CITY OF
Ames™

Capital Improvements Plan
2014-2019
City of Ames, Iowa

The theme for this year's CIP is the city's sesquicentennial celebration. Various pictures and photographs from our vibrant history fill the pages as we usher in 150 years of Ames living. Special thanks to the Ames Historical Society and the Ames Public Library for many of the photographs and information about the city.

1864

year the City of Ames was established

58,965

current population of the City of Ames

636

population of the City of Ames in 1870

January 2014

Mayor and Ames City Council:

There is reason for great optimism in the City of Ames as we appear to be emerging from one of the most difficult economic periods in our country's long history. Fortunately, the City of Ames was able to withstand this economic downturn without resorting to cuts in services or drastic increases in taxes to our citizens. Our economic future seems to be bolstered by increasing student enrollment at Iowa State University, impending major development projects in the Campustown business district, expanding residential property within the city limits to the north, and growing sales tax revenues from the newly renovated North Grand Mall, as well as from other retail businesses throughout the community. With this economic resurgence, comes an obligation to maintain the existing infrastructure for our current citizens and a need to expand our infrastructure to accommodate our growing population.

Towards these ends, the attached Capital Improvements Plan for FY 2014/15 through FY 2018/19 reflects a commitment of $284,622,875 over the next five years in the following areas that will improve the quality of life for those who choose to live in or visit the City of Ames. I have attempted to provide highlights of the CIP below.

PUBLIC SAFETY		UTILITIES		TRANSPORTATION		COMMUNITY ENRICHMENT	
Fire	$439,685	Resource Recovery	$2,150,050	Streets Engineering	$57,071,500	Parks & Recreation	$4,389,500
Traffic	$5,519,300	Water Treatment	$73,855,000	Streets Maintenance	$5,435,000	Neighborhood Improvements	$250,000
Electric	$80,000	Water Distribution	$6,375,000	Transit	$5,103,340	Downtown Facade Improvements	$250,000
		Storm Sewer	$11,569,000	Airport	$4,358,000	Municipal Cemetery Improvements	$200,000
		Sanitary Sewers	$17,475,000			City Maintenance Facility Improvements	$368,500
		WPC Treatment	$11,594,000			City Hall Improvements	$250,000
		Electric	$77,890,000				
TOTAL	**$6,038,985**		**$200,908,050**		**$71,967,840**		**$5,708,000**

PUBLIC SAFETY - $6,038,985

Fire - $439,685

The most significant project in this section involves the replacement of the **Self-Contained Breathing Apparatus** (page 9). This equipment is essential protective gear for our firefighters which allows them to enter hazardous environments to perform their duties. This equipment, purchased in 2001, is reaching its life expectancy.

Electric - $80,000

As our city's boundaries expand, there is a need for additions to the **Outdoor Storm Warning System** (page 13). Initially, these funds will be used to fill gaps in the community's siren coverage near Ada Hayden Heritage Park and the National Animal Disease Laboratories.

Traffic - $5,519,300

The efficient flow of automobile traffic throughout the City will be enhanced with the **Traffic Signal Program** (page 16), **Traffic Calming Program** (page 21), and **US69 Intersection Improvements** (page 22). The City Council's objective to promote alternative transportation modes is bolstered with the **Multi-Modal Roadway Improvements** (page 20) which calls for the creation of sharrows, (shared marked lanes) to accommodate bikes and vehicles along E. Lincoln Way, Clark, Hoover, and Duff Avenues.

UTILITIES - $200,908,050

Resource Recovery - $2,150,050

As our first-of-a-kind, waste-to-energy plant continues to age, we are focusing attention on preventive maintenance with projects totaling $1,268,050 in the **Resource Recovery System Improvements** program (page 26).

In accordance with recommendations provided by our insurance carrier, in FY 2014/15 we will complete a $505,370 project to upgrade our fire protection system in the **Resource Recovery Process Area Sprinkler System Replacement** project (page 27).

Sanitary Sewer - $29,069,000

As the Sanitary Sewer System Evaluation is nearing completion, severe structural defects have been identified in the sanitary sewer collection system. The CIP includes $17,350,000 in the **Sanitary Sewer Rehabilitation Program** (page 48) over the next five years to rehabilitate manholes, as well as repair or line pipes. These improvements will remove major sources of infiltration into our system and reduce peak wet weather flow into our Water Pollution Control Plant. Although expensive, this program will be more cost-effective than expanding the capacity of our plant to treat clean water.

Approximately, $11,594,000 has been included in the CIP for various projects to repair major elements of the Water Pollution Control Plant. These projects were prioritized in a recently completed comprehensive condition evaluation of this twenty-four-year-old facility.

Water - $80,230,000

The City's largest capital improvement is highlighted on page 31 where $66,080,000 is reflected in the CIP to complete the construction of the new, 15 million gallon per day **Water Treatment Plant** along East 13th Street. This amount, coupled with expenditures from previous fiscal years for conceptual design, easements, land acquisition, and construction design, brings the total cost for this project to $74,487,000.

You will note that the location of the proposed new wells has shifted from east of Highway 35 south of the city limits to park land north of 13th Street and east of the Skunk River (**Water Supply Expansion**, page 33). Ground water hydraulic modeling determined that this location on City property will provide an adequate supply of water at a reduced cost for construction since the required length for the interconnection pipe would be reduced substantially.

Storm Sewer - $11,569,000

Along with a number of projects to address storm water runoff issues caused by an increase in impervious surfaces created due to growth, two projects have been included in the CIP to satisfy the City Council's goal to mitigate river flooding and localized storm water flooding (pages 40 and 44). **Flood Mitigation-River Flooding** involves $5,921,000 to reshape/restore a segment of the Squaw Creek bank along S. Duff Avenue. The **Flood Mitigation-Localized Flooding** project totals $1,300,000 and will address identified drainage problems in the Teagarden neighborhood and bank stabilization issues along the South Skunk River.

Electric - $77,890,000

In response to the City Council's recent direction to convert our power plant boilers from coal to natural gas, the Electric Utility CIP reflects two new significant projects: the **Unit #7 and Unit # 8 Fuel Conversion** project (page 66) and the **Natural Gas Transport Pipe Line** (page 67). These two projects are estimated to cost approximately $54,000,000 to help reduce our community's carbon footprint and meet EPA regulations.

In order to mitigate the magnitude of electric rate increases to finance these two major projects, many of the projects identified in previous CIPs have been delayed.

TRANSPORTATION - $71,967,840

Streets - $62,506,500

Our annual street condition analysis indicates that the City Council's increased investment in maintaining our street system over the years is yielding success. According to this analysis, only 25% of our arterial and collector streets have a rating below a 45 Pavement Condition Index, which is the rating we utilize to indicate the need for total reconstruction. Therefore, you will note that the majority of the expenditures included in the CIP for street improvements are directed to local streets.

With the City Council's recent action to annex land in the north growth area, the **Grant Avenue Pavement Improvements** project (Page 91) has been added to the CIP for FY 2014/15. The City's share for the construction of this new, $2,825,000 road segment is $649,750.

The **Grand Avenue Extension** (page 101), continues to be delayed. With the elimination of federal earmarks, the financing of this $17,450,000 project with only local tax dollars appears to be cost prohibitive. Hopefully, by delaying the implementation of this project staff will have additional time to search for other possible grant funds to mitigate the financing burden on our citizens.

In keeping with the City Council's previous goal to beautify our entryways, the CIP reflects two new projects, **Right-of-Way Restoration** (page 100) and **Right-of-Way Appearance Enhancements** (page 108). These new initiatives will bolster our commitment to enhancing our public rights-of-way. The first program will involve the restoration of the green area adjacent to recently completed street projects, while the second program will accomplish improvements to retaining walls, entryways, and medians.

In addition, in accordance with the 2012 Bridge Inspection and Maintenance Report, the **Bridge Rehabilitation Program** (Page 105) earmarks $3,495,000 to replace the 6th Street bridge and repair the E. Lincoln Way bridge.

CyRide - $5,103,340

With the increased enrollment at Iowa State University, we are experiencing an unprecedented increase in ridership on CyRide. In order to accommodate this demand, the CIP envisions twenty-eight additional buses for our fleet in the **Vehicle Replacement** project (page 114). Unfortunately, federal funding for the purchase of new vehicles will no longer be available after FY 2014/15. Therefore, the $2,035,000 earmarked for vehicle purchases will allow us to purchase only three new buses. The remaining twenty-five buses will be used vehicles.

Even with the completion of our most recent expansion of the CyRide facility, growth in our fleet will require us to house eleven buses outside in FY 2014/15. Consequently, the **Building Expansion & Modernization** project (page 113) calls for $2,164,000 to address this space situation at the current location or at a satellite site.

Airport - $4,358,000

The **Airport Improvements** project (page 119) reflected in the CIP includes $3,200,000 shared equally among the City, Iowa State University, and the private sector for a new terminal building and attached hangar. Funds have also been included to begin the planning and land acquisition for a runway extension.

COMMUNITY ENRICHMENT -$5,708,000

Parks- $4,389,500

Our park system continues to be a major contributor to the excellent quality of life here in Ames. To maintain this asset over the next five years, City funds will be used to develop the Roosevelt neighborhood park (page 132), maintain our indoor pool (page 124), reconstruct the Ada Hayden Heritage Park (page 127) path system, improve safety at Brookside Park (page 135), replace the Inis Grove Park restroom (page 133), refurbish the Ames/ISU Ice Arena (page 130), and resurface tennis courts (page 131).

Assuming that we can work out an acceptable fee for the use of Ames School District gyms for our recreation programs, the partnership that was begun previously with the expense sharing for playground equipment at grade schools will continue with the City's contribution towards basketball and volleyball standards in four new school gyms (page 128).

A few new projects have been added to the park system. These additions include: the irrigation of the sports fields at Inis Grove and North River Valley Parks, the replacement of the Homewood clubhouse, the removal and relocation of the wading pool at Brookside Park (page 125), the construction of a pedestrian bridge at Moore Memorial Park (page 134), as well as the installation of a new slide(s) at the Furman Aquatic Center (page 129).

Neighborhood Improvements - $500,000

The City's commitment to residential neighborhoods is continued with the **Neighborhoods Improvement** grant program (page 137) where City funds are used to accomplish physical improvements, as well as promote resident interaction. For the commercial neighborhoods, the **Downtown Façade Program** (page 139) will continue to facilitate exterior improvements to businesses in the Mainstreet Cultural District and incentivize the renovation of the existing buildings.

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The credit for identification of the needs reflected in this document goes to our department heads and their staff members. With this new found optimism for growth comes a responsibility to accommodate this expansion. It is apparent that our department heads are up to this challenge and the increase in capital improvement project work that will follow.

Special thanks should go to the Finance Department, specifically Duane Pitcher, Finance Director, Nancy Masteller, Budget Officer, and Sharon Hjortshoj, Finance Department Secretary, for their hard work in compiling this document. Finally, Bob Kindred, Assistant City Manager, Melissa Mundt, Assistant City Manager, and Brian Phillips, Management Analyst, all deserve recognition for making sure there is continuity in the projects that have been included in the CIP.

Sincerely,

Steve

Steven L. Schainker
City Manager

CITY OF AMES, IOWA

FIVE-YEAR CAPITAL IMPROVEMENT PLAN
2014-2019

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HOW TO USE THE C.I.P. DOCUMENT

The 2014-2019 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 www.cityofames.org/pwcipmap.

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 2014 – 2019 CAPITAL IMPROVEMENTS PLAN
CITY OF AMES, IOWA

UTILITIES SUMMARY – continued

UTILITIES SUMMARY – continued

TRANSPORTATION SUMMARY

TRANSPORTATION SUMMARY, continued

COMMUNITY ENRICHMENT / INTERNAL SERVICES – SUMMARY

PROJECTION OF DEBT CAPACITY

	2012/13 ACTUAL	2013/14 BUDGETED	2014/15 PROJECTED	2015/16 PROJECTED	2016/17 PROJECTED	2017/18 PROJECTED	2018/19 PROJECTED
1. Total Actual Valuation	3,485,540,534	3,536,735,367	3,604,369,966	3,712,501,065	3,823,876,097	3,938,592,380	4,056,750,151
2. State Mandated Debt Limit	174,277,027	176,836,768	180,218,498	185,625,053	191,193,805	196,929,619	202,837,508
3. City Reserve (25% of Limit)	43,569,257	44,209,192	45,054,625	46,406,263	47,798,451	49,232,405	50,709,377
Un-Reserved Debt Capacity	130,707,770	132,627,576	135,163,873	139,218,790	143,395,354	147,697,214	152,128,131
4. Outstanding Debt	70,385,000	62,260,000	55,210,000	48,485,000	41,560,000	34,795,000	28,385,000
5. Proposed Issues	-	-	9,840,000	8,058,500	7,709,000	7,335,000	8,700,000
6. Balance of Proposed Issues	-	-	-	9,853,238	17,311,210	23,819,370	29,368,759
Total Debt Subject to Limit	70,385,000	62,260,000	65,050,000	66,396,738	66,580,210	65,949,370	66,453,759
7. Available Un-Reserved Debt Capacity ($)	60,322,770	70,367,576	70,113,873	72,822,052	76,815,144	81,747,844	85,674,372
8. Available Un-Reserved Debt Capacity (%)	46.15%	53.06%	51.87%	52.31%	53.57%	55.35%	56.32%
9. Total Debt Capacity ($)	103,892,027	114,576,768	115,168,498	119,228,315	124,613,595	130,980,249	136,383,749
10. Total Debt Capacity (%)	59.61%	64.79%	63.90%	64.23%	65.18%	66.51%	67.24%

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
2014/15:				
STORM SEWER		300,000		
Flood Mitigation - Localized Flooding	300,000		100%	
STREETS ENGINEERING		6,884,750		
Grant Avenue Paving	649,750		23%	Special Assessments
CyRide Rte Pavement Improvements (24th/Bloomington Rd)	525,000		29%	MPO/STP Funds/Electric
Collector St Pavement Improvements (Woodland/West St)	1,205,000		97%	Electric Utility Fund
Concrete Pavement Improvements	1,655,000		96%	Road Use Tax/Electric
Downtown Street Pavement Improvements (5th Street)	900,000		100%	
Asphalt Street Improvements (Ferndale Avenue/Coy Street)	1,250,000		96%	Electric Utility Fund
Arterial Street Pavement Improvements (Lincoln Way)	700,000		93%	Electric Utility Fund
STREETS MAINTENANCE		180,000		
Bridge Rehabilitation Program	180,000		100%	
2014/15 SUBTOTAL		**7,364,750**		
RESOURCE RECOVERY (ABATED G.O. BONDS)		300,000		
Process Area Sprinkler System Replacement	300,000		100%	
STREETS ENGINEERING (ABATED G.O. BONDS)		2,175,250		
Grant Avenue Paving (abated by Special Assessments)	2,175,250		77%	G.O. Bonds
2014/15 TOTAL		**9,840,000**		

SUMMARY OF MAJOR BOND ISSUES, continued

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2015/16:				
TRAFFIC		450,000		
West Lincoln Way Intersection Improvements	450,000		38%	Developer/Grant
STORM SEWER		986,000		
Flood Mitigation - Localized Flooding	700,000		70%	WIRB Grant
Flood Mitigation - River Flooding	286,000		25%	FEMA Grant
STREETS ENGINEERING		3,440,500		
Collector Street Pavement Improvements (Meadowlane Ave)	750,000		94%	Electric Utility Fund
Concrete Pavement Improvements	770,500		89%	Road Use Tax/Electric
Downtown Street Pavement Improvements (Clark Avenue)	750,000		94%	Electric Utility Fund
Arterial Street Pavement Improvements (East Lincoln Way)	420,000		27%	MPO/STP Funds/Electric
Seal Coat Pavement Improvements	350,000		35%	Road Use Tax
Grand Avenue Extension	300,000		30%	Federal/State Grants
Cherry Avenue Extension	100,000		100%	
STREETS MAINTENANCE		2,315,000		
Bridge Rehabilitation Program	2,315,000		70%	Grants
AIRPORT		867,000		
Airport Improvements	867,000		27%	FAA/Grants/ISU/Private
2015/16 TOTAL		**8,058,500**		

SUMMARY OF MAJOR BOND ISSUES, continued

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2016/17				
STORM SEWER		1,194,000		
Flood Mitigation - River Flooding	1,194,000		25%	FEMA Grant
STREETS ENGINEERING		6,515,000		
CyRide Route Pavement Improvements (S. 3rd/S 4th Sts)	525,000		28%	MPO/STP Funds/Electric
Collector Street Pavement Improvements (Hoover Avenue)	950,000		100%	
Concrete Pavement Improvements	985,000		91%	Road Use Tax/Electric
Downtown Pavement Improvements (Sherman Avenue)	250,000		100%	
Asphalt Pavement Improvements (Pierce Avenue/Circle)	790,000		94%	Electric Utility Fund
Arterial Street Pavement Improvements (West Lincoln Way)	345,000		100%	
Seal Coat Pavement Improvements	1,050,000		68%	Road Use Tax
Grand Avenue Extension	1,530,000		33%	MPO/STP Funds/Grants
Cherry Avenue Extension	90,000		30%	Federal/State Grants
2016/17 TOTAL		**7,709,000**		

