250,000	250,000	250,000	250,000	250,000	111
Right-of-Way Appearance Enhancements	285,000	95,000	30,000	100,000	30,000	30,000	112
Neighborhood Curb Replacement Program	675,000	75,000	150,000	150,000	150,000	150,000	113
Bridge Rehabilitation Program	870,000	-	-	120,000	100,000	650,000	114
TOTAL PROJECT EXPENDITURES	**3,795,000**	**591,000**	**601,000**	**810,000**	**618,000**	**1,175,000**	
FUNDING SOURCES:							
Debt:							
G.O. Bonds	870,000	-	-	120,000	100,000	650,000	
City:							
Road Use Tax	2,890,000	591,000	601,000	655,000	518,000	525,000	
Other:							
Private Funds	35,000	-	-	35,000	-	-	
TOTAL FUNDING SOURCES	**3,795,000**	**591,000**	**601,000**	**810,000**	**618,000**	**1,175,000**	

MAIN STREET SIDEWALK PAVER REPLACEMENT **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

This project provides for the replacement of the pavers in the Main Street Corridor. These pavers were installed with the Main Street Reconstruction project in 1999. At that time, the pavers were an aesthetic upgrade to traditional concrete sidewalks. Over time, the pavers have proven to be a difficult maintenance item. Uneven pavers appear every year, and Public Works Operations crews spend considerable amount of time to level or replace pavers. Additional pavers are now in short supply as the pavers are not produced anymore. Winter ice control chemicals applied by adjacent business owners have led to accelerated deterioration of the pavers, especially on the southern side of Main Street where the building provides continuous shade in the winter and no sunlight reaches to the sidewalk to aid in melting of snow and ice.

COMMENTS

The proposed projects would be broken up into block-long segments, and work would need to be coordinated continually with adjacent business owners to maintain access and safe pedestrian traffic flow through the corridor. This plan would replace the pavers along Main Street in five years.

The Kellogg Avenue and Main Street intersection is still performing well. This portion of the project could be delayed if necessary.

LOCATION

2017/18 Clark to Burnett (north side and south side sidewalks and crosswalks)
2018/19 Burnett to Kellogg (north side and south side sidewalks and crosswalks)
2019/20 Kellogg to Douglas (north side and south side sidewalks and crosswalks and Cynthia Duff Plaza)
2020/21 Douglas to Duff (north side and south side sidewalks and crosswalks)
2021/22 Kellogg Avenue and Main Street Intersection

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering		96,000	24,000	24,000	25,000	11,000	12,000
Construction		619,000	147,000	147,000	165,000	77,000	83,000
	TOTAL	**715,000**	**171,000**	**171,000**	**190,000**	**88,000**	**95,000**
FINANCING:							
Road Use Tax		715,000	171,000	171,000	190,000	88,000	95,000
	TOTAL	**715,000**	**171,000**	**171,000**	**190,000**	**88,000**	**95,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Street Maintenance	Public Works	060-7707-439

PAVEMENT RESTORATION **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This annual program is for preventive and proactive maintenance of the streets. This allows for a large variety of possible maintenance activities including, but not limited to, slurry seal, full-depth concrete paving, milling and patching of asphalt, joint sealing, diamond grinding, partial depth patching, and new maintenance techniques to preserve and enhance City streets. Locations will be coordinated with street construction to gain the best possible life cycle of streets.

COMMENTS

This program is funded at $250,000 annually to help extend the longevity of the pavement system and supplement the current pavement restoration activities. Priorities for this program are indentified using information from the pavement management system and input from citizens and maintenance crews.

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Construction		1,250,000	250,000	250,000	250,000	250,000	250,000
	TOTAL	**1,250,000**	**250,000**	**250,000**	**250,000**	**250,000**	**250,000**
FINANCING:							
Road Use Tax		1,250,000	250,000	250,000	250,000	250,000	250,000
	TOTAL	**1,250,000**	**250,000**	**250,000**	**250,000**	**250,000**	**250,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Street Maintenance	Public Works	060-7723-439

RIGHT-OF-WAY APPEARANCE ENHANCEMENTS **PROJECT STATUS:** Delayed Site Change

DESCRIPTION/JUSTIFICATION
This project provides for the enhancement of the rights-of-way in the city of Ames. The funding could be used for a number of elements including retaining walls, entryway enhancements, median enhancements, and right-of-way restoration.

COMMENTS
In addition to retaining wall repairs, the right-of-way enhancement portion could be used to enhance or repair other right of way elements such as decorative signs or monuments. This program could also be used to complete entryway improvements in the city.

The Lincoln Way Medians project shown below is for design activities only. Formalizing agreements with partners such as Iowa State University and the Ames Foundation is vital for the success of this project. Once these agreements are reached, the project design may begin as programmed and the construction will be budgeted in a future Capital Improvement Plan year.

LOCATION

2017/18 927 Dayton Avenue ($17,000 Engineering; $68,000 Construction), Main Street Lighting Sculptures ($10,000)
2018/19 Various locations;
2019/20 Various locations; Lincoln Way Medians (Beach Avenue to Sheldon Avenue - Engineering) ($70,000)
2020/21 Various locations
2021/22 Various locations

The delay is due to waiting for the Lincoln Way Corridor Plan to be completed and to coordinate with the Campustown Public Improvements project along Welch Avenue. This delay will allow for more coordination between projects.

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Engineering	87,000	17,000		70,000		
Right-of-Way Enhancements	198,000	78,000	30,000	30,000	30,000	30,000
TOTAL	**285,000**	**95,000**	**30,000**	**100,000**	**30,000**	**30,000**
FINANCING:						
Road Use Tax	250,000	95,000	30,000	65,000	30,000	30,000
Private Funds	35,000			35,000		
TOTAL	**285,000**	**95,000**	**30,000**	**100,000**	**30,000**	**30,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Street Maintenance	Public Works	060-7731-439

NEIGHBORHOOD CURB REPLACEMENT PROGRAM **PROJECT STATUS:** Site Change Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION
This is the annual program for replacement of deteriorated curb and gutter in selected neighborhood areas. Curb and gutter replacement enhances neighborhood and right-of-way aesthetics.

Areas to receive curb and gutter replacement are selected by staff using input of neighborhoods, the condition of the curb, and the extent of needed repairs.

COMMENTS
Neighborhood Curb Replacement Program decision criteria approved by City Council include the extent of curb deterioration, the number of residential structures in the block, and the longitudinal grade. Locations are coordinated with other pavement improvement locations in the CIP.

LOCATION

2017/18	South 2nd Street (South Maple Avenue to South Hazel Avenue)
2018/19	West Street (Crane Avenue to Hillcrest Avenue)
2019/20	Franklin Avenue (Lincoln Way to Oakland Street)
2020/21	12th Street (Grand Avenue to Kellogg Avenue)
2021/22	Murray Drive (Northwestern Avenue to Grand Avenue)

The site change is due to coordinating with seal coat reconstruction projects with neighborhoods.

The cost change is due to increasing construction costs and project size identified.

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Engineering	72,500	12,500	15,000	15,000	15,000	15,000
Construction	602,500	62,500	135,000	135,000	135,000	135,000
TOTAL	**675,000**	**75,000**	**150,000**	**150,000**	**150,000**	**150,000**
FINANCING:						
Road Use Tax	675,000	75,000	150,000	150,000	150,000	150,000
TOTAL	**675,000**	**75,000**	**150,000**	**150,000**	**150,000**	**150,000**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Street Maintenance	Public Works	060-7770-439

BRIDGE REHABILITATION PROGRAM **PROJECT STATUS:** Site Change Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION
This program provides funding for necessary repairs recommended by the biennial Iowa Department of Transportation (IDOT) bridge inspections. The IDOT requires these inspections for bridges within the city of Ames.

COMMENTS
The 2016 Bridge Inspection and Maintenance Reports indicated minor rehabilitation work should be performed on the 6th Street Bridge over the Union Pacific Railroad and on the Minnesota Avenue Bridge over the Union Pacific Railroad. Work at both of these locations includes footing and concrete joint repairs. These repairs will help extend the lifespan of the existing structures.

The 2016 Bridge Inspection and Maintenance Reports also indicated that the handrail on the Lincoln Way Bridge over Squaw Creek is rapidly deteriorating. The handrail is beginning to rust through in locations and will begin to present further problems in the future if not repaired. The bridge is also in need of minor concrete repair to extend its useful life.

In 2021/22, a project to widen the South 4th Street Bridge to include a shared use path is proposed. This is a heavily trafficked pedestrian and bicycle corridor that is lacking in infrastructure to cross Squaw Creek. This project would address that concern and provide better flow across the bridge.

LOCATION

2017/18	No project
2018/19	No project
2019/20	6th Street Bridge over the UPRR and Minnesota Avenue Bridge over the UPRR (construction/engineering)
2020/21	Lincoln Way Bridge over Squaw Creek (construction/engineering)
2021/22	South 4th Street Bridge over Squaw Creek (construction/engineering)

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Engineering	135,000			20,000	15,000	100,000
Construction	735,000			100,000	85,000	550,000
TOTAL	**870,000**			**120,000**	**100,000**	**650,000**
FINANCING:						
G.O. Bonds	870,000			120,000	100,000	650,000
TOTAL	**870,000**			**120,000**	**100,000**	**650,000**

PROGRAM - ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation – Street Maintenance	Public Works	377-7754-439

TRANSPORTATION - TRANSIT

PROJECT/FUNDING SOURCE	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22	Page
PROJECT:							
Vehicle Replacement	5,264,174	1,794,720	715,000	695,400	773,934	1,285,120	116
Building Expansion and Modernization	2,105,000	880,000	870,000	285,000	35,000	35,000	117
CyRide Shop/Office Equipment	425,000	106,000	62,000	87,000	108,000	62,000	118
Bus Stop Improvements	250,000	50,000	50,000	50,000	50,000	50,000	119
Technology Improvements	830,000	175,000	370,000	170,000	70,000	45,000	120
TOTAL PROJECT EXPENDITURES	**8,874,174**	**3,005,720**	**2,067,000**	**1,287,400**	**1,036,934**	**1,477,120**	
FUNDING SOURCES:							
City:							
Transit Fund	3,866,835	973,944	1,019,000	823,080	509,787	541,024	
Other:							
Federal Transit Administration	2,215,563	-	408,000	424,320	487,147	896,096	
Federal/State Grants	2,791,776	2,031,776	640,000	40,000	40,000	40,000	
Total Other Funding	5,007,339	2,031,776	1,048,000	464,320	527,147	936,096	
TOTAL FUNDING SOURCES	**8,874,174**	**3,005,720**	**2,067,000**	**1,287,400**	**1,036,934**	**1,477,120**	

CYRIDE VEHICLE REPLACEMENT **PROJECT STATUS:** Scope/Cost Change

DESCRIPTION/JUSTIFICATION

CyRide will replace/expand its bus fleet by five used buses each year to meet ridership demand and replace vehicles that can no longer be operated in daily service. Additionally, CyRide has grant funding for four new buses to be delivered in 2017/18 and anticipates future state funding for new buses through the state's capital funding allocation process. CyRide has four vehicles used for administrative support and in the operations division for drivers to switch shifts. These vehicles are on a four- to six-year replacement schedule, ultimately replaced when they no longer are mechanically sound. The two maintenance trucks are on a ten-year replacement cycle. Dial-A-Ride vehicles are replaced every 4-6 years.

In total, these purchases are programmed as follows:

2017/18: Purchase two to three used 40' buses ($60,000); purchase four new 40' buses ($1,734,720)

2018/19: Purchase five used 40' buses ($125,000); purchase one new 40’ buses ($510,000), replace administrative vehicle ($30,000); replace maintenance truck 007 ($50,000)

2019/20: Purchase five used 40' buses ($135,000); purchase one new 40’ bus ($530,400); replace administrative vehicle ($30,000)

2020/21: Purchase five used 40’ buses ($135,000); purchase one new 40’ bus ($551,616); replace the Dial-A-Ride van ($57,318); replace administrative vehicle ($30,000)

2021/22: Purchase five used 40' buses ($135,000); purchase one new 40’ bus and six minibuses ($551,616 and $465,329, respectively), replace the Dial-A-Ride bus ($103,175); replace administrative vehicle ($30,000)

COMMENTS

All vehicles, except the new buses/Dial-A-Ride vehicles, will be 100% locally funded. The new buses will be funded with 80-85% federal funding, including the State of Iowa’s Iowa Clean Air Attainment Program (ICAAP) funds that are a distribution of federal dollars.

LOCATION

CyRide, 601 N. University Boulevard

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Large Buses - 40' New		4,343,681	1,734,720	510,000	530,400	551,616	1,016,945
Used Buses		590,000	60,000	125,000	135,000	135,000	135,000
Administrative Vehicles		120,000		30,000	30,000	30,000	30,000
Shop Vehicles		50,000		50,000			
Dial-A-Ride Bus/Van		160,493				57,318	103,175
	TOTAL	**5,264,174**	**1,794,720**	**715,000**	**695,400**	**773,934**	**1,285,120**
FINANCING:							
Transit Fund		1,660,835	406,944	307,000	271,080	286,787	389,024
PTMS Funds		2,215,563		408,000	424,320	487,147	896,096
ICAAP Funds		1,387,776	1,387,776				
	TOTAL	**5,264,174**	**1,794,720**	**715,000**	**695,400**	**773,934**	**1,285,120**

PROGRAM - ACTIVITY: Transportation – Transit

DEPARTMENT: CyRide

ACCOUNT NO. 552-1159-439, 552-1171-439

CYRIDE BUILDING EXPANSION & MODERNIZATION **PROJECT STATUS:** Scope/Cost Change

DESCRIPTION/JUSTIFICATION

CyRide's original bus storage building is 32 years old and major components of the building are at the end of their useful life. Additionally, the facility is housing more vehicles than it was originally designed for, creating higher wear and tear on the facility. As a result, this plan has been developed to keep the facility in a state of good repair, as is required by the Federal Transit Administration:

2017/18: Replace permanent bus hoists ($430,000); rehabilitate bus wash ($325,000); replacement of deteriorated concrete ($90,000)
2018/19: Replace CyRide's HVAC system in the original portion of the building ($810,000); replace EIFS coating ($25,000)
2019/20: Replace fueling system with a high-speed fueling system ($250,000)
2020/21: No projects re programmed at this time
2021-22: No projects re programmed at this time

In addition, A& E services will be utilized each year ($35,000) to support construction projects/development of bid plans and specifications.