SUMMARY OF MAJOR BOND ISSUES, continued

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2017/18				
UTILITIES		1,150,000		
Campustown Public Improvements	1,150,000		77%	Water/Sewer Utility Funds
STREETS ENGINEERING		6,185,000		
Collector Street Pavement Improvements (East 20th Street)	575,000		92%	Electric Utility Fund
Concrete Pavement Improvements	815,000		94%	Road Use Tax
Downtown Pavement Improvements (Main Street Alley)	235,000		82%	Electric Utility Fund
Asphalt Street Pavement Improvements	1,200,000		100%	
Arterial Street Pavement Improvements (North Dakota)	700,000		100%	
Seal Coat Pavement Improvements	650,000		60%	Road Use Tax
Grand Avenue Extension	1,500,000		23%	MPO/STP Funds/Grants
Cherry Avenue Extension	510,000		20%	Federal/State Grants
2017/18 TOTAL		**7,335,000**		

SUMMARY OF MAJOR BOND ISSUES, continued

GENERAL OBLIGATION BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT G.O. FUNDED	OTHER SOURCES OF FUNDING
2018/19				
STREETS ENGINEERING		8,700,000		
Collector Street Pavement Improvements (Hickory Drive)	750,000		94%	Electric Utility Fund
Concrete Pavement Improvements	2,700,000		98%	Road Use Tax
Downtown Pavement Improvements (Market Avenue)	250,000		100%	
Asphalt Street Pavement Improvements	1,750,000		100%	
Seal Coat Pavement Improvements	1,250,000		71%	Road Use Tax
Grand Avenue Extension	2,000,000		38%	MPO/STP Funds/Grants
2018/19 TOTAL		**8,700,000**		
GRAND TOTAL GENERAL OBLIGATION BONDS		**41,642,500**		

SUMMARY OF MAJOR BOND ISSUES, continued

REVENUE BONDS	PROJECT TOTAL	CATEGORY TOTAL	% PROJECT BOND FUNDED	OTHER SOURCES OF FUNDING
2014/15:				
ELECTRIC		23,000,000		
Units #7 and #8 Fuel Conversion	16,000,000		100%	
Natural Gas Transport Pipe	7,000,000		100%	
2014/15 YEAR TOTAL		**23,000,000**		
2015/16:				
ELECTRIC		30,880,000		
Units #7 and #8 Fuel Conversion	20,880,000		100%	
Natural Gas Transport Pipe	10,000,000		100%	
2015/16 YEAR TOTAL		**30,880,000**		
GRAND TOTAL REVENUE BONDS		**53,880,000**		

CITY-WIDE PROGRAM SUMMARY

JUDGE & RODGERS BAKERY

North side of Onondaga between Douglas and Kellogg, looking west. In three-story Odd Fellows Building can be seen the sign for Judge & Rodgers Bakery. Surveyors are seen in street locating streetcar tracks laid in 1907. Beyond Kellogg corner is livery stable operated by Frank Morris. Very little development beyond stable, just an occasional residence.

CAPITAL IMPROVEMENT PLAN - GRAND TOTALS

PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19	PAGE
EXPENDITURES:							
Public Safety	6,038,985	717,175	2,429,175	851,335	1,010,500	1,030,800	7
Utilities	200,908,050	63,594,850	74,775,100	31,143,800	15,258,800	16,135,500	23
Transportation	71,967,840	15,220,170	13,944,670	13,219,000	15,018,000	14,566,000	87
Community Enrichment	5,708,000	1,444,000	1,174,000	1,180,000	965,000	945,000	121
Total Expenditures	**284,622,875**	**80,976,195**	**92,322,945**	**46,394,135**	**32,252,300**	**32,677,300**	
REVENUES:							
Bonds	95,522,500	32,840,000	38,938,500	7,709,000	7,335,000	8,700,000	
City	70,358,705	12,678,295	15,212,975	12,901,185	13,498,350	16,067,900	
Other	118,741,670	35,457,900	38,171,470	25,783,950	11,418,950	7,909,400	
Total Revenues	**284,622,875**	**80,976,195**	**92,322,945**	**46,394,135**	**32,252,300**	**32,677,300**	

CAPITAL IMPROVEMENT PLAN - EXPENDITURE SUMMARY BY PROGRAM

PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19	PAGE
EXPENDITURES:							
Public Safety:							
Fire	439,685	145,175	145,175	25,335	124,000		8
Electric	80,000	40,000			40,000		12
Traffic	5,519,300	532,000	2,284,000	826,000	846,500	1,030,800	14
Total Public Safety	**6,038,985**	**717,175**	**2,429,175**	**851,335**	**1,010,500**	**1,030,800**	
Utilities:							
Resource Recovery	2,150,050	730,850	254,100	264,800	175,800	724,500	25
Water Treatment	73,855,000	27,794,000	29,215,000	15,204,000	1,164,000	478,000	30
Water Distribution	6,375,000	975,000	975,000	975,000	2,475,000	975,000	36
Storm Sewer	11,569,000	800,000	2,972,000	5,783,000	1,007,000	1,007,000	39
Sanitary Sewer	17,475,000	3,495,000	3,495,000	3,495,000	3,495,000	3,495,000	47
WPC Treatment	11,594,000	3,350,000	3,514,000	2,397,000	997,000	1,336,000	50
Electric	77,890,000	26,450,000	34,350,000	3,025,000	5,945,000	8,120,000	64
Total Utilities	**200,908,050**	**63,594,850**	**74,775,100**	**31,143,800**	**15,258,800**	**16,135,500**	

CAPITAL IMPROVEMENT PLAN - EXPENDITURE SUMMARY BY PROGRAM, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19	PAGE
EXPENDITURES, continued:							
Transportation:							
Streets/Engineering	57,071,500	11,923,000	6,350,500	12,037,000	13,961,000	12,800,000	89
Streets/Maintenance	5,435,000	545,000	3,750,000	480,000	330,000	330,000	103
Transit	5,103,340	2,752,170	644,170	532,000	527,000	648,000	112
Airport	4,358,000		3,200,000	170,000	200,000	788,000	118
Total Transportation	**71,967,840**	**15,220,170**	**13,944,670**	**13,219,000**	**15,018,000**	**14,566,000**	
Community Enrichment/Internal Services:							
Parks and Recreation	4,389,500	1,106,500	848,000	825,000	815,000	795,000	122
City Manager	250,000	50,000	50,000	50,000	50,000	50,000	136
Planning and Housing	250,000	50,000	50,000	50,000	50,000	50,000	138
Public Works	200,000	65,000	65,000	70,000			140
Internal Services/Facilities	618,500	172,500	161,000	185,000	50,000	50,000	142
Total Community Enrichment	**5,708,000**	**1,444,000**	**1,174,000**	**1,180,000**	**965,000**	**945,000**	
GRAND TOTAL EXPENDITURES	**284,622,875**	**80,976,195**	**92,322,945**	**46,394,135**	**32,252,300**	**32,677,300**	

CAPITAL IMPROVEMENT PLAN - REVENUE SUMMARY BY TYPE

PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19
REVENUES:						
Bonds:						
G.O. Bonds	41,642,500	9,840,000	8,058,500	7,709,000	7,335,000	8,700,000
Electric Revenue Bonds	53,880,000	23,000,000	30,880,000			
Total Bonds	**95,522,500**	**32,840,000**	**38,938,500**	**7,709,000**	**7,335,000**	**8,700,000**
City:						
Road Use Tax	6,739,125	1,657,625	1,396,750	1,338,750	1,096,000	1,250,000
Local Option Sales Tax	8,134,485	1,396,675	1,958,175	1,471,335	1,675,500	1,632,800
Electric Utility Fund	23,962,800	3,553,500	3,427,500	3,077,850	5,907,350	7,996,600
Water Utility Fund	12,739,625	2,125,625	4,380,750	2,763,750	1,976,500	1,493,000
Sewer Utility Fund	10,178,125	1,922,625	2,691,750	2,655,750	1,347,000	1,561,000
Storm Sewer Utility Fund	3,240,000	540,000	540,000	720,000	720,000	720,000
Resource Recovery Fund	1,850,050	430,850	254,100	264,800	175,800	724,500
Transit Fund	2,913,570	805,770	511,200	495,200	490,200	611,200
Airport Construction Fund	208,800			20,000	110,000	78,800
Ice Arena Reserve Funds	300,000	215,000	25,000	60,000		
Fleet Services Fund	92,125	30,625	27,750	33,750		
Total City	**70,358,705**	**12,678,295**	**15,212,975**	**12,901,185**	**13,498,350**	**16,067,900**

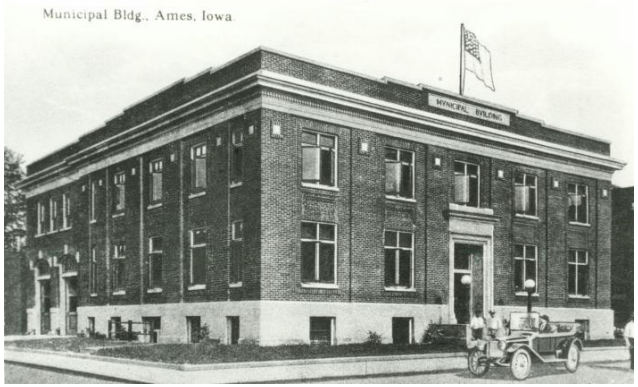
CAPITAL IMPROVEMENT PLAN - REVENUE SUMMARY BY TYPE, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19
REVENUES, continued:						
Other:						
MPO/STP Funds	8,567,000	1,362,000	1,220,000	2,152,000	1,440,000	2,393,000
Federal/State Grants	18,112,500	1,226,800	3,545,800	6,248,800	6,054,300	1,036,800
State Revolving Fund	80,272,000	31,667,000	30,549,000	10,862,000	3,597,000	3,597,000
DWSRF Forgivable Loan	6,224,000			6,224,000		
Federal Transit Administration	1,013,430	1,013,430				
Federal Aviation Administration	1,399,200		450,000	150,000	90,000	709,200
Iowa State University	1,760,200	67,500	1,159,500	122,150	237,650	173,400
Iowa State University GSB	192,340	96,170	96,170			
Ames Community School District	50,000	25,000		25,000		
Developer Funds	250,000		250,000			
Private Funds	901,000		901,000			
Total Other	**118,741,670**	**35,457,900**	**38,171,470**	**25,783,950**	**11,418,950**	**7,909,400**
GRAND TOTAL REVENUES	**284,622,875**	**80,976,195**	**92,322,945**	**46,394,135**	**32,252,300**	**32,677,300**

Town Hall, constructed in 1886. The little building to the right is the jail, equipped with two cells. Prior to the construction of Town Hall, town officials met in the office of the City Attorney. The fire wagon was housed in the ground level of Town Hall. Photo, 1910.

PUBLIC SAFETY

BRIEF POLICE HISTORY



Town Marshall, William A. Ricketts, pictured far left, affectionately known as "Big Bill," was a one-person police force from 1896 to 1903, when the Ames population was 2,400. Ricketts spent his time corralling brawlers, chastising bootleggers, and nabbing thieves. Terry Bird, pictured lower right, checks damage to office communications after City Hall was bombed on May 22, 1970.

PUBLIC SAFETY - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19	PAGE
EXPENDITURES:							
Fire	439,685	145,175	145,175	25,335	124,000		8
Electric	80,000	40,000			40,000		12
Traffic	5,519,300	532,000	2,284,000	826,000	846,500	1,030,800	14
Total Expenditures	**6,038,985**	**717,175**	**2,429,175**	**851,335**	**1,010,500**	**1,030,800**	
REVENUES:							
Bonds:							
G.O. Bonds	450,000		450,000				
City:							
Road Use Tax	1,596,000	432,000	249,000	305,000	260,000	350,000	
Local Option Sales Tax	2,619,985	215,175	820,175	386,335	610,500	587,800	
Sub-Total City Funds	4,215,985	647,175	1,069,175	691,335	870,500	937,800	
Other:							
MPO/STP Funds	623,000	70,000	160,000	160,000	140,000	93,000	
Iowa D.O.T. Safety Grant	500,000		500,000				
Developer	250,000		250,000				
Sub-Total Other Funds	1,373,000	70,000	910,000	160,000	140,000	93,000	
Total Revenues	**6,038,985**	**717,175**	**2,429,175**	**851,335**	**1,010,500**	**1,030,800**	

PUBLIC SAFETY - FIRE

PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19	PAGE
EXPENDITURES:							
1 Self-Contained Breathing Apparatus	290,350	145,175	145,175				9
2 Fire Station #2 Restroom	25,335			25,335			10
3 Fire Station #1 Concrete Replacement	124,000				124,000		11
Total Expenditures	**439,685**	**145,175**	**145,175**	**25,335**	**124,000**		
REVENUES:							
City:							
Local Option Sales Tax	439,685	145,175	145,175	25,335	124,000		
Total Revenues	**439,685**	**145,175**	**145,175**	**25,335**	**124,000**		

SELF-CONTAINED BREATHING APPARATUS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

Ames firefighters utilize Self-Contained Breathing Apparatus (SCBA) to enter hazardous environments while performing firefighting operations or to operate in areas that are oxygen deficient. The SCBA is an essential piece of personal protective equipment that may be used with little or no advance warning, so they must always be kept in ideal working order.

The current SCBAs are reaching their life expectancy and the units need to be replaced or refurbished. The cost to replace the SCBAs and equipment is estimated at $290,350, which includes: 41 SCBA units with face piece with voice amplifier, regulators, and spare cylinders.

The project includes the hardware and software needed to support the maintenance of the equipment. In addition, the supplied air units used in confined space operations and four rapid intervention kits need to be replaced.

Staff recommends purchasing one-half of the SCBA equipment in FY 14/15, and the remaining equipment in FY 15/16. The total request is for 41 SCBA units including an additional cylinder, face piece, and regulator.

COMMENTS

Federal regulations state the life of a cylinder is 15 years. The City of Ames purchased the cylinders in May 2001, and they expire in May 2016. To comply with DOT regulations, the SCBA cylinders must be replaced.

2014/15: Purchase one-half of the SCBA units - $145,175
2015/16: Purchase second half of the SCBA units - $145,175

FISCAL YEAR PRIORITY			1	1			
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Equipment		290,350	145,175	145,175			
	TOTAL	**290,350**	**145,175**	**145,175**			
FINANCING:							
Local Option Sales Tax		290,350	145,175	145,175			
	TOTAL	**290,350**	**145,175**	**145,175**			

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Public Safety – Fire	Fire	030-2272-429

FIRE STATION #2 RESTROOM **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION
Fire Station #2 is approximately 44 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 such as VEISHEA.

The construction of the additional restroom requires relocation of an existing storage closet that is used to store firefighting gear and maintenance equipment. The estimated cost for the total project is $25,335.

COMMENTS
A plan will be developed by a designer who is working with the Inspections Division to ensure the restroom is code compliant. Estimates will be updated as needed.

LOCATION
Fire Station #2, 132 Welch Avenue

FISCAL YEAR PRIORITY					1		
	TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:						
Construction	25,335			25,335		
TOTAL	**25,335**			**25,335**		
FINANCING:						
Local Option Sales Tax	25,335			25,335		
TOTAL	**25,335**			**25,335**		

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

FIRE STATION # 1 CONCRETE REPLACEMENT **PROJECT STATUS:** Delayed

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

LOCATION
Fire Station #1, 1300 Burnett

FISCAL YEAR PRIORITY						1	
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Driveway Repair		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.

PUBLIC SAFETY - ELECTRIC

PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19	PAGE
EXPENDITURES:							
1 Outdoor Storm Warning System	80,000	40,000			40,000		13
Total Expenditures	**80,000**	**40,000**			**40,000**		
REVENUES:							
City:							
Local Option Sales Tax	80,000	40,000			40,000		
Total Revenues	**80,000**	**40,000**			**40,000**		

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

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

LOCATION
Location of these sirens will vary. Initial emphasis will be given to filling "gaps" in the community's existing siren coverage near Ada Hayden Heritage Park and the National Veterinary Disease Lab.