COMMENTS

The HVAC units and permanent bus hoists are original to the building; the portable hoists are 38 years old and past their useful life. The warranty on CyRide's current bus storage roofs expired in 1994 on the oldest section and in 2010 on the newest section. CyRide's current bus washer will be 13 years old at the time of replacement, which is past the expected 10-year life for this type of equipment. A portion of the concrete parking lot is crumbling under the weight of the buses. The A & E services would provide technical expertise during the various construction projects, as well as assisting with the preparation of bid documents. The EIFS coating is up to twenty years old and is in deteriorating condition. The new high speed fueling system would allow current employees to fuel each bus in the same amount of time as CyRide's continues to expand its fleet, alleviating the current need for a second fueling bay or additional staff.

This plan does not include bus storage expansion and assumes that 20-30 buses will be housed outdoors. However, the 2014/15 Capital Improvement Plan included a $200,000 commitment to a state grant that was not approved. This funding will be retained in a reserve account for local share to match a grant until funding is secured for a building expansion project.

LOCATION

CyRide, 601 N. University Boulevard

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Architectural/Engineering		175,000	35,000	35,000	35,000	35,000	35,000
Equipment		1,840,000	755,000	835,000	250,000		
Construction		90,000	90,000				
	TOTAL	**2,105,000**	**880,000**	**870,000**	**285,000**	**35,000**	**35,000**
FINANCING:							
Transit Fund		901,000	276,000	270,000	285,000	35,000	35,000
State of Iowa - PTIG		1,204,000	604,000	600,000			
	TOTAL	**2,105,000**	**880,000**	**870,000**	**285,000**	**35,000**	**35,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Transit	CyRide	552-1159-439
		552-1175-439

CYRIDE SHOP AND OFFICE EQUIPMENT **PROJECT STATUS:** Scope/Cost Change

DESCRIPTION/JUSTIFICATION

This project is to address replacement of shop and office equipment used for CyRide operations. While a majority of the 2017/18 – 2021/22 shop purchases in this category are smaller items where replacement need is less predictable, they have been generally described in this CIP. Specific shop needs will be identified annually to efficiently operate CyRide and address OSHA, Department of Natural Resources, and other federal requirements as they are implemented at a total cost of $20,000 to $50,000 per year, plus larger equipment as described below. Additionally, three to six computers will be funded each year at an estimated cost of $6,000 to 12,000 per year.

2017/18 – 2021/22 larger equipment purchases include:

- 2017/18 – Flood Pump ($80,000);
- 2019/20 – Air Compressor ($25,000)
- 2020-21 – Replace CyRide's current forklift ($40,000),

COMMENTS

The 2017/18 smaller shop and office equipment expenditures include the replacement of six computers and the following shop equipment:

- Six Trash Pumps ($12,000)
- Air Jack ($1,600)
- Bus Fogger/Sanitizer ($6,400)

The Flood Pump is one of two pieces of equipment that are required to complete the waterproofing of CyRide's facility, which flooded in 2010. The first pump was purchased in 2016/17. CyRide's Air Compressor will be 36 years old at the time of replacement and will have exceeded its useful life. CyRide's forklift is 35 years old and is becoming unreliable and expensive to repair.

LOCATION

CyRide, 601 N. University Boulevard

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Computers	60,000	6,000	12,000	12,000	18,000	12,000
Forklift	40,000				40,000	
Shop Equipment	220,000	20,000	50,000	50,000	50,000	50,000
Flood Pump	80,000	80,000				
Air Compressor	25,000			25,000		
TOTAL	**425,000**	**106,000**	**62,000**	**87,000**	**108,000**	**62,000**
FINANCING:						
Transit Fund	425,000	106,000	62,000	87,000	108,000	62,000
TOTAL	**425,000**	**106,000**	**62,000**	**87,000**	**108,000**	**62,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Transit	CyRide	552-1159-439

BUS STOP IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

One of the most frequently requested customer suggestions received by CyRide is regarding the condition or lack of amenities at its more than 435 bus stop locations throughout the city. Therefore, over the next five-year period (2017/18 through 2021/22), CyRide will install two to three new bus shelters and move existing bus shelters to new locations each year, thereby increasing the total number of bus shelters for CyRide's customers. The specific locations will be identified each year based on CyRide's ability to complete installation at sites that year and the bus stop priority list based on a previous bus stop improvements study. In addition to shelters, concrete pads; amenities and connections to sidewalks will be included to make using the bus easier for customers. In total, approximately $50,000 per year in improvements will be completed.

COMMENTS

Funding for these improvements will be provided by 80% federal dollars administered under a grant from the State of Iowa and 20% local funding from CyRide's budget.

LOCATION

Various locations throughout Ames

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Pads, Benches, Shelters		250,000	50,000	50,000	50,000	50,000	50,000
	TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**
FINANCING:							
Transit Fund		50,000	10,000	10,000	10,000	10,000	10,000
Federal 5310 Grants		200,000	40,000	40,000	40,000	40,000	40,000
	TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Transit	CyRide	552-1174-439

CYRIDE TECHNOLOGY IMPROVEMENTS **PROJECT STATUS:** Scope/Cost Change

DESCRIPTION/JUSTIFICATION

CyRide has equipped its bus fleet with video camera technology that has improved customer safety and information regarding its daily operation of service. As a result, CyRide has developed a bus video replacement system that replaces the video system on up to five buses each year ($25,000 to $45,000 annually) over the course of the five-year plan. These systems must be replaced periodically as the existing equipment has become obsolete and is not supported by the vendor. CyRide currently has four different video systems on its bus fleet, which are used to investigate customer complaints and identify operational issues.

CyRide began upgrading its office building security camera system by replacing the office portion of this system in 2016/17 ($60,000) with the system expanded to the bus storage building/maintenance in 2018/19 ($200,000). CyRide would also upgrade its NextBus GPS tracking system ($100,000) in 2017/18, as it will be five years old. The vendor has notified CyRide that it will no longer support portions of the program's current version.

In the 2017/18 fiscal year, CyRide would purchase a human resources package that would allow staff to document employee actions, various federal checks that are required and maintain an overall accurate work history of its more than 165 bus operators. The number of drivers employed at CyRide has grown by more than one third in the last ten years and has become unmanageable without software designed to track this information ($50,000).

CyRide would also replace its radio system ($100,000), as part of the citywide emergency radio replacement program, anticipated in 2018/19. Up to 25 Automatic Passenger Counters (APCs) would be purchased in 2018/19, 2019/20, and 2020/21 to assist CyRide in counting passengers as they board the bus, thereby decreasing boarding time on its routes. In 2019/20, CyRide will need to replace its asset management software that will keep CyRide in compliance with a new federal asset management requirement. The anticipated cost of this software is $100,000.

COMMENTS

CyRide's administrative offices are the only portion of the facility currently equipped with a video surveillance system. This system is nine years old, not capable of expansion, and experiencing reliability issues. CyRide's maintenance shop and bus storage areas would be added to a new system to complete coverage of the facility. This new system will be completed over a two-year period (2016/17 and 2018/19).

LOCATION

CyRide, 1700 University Boulevard

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Bus Security Cameras	205,000	25,000	45,000	45,000	45,000	45,000
Building Security System	200,000		200,000			
HR Software	50,000	50,000				
Radio System Upgrade	100,000		100,000			
GPS Tracking System	100,000	100,000				
APCs	75,000		25,000	25,000	25,000	
Asset Management Software	100,000			100,000		
TOTAL	**830,000**	**175,000**	**370,000**	**170,000**	**70,000**	**45,000**
FINANCING:						
Transit Fund	830,000	175,000	370,000	170,000	70,000	45,000
TOTAL	**830,000**	**175,000**	**370,000**	**170,000**	**70,000**	**45,000**

PROGRAM - ACTIVITY: Transportation – Transit

DEPARTMENT: CyRide

ACCOUNT NO. 552-1159-439

TRANSPORTATION - AIRPORT

PROJECT/FUNDING SOURCE	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22	Page
PROJECT:							
Airport Improvements	664,000	166,000	-	-	396,000	102,000	122
TOTAL PROJECT EXPENDITURES	**664,000**	**166,000**	**-**	**-**	**396,000**	**102,000**	
FUNDING SOURCES:							
City:							
Airport Construction Fund	66,400	16,600	-	-	39,600	10,200	
Other:							
Federal Aviation Administration	597,600	149,400	-	-	356,400	91,800	
TOTAL FUNDING SOURCES	**664,000**	**166,000**	**-**	**-**	**396,000**	**102,000**	

AIRPORT IMPROVEMENTS **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION
Airport improvement projects are accomplished through this program.

COMMENTS
The projects included in this program are determined by the Airport Master Plan which details Airport development needs for a ten-year period. The Master Plan Update that was completed in 2007 identifies projects that qualify for Federal Aviation Administration (FAA) funding.

2017/18	Master Plan partial update and runway extension justification
2018/19	No Project
2019/20	No Project
2020/21	Electric Vault and Old Terminal Building Demolition
2021/22	Environmental Assessment (Runway 01/19 Extension)

The projects shown beginning in FY 2017/18 represent the steps necessary to extend the main runway 01/19 from approximately 6,000 feet to 8,000 feet. The purpose is to accommodate future growth of the airport by making it possible for larger aircraft to land in Ames year-round. The projects to relocate electrical equipment to an above-ground vault and demolish the old terminal building in FY 2020/21, and to perform the environmental assessment for the runway extension in FY 2021/22 were both delayed one year from last year's CIP. The delay was recommended by FAA Central Region staff to ensure the availability of Federal funds for the projects.

LOCATION
Ames Municipal Airport

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Engineering	327,400	166,000			59,400	102,000
Construction	336,600				336,600	
TOTAL	**664,000**	**166,000**			**396,000**	**102,000**
FINANCING:						
Airport Construction Fund	66,400	16,600			39,600	10,200
FAA Funding	597,600	149,400			356,400	91,800
TOTAL	**664,000**	**166,000**			**396,000**	**102,000**

PROGRAM – ACTIVITY:	DEPARTMENT:	ACCOUNT NO.
Transportation – Airport	Public Works	330-7070-439

Community Enrichment

Bloomberg, 2015)
U.S. City with the Lowest Unemployment Rate (Forbes, 2016)
Ranked No. 4 Best Small City to Make a Living (MoneyGeek, 2016)
Ranked No. 35 in Top 100 Best Places to Live
Unemployment Rate (Forbes, 2016)
Ranked No. 8 in Best Towns for Millennials in America (Niche)
One of the 7 Top Tech Hubs Among America's Small College Towns (The SpareFoot Blog)
Named one of the 15 Cities
small cities overall out of 421 MSAs for Best Cities for Job Growth (NewGeography, 2015)
p 25 nationally for Best Places for STEM Grads (Nerdwallet, 2015)
One of the Happiest Small
a to Get a Job in 2015 (Business Insider)
Best College Town in 2014 (Livability.com)
016)
One of the Best-Performing Small Cities (Milken Institute, 2015)
Ranked No. 8 Best Places to Live in
agazine, 2014)
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One of the Happiest Small Pl

COMMUNITY ENRICHMENT

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22	Page
EXPENDITURES:							
Parks and Recreation	4,255,000	745,000	1,025,000	680,000	720,000	1,085,000	124
Cemetery	15,000	-	15,000	-	-	-	137
City Manager	450,000	250,000	50,000	50,000	50,000	50,000	139
Planning and Housing	500,000	100,000	100,000	100,000	100,000	100,000	142
Internal Services/Facilities	300,000	50,000	50,000	50,000	100,000	50,000	145
TOTAL EXPENDITURES	**5,520,000**	**1,145,000**	**1,240,000**	**880,000**	**970,000**	**1,285,000**	
FUNDING SOURCES:							
City:							
Local Option Sales Tax	4,895,000	980,000	1,090,000	870,000	870,000	1,085,000	
Park Development Fund	280,000	80,000	-	-	-	200,000	
Ice Arena Capital Reserve	295,000	60,000	125,000	10,000	100,000	-	
Total City Funding	5,470,000	1,120,000	1,215,000	880,000	970,000	1,285,000	
Other:							
Ames Community School District	50,000	25,000	25,000	-	-	-	
TOTAL FUNDING SOURCES	**5,520,000**	**1,145,000**	**1,240,000**	**880,000**	**970,000**	**1,285,000**	

COMMUNITY ENRICHMENT - PARKS AND RECREATION

PROJECT/FUNDING SOURCE	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22	Page
PROJECT:							
Park System/Facility Improvements	1,860,000	430,000	325,000	435,000	165,000	505,000	126
Furman Aquatic Center	110,000	50,000	-	-	-	60,000	127
Homewood Golf Course	660,000	50,000	500,000	-	10,000	100,000	128
Ames/ISU Ice Arena	295,000	60,000	125,000	10,000	100,000	-	129
Sunset Ridge Park Development	80,000	80,000	-	-	-	-	130
ADA Transition Plan Improvements	125,000	25,000	25,000	25,000	25,000	25,000	131
Municipal Pool	100,000	50,000	50,000	-	-	-	132
Moore Memorial Park Pedestrian Bridge	385,000	-	-	35,000	350,000	-	133
Playground Equipment Improvements	370,000	-	-	175,000	60,000	135,000	134
Ada Hayden Heritage Park	70,000	-	-	-	10,000	60,000	135
Rose Prairie Park Development	200,000	-	-	-	-	200,000	136
TOTAL PROJECT EXPENDITURES	**4,255,000**	**745,000**	**1,025,000**	**680,000**	**720,000**	**1,085,000**	