FISCAL YEAR PRIORITY			1			1	
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Equipment and Installation		80,000	40,000			40,000	
	TOTAL	**80,000**	**40,000**			**40,000**	
FINANCING:							
Local Option Sales Tax		80,000	40,000			40,000	
	TOTAL	**80,000**	**40,000**			**40,000**	

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

PUBLIC SAFETY - TRAFFIC

	PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19	PAGE
EXPENDITURES:								
1	Traffic Signal Program	1,100,000	250,000	150,000	200,000	200,000	300,000	16
2	Shared Use Path System Expansion	2,723,300	100,000	835,000	521,000	586,500	680,800	17
3	Traffic Engineering Studies	200,000	50,000	50,000		50,000	50,000	18
4	West Lincoln Way Intersection Improvements	1,325,000	125,000	1,200,000				19
5	Multi-Modal Roadway Improvements	101,000	7,000	29,000	55,000	10,000		20
6	Traffic Calming Program	20,000		20,000				21
7	U.S. 69 Intersection Improvements	50,000			50,000			22
	Total Expenditures	**5,519,300**	**532,000**	**2,284,000**	**826,000**	**846,500**	**1,030,800**	
REVENUES:								
Bonds:								
G.O. Bonds		450,000		450,000				

PUBLIC SAFETY - TRAFFIC, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19
REVENUES, continued:						
City:						
Road Use Tax	1,596,000	432,000	249,000	305,000	260,000	350,000
Local Option Sales Tax	2,100,300	30,000	675,000	361,000	446,500	587,800
Sub-Total City Funds	3,696,300	462,000	924,000	666,000	706,500	937,800
Other:						
MPO/STP Funds	623,000	70,000	160,000	160,000	140,000	93,000
Iowa D.O.T. Safety Grant	500,000		500,000			
Developer	250,000		250,000			
Sub-Total Other Funds	1,373,000	70,000	910,000	160,000	140,000	93,000
Total Revenues	**5,519,300**	**532,000**	**2,284,000**	**826,000**	**846,500**	**1,030,800**

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

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 provides funding for those maintenance needs. In addition, this program provides for the necessary upgrading of the traffic signal system as technology continues to change. In recent years, the traffic signal replacements have included radar detection systems instead of the typically used in-pavement loop detection system that frequently was the point of vehicle detection failure. Another advantage of the radar detection system is that it detects bicycles in addition to vehicles.

COMMENTS

Proposed locations:

2014/15	Lincoln Way/Union Drive signal replacement ($200,000); and 13th Street/Stange Road signal replacement ($50,000 for one leg in partnership with Iowa State University)
2015/16	Maintenance/equipment upgrades at various locations
2016/17	Lincoln Way/Hyland Avenue signal replacement
2017/18	Dayton Avenue/East Lincoln Way signal replacement
2018/19	Traffic Adaptive System (Lincoln Way – Beach Avenue to Beedle Drive)

The project included in 2018/19 is a Traffic Adaptive System (Lincoln Way – Beach Avenue to Hyland Avenue) which is a form of Intelligent Transportation System (ITS) infrastructure that conducts real-time optimization of traffic and pedestrian flow at signalized intersections.

The cost change in 2014/15 and 2015/16 is due to prioritization and coordination with ISU for replacement of the traffic signal at 13th Street/Stange Road intersection. The equipment at this intersection has immediate need for replacement due to the existing condition.

FISCAL YEAR PRIORITY			1	2	1	1	1
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		150,000	30,000	30,000	30,000	30,000	30,000
Construction		950,000	220,000	120,000	170,000	170,000	270,000
	TOTAL	**1,100,000**	**250,000**	**150,000**	**200,000**	**200,000**	**300,000**
FINANCING:							
Road Use Tax		1,100,000	250,000	150,000	200,000	200,000	300,000
	TOTAL	**1,100,000**	**250,000**	**150,000**	**200,000**	**200,000**	**300,000**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Public Safety – Traffic	Public Works	060-7518-429 060-7520-429

SHARED USE PATH SYSTEM EXPANSION **PROJECT STATUS:** Cost Change Revenue Change 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 Transportation Plan identifies those paths that separate bicycle traffic from higher-speed automobile traffic.

COMMENTS

Scheduling the Skunk River Trail Extension segments as proposed will allow the South Ames Business Group to assist in right-of-way connections to those segments and will build from the Southeast Entry Plan. The projects included in this program are subject to acquiring voluntary easements from property owners.

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

2014/15	South Duff Avenue (Squaw Creek to South 5th Street)
2015/16	Skunk River Trail (Southeast 16th Street to East Lincoln Way) (bridge construction and bank stabilization at Squaw Creek)
2016/17	Skunk River Trail (Southeast 16th Street to East Lincoln Way) (trail paving)
2017/18	Skunk River Trail (River Valley Park north)
2018/19	Squaw Creek (South Skunk River to South Duff Avenue)

The Skunk River Trail (Southeast 16th Street to East Lincoln Way) project will be coordinated with the Flood Response and Mitigation Program in year 2015/16.

The cost change is due to adding land acquisition in 2017/18 and the addition of the 2018/19 project. The revenue change reflects less MPO/STP funds available in 2017/18 and the addition of the MPO/STP funds for the 2018/19 project. Due to the high cost projections for the Skunk River Trail (S.E. 16th to E. Lincoln Way) as shown in 2015/16 and 2016/17, staff will analyze alternative alignments to reduce costs.

FISCAL YEAR PRIORITY			2	3	2	2	2
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		410,000	20,000	95,000	75,000	102,000	118,000
Land Acquisition		212,300		47,000		76,500	88,800
Construction		2,101,000	80,000	693,000	446,000	408,000	474,000
	TOTAL	**2,723,300**	**100,000**	**835,000**	**521,000**	**586,500**	**680,800**
FINANCING:							
Local Option Sales Tax		2,100,300	30,000	675,000	361,000	446,500	587,800
MPO/STP Funds		623,000	70,000	160,000	160,000	140,000	93,000
	TOTAL	**2,723,300**	**100,000**	**835,000**	**521,000**	**586,500**	**680,800**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Public Safety – Traffic	Public Works	030-7505-429
		320-7505-429

TRAFFIC ENGINEERING STUDIES **PROJECT STATUS:** Site Change Project Reprioritization

DESCRIPTION/JUSTIFICATION
The studies planned for this annual program will focus on examining the traffic signal system, the bicycle path (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
Proposed studies:

2014/15	Turning Movement Count & Traffic Signal Progression Study
2015/16	Hourly Model Development
2017/18	Shared Use Path Utilization Study
2018/19	Crash Analysis GIS Tool

The site change is due to trading the 2014/15 and the 2015/16 projects. The Turning Movement Count & Traffic Signal Progression Study in 2014/15 will serve two purposes: to identify traffic patterns along signalized corridors to enhance the efficiency of traffic flows and to assess the potential use of adaptive traffic signal control in Ames. Through Hourly Model Development in 2015/16, data will be collected and analyzed in order to transition the AAMPO model from a daily (24-hour) to a per-hour model.

The Shared Use Path Utilization Study (2017/18) will gather traffic volumes of bicycles/pedestrians on the City's shared use path system by time of day and facility type to prioritize maintenance and winter maintenance activities. This will also aid in prioritizing alternative funding source pursuits.

The Crash Analysis GIS Tool (2018/19) will expand on a traffic safety tool that was completed for the City in 2011. This study will take those procedures/tools and automate (updating as needed) them in the GIS system. As updated annual data becomes available, the calculations and comparisons will be simplified from the current manual process. In addition, instead of the current site by site analysis, this tool will be citywide. It is anticipated that this tool will not only help with getting grants, but also in identifying issue locations and ultimately be used in reporting of safety performance measures.

FISCAL YEAR PRIORITY			3	4		3	3
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		200,000	50,000	50,000		50,000	50,000
	TOTAL	**200,000**	**50,000**	**50,000**		**50,000**	**50,000**
FINANCING:							
Road Use Tax		200,000	50,000	50,000		50,000	50,000
	TOTAL	**200,000**	**50,000**	**50,000**		**50,000**	**50,000**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Public Safety – Traffic	Public Works	060-7537-429

WEST LINCOLN WAY INTERSECTION IMPROVEMENTS **PROJECT STATUS:** No 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 necessitates 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 2012. Additional turn lanes are also anticipated for right-turning movements northbound from Franklin Avenue onto Lincoln Way. The increased traffic will also warrant replacement of signals at the Franklin Avenue/Lincoln Way intersection.

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 and the City to share equally in the construction cost of these improvements.

COMMENTS

2014/15 Franklin Avenue/Lincoln Way (planning and land acquisition)
2015/16 Franklin Avenue/Lincoln Way (engineering and construction)

The Franklin Avenue/Lincoln Way intersection improvement project is anticipated to meet the terms of the development agreement in 2015/16; therefore, planning for the project will occur in 2014/15 with construction planned for 2015/16.

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

FISCAL YEAR PRIORITY		4	1			
	TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:						
Land Acquisition	100,000	100,000				
Planning	25,000	25,000				
Engineering	200,000		200,000			
Construction	1,000,000		1,000,000			
TOTAL	**1,325,000**	**125,000**	**1,200,000**			
FINANCING:						
G. O. Bonds	450,000		450,000			
Road Use Tax	125,000	125,000				
Iowa D.O.T Safety Grant	500,000		500,000			
Developer (50% of construction less 50% of Safety Grant)	250,000		250,000			
TOTAL	**1,325,000**	**125,000**	**1,200,000**			

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Public Safety – Traffic	Public Works	060-7550-429

MULTI-MODAL ROADWAY IMPROVEMENTS **PROJECT STATUS:** No 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 on-street bike lanes and 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. 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.

LOCATIONS

2014/15 **Sharrows:** East Lincoln Way frontage road (Freel Drive to Dayton Avenue)
2015/16 **Sharrows:** Clark Avenue (6th Street to 24th Street)
2016/17 **Sharrows:** Hoover Avenue (30th Street to Bloomington Road); Northwestern Avenue (6th Street to 30th Street) - will coordinate with roadway surfacing projects
2017/18 **Sharrows:** Duff Avenue (6th Street to Lincoln Way)

FISCAL YEAR PRIORITY			5	5	3	4	
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		10,100	700	2,900	5,500	1,000	
Construction		90,900	6,300	26,100	49,500	9,000	
	TOTAL	**101,000**	**7,000**	**29,000**	**55,000**	**10,000**	
FINANCING:							
Road Use Tax Fund		101,000	7,000	29,000	55,000	10,000	
	TOTAL	**101,000**	**7,000**	**29,000**	**55,000**	**10,000**	

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Public Safety – Traffic	Public Works	060-7521-429

TRAFFIC CALMING PROGRAM **PROJECT STATUS:** No Change

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.

The 2015/16 location has been identified as Hyde Avenue to be coordinated with the paving of Grant Avenue. Some residents on Hyde Avenue have been concerned about speeding in their area, and with the paving of Grant Avenue, this route to the Gilbert schools is anticipated to still be an issue. Specific measures to be used are still to be determined.

LOCATION

2015/16 Hyde Avenue (Grant Avenue to Bloomington Road) ($20,000)

FISCAL YEAR PRIORITY				6			
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Construction		20,000		20,000			
	TOTAL	**20,000**		**20,000**			
FINANCING:							
Road Use Tax		20,000		20,000			
	TOTAL	**20,000**		**20,000**			

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Public Safety – Traffic	Public Works	060-7512-429

US69 INTERSECTION IMPROVEMENTS **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION
Intersection improvement projects along US69 within and just outside the City limits are targeted to alleviate congestion and reduce accidents.

COMMENTS
Proposed schedule:
2016/17: 13th Street/Grand Avenue (planning/public participation)

The Long-Range Transportation Plan (LRTP) adopted in September 2010 included this project as a high (short-term) priority. Responses from the public input survey during the LRTP update showed this intersection as the clear, highest priority for further study.

This project will commence during 2016/17 with a public participation process that will continue through the design of improvements. A design consultant will be selected to apply context-sensitive solutions as they develop intersection improvement plans. Public involvement will continue as design alternatives are developed. Following the planning phase, construction and land acquisition costs will be programmed into the CIP.

This project has been delayed in order to complete the next Long-Range Transportation Plan update before commencing this project.

FISCAL YEAR PRIORITY					4		
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Planning		50,000			50,000		
	TOTAL	**50,000**			**50,000**		
FINANCING:							
Road Use Tax		50,000			50,000		
	TOTAL	**50,000**			**50,000**		

PROGRAM – ACTIVITY: Public Safety – Traffic
DEPARTMENT: Public Works
ACCOUNT NO.

UTILITIES

THE BACHELOR MAIDS CLUB

This Club was a group of popular young women in Ames who enjoyed many get-togethers. On July 30, 1903, these nine young Ames women spent the day on a trail in Manitou, Colorado. From left are Jeannette Bartholomew, Inis Hunter (Grove), Hattie Brouhard, Grace Schleiter, Mame (Mary) Tilden (Brown), Katherine Steward, Jessie (Jessica) Cole (Augustine), and Win (Winifred) Tilden. The man at the far right is the trail guide and the woman to his right is Nellie Cole. These young women were vacationing in various parts of Colorado and had arranged on this meeting in Manitou.

UTILITIES - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19	PAGE
EXPENDITURES:							
Resource Recovery	2,150,050	730,850	254,100	264,800	175,800	724,500	25
Water Treatment	73,855,000	27,794,000	29,215,000	15,204,000	1,164,000	478,000	30
Water Distribution	6,375,000	975,000	975,000	975,000	2,475,000	975,000	36
Storm Sewer	11,569,000	800,000	2,972,000	5,783,000	1,007,000	1,007,000	39
Sanitary Sewer	17,475,000	3,495,000	3,495,000	3,495,000	3,495,000	3,495,000	47
WPC Treatment	11,594,000	3,350,000	3,514,000	2,397,000	997,000	1,336,000	50
Electric	77,890,000	26,450,000	34,350,000	3,025,000	5,945,000	8,120,000	64
Total Expenditures	**200,908,050**	**63,594,850**	**74,775,100**	**31,143,800**	**15,258,800**	**16,135,500**	
REVENUES:							
Bonds:							
G.O. Bonds	3,930,000	600,000	986,000	1,194,000	1,150,000		
Electric Revenue Bonds	53,880,000	23,000,000	30,880,000				
Sub-Total Bond Funds	57,810,000	23,600,000	31,866,000	1,194,000	1,150,000		

UTILITIES - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19
REVENUES, continued:						
City:						
Resource Recovery Fund	1,850,050	430,850	254,100	264,800	175,800	724,500
Water Utility Fund	12,447,500	2,055,000	4,313,000	2,690,000	1,936,500	1,453,000
Sewer Utility Fund	10,086,000	1,892,000	2,664,000	2,622,000	1,347,000	1,561,000
Storm Sewer Utility Fund	3,040,000	500,000	500,000	680,000	680,000	680,000
Electric Utility Fund	23,141,800	3,382,500	3,177,500	2,927,850	5,707,350	7,946,600
Sub-Total City Funds	50,565,350	8,260,350	10,908,600	9,184,650	9,846,650	12,365,100
Other:						
State Revolving Fund	80,272,000	31,667,000	30,549,000	10,862,000	3,597,000	3,597,000
Iowa State University	868,200	67,500	292,500	97,150	237,650	173,400
DWSRF Forgivable Loan	6,224,000			6,224,000		
Grant Funds	5,168,500		1,159,000	3,582,000	427,500	
Sub-Total Other Funds	92,532,700	31,734,500	32,000,500	20,765,150	4,262,150	3,770,400
Total Revenues	**200,908,050**	**63,594,850**	**74,775,100**	**31,143,800**	**15,258,800**	**16,135,500**

UTILITIES - RESOURCE RECOVERY

PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19	PAGE
EXPENDITURES:							
1 Resource Recovery System Improvements	1,268,050	348,850	254,100	264,800	175,800	224,500	26
2 Process Area Sprinkler System Replacement	300,000	300,000					27
3 Resource Recovery Exterior Enhancements	82,000	82,000					28
4 Resource Recovery Cold Storage Building	500,000					500,000	29
Total Expenditures	**2,150,050**	**730,850**	**254,100**	**264,800**	**175,800**	**724,500**	
REVENUES:							
Bonds:							
G.O. Bonds	300,000	300,000					
City:							
Resource Recovery Fund	1,850,050	430,850	254,100	264,800	175,800	724,500	
Total Revenues	**2,150,050**	**730,850**	**254,100**	**264,800**	**175,800**	**724,500**	

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 #2 rotary disc screen rollers (RDS) and chains and rebuilding 20% of the C-1 conveyor). Resource Recovery personnel perform the work to complete the preventive maintenance projects.

COMMENTS

Proposed projects:

2014/15 Preventive maintenance materials for replacement of the RDS rollers and chains ($46,000); replace #2 mill sideliners ($41,000); replace glass crusher rotor ($16,000); rebuild 20% of the C-1 conveyor ($19,550); replace ADS vessel ($185,000); HVAC for electric room ($22,000); #1 mill armored teeth ($4,100); and #1 mill one-time stock inventory ($15,200)

2015/16 Preventive maintenance materials for the replacement of the RDS rollers and chains ($40,250); replace tipping floor concrete at C-1 area ($180,000); rebuild 20% of the C-1 conveyor ($19,550); and #1 mill armored teeth and combs ($14,300)

2016/17 Preventive maintenance materials for the replacement of the RDS rollers and chains ($40,250); rebuild 20% of C-1 conveyor ($19,550); dust collection vessel ($205,000)

2017/18 Preventive maintenance materials for the replacement of the RDS rollers and chains ($40,250); rebuild 20% of C-1 conveyor ($19,550); fire system air compressor ($15,000); #1 mill replacement combs and hydraulic pumps ($50,000); #1 mill replacement rotor ($36,000); and scale software upgrade ($15,000)

2018/19 Preventive maintenance materials for the replacement of the RDS rollers and chains ($46,000); rebuild 20% of C-1 conveyor ($19,500); replace Atlas Copco compressor ($60,000); locker room remodel ($20,000); replace spark detection system ($37,000); glass crusher parts replacement – rotor, delabeler, prebreaker ($18,000); and replace C-2 belt ($24,000)

The cost change is the result of updated cost estimates and minor project modifications.

LOCATION

Arnold O. Chantland Resource Recovery Plant, 110 Center Avenue

FISCAL YEAR PRIORITY			1	1	1	1	1
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
System Improvements		1,268,050	348,850	254,100	264,800	175,800	224,500
	TOTAL	**1,268,050**	**348,850**	**254,100**	**264,800**	**175,800**	**224,500**
FINANCING:							
Resource Recovery Fund		1,268,050	348,850	254,100	264,800	175,800	224,500
	TOTAL	**1,268,050**	**348,850**	**254,100**	**264,800**	**175,800**	**224,500**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Resource Recovery	Public Works	590-8903-489

RESOURCE RECOVERY PROCESS AREA SPRINKLER SYSTEM REPLACEMENT

PROJECT STATUS: No Change

DESCRIPTION/JUSTIFICATION

The fire sprinkler system at the Resource Recovery Plant does not currently meet City code because it lacks backflow prevention. The system has also had component failures due to its age and cannot be accessed outside the building. The City's insurance carrier recommended installation of additional sprinkler heads in the facility, which necessitated installation of a larger service line to maintain flow.

COMMENTS

2014/15 Phase II: Design, engineering and installation of replacement for existing 38-year-old process area sprinkler system

Phase I (engineering and construction of a new building to house backflow prevention and new system valves with access for emergency services personnel) was completed in 2013/14 at a cost of $205,370.

LOCATION

Arnold O. Chantland Resource Recovery Plant, 110 Center Avenue

FISCAL YEAR PRIORITY		2				
	TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:						
Engineering	40,000	40,000				
Construction	260,000	260,000				
TOTAL	**300,000**	**300,000**				
FINANCING:						
G.O. Bonds (abated by Resource Recovery revenues)	300,000	300,000				
TOTAL	**300,000**	**300,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Resource Recovery	Public Works	375-8911-489

RESOURCE RECOVERY EXTERIOR ENHANCEMENTS **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
This project is for the rehabilitation and improvement of the Resource Recovery building exterior and grounds. Certain beautification efforts will also result in energy efficiency improvements.

COMMENTS
Proposed projects:
2014/15 Repaint south side of the building ($18,800); repaint rooftop equipment ($38,200); install landscaping ($25,000)

The City Manager has recommended enhancing visual appearance of City properties.

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

FISCAL YEAR PRIORITY			3				
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Improvements		82,000	82,000				
	TOTAL	**82,000**	**82,000**				
FINANCING:							
Resource Recovery Fund		82,000	82,000				
	TOTAL	**82,000**	**82,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Resource Recovery	Public Works	590-8915-489

RESOURCE RECOVERY COLD STORAGE BUILDING **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
This project will provide for construction of a cold storage building on Resource Recovery property to the east of the plant.

COMMENTS
Resource Recovery has been storing equipment for the plant at various places at the Power Plant and in the glass crusher room at the Resource Recovery plant. A cold storage building on Resource Recovery property will provide safe, secure storage for all Resource Recovery equipment at a single location and will give Resource Recovery personnel 24/7 access to the equipment.

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

FISCAL YEAR PRIORITY							2
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Construction		500,000					500,000
	TOTAL	**500,000**					**500,000**
FINANCING:							
Resource Recovery Fund		500,000					500,000
	TOTAL	**500,000**					**500,000**

PROGRAM - ACTIVITY: Utilities – Resource Recovery
DEPARTMENT: Public Works
ACCOUNT NO.

UTILITIES - WATER TREATMENT

PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19	PAGE
EXPENDITURES:							
1 New Water Treatment Plant	66,080,000	26,714,000	25,877,000	13,489,000			31
2 Advanced Metering Infrastructure	2,235,000	417,000	431,000	447,000	462,000	478,000	32
3 Water Supply Expansion	4,453,000	563,000	2,622,000	1,268,000			33
4 Water Plant Facility Improvements	517,000	100,000	285,000		132,000		34
5 Well Field Standby Power	570,000				570,000		35
Total Expenditures	**73,855,000**	**27,794,000**	**29,215,000**	**15,204,000**	**1,164,000**	**478,000**	
REVENUES:							
City:							
Water Utility Fund	7,347,500	1,080,000	3,338,000	1,715,000	736,500	478,000	
Other:							
Drinking Water State Revolving Fund	59,856,000	26,714,000	25,877,000	7,265,000			
DWSRF Forgivable Loan	6,224,000			6,224,000			
FEMA Hazard Mitigation Grant	427,500				427,500		
Sub-Total Other Funds	66,507,500	26,714,000	25,877,000	13,489,000	427,500		
Total Revenues	**73,855,000**	**27,794,000**	**29,215,000**	**15,204,000**	**1,164,000**	**478,000**	

NEW WATER TREATMENT PLANT **PROJECT STATUS:** Cost Change Revenue Change

DESCRIPTION/JUSTIFICATION

The existing Water Treatment Plant utilizes components that date back to the mid-1920s. Concern over the structural condition of the facility, along with a projected need for additional capacity, triggered an Infrastructure and Capacity Assessment to determine the most appropriate, cost-effective course to meeting the community's drinking water needs over the next 20 years. The assessment quantified the numerous structural, mechanical, and electrical challenges with trying to renovate the existing facility. Additionally, the study identified many costly design modifications that would be necessary to comply with standards imposed by the Iowa Department of Natural Resources since the facility's construction, and to comply with Current Americans with Disabilities Act requirements. The final conclusion of the assessment, endorsed by Council in July 2009, resulted in a plan to construct a new 15-million-gallon per day (mgd) lime softening facility on a new site.

COMMENTS

The cost estimate shown below is based on the 80% design cost estimate and Value Engineering review, and includes future inflation. The proposed funding source for the project will be loans from the Iowa Drinking Water State Revolving Fund (DWSRF). These loans are currently offered at 1.75% interest and will be repaid over 20 years out of water revenues. The project has been awarded a loan forgiveness of approximately $6,224,000 for constructing the facility to a LEED (Leadership in Energy and Environmental Design) certified standard.

The anticipated project schedule and budget are as follows:

FY 2008/09	$ 774,000	Alternative analysis and pre-design
FY 2009/10 – 2013/14	875,000	Land acquisition and easements
FY 2012/13 – 2016/17	8,770,000	Final design and construction inspection
FY 2013/14 – 2016/17	62,828,000	Construction phase
FY 2013/14 – 2016/17	1,240,000	LEED registration and commissioning, permits, special inspections, equipment allowance
Total	$ 74,487,000	

LOCATION

New Water Plant, 1800 E. 13th Street

FISCAL YEAR PRIORITY			1	1	1		
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering/Legal/Administrative		4,825,000	2,267,000	1,430,000	1,128,000		
Construction		61,255,000	24,447,000	24,447,000	12,361,000		
	TOTAL	**66,080,000**	**26,714,000**	**25,877,000**	**13,489,000**		
FINANCING:							
Drinking Water State Revolving Fund		59,856,000	26,714,000	25,877,000	7,265,000		
DWSRF Forgivable Loan		6,224,000			6,224,000		
	TOTAL	**66,080,000**	**26,714,000**	**25,877,000**	**13,489,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Water Treatment	Water & Pollution Control	512-3933-489

ADVANCED METERING INFRASTRUCTURE **PROJECT STATUS:** No 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).

COMMENTS
The water meter reading system currently in place is a mechanical system that transmits the reading from the water meter (located inside the property) to a remote register on the outside of a property using a low-voltage wire. This technology is obsolete and, as of March 2013, no longer available. A cross-department team has evaluated multiple technology platforms utilizing various combinations of "drive-by" reads, radio reads, cellular reads, and other methods of obtaining meter readings. The team has concluded that an AMR walk-by or drive-by system would be the most cost-effective, short-term (two to three years) solution to replace the old technology that is no longer available. This option would allow both the water and electric meter systems to migrate to an unlicensed AMI Mesh system in the near future. The solicitation for equipment will place a high priority on systems capable of supporting both water and electric meter readings.

The cost to convert the entire inventory of water meters to the new reading technology is estimated at approximately $4,023,200 (in 2013 dollars) for equipment (18,800 meters @ $187 per meter), plus contracted installation (18,800 meters @ $27 per meter). The implementation would be spread out over 10 years, with new equipment being installed in discrete areas each year in coordination with the Utility Customer Service Division of the Finance Department. As existing equipment is taken out of service, it can be retained as spare parts to maintain the old inventory until the entire system is replaced.

LOCATION
Throughout the City of Ames

FISCAL YEAR PRIORITY			2	3	3	2	1
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Equipment		2,235,000	417,000	431,000	447,000	462,000	478,000
	TOTAL	**2,235,000**	**417,000**	**431,000**	**447,000**	**462,000**	**478,000**
FINANCING:							
Water Utility Fund		2,235,000	417,000	431,000	447,000	462,000	478,000
	TOTAL	**2,235,000**	**417,000**	**431,000**	**447,000**	**462,000**	**478,000**

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

WATER SUPPLY EXPANSION

PROJECT STATUS: Location Change | Scope Change | Cost Change | Advanced

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 currently developed water supply is adequate to meet normal demands until at least 2020. 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. Additionally, summer demands during the recent droughts suggest that the source water capacity should be increased in conjunction with the increased treatment capacity that will be available in the new Water Plant. The location for the next well field has been revised using a detailed ground water hydraulic model. New wells are now proposed to be constructed on city-owned land north of East 13th Street and east of the Skunk River. Development of the well field will consist of an interconnecting pipeline and three new wells, each with a capacity of 1,000 gallons per minute (~1.5 million gallons per day). Timing of the project would bring the new wells on-line concurrently with the start-up of the new Water Plant. Further into the future, additional source water supplies are planned along I-35 south of Ames.

FY 2014/15	Design (engineering, survey, geotechnical evaluations)
FY 2015/16 – 2016/17	Construction of pipeline and three wells in North River Valley Well Field

LOCATION

North River Valley Well Field – North of E. 13th and east of Skunk River

FISCAL YEAR PRIORITY			3	2	2		
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering / Admin		563,000	563,000				
Construction		3,890,000		2,622,000	1,268,000		
	TOTAL	**4,453,000**	**563,000**	**2,622,000**	**1,268,000**		
FINANCING:							
Water Utility Fund		4,453,000	563,000	2,622,000	1,268,000		
	TOTAL	**4,453,000**	**563,000**	**2,622,000**	**1,268,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Water Production	Water & Pollution Control	510-3943-489

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

DESCRIPTION/JUSTIFICATION

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

COMMENTS

The schedule for these improvements is as follows:

FY 14/15	$ 100,000	Demolition of North Dakota elevated water tank
FY 15/16	$ 135,000	Lime pond security improvements
	$ 100,000	Remote site access control
	$ 50,000	Replace high service pump #3
FY 17/18	$ 132,000	Construct maintenance building at new treatment plant site

Because of the planned replacement of the Water Treatment Plant, no major facility improvements are planned for the existing plant. The only maintenance and repairs being performed are those necessary to keep the facility operational until the new plant comes online in four years. 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 North Dakota Avenue tank has been out of service for several years, and its demolition is not a high priority as long as it does not become an eyesore. It is being recommended to be delayed by one year to FY 14/15 until after bids are received for the new Water Plant. The Lime Pond Security Improvements project is being delayed until FY 15/16 to ensure it is compatible with the security system to be installed at the new Water Treatment Plant. Replacing High Service Pump Number Three will increase the flexibility for the plant operators to match demand with pumping rates, and will also improve electrical efficiency. 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 value loss due to fire. Additionally, it will house the facility's tractor and mowers.

LOCATION

Current Water Plant, 300 East 5th Street
New Water Plant, 1800 E 13th Street

FISCAL YEAR PRIORITY			4	4		3	
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Construction		517,000	100,000	285,000		132,000	
	TOTAL	**517,000**	**100,000**	**285,000**		**132,000**	
FINANCING:							
Water Utility Fund		517,000	100,000	285,000		132,000	
	TOTAL	**517,000**	**100,000**	**285,000**		**132,000**	

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Water Treatment	Water & Pollution Control	510-3946-489

WELL FIELD STANDBY POWER **PROJECT STATUS:** Revenue 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 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.

LOCATION
300 E 5th Street

FISCAL YEAR PRIORITY						1	
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		70,000				70,000	
Construction		500,000				500,000	
	TOTAL	**570,000**				**570,000**	
FINANCING:							
Water Utility Fund		142,500				142,500	
FEMA Hazard Mitigation Grant		427,500				427,500	
	TOTAL	**570,000**				**570,000**	

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

UTILITIES - WATER DISTRIBUTION

PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19	PAGE
EXPENDITURES:							
1 Water System Improvements	4,875,000	975,000	975,000	975,000	975,000	975,000	37
2 Campustown Public Improvements	1,500,000				1,500,000		38
Total Expenditures	**6,375,000**	**975,000**	**975,000**	**975,000**	**2,475,000**	**975,000**	
REVENUES:							
Bonds:							
G.O. Bonds	1,150,000				1,150,000		
City:							
Water Utility Fund	5,100,000	975,000	975,000	975,000	1,200,000	975,000	
Sewer Utility Fund	125,000				125,000		
Sub-Total City Funds	5,225,000	975,000	975,000	975,000	1,325,000	975,000	
Total Revenues	**6,375,000**	**975,000**	**975,000**	**975,000**	**2,475,000**	**975,000**	

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

DESCRIPTION/JUSTIFICATION
This program provides for replacing water mains in areas that are experiencing rusty water problems. It also provides for installing larger distribution mains in areas that have a high concentration of 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.

LOCATION
2014/15 Water Main Replacement:
Hayward Avenue (Lincoln Way to Hunt Street); East Avenue (East Lincoln Way to East 3rd Street); East 3rd Street (Duff Avenue to East Avenue); Ridgewood Avenue (9th Street to 13th Street); 9th Street (Ridgewood Avenue to Brookridge Avenue); and Park Way (Ridgewood Avenue to Brookridge Avenue)

2014/15 Water Service Transfer:
Woodland Street (Hickory Drive to approximately 300 feet east); and East 2nd Street (Duff Avenue to Des Moines Avenue and Center Avenue to east terminus)

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.

The system currently has 13.6 miles of active 4" water main. Improvements to these water mains will result in reduced maintenance costs.

FISCAL YEAR PRIORITY			1	1	2	1	1
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		725,000	145,000	145,000	145,000	145,000	145,000
Construction		4,150,000	830,000	830,000	830,000	830,000	830,000
	TOTAL	**4,875,000**	**975,000**	**975,000**	**975,000**	**975,000**	**975,000**
FINANCING:							
Water Utility Fund		4,875,000	975,000	975,000	975,000	975,000	975,000
	TOTAL	**4,875,000**	**975,000**	**975,000**	**975,000**	**975,000**	**975,000**

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

CAMPUSTOWN PUBLIC IMPROVEMENTS **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
This project identifies public improvements necessary as part of the upcoming projects to revitalize Campustown. 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. Considering the age of the infrastructure as well as the increased demand from redevelopment, updated water, storm, and sanitary mains are critical. These improvements will be coupled with new pavement improvements in the area.

COMMENTS
The results from the recently formed Task Force will aid in creating a vision for the above ground components of this project.

LOCATION
Welch Avenue (Lincoln Way to Hunt Street)

FISCAL YEAR PRIORITY						1	
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		300,000				300,000	
Construction		1,200,000				1,200,000	
	TOTAL	**1,500,000**				**1,500,000**	
FINANCING:							
G.O. Bonds		1,150,000				1,150,000	
Water Utility Fund		225,000				225,000	
Sewer Utility Fund		125,000				125,000	
	TOTAL	**1,500,000**				**1,500,000**	

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

UTILITIES - STORM SEWER

	PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19	PAGE
EXPENDITURES:								
1	Flood Mitigation - Localized Flooding	1,300,000	300,000	1,000,000				40
2	Low Point Drainage Improvements	750,000	150,000	150,000	150,000	150,000	150,000	41
3	Storm Water Facility Rehabilitation Program	500,000	100,000	100,000	100,000	100,000	100,000	42
4	Storm Sewer Improvement Program	1,250,000	250,000	250,000	250,000	250,000	250,000	43
5	Flood Mitigation - River Flooding	5,921,000		1,145,000	4,776,000			44
6	Storm Sewer Erosion Control Program	1,308,000		327,000	327,000	327,000	327,000	45
7	Storm Sewer System Analysis	540,000			180,000	180,000	180,000	46
	Total Expenditures	**11,569,000**	**800,000**	**2,972,000**	**5,783,000**	**1,007,000**	**1,007,000**	
REVENUES:								
Bonds:								
G.O. Bonds		2,480,000	300,000	986,000	1,194,000			
City:								
Storm Sewer Utility Fund		3,040,000	500,000	500,000	680,000	680,000	680,000	
Other:								
State Revolving Funds		1,308,000		327,000	327,000	327,000	327,000	
Grant Funds		4,741,000		1,159,000	3,582,000			
	Sub-Total Other Funds	6,049,000		1,486,000	3,909,000	327,000	327,000	
	Total Revenues	**11,569,000**	**800,000**	**2,972,000**	**5,783,000**	**1,007,000**	**1,007,000**	

FLOOD MITIGATION – LOCALIZED FLOODING **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

In response to the 2008 and 2010 flood events in the community, staff has identified projects to mitigate future localized flooding. Future years may include project locations as a result of the current Flood Mitigation Study.