COMMUNITY ENRICHMENT - PARKS AND RECREATION, continued

PROJECT/FUNDING SOURCE	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
FUNDING SOURCES:						
City:						
Local Option Sales Tax	3,630,000	580,000	875,000	670,000	620,000	885,000
Ice Arena Capital Reserve	295,000	60,000	125,000	10,000	100,000	-
Park Construction Fund	280,000	80,000	-	-	-	200,000
Total City Funding	4,205,000	720,000	1,000,000	680,000	720,000	1,085,000
Other:						
Ames Community School District	50,000	25,000	25,000	-	-	-
TOTAL FUNDING SOURCES	**4,255,000**	**745,000**	**1,025,000**	**680,000**	**720,000**	**1,085,000**

PARK SYSTEM/FACILITY IMPROVEMENTS **PROJECT STATUS:** Scope Change Cost Change

DESCRIPTION/JUSTIFICATION

To maintain City parks in a safe and quality manner, the projects listed below address maintenance issues and improvements at various locations.

COMMENTS

2017/18: River Valley Park: Install irrigation on North River Valley Park sports fields ($70,000); Install parking lot at North River Valley Park sports fields ($200,000)
Munn Woods: Install crossing over College Creek in Munn Woods ($20,000)
Bandshell Park: Upgrade electrical system in Bandshell ($110,000)
Site to be determined: Engineering/design for spray pad ($30,000)

2018/19: Carr Park: Engineering/design for removing bath house and new shelter with restroom ($15,000)
Gateway Hills Park: Engineering/design for adding a restroom ($10,000);
Site to be determined: Remove wading pool and construct a spray pad out of the flood plain ($300,000)

2019/20: Bandshell: Engineering/design for renovating changing rooms ($5,000)
Carr Park: Remove bath house and construct new shelter with restroom ($225,000)
Gateway Hills Park: Construct restroom ($50,000); Exterior building improvements/repairs to administrative office ($35,000); Install erosion control at Carroll Marty Disc Golf Course ($75,000)
McCarthy Lee Park: Install irrigation system at McCarthy Lee sports fields ($45,000)

2020/21: Bandshell: Renovate changing rooms ($50,000)
Inis Grove Park: Replace tennis court fencing ($25,000)
McCarthy Lee Park: Add gutters to the hill drive ($20,000)
Gateway Hills Park: Install new standards, drainage and borders on sand volleyball courts ($50,000)
River Valley Park: Engineering/design for adding a bathroom at the south softball diamonds ($20,000)

2021/22: Community Center: Refinish wood gymnasium floor ($30,000)
Park Maintenance: Consolidate maintenance facilities ($200,000)
River Valley Park: Install new restroom at the south softball diamonds ($200,000); Replace Cottonwood shelter ($75,000)

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering		80,000	30,000	25,000	5,000	20,000	
Construction		1,780,000	400,000	300,000	430,000	145,000	505,000
	TOTAL	**1,860,000**	**430,000**	**325,000**	**435,000**	**165,000**	**505,000**
FINANCING:							
Local Option Sales Tax		1,860,000	430,000	325,000	435,000	165,000	505,000
	TOTAL	**1,860,000**	**430,000**	**325,000**	**435,000**	**165,000**	**505,000**

PROGRAM – ACTIVITY: Community Enrichment
DEPARTMENT: Parks and Recreation
ACCOUNT NO: Various

FURMAN AQUATIC CENTER **PROJECT STATUS:** Cost Change Delayed

DESCRIPTION/JUSTIFICATION

This facility opened in May of 2010. It has been operational for six seasons with an average of approximately 100,000 visitors per summer. To ensure it remains a quality facility, structural and mechanical items have been identified and will be addressed in a systematic manner.

When the facility was being designed and constructed, pool consultants stated that a new, major feature should be installed every five years to ensure admissions remain high. With this in mind, $50,000 was allocated in the FY 2016/17 CIP for design services with an additional $500,000 in FY 2017/18 for construction. As staff has been researching options and talking to other Parks and Recreation Departments, adding major features does not guarantee high admissions. In addition, any major feature added to the Furman Aquatic Center would result in a loss of deck space, which is at a premium already. Therefore, staff is recommending not adding a major feature at this time. However, adding an amenity that is less expensive and does not need deck space is desirable. Options include an inflatable obstacle course and a climbing wall. To reflect this change, $50,000 is being moved from FY 2016/17 to FY 2017/18 and $500,000 has been removed from FY 2017/18.

COMMENTS

2017/18: Install an additional feature ($50,000)
2021/22: Install a shelter adjacent the parking lot ($60,000)

LOCATION

Furman Aquatic Center, 1365 13th Street

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Construction		110,000	50,000				60,000
	TOTAL	**110,000**	**50,000**				**60,000**
FINANCING:							
Local Option Sales Tax		110,000	50,000				60,000
	TOTAL	**110,000**	**50,000**				**60,000**

PROGRAM - ACTIVITY: Community Enrichment
DEPARTMENT: Parks and Recreation
ACCOUNT NO. 030-4907-459

HOMEWOOD GOLF COURSE **PROJECT STATUS:** Scope Change Cost Change

DESCRIPTION/JUSTIFICATION
To enhance the services provided, the projects listed below will address facility needs.

The current clubhouse was moved to the site in 1970, is not energy efficient, and lacks adequate storage in the lower level for carts. This project will remove the clubhouse and replace it with a larger community room that could be used for weddings, family gatherings, and company outings. This project is a great opportunity to provide residents with a year round facility, as well as, address the above stated deficiencies. An open floor plan with the ability to separate the community room from the golfer check-in area will ensure this facility can be used in all seasons.

The current bridge was designed for walking golfers. Since the demand for motorized carts at Homewood has increased, replacing this bridge with one designed for motorized carts will speed up play and reduce safety concerns for golfers having to drive along hole #8 to get to the 9th green.

COMMENTS
2017/18: Engineering/design for replacing the current clubhouse with a new building ($50,000)
2018/19: Replace the current clubhouse with a new building ($500,000)
2020/21: Engineering/design for replacing the bridge on Hole #9 so it can accommodate carts ($10,000)
2021/22: Replace the bridge on Hole #9 so it can accommodate carts ($100,000)

LOCATION
Homewood Golf Course, 401 E 20th Street

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Engineering	60,000	50,000			10,000	
Construction	600,000		500,000			100,000
TOTAL	**660,000**	**50,000**	**500,000**		**10,000**	**100,000**
FINANCING:						
Local Option Sales Tax	660,000	50,000	500,000		10,000	100,000
TOTAL	**660,000**	**50,000**	**500,000**		**10,000**	**100,000**

PROGRAM – ACTIVITY: Community Enrichment
DEPARTMENT: Parks and Recreation
ACCOUNT NO: 030-4917-459

AMES/ISU ICE ARENA **PROJECT STATUS:** Cost Change Scope Change

DESCRIPTION/JUSTIFICATION

The Ames/ISU Ice Arena will be celebrating its 15th anniversary in April of 2016. With the goal of maintaining a quality facility, the following items need to be replaced.

Funding for capital improvement projects is provided through the Ice Arena Captial Reserve Fund. Every year, the City and Iowa State University each contribute $20,000 to this fund to ensure the facility is well-maintained. As of June 30, 2016, this fund totaled $189,879.

COMMENTS

FY 2017/18: Replace dasher board system ($60,000)
FY 2018/19: Convert to new refrigerant (i.e. Freon) ($20,000)
FY 2018/19: Replace ice resurfacer ($105,000)
FY 2019/20: Engineering/design parking lot reconstruction ($10,000)
FY 2020/21: Reconstruct parking lot ($100,000)

LOCATION

Ames/ISU Ice Arena, 1505 Gateway Hills Park Drive

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Equipment	165,000	60,000	105,000			
Construction	120,000		20,000		100,000	
Engineering/Design	10,000			10,000		
TOTAL	**295,000**	**60,000**	**125,000**	**10,000**	**100,000**	
FINANCING:						
Ice Arena Capital Reserve Funds	295,000	60,000	125,000	10,000	100,000	
TOTAL	**295,000**	**60,000**	**125,000**	**10,000**	**100,000**	

PROGRAM - ACTIVITY: Community Enrichment

DEPARTMENT: Parks and Recreation

ACCOUNT NO. 571-4928-459
572-4928-459

SUNSET RIDGE PARK DEVELOPMENT **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

Sunset Ridge is a growing development with close to 300 homes when finished. The homeowners association has approached the Parks and Recreation Commission regarding developing a park in the neighborhood and is interested in deeding a two acre parcel to the City for this purpose. The Parks and Recreation Master Plan identifies neighborhood park service areas to cover a 1/4 to 1/2 mile radius. Using the 1/2 mile radius, a portion of Sunset Ridge is covered by Daley Park; however, individuals would need to cross Lincoln Way without a controlled intersection to get there. Standard amenities in neighborhood parks include a basketball pad with goals, a small shelter, a play structure and swings, and utilities. The homeowners association already has a basketball pad on another parcel so this will not be included in this development. The estimated costs for these improvements will total $80,000. As part of the conversation, the HOA has agreed to maintain the turf areas of the park which will reduce the amount of time required of park maintenance staff. The details still need to be finalized.

COMMENTS

FY 2017/18: Develop the Sunset Ridge Neighborhood Park ($80,000)

LOCATION

Sunset Ridge Development

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Park Development		80,000	80,000				
	TOTAL	**80,000**	**80,000**				
FINANCING:							
Park Development Fund		80,000	80,000				
	TOTAL	**80,000**	**80,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Enrichment	Parks and Recreation	340-4994-459

ADA TRANSITION PLAN IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

To better understand where Parks and Recreation does not comply with the 2010 Americans with Disabilities Act Standards for Accessible Design, an inventory and assessment of the park system and facilities is being conducted in FY 2016/17. Upon conclusion of the inventory and assessment, a transition plan will be developed in order to become compliant. In anticipation of items needing to be corrected, money is being put into each year of the CIP. This is an estimate and could be higher or lower, but will not be known until the transition plan is finalized.

COMMENTS

2017/18: ADA Transition Plan items to be determined ($25,000)

2018/19: ADA Transition Plan items to be determined ($25,000)

2019/20: ADA Transition Plan items to be determined ($25,000)

2020/21: ADA Transition Plan items to be determined ($25,000)

2021/22: ADA Transition Plan items to be determined ($25,000)

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Construction		125,000	25,000	25,000	25,000	25,000	25,000
	TOTAL	**125,000**	**25,000**	**25,000**	**25,000**	**25,000**	**25,000**
FINANCING:							
Local Option Sales Tax		125,000	25,000	25,000	25,000	25,000	25,000
	TOTAL	**125,000**	**25,000**	**25,000**	**25,000**	**25,000**	**25,000**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO:**
Community Enrichment	Parks and Recreation	030-4902-459

MUNICIPAL POOL **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

In 2006, 2009, and 2012, engineering consultants were retained to provide recommendations regarding mechanical, electrical, structural, and any other needed improvements for Municipal Pool. In 2012, consultants were given the goal of keeping this facility operational until approximately 2017. Their 2012 study indicated substantial improvements, totaling $450,000, were needed between 2013 and 2017. It was also suggested these improvements be made as soon as possible. The consultants also stated in their report that following **2017**, further repairs to this facility could be cost prohibitive.

The City and Ames Community School District's joint use agreement for Municipal Pool expires on **June 30, 2017.** All capital costs are shared equally by the City and Ames Community School District. Over a 20-year period (FY 1995/96 and continuing through FY 2015/16), the City and School District will have invested approximately $1,900,000 ($100,000 per year average) in capital improvements at this facility. Even though the agreement expires June 30, 2017, it is unlikely the School District or the City will have a new facility by that time. Therefore, shared funding of capital expenses is being shown through FY 2018/19. A new agreement will be needed for FY 2017/18 and beyond.

COMMENTS

2017/18: Total $50,000 – To be determined
2018/19: Total $50,000 – To be determined

LOCATION

Municipal Pool, 1925 Ames High Drive

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Architects/Engineering		10,000	5,000	5,000			
Construction		90,000	45,000	45,000			
	TOTAL	**100,000**	**50,000**	**50,000**			
FINANCING:							
Local Option Sales Tax		50,000	25,000	25,000			
Ames School District		50,000	25,000	25,000			
	TOTAL	**100,000**	**50,000**	**50,000**			

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Enrichment	Parks and Recreation	030-4916-459

MOORE MEMORIAL PARK PEDESTRIAN BRIDGE **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION

Moore Memorial Park is 90 acres; 50 acres are located east of Squaw Creek and 40 acres are west of the creek. The 50-acre parcel was developed into a community park in 1991. The 40-acre parcel has been leased to Iowa State as an agricultural research plot for $3,000 per year.

In response to community input to connect parks via hard surface trails, a pedestrian bridge will link these two parcels of City property. The plan is to then have a trail from Moore Memorial Park along Scholl Road to Ontario Street. This improvement has become viable because ISU owns the land adjacent the City's 40-acre parcel. In the event ISU allows public access through its parcel, several miles of recreational trails would be linked together. Staff will meet with ISU officials to determine if public access will be allowed through this parcel of land in the future.

COMMENTS

2019/20: Engineering/design for a pedestrian bridge across Squaw Creek at Moore Memorial Park ($35,000)
2020/21: Install a pedestrian bridge across Squaw Creek at Moore Memorial Park ($350,000)

LOCATION

Moore Memorial Park, 3050 Northridge Parkway

	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:						
Engineering/Design	35,000			35,000		
Construction	350,000				350,000	
TOTAL	**385,000**			**35,000**	**350,000**	
FINANCING:						
Local Option Sales Tax	385,000			35,000	350,000	
TOTAL	**385,000**			**35,000**	**350,000**	

PROGRAM - ACTIVITY: Community Enrichment
DEPARTMENT: Parks and Recreation
ACCOUNT NO.