COMMENTS

The Teagarden Drainage Study identified three potential detention basins that could be constructed to prevent further impacts of water rising along South Duff Avenue (US Highway 69) south of Airport Road. The drainage area is divided between three branches of streams: north, south, and middle. The detention basins for the middle and north branches would primarily be located on private property, so working with the land owners will be a critical part of the design. The detention basin for the south branch would be located on the property of the Ames Municipal Airport. The bank stabilization is to mitigate and protect against localized flood damage through one area property. It is scheduled in 2015/16 to coordinate with construction of a segment of the Skunk River Trail. This bank stabilization is also important in protecting public infrastructure from future damage.

The site changes and cost change are the result of the identification of the location of projects and the cost estimates for those projects.

LOCATION

2014/15: Teagarden Drainage Improvements (South Branch detention improvements)
2015/16: South Skunk River bank stabilization (Southeast 16th Street to East Lincoln Way)

The Flood Mitigation Study is anticipated to be complete in late 2013 and may identify future projects for this program.

FISCAL YEAR PRIORITY		1	1			
	TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:						
Engineering	260,000	60,000	200,000			
Construction	1,040,000	240,000	800,000			
TOTAL	**1,300,000**	**300,000**	**1,000,000**			
FINANCING:						
G.O. Bonds	1,000,000	300,000	700,000			
Watershed Improvement Review Board Grant	300,000		300,000			
TOTAL	**1,300,000**	**300,000**	**1,000,000**			

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Storm Sewer	Public Works	375-8611-489

LOW POINT DRAINAGE IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This is the annual program for drainage improvements to decrease flooding at low points. Low point drainage improvements are not focused on residential street locations, but rather 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 for increasing the ability to control the runoff so that it can be carried by downstream systems.

COMMENTS

2014/15 Northwood Drive (2800 block)
2015/16 Westwood Drive (400 block)
2016/17 Little Bluestem Court
2017/18 Crystal Street (200 block)
2018/19 15th Street (Wilson Avenue to Clark Avenue)

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 Storm Sewer System Analysis program will identify future projects to be included in this program.

FISCAL YEAR PRIORITY			2	4	4	2	2
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		150,000	30,000	30,000	30,000	30,000	30,000
Construction		600,000	120,000	120,000	120,000	120,000	120,000
	TOTAL	**750,000**	**150,000**	**150,000**	**150,000**	**150,000**	**150,000**
FINANCING:							
Storm Sewer Utility Fund		750,000	150,000	150,000	150,000	150,000	150,000
	TOTAL	**750,000**	**150,000**	**150,000**	**150,000**	**150,000**	**150,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Storm Sewer	Public Works	560-8653-489

STORM WATER FACILITY REHABILITATION PROGRAM **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

In accordance with the 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 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. 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

Proposed locations:

2014/15	Somerset Subdivision
2015/16	Pete Cooper's Subdivision
2016/17	Bloomington Heights Subdivision
2017/18	Northridge Heights near GW Carver
2018/19	Spring Valley Subdivision (detention area north of 4811 Idaho Circle)

City staff will be recommending, as part of a post-construction stormwater management ordinance, a new model agreement which would require an association/owner to maintain the facilities within their property.

FISCAL YEAR PRIORITY			3	5	5	3	3
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		100,000	20,000	20,000	20,000	20,000	20,000
Construction		400,000	80,000	80,000	80,000	80,000	80,000
	TOTAL	**500,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**
FINANCING:							
Storm Sewer Utility Fund		500,000	100,000	100,000	100,000	100,000	100,000
	TOTAL	**500,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Storm Sewer	Public Works	560-8621-489

STORM SEWER 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 has caused the 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 to 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 Sewer System Analysis may identify the need for additional improvements as part of the program.

LOCATIONS
2014/15: Hayward Avenue (culvert replacement south of Lincoln Way) ($150,000); and other locations as determined

FISCAL YEAR PRIORITY			4	6	6	4	4
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
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 Sewer	Public Works	560-8642-489

FLOOD MITIGATION – RIVER FLOODING **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

Following the floods of 2010, the City Council established a goal of mitigating the impact of future flooding in Ames. A comprehensive Flood Mitigation Study was completed in late 2013 that considered many possible mitigation alternatives across a wide range of factors, including: degree of reduction of flood water elevation, estimated annual damage reduction, construction costs, ongoing operations and maintenance costs, environmental impacts, and likelihood of obtaining federal grant funding.

COMMENTS

On December 10, 2013, the City Council approved a series of flood mitigation measures. These included discrete elements targeted at: A.) Undertaking a 'stream restoration' of Squaw Creek; B.) Working with IDOT to improve the conveyance capacity of the US Highway 30 bridge; C.) Working through the Squaw Creek Watershed Management Authority to pursue flood mitigation alternatives in the upper reaches of the watershed; and D.) Conducting a workshop to review and discuss the range of possible floodplain regulatory approaches.

This project involves a 'restoration' of the Squaw Creek channel. While the exact scope of work is yet to be defined, a central component would include reshaping the channel 2,000 feet either side of the South Duff Avenue bridge. This would reduce the water surface elevation of a 1% annual chance flood (i.e. – a "100-year" flood) by approximately 2 feet on South Duff Avenue, a major damage center. It could also include additional elements such as bank stabilization, habitat restoration, and the addition of recreation amenities. The dollar amounts shown below are based on the channel reshaping element only. Once a vision and direction for the project have been established, then a consultant will be retained in FY 2015/16 to begin the detailed design work. Simultaneously, outside grant funding through FEMA, REAP, and other possible sources will be pursued. The budget for this project will likely change once the complete scope of work is defined.

A possible future conveyance improvement activity (not included in the five-year CIP) is the lengthening of the Highway 30 bridge by the Iowa Department of Transportation. That work would involve extending the span of the bridge by approximately 430' to the west, at an estimated cost of $7,740,000 (in 2013 dollars).

LOCATION

South Duff Avenue and Squaw Creek

FISCAL YEAR PRIORITY				2	1		
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Design/Engineering		706,000		567,000	139,000		
Easements		578,000		578,000			
Construction		4,637,000			4,637,000		
	TOTAL	**5,921,000**		**1,145,000**	**4,776,000**		
FINANCING:							
General Obligation Bonds		1,480,000		286,000	1,194,000		
FEMA Hazard Mitigation Grants		4,441,000		859,000	3,582,000		
	TOTAL	**5,921,000**		**1,145,000**	**4,776,000**		

PROGRAM - ACTIVITY: Utilities – Storm Sewer

DEPARTMENT: Public Works

ACCOUNT NO.

STORM SEWER EROSION CONTROL PROGRAM **PROJECT STATUS:** Delayed Site Change Scope 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 sewer 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, locations for future improvements will be further identified.

LOCATION
2015/16: Teagarden Drainage Improvements (South Branch drainage channel improvements)
2016/17: South Skunk River watershed (along existing shared use path near Homewood Golf Course and Inis Grove)
2017/18: South Skunk River watershed (along existing shared use path near Homewood Golf Course and Inis Grove)
2018/19: Squaw Creek (near Orchard Drive)

The Teagarden Drainage Improvements (South Branch drainage channel improvements) project has been delayed until 2015/16 due to availability of SRF funding. Availability of SRF funding for this program is connected with SRF funding for the Sanitary Sewer Rehabilitation Program (page 48). This project will continue to be coordinated with the Teagarden Drainage Improvements (South Branch detention improvements) included in 2014/15 of the Flood Response and Mitigation Projects. The site change is the result of identifying locations for 2016/17 through 2018/19.

Various locations throughout the community as identified and prioritized in the Urban Stream Assessment and NPDES inspections.

FISCAL YEAR PRIORITY			3	2	1	1
	TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:						
Engineering	268,000		67,000	67,000	67,000	67,000
Construction	1,040,000		260,000	260,000	260,000	260,000
TOTAL	**1,308,000**		**327,000**	**327,000**	**327,000**	**327,000**
FINANCING:						
State Revolving Funds (SRF)	1,308,000		327,000	327,000	327,000	327,000
TOTAL	**1,308,000**		**327,000**	**327,000**	**327,000**	**327,000**

PROGRAM - ACTIVITY: Utilities - Storm Sewer
DEPARTMENT: Public Works
ACCOUNT NO.

STORM SEWER SYSTEM ANALYSIS **PROJECT STATUS:** Delayed

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 as accurate a method of mapping the storm sewer system within the Geographic Information System (GIS) as it does with other utility systems. As the Sanitary Sewer System Evaluation continues to progress and rehabilitation of the sanitary sewer system is completed to remove Infiltration/Inflow, additional pressure is being added 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 sewer capacity and future storm sewer improvements.

The delay for this program is due to prioritization of other Storm Sewer Utility Fund projects.

FISCAL YEAR PRIORITY				6	5	5
	TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:						
Engineering	540,000			180,000	180,000	180,000
TOTAL	**540,000**			**180,000**	**180,000**	**180,000**
FINANCING:						
Storm Sewer Utility Fund	540,000			180,000	180,000	180,000
TOTAL	**540,000**			**180,000**	**180,000**	**180,000**

PROGRAM - ACTIVITY: Utilities – Storm Sewer
DEPARTMENT: Public Works
ACCOUNT NO.

UTILITIES - SANITARY SEWER

PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19	PAGE
EXPENDITURES:							
1 Sanitary Sewer Rehabilitation Program	17,350,000	3,470,000	3,470,000	3,470,000	3,470,000	3,470,000	48
2 Clear Water Diversion	125,000	25,000	25,000	25,000	25,000	25,000	49
Total Expenditures	**17,475,000**	**3,495,000**	**3,495,000**	**3,495,000**	**3,495,000**	**3,495,000**	
REVENUES:							
City:							
Sewer Utility Fund	1,125,000	225,000	225,000	225,000	225,000	225,000	
Other:							
State Revolving Fund	16,350,000	3,270,000	3,270,000	3,270,000	3,270,000	3,270,000	
Total Revenues	**17,475,000**	**3,495,000**	**3,495,000**	**3,495,000**	**3,495,000**	**3,495,000**	

SANITARY SEWER REHABILITATION PROGRAM **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.

COMMENTS

System improvement locations are being identified through the Sanitary Sewer System Evaluation (SSSE) field investigation, which is over 90 percent complete. 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 necessary to fix structural defects with ratings of "5" within 12 months. Structural defects with ratings of "4" must be fixed within five years. It is currently estimated that there are $25.7 million in rating 4 and 5 structural defects to be made in the system. At a rate of $3.47 million per year (plus accounting for the unknowns in the additional 10 percent yet to complete), it is estimated that improvements may take 10 years to complete. This program does not yet reflect any capacity issues that may be identified during modeling efforts associated with the SSSE. 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. The goal of the 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. Capacity deficiencies will be identified as the SSSE progresses, as weather permits.

FISCAL YEAR PRIORITY			1	1	2	1	1
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		3,420,000	684,000	684,000	684,000	684,000	684,000
Construction		13,930,000	2,786,000	2,786,000	2,786,000	2,786,000	2,786,000
	TOTAL	**17,350,000**	**3,470,000**	**3,470,000**	**3,470,000**	**3,470,000**	**3,470,000**
FINANCING:							
Sewer Utility Fund		1,000,000	200,000	200,000	200,000	200,000	200,000
State Revolving Fund (SRF)		16,350,000	3,270,000	3,270,000	3,270,000	3,270,000	3,270,000
	TOTAL	**17,350,000**	**3,470,000**	**3,470,000**	**3,470,000**	**3,470,000**	**3,470,000**

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 and continuing until the Sanitary Sewer System Evaluation (SSSE) is complete, **the footing drain grant portion of this program has been suspended and construction of collector lines to eliminate icing on streets is reduced**. Through completion of the SSSE, the future need of the footing drain grant program will be determined.

FISCAL YEAR PRIORITY			2	2	3	2	2
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
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	520-8584-489

UTILITIES - WATER POLLUTION CONTROL

	PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19	PAGE
EXPENDITURES:								
1	Residuals Handling Improvements	933,000	933,000					51
2	Digester Improvements	2,412,000	880,000	1,089,000		107,000	336,000	52
3	Bar Screen Improvements	750,000	750,000					53
4	Facility Improvements	733,000	73,000	89,000	473,000		98,000	54
5	Mechanical & HVAC Replacements	518,000	418,000	100,000				55
6	Clarifier Maintenance	860,000	200,000		200,000	210,000	250,000	56
7	Electrical System Maintenance	493,000	96,000	116,000	281,000			57
8	Flow Equalization Expansion	1,075,000		1,075,000				58
9	Secondary Treatment Improvements	325,000		250,000	75,000			59
10	Lift Station Improvements	212,000		212,000				60
11	Structural Rehabilitation	2,242,000		583,000	562,000	445,000	652,000	61
12	Nutrient Reduction Modifications	516,000			516,000			62
13	Cogeneration System Maintenance	525,000			290,000	235,000		63
	Total Expenditures	**11,594,000**	**3,350,000**	**3,514,000**	**2,397,000**	**997,000**	**1,336,000**	
REVENUES:								
City:								
Sewer Utility Fund		8,836,000	1,667,000	2,439,000	2,397,000	997,000	1,336,000	
Other:								
Clean Water State Revolving Fund		2,758,000	1,683,000	1,075,000				
	Total Revenues	**11,594,000**	**3,350,000**	**3,514,000**	**2,397,000**	**997,000**	**1,336,000**	

RESIDUALS HANDLING IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
The Water Pollution Control Facility generates approximately 30,000 gallons of treated solids, or residuals, each day. Throughout the year, these solids are held in the facility's storage lagoon and secondary digester, and are ultimately disposed of in the fall as fertilizer on city-owned farm ground directly adjacent to the facility. A comprehensive review of the solids handling portion of the facility took place in FY 2009/10. The study quantified a shortage in storage capacity, and recommended other modifications to the residuals handling process.

The study also identified contract land application as being more cost-effective than continued City application, based primarily on the high capital cost to replace the land application equipment. Contracted application has been used over the past three years and has proven to be very successful.

COMMENTS
The study identified a deficiency in the storage capacity of treated residuals that will become more severe as the community grows. This project will construct an additional 1.6 million gallons of storage capacity, with associated improvements in the residuals load-out facilities. The decant water return line from the residuals storage lagoon will also be replaced. An additional recommendation from the study to replace the digester mixing system is being incorporated into the separate Digester Improvements project.

Design work for the improvements began in mid-2013, and a construction contract should be awarded before the end of FY 13/14. The FY 2014/15 budget shown below is the balance of the construction expense. The total estimated budget for the project is $1,558,000.

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

FISCAL YEAR PRIORITY			1				
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering/Inspection		46,000	46,000				
Construction		887,000	887,000				
	TOTAL	**933,000**	**933,000**				
FINANCING:							
Clean Water State Revolving Fund		933,000	933,000				
	TOTAL	**933,000**	**933,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – WPC Plant	Water & Pollution Control	522-3446-489

DIGESTER IMPROVEMENTS **PROJECT STATUS:** Scope 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. This project couples the schedules of five discrete maintenance activities (cleaning, interior repainting, install mixing, exterior repainting, and replacing piping and valves) to allow for both cost and operational efficiencies.

Cleaning of the digesters is a major routine maintenance task necessary to ensure that adequate storage volume remains available for the treatment process to be effective. During the previous round of digester cleaning work, it was revealed that the interior piping's protective paint coat needs addressed. Recent process evaluations (Residuals Handling Study, 2010; Long-Range Facility Plan, 2012) identified a series of maintenance and improvements to the digesters to maintain the facility's solids handling capacity over the next 20 years. These activities include designing and replacing digester mixing systems, repainting the failing protective paint coatings on the exterior steel digester lids, and replacing piping and valves associated with digester pumping. The scope and cost change for this project are due to the scheduled replacement of the digester sludge pumps in FY 18/19.