PLAYGROUND EQUIPMENT IMPROVEMENTS **PROJECT STATUS:** Delayed Project Change

DESCRIPTION/JUSTIFICATION

During the past 25 years, the City has replaced old play equipment throughout the park system. The life expectancy of play equipment is 20 – 25 years. Therefore, it is necessary to begin replacement of playground equipment that was installed at the beginning of this cycle.

COMMENTS

2019/20: Replace equipment adjacent to Shagbark Shelter in Inis Grove Park ($100,000); Replace equipment in Lloyd Kurtz Park ($75,000)

2020/21: Replace equipment in Christopher Gartner Park ($60,000)

2021/22: Replace equipment in Country Gables Park ($75,000); Install new equipment in Carr Park ($60,000)

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Construction		370,000			175,000	60,000	135,000
	TOTAL	**370,000**			**175,000**	**60,000**	**135,000**
FINANCING:							
Local Option Sales Tax		370,000			175,000	60,000	135,000
	TOTAL	**370,000**			**175,000**	**60,000**	**135,000**

PROGRAM - ACTIVITY: Community Enrichment

DEPARTMENT: Parks and Recreation

ACCOUNT NO.

ADA HAYDEN HERITAGE PARK **PROJECT STATUS:** Cost Change Delayed

DESCRIPTION/JUSTIFICATION
By adding a wetland overlook to view wildlife, these portions of the park will be enhanced and able to be enjoyed more fully by park visitors.

COMMENTS

2020/21: Engineering/design a wetland overlook ($10,000)
2021/22: Construct a wetland overlook ($60,000)

LOCATION
Ada Hayden Heritage Park, 5205 Grand Avenue

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Engineering		10,000				10,000	
Construction		60,000					60,000
	TOTAL	**70,000**				**10,000**	**60,000**
FINANCING:							
Local Option Sales Tax		70,000				10,000	60,000
	TOTAL	**70,000**				**10,000**	**60,000**

PROGRAM - ACTIVITY: Community Enrichment
DEPARTMENT: Parks and Recreation
ACCOUNT NO.

ROSE PRAIRIE PARK DEVELOPMENT **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION

The Parks and Recreation Master Plan identifies neighborhood park service areas to cover a 1/4 to 1/2 mile radius. As the North Growth development occurs, this plan indicated a need for a neighborhood park to serve residents in this area. Standard amenities in neighborhood parks include a basketball pad with goals, a small shelter, a play structure and swings, and utilities. In addition, this park may require paths and sidewalks. The estimated costs for these improvements will total $200,000.

COMMENTS

FY 2021/22: Develop the Rose Prairie Neighborhood Park ($200,000)

LOCATION

Rose Prairie Development

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Park Development		200,000					200,000
	TOTAL	**200,000**					**200,000**
FINANCING:							
Park Development Fund		200,000					200,000
	TOTAL	**200,000**					**200,000**

PROGRAM - ACTIVITY: Community Enrichment

DEPARTMENT: Parks and Recreation

ACCOUNT NO.

COMMUNITY ENRICHMENT - CEMETERY

PROJECT/FUNDING SOURCE	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22	Page
PROJECT:							
Municipal Cemetery Improvements	15,000	-	15,000	-	-	-	138
TOTAL PROJECT EXPENDITURES	**15,000**	**-**	**15,000**	**-**	**-**	**-**	
FUNDING SOURCES:							
City:							
Local Option Sales Tax	15,000	-	15,000	-	-	-	
TOTAL FUNDING SOURCES	**15,000**	**-**	**15,000**	**-**	**-**	**-**	

AMES MUNICIPAL CEMETERY IMPROVEMENTS **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

This program provides funding to enhance the public appearance at the Cemetery. The previous five-year program for restoration and improvement of the cemetery lanes and water lines began in 2011/12. The water lines and final lane paving is expected to be complete in the spring of 2017. Once the paving and water line projects are complete the priority for funding will shift to enhancing services and extending the life span of the Cemetery.

COMMENTS

In 2018/19, a Scattering Garden and walking path is proposed for families that desire to scatter ashes in a serene setting located within the Cemetery. Loved ones may then be memorialized by a marker in the Columbarium Expansion area, which is included in the budget for FY 2016/17.

2016/17	Columbarium Expansion
2018/19	Scattering Garden

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Construction		15,000		15,000			
	TOTAL	**15,000**		**15,000**			
FINANCING:							
Local Option Sales Tax		15,000		15,000			
	TOTAL	**15,000**		**15,000**			

PROGRAM - ACTIVITY: Community Enrichment

DEPARTMENT: Parks and Recreation

ACCOUNT NO.

COMMUNITY ENRICHMENT - CITY MANAGER

PROJECT/FUNDING SOURCE	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22	Page
PROJECT:							
Neighborhood Improvement Program	250,000	50,000	50,000	50,000	50,000	50,000	140
Human Service Agency Grant Program	200,000	200,000	-	-	-	-	141
TOTAL PROJECT EXPENDITURES	**450,000**	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	
FUNDING SOURCES:							
City:							
Local Option Sales Tax	450,000	250,000	50,000	50,000	50,000	50,000	
TOTAL FUNDING SOURCES	**450,000**	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	

NEIGHBORHOOD IMPROVEMENT PROGRAM **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

The Neighborhood Improvement Program was originally designed to enhance the appearance of City neighborhoods with the addition of permanent physical improvements and to promote a greater sense of community through resident participation in neighborhood projects. The program focused solely on providing City grants to help residents accomplish those projects that they have identified as top priorities for their neighborhoods. Competitive proposals are solicited from neighborhood groups and are rated by a Review Panel, which consists of City staff and citizens, according to the following criteria approved by the City Council: public impact, neighborhood participation, safety, environment, housing, and public space. Neighborhood residents are expected to provide a local match to these grants on a dollar-for-dollar basis in the form of labor, materials, and/or cash.

Since the program was initiated in 1996/97, 122 neighborhood projects have been funded by the City, totaling $362,500.31. Projects have included cul-de-sac, right-of-way and median landscaping; playground construction and/or restoration; alleyway beautification; street trees; pond renovation; installation of rain gardens, historic house plaques and medallions; prairie restoration; construction of a neighborhood message center; construction of a shelter house in a neighborhood City park; park sidewalks; neighborhood basketball courts; landscaping of neighborhood entryways; installation of neighborhood barbecue grills; renovating “DZ Triangle;” Monarch butterfly habitat restoration, and neighborhood clean-up days.

With the implementation of the Neighborhood Liaison Program, the City is committed to creating great neighborhoods with a sense of community. To complement this initiative, eligibility for these funds has been expanded beyond the original intent of the Neighborhood Improvement Grant Program to include such projects as sub-area planning elements and other support programs for neighborhood associations. In addition, the application period is now open-ended with the requirement that the funds be expended one year from date of Council approval.