COMMENTS

The anticipated project schedule and budget are as follows:

FY 14/15	$ 880,000	Clean one primary digester ($86,000); repaint interior piping ($258,000); replace mixing system ($201,000); replace associated pump room piping and valves ($335,000)
FY 15/16	$ 1,089,000	Clean secondary digester ($89,000); repaint interior piping ($267,000); repaint exterior lids on all three digesters ($386,000); replace associated pump room piping and valves ($347,000)
FY 17/18	$ 107,000	Replace waste pumps #1, 2, 3, and associated piping
FY 18/19	$ 336,000	Replace digester sludge pumps ($336,000)

LOCATION

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

FISCAL YEAR PRIORITY			2	2		3	1
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Construction & Equipment		2,412,000	880,000	1,089,000		107,000	336,000
	TOTAL	**2,412,000**	**880,000**	**1,089,000**		**107,000**	**336,000**
FINANCING:							
Sewer Utility Fund		2,412,000	880,000	1,089,000		107,000	336,000
	TOTAL	**2,412,000**	**880,000**	**1,089,000**		**107,000**	**336,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – WPC Plant	Water & Pollution Control	520-3450-489

BAR SCREEN IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This project installs a third bar screen system at the WPC Facility. The bar screens provide physical removal of large debris such as rags, boards, and other large items that can plug downstream treatment units.

COMMENTS
The original treatment plant design included two mechanical bar screens and one manual screen. Approximately ten years ago, the manual screen was replaced with a trial of an in-channel grinder screen. The trial was not successful, and the non-operable in-channel grinder will be replaced with a third mechanical bar screen.

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

FISCAL YEAR PRIORITY			3				
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		90,000	90,000				
Equipment		660,000	660,000				
	TOTAL	**750,000**	**750,000**				
FINANCING:							
Clean Water State Revolving Fund		750,000	750,000				
	TOTAL	**750,000**	**750,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – WPC Plant	Water & Pollution Control	522-3439-489

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

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION
It is necessary to plan for the orderly repair, replacement, and upgrade of the plant and 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 scope of this project has been updated following the completion of the Long-Range Facility Plan in late 2012. Individual projects have been prioritized to gradually increase to the level of re-investment recommended by the study. Projects scheduled in FY 14/15 to FY 16/17 are unchanged from the prior CIP.

FY 14/15	Replace four 1st stage trickling filter pump check valves ($73,000)
FY 15/16	Replace two raw water pump check valves ($38,000) Replace waste activated sludge pump No. 1 ($51,000)
FY 16/17	Trickling filter pump station repainting ($59,000) Trickling filter pump station roof hatch alterations ($114,000) Grease receiving station upgrade ($300,000)
FY 18/19	Replace plant phone/paging system ($98,000)

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

FISCAL YEAR PRIORITY			4	5	4		4
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Construction and Equipment		733,000	73,000	89,000	473,000		98,000
	TOTAL	**733,000**	**73,000**	**89,000**	**473,000**		**98,000**
FINANCING:							
Sewer Utility Fund		733,000	73,000	89,000	473,000		98,000
	TOTAL	**733,000**	**73,000**	**89,000**	**473,000**		**98,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - WPC Plant	Water & Pollution Control	520-3454-489

MECHANICAL AND HVAC REPLACEMENTS **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION
Mechanical air handling systems are critical in a wastewater treatment facility both for life safety of building occupants and for extending the life of equipment. This project replaces the equipment described below with like-kind equipment. Many of the components have already been replaced once during the life of the treatment plant.

COMMENTS
Portions of the Administration Building's HVAC system have failed. The raw water pump station grit alley make-up air unit, solids contact building make-up air unit, and digester heat recovery unit are recommended for replacement based on their age and condition. The cost estimate for the digester heat recovery unit in FY 15/16 has been adjusted to provide an increased contingency due to requirements of the Standard for Fire Protection in Wastewater Treatment and Collection Facilities (NFPA 820).

FY 14/15	$ 300,000	Administration Building HVAC replacement
	$ 75,000	Raw water pump station grit alley make-up air unit
	$ 43,000	Solids contact building make-up air unit
FY 15/16	$ 100,000	Digester heat recovery unit

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

FISCAL YEAR PRIORITY			5	8			
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		62,000	50,000	12,000			
Construction/Equipment		456,000	368,000	88,000			
	TOTAL	**518,000**	**418,000**	**100,000**			
FINANCING:							
Sewer Utility Fund		518,000	418,000	100,000			
	TOTAL	**518,000**	**418,000**	**100,000**			

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – WPC Plant	Water & Pollution Control	520-3452-489

WPC CLARIFIER MAINTENANCE **PROJECT STATUS:** Scope Change Cost Change

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

COMMENTS
Because of the harsh environment they are exposed to, the structural and mechanical components of the facility's eight clarifiers need regular maintenance. Periodic recoating of the protective paint systems prolongs the life of the units. Recent coatings of the concrete walls have failed. Consultation with engineering and coating experts have indicated that the most cost-effective maintenance scheme would be to no longer paint the concrete and address any concrete deterioration on an as-needed basis. Funds are shown in the first two years of the CIP to take the clarifiers down and remove any poorly adhered coatings on the concrete.

The clarifier drives and mechanisms were inspected during 2012. Replacement of the drives is recommended beginning in FY 16/17, with priority given to the intermediate and final clarifiers. No significant structural concerns were identified with the metal mechanisms, and replacement is not believed to be needed at this time. When the drives are replaced, the mechanisms will be re-evaluated and a replacement schedule prepared, if appropriate.

FY 13/14	Remove failed coatings on primary clarifiers ($100,000)
FY 14/15	Remove failed coatings on intermediate/final clarifiers ($200,000)
FY 16/17	Replace intermediate clarifier drives ($200,000)
FY 17/18	Replace final clarifier drives ($210,000)
FY 18/19	Replace two of four primary clarifier drives ($250,000)
FY 19/20	Replace two of four primary clarifier drives ($260,000)

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

FISCAL YEAR PRIORITY		6		3	1	2
	TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:						
Clarifier Coatings	200,000	200,000				
Replace Intermediate Clarifier Drives	200,000			200,000		
Replace Final Clarifier Drives	210,000				210,000	
Replace Primary Clarifier Drives	250,000					250,000
TOTAL	**860,000**	**200,000**		**200,000**	**210,000**	**250,000**
FINANCING:						
Sewer Utility Fund	860,000	200,000		200,000	210,000	250,000
TOTAL	**860,000**	**200,000**		**200,000**	**210,000**	**250,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – WPC Plant	Water & Pollution Control	520-3429-489

WPC ELECTRICAL SYSTEM MAINTENANCE **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
A dependable method of receiving and distributing power throughout the Water Pollution Control Facility campus is essential to provide necessary protection of the environment and public health. A planned program of major preventive maintenance is recommended to ensure the electrical system is reliable. This project also includes planned repair or replacement of electrical components.

COMMENTS
The list of projects is intended to implement a proactive Preventive Maintenance Program. Several of these projects were identified as part of the long-range facility program completed in 2012. Upgrades to the switchgear controllers and replacement of the main plant transformer are underway as a part of the FY 13/14 CIP. Additional projects may be added in future years as equipment ages and additional work becomes necessary.

FY 14/15	$ 96,000	Replace old lamps/fixtures (eliminate T12 fluorescent and mercury vapor lamps)
FY 15/16	$ 116,000	Replace exterior-mounted safety switches
FY 16/17	$ 63,000	Main switchgear preventive maintenance (every five years)
	$ 218,000	Replace main circuit breakers

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

FISCAL YEAR PRIORITY			7	4	7		
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Construction & Equipment		493,000	96,000	116,000	281,000		
	TOTAL	**493,000**	**96,000**	**116,000**	**281,000**		
FINANCING:							
Sewer Utility Fund		493,000	96,000	116,000	281,000		
	TOTAL	**493,000**	**96,000**	**116,000**	**281,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – WPC Plant	Water & Pollution Control	520-3438-489

FLOW EQUALIZATION EXPANSION **PROJECT STATUS:** No 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. From 1999 through 2006, this type of blending only occurred for a total of a few hours. With the heavy rainfall and flooding that took place in 2007 and 2008, the overflow was used for at least a portion of 12 different days. In the record flooding of August 2010, blending occurred for portions of six days. During the drought years of 2011, 2012, and 2013, no blending occurred.

COMMENTS

Based on a capacity evaluation conducted by the City's consultant as a part of the Long-Range Facility Plan, it has been determined that peak wet-weather flows can be appropriately processed through a combination of:

1. Operational modifications at the treatment plant;
2. Removal of 25% of the Inflow and Infiltration (I/I) reaching the WPC Facility through the Sanitary Sewer Rehabilitation Project; and
3. A 6-million gallon expansion to the equalization basin capacity.

The proposed project would add an additional 6.0 million gallons, increasing the plant's effective storage capacity to 10.4 million gallons.

LOCATION

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

FISCAL YEAR PRIORITY 1

		TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19
COST:							
Engineering		90,000		90,000			
Construction		985,000		985,000			
	TOTAL	**1,075,000**		**1,075,000**			
FINANCING:							
Clean Water State Revolving Fund		1,075,000		1,075,000			
	TOTAL	**1,075,000**		**1,075,000**			

PROGRAM - ACTIVITY: Utilities - WPC Plant

DEPARTMENT: Water and Pollution Control

ACCOUNT NO.

SECONDARY TREATMENT IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

The secondary treatment unit processes used at the Ames Water Pollution Control Facility consist of biological systems that reduce contaminants left in the wastewater following primary treatment. The Ames WPC Facility uses two different secondary processes; namely, an attached growth process (trickling filters) and a suspended growth process (solids contact). This project provides ongoing major maintenance to these two secondary treatment processes.

COMMENTS

The Long-Range Facility Plan completed in FY 12/13 concluded that the most cost-effective treatment scheme for complying with the Iowa Nutrient Reduction Strategy will continue to make use of the existing solids contact basins, making the continued reinvestment in maintaining the existing infrastructure appropriate. The anticipated project schedule and budget are as follows:

FY 15/16	$ 250,000	Rehabilitation of solids contact screw pumps
FY 16/17	$ 75,000	Replace solids contact gate valves and diffusers

LOCATION

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

FISCAL YEAR PRIORITY				3	5		
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Construction & Equipment		325,000		250,000	75,000		
	TOTAL	**325,000**		**250,000**	**75,000**		
FINANCING:							
Sewer Utility Fund		325,000		250,000	75,000		
	TOTAL	**325,000**		**250,000**	**75,000**		

PROGRAM - ACTIVITY: Utilities – WPC Plant

DEPARTMENT: Water & Pollution Control

ACCOUNT NO.

LIFT STATION IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This project includes a series of upgrades to the wastewater lift stations used to pump sewage from low-lying areas that cannot flow by gravity to the Water Pollution Control Facility.

COMMENTS
Major modifications to the South Dayton Avenue Lift Station and a replacement of the Orchard Drive Lift Station are underway in FY 13/14. This project will perform a similar rebuild of the Northwood Lift Station in FY 15/16.

LOCATION
2800 Block of Duff Avenue

FISCAL YEAR PRIORITY				6			
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		19,000		19,000			
Construction		193,000		193,000			
	TOTAL	**212,000**		**212,000**			
FINANCING:							
Sewer Fund		212,000		212,000			
	TOTAL	**212,000**		**212,000**			

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

STRUCTURAL REHABILITATION **PROJECT STATUS:** Scope Change Cost 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 below, 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 in generally good condition; however, the facility is about 25 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. Projects shown in FY 14/15 to FY 17/18 are unchanged from the prior CIP; the cost and scope change comes from the new projects shown in FY 18/19.

FY 15/16	$ 583,000	Repair precast and cast-in-place concrete deterioration (all except trickling filters) ($250,000); repair solids contact splitter box slabs and sidewalks ($333,000)
FY 16/17	$ 562,000	Joint repairs at sludge pumping building ($46,000); repair perimeter curb at base of digesters ($172,000); clean and seal precast and cast-in-place concrete ($344,000)
FY 17/18	$ 445,000	Repair drainage and moisture issues around multiple structures ($445,000)
FY 18/19	$ 652,000	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)

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

FISCAL YEAR PRIORITY				7	6	4	3
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		269,000		70,000	68,000	53,000	78,000
Construction		1,973,000		513,000	494,000	392,000	574,000
	TOTAL	**2,242,000**		**583,000**	**562,000**	**445,000**	**652,000**
FINANCING:							
Sewer Utility Fund		2,242,000		583,000	562,000	445,000	652,000
	TOTAL	**2,242,000**		**583,000**	**562,000**	**445,000**	**652,000**

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

NUTRIENT REDUCTION MODIFICATIONS **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

In early 2013, the Iowa Department of Natural Resources 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 NPDES permit renewal cycle for each facility. The next NPDES permit for Ames will be issued in 2015. Within two years of that permit reissuance, 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 (2020 to 2025).

FY 2016/17	$ 516,000	Preliminary Engineering Report
FY 2019/20	4,220,000	Final Design
FY 2020/21 – 2022/23	30,160,000	Construction
Total	$ 34,896,000	

Construction of the nutrient removal facility will also achieve compliance with an anticipated reduction in ammonia limits, and would also eliminate the need for a substantial rehabilitation of the trickling filters. Should the nutrient standards be rescinded, then the Simultaneous Nitrification/Denitrification treatment project could be replaced with an Integrated Fixed-film Activated Sludge (IFAS) modification to the solids contact units to achieve the lower ammonia limits ($3,160,000) and the trickling filter rehabilitation ($8,130,000).

LOCATION

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

FISCAL YEAR PRIORITY					1		
	TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:						
Engineering	516,000			516,000		
TOTAL	**516,000**			**516,000**		
FINANCING:						
Sewer Fund	516,000			516,000		
TOTAL	**516,000**			**516,000**		

PROGRAM - ACTIVITY: Utilities – WPC Plant

DEPARTMENT: Water & Pollution Control

ACCOUNT NO.

COGENERATION SYSTEM MAINTENANCE **PROJECT STATUS:** No 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 "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. The engines need regular overhauls approximately every 25,000 hours of run time. MG #1 is too small to be used by itself for electrical generation. Staff has therefore decided to replace this engine with a boiler system, which will be less maintenance intensive. The boiler will be used as a standby method to warm the digesters while the remaining engines will provide electrical generation.

The anticipated schedule of activities is as shown below.

FY 16/17	$ 290,000	Replace MG #1 with boiler system
FY 17/18	$ 235,000	Overhaul MG #3

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

FISCAL YEAR PRIORITY					2	2	
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Contracted Repair/Replace		525,000			290,000	235,000	
	TOTAL	**525,000**			**290,000**	**235,000**	
FINANCING:							
Sewer Utility Fund		525,000			290,000	235,000	
	TOTAL	**525,000**			**290,000**	**235,000**	

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

UTILITIES - ELECTRIC PRODUCTION

	PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19	PAGE
EXPENDITURES:								
Electric Services:								
6	Demand Side Management Programs	5,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	71
Transmission:								
5	69 kV Transmission Reconstruction	2,060,000	250,000	250,000	520,000	520,000	520,000	70
11	Top-O-Hollow Substation Expansion	2,075,000			125,000	1,950,000		76
18	Ontario Substation 69 kV Breaker Addition	1,150,000				150,000	1,000,000	83
Distribution:								
7	Mortensen Road Feeder Reconstruction	550,000	50,000	500,000				72
9	Electric Distribution Roof Replacement	350,000	350,000					74
16	Dayton Ave Substation Switchgear Upgrades	1,150,000				200,000	950,000	81
20	Mortensen Road Transformer Protection	100,000					100,000	85
Power Plant Capital:								
1	Units #7 and #8 Fuel Conversion	36,880,000	16,000,000	20,880,000				66
2	Natural Gas Transport Pipe to Power Plant	17,000,000	7,000,000	10,000,000				67
8	Continuous Emissions Monitoring System	550,000	50,000	500,000				73
15	Power Plant Relay/Control Replacement	425,000				175,000	250,000	80
19	Turbine Controls Upgrade	450,000					450,000	84

UTILITIES - ELECTRIC PRODUCTION, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19	PAGE
EXPENDITURES, continued:							
Power Plant Maintenance:							
3 Gas Turbine #1 Engine Replacement	1,500,000	1,500,000					68
4 RDF Bin Work	250,000	250,000					69
10 Cooling Tower Repairs	1,620,000		1,220,000	400,000			75
12 Feedwater Heater Tube Replacement	980,000			980,000			77
13 Unit #7 Turbine Generator 5-Year Overhaul	1,250,000				1,250,000		78
14 Unit #7 Boiler Tube Repair	4,000,000				150,000	3,850,000	79
17 Power Plant Roof Replacement	550,000				550,000		82
Total Expenditures	**77,890,000**	**26,450,000**	**34,350,000**	**3,025,000**	**5,945,000**	**8,120,000**	
REVENUES:							
Bonds:							
Electric Revenue Bonds	53,880,000	23,000,000	30,880,000				
City:							
Electric Utility Fund	23,141,800	3,382,500	3,177,500	2,927,850	5,707,350	7,946,600	
Other:							
Iowa State University	868,200	67,500	292,500	97,150	237,650	173,400	
Total Revenues	**77,890,000**	**26,450,000**	**34,350,000**	**3,025,000**	**5,945,000**	**8,120,000**	

UNIT #7 AND #8 FUEL CONVERSION **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

This project is required to meet future Environmental Protection Agency (EPA) air quality requirements for electric generating power plants. The City Council approved the conversion of the Ames Power Plant from coal-fired operation to natural gas-fired operation. Work will include:

- Hiring an engineering firm to develop bid specifications for the conversion of the boilers for units #7 and #8 to operate on natural gas as the primary fuel source.
- Hiring a general contractor to provide the equipment and installation of the necessary equipment.