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Construction		50,000	50,000	50,000	50,000	50,000	50,000
	TOTAL	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**
FINANCING:							
Local Option Sales Tax		50,000	50,000	50,000	50,000	50,000	50,000
	TOTAL	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Enrichment	City Manager’s Office	030-0420-459

HUMAN SERVICE AGENCY CAPITAL IMPROVEMENTS GRANT PROGRAM

PROJECT STATUS: New

DESCRIPTION/JUSTIFICATION

Since the 1980s, the City has provided funding to various human agencies for their operations through a purchase-of-service model coordinated with United Way, Story County, and the Iowa State University Student Government. This new program will be designed to fund one-time capital improvements for human service agencies within the city.

COMMENTS

This additional funding opportunity for human service agencies was initiated by the City Council to take advantage of an available balance in the Local Option Sales Tax Fund. Because this funding source involves one-time monies, it is being introduced as a pilot program. The criteria (such as local match requirement, maximum grant amount, and project eligibility) associated with this grant program are yet to be determined by the City Council.

Funding for this pilot program will include:

FY 2016/17	$300,000	General Fund
FY 2017/18	$200,000	Local Option Sales Tax Fund
Total Program Funding	$500,000	

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Grants		200,000	200,000				
	TOTAL	**200,000**	**200,000**				
FINANCING:							
Local Option Sales Tax		200,000	200,000				
	TOTAL	**200,000**	**200,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Enrichment	City Manager's Office	030-0402-459

COMMUNITY ENRICHMENT - PLANNING AND HOUSING

PROJECT/FUNDING SOURCE	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22	Page
PROJECT:							
Downtown Façade Program	250,000	50,000	50,000	50,000	50,000	50,000	143
Campustown Façade Program	250,000	50,000	50,000	50,000	50,000	50,000	144
TOTAL PROJECT EXPENDITURES	**500,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	
FUNDING SOURCES:							
City:							
Local Option Sales Tax	500,000	100,000	100,000	100,000	100,000	100,000	
TOTAL FUNDING SOURCES	**500,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	

DOWNTOWN FAÇADE IMPROVEMENT PROGRAM **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This project was introduced in 2001/02 to facilitate private improvements to the façades of the buildings in the Downtown area. For three years, the City did not receive any requests for these funds.

Downtown Design Guidelines were approved by the City Council in 2001 to ensure that financial assistance for façade improvements is consistent with the historical character of Downtown. In order to qualify for these funds, improvements must be made to at least one of the following exterior elements: upper façades, storefronts, transoms, display windows, kick plates, entrances, signs, or awnings/canopies. Beginning in FY 2011/12, the City Council expanded the program guidelines, and implemented a review and award period in spring each year. Additionally, to aid in comparing applications, the City Council also established a scoring process.

Under this program, the City provides up to $15,000 in grant funds to be matched dollar for dollar. In addition, a $1,000 grant is available to subsidize the cost of an architect. Through September 2016, the program has awarded 37 grants to downtown businesses and has expensed a total of $479,936 on 35 projects. 2017/18 will begin with a new $50,000 allocation.

COMMENTS
This program continues to support the City Council's previous goals for the commercial revitalization of the Downtown. As interest in this program continues, funding can be expanded or City Council may consider appropriating funds to priority projects.

LOCATION
Downtown Ames

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Incentives (Loans or Grants)		250,000	50,000	50,000	50,000	50,000	50,000
	TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**
FINANCING:							
Local Option Sales Tax		250,000	50,000	50,000	50,000	50,000	50,000
	TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Enrichment	Planning & Housing	030-1030-459

CAMPUSTOWN FAÇADE IMPROVEMENT PROGRAM **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This purpose of the Campustown Facade Improvement Program is to improve the Campustown commercial district by providing financial incentives to enhance the appearance and use of existing buildings with commercial uses. The program design is to encourage and maintain the eclectic culture and 'uniqueness' of Campustown, to increase safety, security, and investments by property and business owners and to add to the vitality of Campustown.

The Campustown Facade Improvement Program seeks to encourage the creation of a place that is walkable, transparent, eclectic, sustainable, social, and historic. Beginning in Fiscal Year 2014/15, the first step in the process was to hire a consultant to assist the City in the development of a "Vision Statement," prepare an "Idea Book," review design ideas and guidelines, provide assistance to applicants wanting to apply for the program, determine costs and feasibility, conduct workshops and working meetings with applicants and City staff. The second step is to implement two pilot projects to include construction and evaluation.

In 2015/16, $32,000 was awarded for two pilot projects. Under this program, the City would provide up to $15,000 in grant funds to be matched dollar for dollar. In addition, a $1,000 grant is available to subsidize the cost of an architect. Through September 2016, the program has awarded grants to four Campustown businesses and has expensed a total of $32,000 on two projects. 2017/18 will begin with a new $50,000 allocation

COMMENTS
This program will address the City Council's goal to revitalize of the Campustown. As interest in this program continues, funding can be expanded or City Council may consider appropriating funds to priority projects.

LOCATION
Campustown Ames

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Incentives (Loans or Grants)		250,000	50,000	50,000	50,000	50,000	50,000
	TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**
FINANCING:							
Local Option Sales Tax		250,000	50,000	50,000	50,000	50,000	50,000
	TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Enrichment	Planning & Housing	030-1031-459

INTERNAL SERVICES - FACILITIES/FLEET SERVICES

PROJECT/FUNDING SOURCE	TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22	Page
PROJECT:							
City Hall Improvements	300,000	50,000	50,000	50,000	100,000	50,000	146
TOTAL PROJECT EXPENDITURES	**300,000**	**50,000**	**50,000**	**50,000**	**100,000**	**50,000**	
FUNDING SOURCE:							
City:							
Local Option Sales Tax	300,000	50,000	50,000	50,000	100,000	50,000	
TOTAL FUNDING SOURCES	**300,000**	**50,000**	**50,000**	**50,000**	**100,000**	**50,000**	

CITY HALL IMPROVEMENTS **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION

This City Hall improvements program is focused on major maintenance or replacement of items for the building, Veterans Memorial, and parking lots on the west side of the building and across the street to the east.

City Hall's mechanical, electrical, plumbing, sprinkler, and numerous other support systems were installed in 1990. Funds have been allocated per year for equipment or system failures that may occur and are beyond the funding levels in the City Hall operating budget.

Due to the 24/7 operations of the Police Department, the replacement of flooring in this area will reach the end of its useful life in the area that was part of the first remodel. Currently the area is carpet but multiple options will be explored to provide a long lasting and safe environment.

LOCATION

City Hall, 515 Clark Avenue

2020/21 Add $50,000 for replacement of flooring in Police Area.

		TOTAL	2017/18	2018/19	2019/20	2020/21	2021/22
COST:							
Maintenance		300,000	50,000	50,000	50,000	100,000	50,000
	TOTAL	**300,000**	**50,000**	**50,000**	**50,000**	**100,000**	**50,000**
FINANCING:							
Local Option Sales Tax		300,000	50,000	50,000	50,000	100,000	50,000
	TOTAL	**300,000**	**50,000**	**50,000**	**50,000**	**100,000**	**50,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Internal Services	Facilities	030-2930-419