The cost estimates below are from the Black & Veatch "Energy Resource Options Study", dated February 2013. Completion by April 2016 is necessary in order to meet the new EPA requirements.

LOCATION

Power Plant, 200 East 5th Street

FISCAL YEAR PRIORITY			1	1			
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		2,000,000	2,000,000				
Equipment & Installation		34,880,000	14,000,000	20,880,000			
	TOTAL	**36,880,000**	**16,000,000**	**20,880,000**			
FINANCING:							
Bonds - Electric Utility		36,880,000	16,000,000	20,880,000			
	TOTAL	**36,880,000**	**16,000,000**	**20,880,000**			

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Production	Electric	530-4807-489

NATURAL GAS TRANSPORT PIPE TO POWER PLANT **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
This project is required in conjunction with the Ames Power Plant conversion from coal-fired operation to natural gas-fired operation.

Natural gas transportation capability in the Ames area is not sufficient to fuel the City's Power Plant boilers. Additional pipeline infrastructure is needed from Northern Natural Gas's major pipeline near Story City, Iowa to the Ames area. The estimated costs below include permitting, route determination, right-of-way acquisition, pipeline engineering, fabrication, and installation. These costs do not include the purchase of the natural gas itself, maintenance of the line, or the transport fees charged by Northern Natural. The line must be in service and delivering gas no later than April 2016 in order for the Power Plant to meet new Environmental Protection Agency clean air standards.

Electric Services staff is also working with Alliant Energy, the local natural gas provider in the area, to see if natural gas transport services can be contracted at a comparable cost.

LOCATION
From Story City – Ames Plant (route to be determined)

FISCAL YEAR PRIORITY			2	2			
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		500,000	500,000				
Construction		16,500,000	6,500,000	10,000,000			
	TOTAL	**17,000,000**	**7,000,000**	**10,000,000**			
FINANCING:							
Bonds - Electric Utility		17,000,000	7,000,000	10,000,000			
	TOTAL	**17,000,000**	**7,000,000**	**10,000,000**			

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Production	Electric	530-4808-489

GAS TURBINE #1 ENGINE REPLACEMENT AND GENERATOR/ TURBINE INSPECTION AND OVERHAUL

PROJECT STATUS: New

DESCRIPTION/JUSTIFICATION

Gas Turbine #1 (GT-1) was built in 1972. The unit consists of three separate pieces of equipment: an engine, a free turbine, and a generator. In 2013, the engine portion suffered a catastrophic failure. Insurance will cover the cost above the $350,000 deductible to replace the engine with a rebuilt one. Sound engineering practices require inspection of the generator and turbine prior to the installation of the new engine to ensure no damage was done to these sections and to restore performance. The amount on the CIP reflects estimated cost net of insurance claim proceeds.

LOCATION

Turbine site, 2200 Pullman Street

FISCAL YEAR PRIORITY			3				
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Insurance deductible		350,000	350,000				
Other parts and labor – engine		150,000	150,000				
Inspection labor and parts – generator		500,000	500,000				
Inspection labor and parts – turbine		500,000	500,000				
	TOTAL	**1,500,000**	**1,500,000**				
FINANCING:							
Electric Utility Fund		1,500,000	1,500,000				
	TOTAL	**1,500,000**	**1,500,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Production	Electric	530-4827-489

RDF BIN WORK **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION
This project is to repair or replace a number of major components (traverse augers, metering bins, out-feed conveyors, structure steel and receiving bin walls) on the refuse derived fuel (RDF) bin. The entire structure of the RDF bin is composed of Cor-ten steel. This steel is used where there is no protective covering to be applied and it rusts to create a corrosion shield for itself. Because the RDF material sticks to the exposed steel and then stays wet due to the weather or humidity created by the condensation in the bin, the Cor-ten simply continues to rust because it never dries out. The bin is twelve years old and requires almost constant attention now. Past experience with the old RDF bin indicates that after fifteen years, the steel of the bin will require repair or replacement. Heavy corrosion on the firewall, the out-feed conveyors, and the traverse auger rails has already been addressed. Some major work is needed to replace the receiving bin walls and the roof steel. Both of these areas are currently being patched.

COMMENTS
Staff expects the frequency of these repairs to increase throughout the current year. Since it is difficult to coordinate outages when there isn't conflict with the Resource Recovery Plant, staff plans to have materials on hand and scheduling repairs as the opportunity presents itself.

LOCATION
Power Plant, 200 East 5th Street

FISCAL YEAR PRIORITY			4				
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
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:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities - Electric Production	Electric	530-4809-489

69KV TRANSMISSION RECONSTRUCTION **PROJECT STATUS:** Cost Decrease

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 17%. Cost decrease is due to prioritization of Power Plant natural gas conversion projects.

LOCATION

Various

FISCAL YEAR PRIORITY		5	6	2	5	6
	TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:						
Engineering	310,000	50,000	50,000	70,000	70,000	70,000
Construction	1,750,000	200,000	200,000	450,000	450,000	450,000
TOTAL	**2,060,000**	**250,000**	**250,000**	**520,000**	**520,000**	**520,000**
FINANCING:						
Electric Utility Fund	1,709,800	207,500	207,500	431,600	431,600	431,600
Iowa State University	350,200	42,500	42,500	88,400	88,400	88,400
TOTAL	**2,060,000**	**250,000**	**250,000**	**520,000**	**520,000**	**520,000**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Extension Improvements	Electric	530-4856-489

DEMAND SIDE MANAGEMENT (DSM)
ENERGY CONSERVATION PROGRAMS

PROJECT STATUS: No Change

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

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 under consideration are:

- Add rebate for air conditioner tune up to the High Efficiency Air Conditioner Rebate program
- Add a 30% of cost rebate for LED to Residential and Commercial Efficient Lighting Rebate programs
- Removal of compact fluorescent lamps (CFL) from Residential and Commercial Efficient Lighting Rebate programs

New Load Management programs under consideration are:

- Interruptible rates for industrial customers
- Time of use rates

LOCATION

Electric Administration

FISCAL YEAR PRIORITY		6	5	5	6	5
	TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:						
Program Development and Administration	5,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
TOTAL	**5,000,000**	**1,000,000**	**1,000,000**	**1,000,000**	**1,000,000**	**1,000,000**
FINANCING:						
Electric Utility Fund	5,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
TOTAL	**5,000,000**	**1,000,000**	**1,000,000**	**1,000,000**	**1,000,000**	**1,000,000**

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

MORTENSEN ROAD UNDERGROUND AND OVERHEAD FEEDER RECONSTRUCTION

PROJECT STATUS: New

DESCRIPTION/JUSTIFICATION

At the request of Iowa State University, this project will relocate a portion of the overhead feeders from the ISU athletic fields to State Street and extend an overhead feeder from Mortensen Road Substation north along State Street to serve future development planned for this area. Included in this project is the reconstruction of approximately one-half mile of deteriorated overhead 13.8kV distribution line on Mortensen Road between State Avenue and Welch Avenue. Direct-buried 500 kcmil aluminum feeder cables will be replaced with 750 kcmil copper feeder cables in duct and will include the addition of tie switches for added capacity and reliability to areas served by Mortensen Road substation along Mortensen Road, South Dakota, and State Avenue. Both ISU and the City customers will benefit from this project.

LOCATION

3040 Mortensen Road

FISCAL YEAR PRIORITY			7	3			
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		50,000	50,000				
Construction		500,000		500,000			
	TOTAL	**550,000**	**50,000**	**500,000**			
FINANCING:							
Electric Utility Fund		275,000	25,000	250,000			
Iowa State University		275,000	25,000	250,000			
	TOTAL	**550,000**	**50,000**	**500,000**			

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Extension Improvements	Electric	530-4858-489

CONTINUOUS EMISSIONS MONITORING SYSTEM REPLACEMENT

PROJECT STATUS: Cost Change Delayed

DESCRIPTION/JUSTIFICATION

This capital improvement project is for replacement of the continuous emissions monitoring systems on Units #7 and #8 boilers. Continuous emissions monitoring systems provide relative data on the makeup of the plant's emissions. Both systems have key components that are 20+ years old and are no longer supported by the manufacturer. Having a very limited supply of parts and support available will create reliability issues in the future. Due to a battery of testing required, replacement of key components individually can present many logistical issues as well as considerable cost increases due to testing needing to be repeated with each component replacement. With this in mind as well as a need for room to add analytical instrumentation to meet new EPA monitoring requirements in the future, a complete system change-out is recommended.

LOCATION

Power Plant, 200 East 5th Street

FISCAL YEAR PRIORITY		8	4			
	TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:						
Engineering	50,000	50,000				
Materials and Installation	500,000		500,000			
TOTAL	**550,000**	**50,000**	**500,000**			
FINANCING:						
Electric Utility Fund	550,000	50,000	500,000			
TOTAL	**550,000**	**50,000**	**500,000**			

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Production	Electric	530-4861-489

ELECTRIC DISTRIBUTION ROOF REPLACEMENT **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
It has been 17 years since the roof on the Electric Distribution Building was last replaced. At that time, the new roof had a warranty of 15 years. The warehouse area is now experiencing leaking. Staff has been patching the roof to address leaks, but a complete replacement is required to protect equipment and extend the life of the building.

LOCATION
Electric Distribution Building, 2208 Edison Street

FISCAL YEAR PRIORITY			9				
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering and Installation		350,000	350,000				
	TOTAL	**350,000**	**350,000**				
FINANCING:							
Electric Utility Fund		350,000	350,000				
	TOTAL	**350,000**	**350,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Production	Electric	530-4811-489

COOLING TOWER REPAIRS **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION

The #7 and #8 cooling towers are in need of repair. Their proper operation is critical to the efficiency of the Power Plant. These towers are outdoor evaporative cross flow towers that are subject to severe environmental operating conditions. The #7 tower had a major rework in the late 1980s when most of the structure, fill, louvers and drift eliminators were replaced. The #8 tower has had minor repairs on several occasions during the last ten years, including limited structure repairs and fill and drift eliminator replacements.

FY 2012/13	Unit #7 – Engineering (estimated)	50,000
FY 2015/16	Unit #8 Cooling Tower – Materials and Labor (estimated)	$ 1,220,000
FY 2016/17	Unit #7 – Materials and Labor	400,000
		$ 1,670,000

COMMENTS

The #8 louvers have deteriorated and need to be replaced. They are made of pressed asbestos which increases the cost of construction and disposal. Due to operating requirements of the Power Plant, it is difficult to schedule these units for repairs because the plant can't be operated without them. Normally these repairs are made during the scheduled five-year turbine generator overhauls, but the #8 tower needs some repairs before that. The louvers will be replaced and some structural repairs on #8 will be made during the planned outage. The #7 tower needs major structural repair in the fan mounting areas and replacement of the fan drive shafts. The fan hubs, blades and shrouds are 42 years old and need to be replaced. The fan deck, hot water basin and its support also need to be replaced.

LOCATION

Power Plant, 200 East 5th Street

FISCAL YEAR PRIORITY				7	1		
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Materials and Labor		1,620,000		1,220,000	400,000		
	TOTAL	**1,620,000**		**1,220,000**	**400,000**		
FINANCING:							
Electric Utility Fund		1,620,000		1,220,000	400,000		
	TOTAL	**1,620,000**		**1,220,000**	**400,000**		

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Production	Electric	530-4840-489

TOP-O-HOLLOW SUBSTATION EXPANSION AND BREAKER ADDITION

PROJECT STATUS: Delayed Cost Increase

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 obsolete air-blast breakers and electromechanical relays with vacuum interrupter breakers and microprocessor based relaying equipment, and expand 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, lower the arc energy levels for improved worker safety, and provide improved protection to electrical assets from fault damage. The land for this project has been previously purchased 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. The budget has been increased to include the addition of a padmounted capacitor bank for power factor correction and replacement of undersized feeder conduits and cables.

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 a conservative 7% of the total project cost (17% 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 2013/14	Engineering	250,000
FY 2016/17	Engineering	125,000
FY 2017/18	Construction	1,950,000
	Total	$ 2,349,883

LOCATION

Top-O-Hollow Road west of Calhoun Avenue

FISCAL YEAR PRIORITY					3	1	
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		125,000			125,000		
Construction		1,950,000				1,950,000	
	TOTAL	**2,075,000**			**125,000**	**1,950,000**	
FINANCING:							
Electric Utility Fund		1,929,750			116,250	1,813,500	
Iowa State University		145,250			8,750	136,500	
	TOTAL	**2,075,000**			**125,000**	**1,950,000**	

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Utilities – Electric Extension/Improvements	Electric	530-4882-489

FEEDWATER HEATER TUBE REPLACEMENT **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION

Feedwater heaters are devices that use extraction steam from the turbine to preheat the feedwater prior to returning to the boiler. This increases the efficiency of the entire steam generating system. Two high pressure units were installed in 1982 on Unit #8 (Numbers 84 and 85), and in 1987 on Unit #7 (Numbers 74 and 75). Generally, feedwater heaters can lose up to twenty percent of their tubes and maintain an adequate thermal transfer capability for normal operations. All the feedwater heaters have surpassed this number of plugged tubes, requiring their replacement.

COMMENTS

Replacement of 84 and 85 feedwater heaters was completed in FY 12/13. The replacement of Unit #7's feedwater heaters will be subject to regulatory approval.

FY 2011/12	Engineering	$ 23,006
FY 2012/13	Unit #8 materials and labor	996,994
FY 2016/17	Unit #7 materials and labor	980,000
	Total	$ 2,000,000

LOCATION

Power Plant, 200 East 5th Street

FISCAL YEAR PRIORITY 4

	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19
COST:						
Labor and Equipment	980,000			980,000		
TOTAL	**980,000**			**980,000**		
FINANCING:						
Electric Utility Fund	980,000			980,000		
TOTAL	**980,000**			**980,000**		

PROGRAM - ACTIVITY: Utilities – Electric Production

DEPARTMENT: Electric

ACCOUNT NO.

UNIT #7 TURBINE GENERATOR FIVE-YEAR OVERHAUL **PROJECT STATUS:** Delayed Cost Increase

DESCRIPTION/JUSTIFICATION
The Unit #7 turbine generator will be disassembled and necessary repairs made after 20,000 hours of operation. An inspection was done in 2007 and will be due again in FY 16/17, based on current levels of operation of the unit.

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 occur as problems are identified during the inspection. The budget covers the inspection process and normal repair/replacement work that should be expected after 20,000 hours of operation. Cost increase is due to the experience with the Unit #8 overhaul costs.

LOCATION
Power Plant, 200 East 5th Street

FISCAL YEAR PRIORITY						2	
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Construction		1,250,000				1,250,000	
	TOTAL	**1,250,000**				**1,250,000**	
FINANCING:							
Electric Utility Fund		1,250,000				1,250,000	
	TOTAL	**1,250,000**				**1,250,000**	

PROGRAM - ACTIVITY: Utilities – Electric Production
DEPARTMENT: Electric
ACCOUNT NO.

UNIT #7 BOILER TUBE REPAIR **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION

The Unit #7 boiler is forty 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. The bottom throat of the boiler also needs to be enlarged to allow for an increased rate of refuse derived fuel (RDF) for burning.

COMMENTS

FY 2014/15	Engineering	$ 150,000
FY 2017/18	Material and labor for installation	3,850,000
		$ 4,000,000

LOCATION

Power Plant, 200 East 5th Street

FISCAL YEAR PRIORITY						3	1
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		150,000				150,000	
Materials and Installation		3,850,000					3,850,000
	TOTAL	**4,000,000**				**150,000**	**3,850,000**
FINANCING:							
Electric Utility Fund		4,000,000					3,850,000
						150,000	
	TOTAL	**4,000,000**				**150,000**	**3,850,000**

PROGRAM - ACTIVITY: Utilities – Electric Production

DEPARTMENT: Electric

ACCOUNT NO.

POWER PLANT RELAY/CONTROL REPLACEMENT **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

This project will replace existing electro-mechanical 13.8kV feeder and bus differential relays in the Power Plant. The existing relays are obsolete electro-mechanical devices which are becoming difficult to maintain/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.

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

LOCATION

Ames Power Plant at 5th Street/Carroll Avenue

FISCAL YEAR PRIORITY						4	8
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		175,000				175,000	
Construction		250,000					250,000
	TOTAL	**425,000**				**175,000**	**250,000**
FINANCING:							
Electric Utility Fund		425,000				175,000	250,000
	TOTAL	**425,000**				**175,000**	**250,000**

PROGRAM – ACTIVITY: Utilities – Electric Extension Improvements

DEPARTMENT: Electric

ACCOUNT NO.

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

DESCRIPTION/JUSTIFICATION

This project will upgrade two existing 13.8 kV distribution metal clad switchgear lineups at 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 having 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.

Cost increase is due to delay of this project.

LOCATION

Dayton Ave Substation, Pullman Street

FISCAL YEAR PRIORITY						7	3
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
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 Extension Improvements

DEPARTMENT: Electric

ACCOUNT NO.

POWER PLANT ROOF REPLACEMENT PHASE III **PROJECT STATUS:** Delayed Cost Increase

DESCRIPTION/JUSTIFICATION

The Power Plant is executing a multi-year roof replacement and repair plan to address roof maintenance. Phases I and II of the plan were completed in FY 08/09 and FY 09/10 and addressed the roof sections over the turbine room and auxiliary bay. These phases were included in the operating budget of the Power Plant. This project is Phase III of the plan and will replace the roof sections over the boiler equipment. Leaking roofs can cause equipment failure if water penetrates electrical cabinet enclosures.

Cost increase is due to delay of this project.

LOCATION

Power Plant, 200 East 5th Street

FISCAL YEAR PRIORITY						8	
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Materials and Labor		550,000				550,000	
	TOTAL	**550,000**				**550,000**	
FINANCING:							
Electric Utility Fund		550,000				550,000	
	TOTAL	**550,000**				**550,000**	

PROGRAM - ACTIVITY: Utilities – Electric Production

DEPARTMENT: Electric

ACCOUNT NO.

ONTARIO SUBSTATION 69KV BREAKER ADDITION **PROJECT STATUS:** Delayed Cost Change

DESCRIPTION/JUSTIFICATION

This project will add 69kV line and transformer breakers, a main breaker upgrade to the 13.8kV switchgear, and all new 13.8 kV and 69kV relaying and controls to Ontario Road Substation.

The addition of 69kV line and transformer breakers, 13.8kV main breaker, and relaying 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 8.5% (based on a 17% share of 69kV facilities, which are estimated to be 50% of the cost of this project).

LOCATION

Delaware Avenue and Utah Drive

FISCAL YEAR PRIORITY						9	4
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		150,000				150,000	
Construction		1,000,000					1,000,000
	TOTAL	**1,150,000**				**150,000**	**1,000,000**
FINANCING:							
Electric Utility Fund		1,052,250				137,250	915,000
Iowa State University		97,750				12,750	85,000
	TOTAL	**1,150,000**				**150,000**	**1,000,000**

PROGRAM – ACTIVITY: Utilities – Electric Extension Improvements

DEPARTMENT: Electric

ACCOUNT NO.

TURBINE CONTROLS UPGRADE **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION
This project converts the supervisory controls on Units #7 and #8 turbine generators from electric-mechanical to electronic.

COMMENTS
This conversion will enable more effective scheduling of the units. The electric-mechanical systems are worn and in need of repair. Replacement of these components is more cost-effective than attempting to repair them, and will result in more effective operation of the units.

FY 18/19	Unit #8		$ 450,000
FY 19/20	Unit #7		200,000
		Total	$ 650,000

LOCATION
Power Plant, 200 East 5th Street

FISCAL YEAR PRIORITY							2
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Construction		450,000					450,000
	TOTAL	**450,000**					**450,000**
FINANCING:							
Electric Utility Fund		450,000					450,000
	TOTAL	**450,000**					**450,000**

PROGRAM - ACTIVITY: Utilities – Electric Production
DEPARTMENT: Electric
ACCOUNT NO.

MORTENSEN ROAD SUBSTATION 69KV TRANSFORMER PROTECTION

PROJECT STATUS: New

DESCRIPTION/JUSTIFICATION

This budget item is for the addition of a 69KV breaker, relays and controls to replace the fuse protection on the distribution transformer. Use of breakers for transformer protection is consistent with recommended engineering practices 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.

FY 2018/19	Engineering	$ 100,000
FY 2019/20	Construction	350,000
	Total	$ 450,000

LOCATION

Mortensen Road Substation located at Mortensen Road and State Avenue

FISCAL YEAR PRIORITY 7

	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19
COST:						
Engineering	100,000					100,000
TOTAL	**100,000**					**100,000**
FINANCING:						
Electric Utility Fund	100,000					100,000
TOTAL	**100,000**					**100,000**

PROGRAM - ACTIVITY: Utilities – Electric Extension Improvements

DEPARTMENT: Electric

ACCOUNT NO.

The Cyclone Bicycle Club members posed with their bicycles outside Morrill Hall on the campus of Iowa State University in 1892.

TRANSPORTATION

AMES JUNIOR HIGH SCHOOL

The older part of the building (the 2/3 shown at the left) was built in 1881 as the first brick schoolhouse in Ames and served as the only school for all Ames children in the 1880s and 1890s. The part to the right was added and provided four additional class-rooms. This building stood on the west side of Clark Avenue between Fifth and Sixth streets.

TRANSPORTATION - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19	PAGE
EXPENDITURES:							
Streets/Engineering	57,071,500	11,923,000	6,350,500	12,037,000	13,961,000	12,800,000	89
Streets/Maintenance	5,435,000	545,000	3,750,000	480,000	330,000	330,000	103
Transit	5,103,340	2,752,170	644,170	532,000	527,000	648,000	112
Airport	4,358,000		3,200,000	170,000	200,000	788,000	118
Total Expenditures	**71,967,840**	**15,220,170**	**13,944,670**	**13,219,000**	**15,018,000**	**14,566,000**	
REVENUES:							
Bonds:							
G.O. Bonds	37,262,500	9,240,000	6,622,500	6,515,000	6,185,000	8,700,000	
City:							
Road Use Tax	5,051,000	1,195,000	1,120,000	1,000,000	836,000	900,000	
Local Option Sales Tax	500,000	100,000	100,000	100,000	100,000	100,000	
Water Utility Fund	200,000	40,000	40,000	40,000	40,000	40,000	
Sewer Utility Fund	200,000	40,000	40,000	40,000	40,000	40,000	
Electric Utility Fund	821,000	171,000	250,000	150,000	200,000	50,000	
Transit Fund	2,913,570	805,770	511,200	495,200	490,200	611,200	
Airport Construction Fund	208,800			20,000	110,000	78,800	
Sub-Total City Funds	9,894,370	2,351,770	2,061,200	1,845,200	1,816,200	1,820,000	

TRANSPORTATION - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19
REVENUES, continued:						
Other:						
MPO/STP Funds	7,944,000	1,292,000	1,060,000	1,992,000	1,300,000	2,300,000
Federal/State Grants	12,444,000	1,226,800	1,886,800	2,666,800	5,626,800	1,036,800
Iowa State University	892,000		867,000	25,000		
Iowa State University GSB	192,340	96,170	96,170			
Ames Community School District	25,000			25,000		
Private Funds	901,000		901,000			
Federal Transit Administration	1,013,430	1,013,430				
Federal Aviation Administration	1,399,200		450,000	150,000	90,000	709,200
Sub-Total Other Funds	24,810,970	3,628,400	5,260,970	4,858,800	7,016,800	4,046,000
Total Revenues	**71,967,840**	**15,220,170**	**13,944,670**	**13,219,000**	**15,018,000**	**14,566,000**

TRANSPORTATION - STREET ENGINEERING

	PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19	PAGE
EXPENDITURES:								
1	Grant Avenue Pavement Improvements	2,825,000	2,825,000					91
2	CyRide Route Pavement Improvements	3,699,000	1,832,000		1,867,000			92
3	Collector Street Pavement Improvements	4,415,000	1,240,000	800,000	950,000	625,000	800,000	93
4	Concrete Pavement Improvements	7,296,500	1,726,000	870,500	1,085,000	865,000	2,750,000	94
5	Downtown Street Pavement Improvements	2,485,000	900,000	800,000	250,000	285,000	250,000	95
6	Asphalt Street Pavement Improvements	5,090,000	1,300,000		840,000	1,200,000	1,750,000	96
7	Mortensen Road Improvements	500,000	500,000					97
8	Arterial Street Pavement Improvements	3,375,000	750,000	1,580,000	345,000	700,000		98
9	Seal Coat Pavement Improvements	6,036,000	650,000	1,000,000	1,550,000	1,086,000	1,750,000	99
10	Right-of-Way Restoration	1,000,000	200,000	200,000	200,000	200,000	200,000	100
11	Grand Avenue Extension	17,450,000		1,000,000	4,650,000	6,500,000	5,300,000	101
12	Cherry Avenue Extension	2,900,000		100,000	300,000	2,500,000		102
	Total Expenditures	**57,071,500**	**11,923,000**	**6,350,500**	**12,037,000**	**13,961,000**	**12,800,000**	

TRANSPORTATION - STREET ENGINEERING, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19
REVENUES:						
Bonds:						
G.O. Bonds	33,900,500	9,060,000	3,440,500	6,515,000	6,185,000	8,700,000
City:						
Road Use Tax	3,696,000	930,000	820,000	670,000	606,000	670,000
Water Utility Fund	200,000	40,000	40,000	40,000	40,000	40,000
Storm Sewer Utility Fund	200,000	40,000	40,000	40,000	40,000	40,000
Electric Utility Fund	821,000	171,000	250,000	150,000	200,000	50,000
Sub-Total City Funds	4,917,000	1,181,000	1,150,000	900,000	886,000	800,000
Other:						
MPO/STP Funds	7,944,000	1,292,000	1,060,000	1,992,000	1,300,000	2,300,000
Federal/State Grants	10,310,000	390,000	700,000	2,630,000	5,590,000	1,000,000
Sub-Total Other Funds	18,254,000	1,682,000	1,760,000	4,622,000	6,890,000	3,300,000
Total Revenues	**57,071,500**	**11,923,000**	**6,350,500**	**12,037,000**	**13,961,000**	**12,800,000**

GRANT AVENUE (HYDE AVENUE) PAVEMENT IMPROVEMENTS

PROJECT STATUS: New

DESCRIPTION/JUSTIFICATION

This project includes paving Grant Avenue to serve residential development sites up to 190th Street in the newer established allowable growth area. The addition of the project is in response to an annexation request from the owners of the Quarry Estates Subdivision.

Cost-sharing arrangements for this road were previously negotiated between the three abutting developers and the City, which accepted responsibility for the road adjacent to Ada Hayden Heritage Park. This cost sharing was established at 17% for Quarry Estates, 37% for Rose Prairie, and 23% each for Hunziker Land Development (and Hunziker Apartments) and the City. Under this arrangement, Rose Prairie accepted responsibility for costs of constructing the street in front of the Sturges property just south of Rose Prairie. Further, the City, Hunziker and Quarry Estates have tentatively accepted responsibility for constructing the street in front of six other residential properties along the road. Design of the roadway was completed in 2013/14.

LOCATION

2014/15 Grant Avenue: Hyde Avenue (in Bloomington Heights subdivision) north to 190th Avenue (construction)

FISCAL YEAR PRIORITY		1				
	TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:						
Engineering	437,320	437,320				
Construction	2,387,680	2,387,680				
TOTAL	**2,825,000**	**2,825,000**				
FINANCING:						
G.O. Bonds	649,750	649,750				
G.O. Bonds (abated by special assessment)	2,175,250	2,175,250				
TOTAL	**2,825,000**	**2,825,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Streets Engineering	Public Works	375-8124-439

CYRIDE ROUTE PAVEMENT IMPROVEMENTS **PROJECT STATUS:** Cost Decrease

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 projected traffic volumes.

COMMENTS

2014/15	24th Street (Union Pacific Railroad (UPRR) tracks to Northwestern Avenue); and Bloomington Road (Eisenhower Avenue to west 500 feet)
2015/16	No project
2016/17	South 3rd Street (Grand Avenue to South Duff Avenue); and South 4th Street (Squaw Creek to Grand Avenue)
2017/18	No project
2018/19	No project

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

The cost decrease is due to updated electric cost estimates for the 2014/15 project.

FISCAL YEAR PRIORITY			2		1		
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		730,000	365,000		365,000		
Construction		2,904,000	1,452,000		1,452,000		
Electric		65,000	15,000		50,000		
	TOTAL	**3,699,000**	**1,832,000**		**1,867,000**		
FINANCING:							
G. O. Bonds		1,050,000	525,000		525,000		
Electric Utility Fund		65,000	15,000		50,000		
MPO/STP Funds		2,584,000	1,292,000		1,292,000		
	TOTAL	**3,699,000**	**1,832,000**		**1,867,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Streets Engineering	Public Works	320-8129-439
		375-8129-439
		530-8129-439

COLLECTOR STREET PAVEMENT IMPROVEMENTS **PROJECT STATUS:** Cost Decrease

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

2014/15	Woodland Street (West Street to Forest Glen); and West Street (Hillcrest Avenue to Sheldon Avenue)
2015/16	Meadowlane Avenue (Carr Drive to East 20th Street)
2016/17	Hoover Avenue (24th Street to 30th Street)
2017/18	East 20th Street (Duff Avenue to Meadowlane Avenue)
2018/19	Hickory Drive (Westbrook Drive to Woodland Street)

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

The cost decrease is due to updated cost estimates for the 2014/15 project.

FISCAL YEAR PRIORITY			3	4	3	4	3
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		594,000	155,000	112,000	140,000	75,000	112,000
Construction		3,636,000	1,050,000	638,000	810,000	500,000	638,000
Street Lighting		185,000	35,000	50,000		50,000	50,000
	TOTAL	**4,415,000**	**1,240,000**	**800,000**	**950,000**	**625,000**	**800,000**
FINANCING:							
G. O. Bonds		4,230,000	1,205,000	750,000	950,000	575,000	750,000
Electric Utility Fund		185,000	35,000	50,000		50,000	50,000
	TOTAL	**4,415,000**	**1,240,000**	**800,000**	**950,000**	**625,000**	**800,000**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Streets Engineering	Public Works	375-8135-439 530-8135-439

CONCRETE PAVEMENT IMPROVEMENTS **PROJECT STATUS:** Cost Change Site Change

DESCRIPTION/JUSTIFICATION

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

COMMENTS

2014/15: Ridgewood Avenue (9th Street to 13th Street); 9th Street (Ridgewood Avenue to Northwestern Avenue); and Hayward Avenue (Lincoln Way to Hunt Street)

2015/16: 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); and 5th Street (Northwestern Avenue to Allan Drive)

2016/17: Dawes Drive

2017/18: Ford Street (South Dayton Avenue to Bell Avenue); and Bell Avenue (East Lincoln Way to Ford Street)

2018/19: Friley Road (Gaskill Drive to Beach Avenue), 8th Street (Northwestern Avenue to Duff Avenue), and Douglas Avenue (7th Street to 10th Street)

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

The cost change is due to updated cost estimates for the projects. The site change is due to Airport Road (University Avenue to South Riverside Drive) and University Avenue (Airport Road to US Highway 30) being removed from 2017/18 to better coordinate with the progress of the ISU Research Park expansion.

FISCAL YEAR PRIORITY		4	3	4	5	2
	TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:						
Engineering	1,005,500	255,000	100,500	135,000	115,000	400,000
Street Lighting	21,000	21,000				
Construction	6,170,000	1,450,000	720,000	900,000	750,000	2,350,000
Electric Relocation	100,000		50,000	50,000		
TOTAL	**7,296,500**	**1,726,000**	**870,500**	**1,085,000**	**865,000**	**2,750,000**
FINANCING:						
G.O. Bonds	6,925,500	1,655,000	770,500	985,000	815,000	2,700,000
Road Use Tax	250,000	50,000	50,000	50,000	50,000	50,000
Electric Utility Fund	121,000	21,000	50,000	50,000		
TOTAL	**7,296,500**	**1,726,000**	**870,500**	**1,085,000**	**865,000**	**2,750,000**

PROGRAM – ACTIVITY:
Transportation - Streets Engineering

DEPARTMENT:
Public Works

ACCOUNT NO.
060-8170-439
375-8170-439
530-8170-439

DOWNTOWN STREET PAVEMENT IMPROVEMENTS **PROJECT STATUS:** Cost Change Delayed

DESCRIPTION/JUSTIFICATION
This annual program is for the rehabilitation/reconstruction of streets 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 project 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
2014/15 5th Street (Grand Avenue to Burnett Avenue)
2015/16 Clark Avenue (Lincoln Way to Main Street)
2016/17 Sherman Avenue
2017/18 Main Street Alley (Duff Avenue to Douglas Avenue); and Main Street Alley (Kellogg Avenue to Burnett Avenue)
2018/19 Market Avenue

The cost change is due to updated cost estimates for the 2014/15 project and to scheduling Market Avenue and Sherman Avenue into two different years. (Both had been scheduled in 2016/17 in the 2013/14 – 2017/18 Capital Improvements Plan.)

Market Avenue is being delayed in order to prioritize other roadway pavement improvements throughout the community.

FISCAL YEAR PRIORITY		5	5	5	6	4
	TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:						
Engineering	369,000	150,000	120,000	32,000	35,000	32,000
Construction	2,016,000	750,000	630,000	218,000	200,000	218,000
Electric	100,000		50,000		50,000	
TOTAL	**2,485,000**	**900,000**	**800,000**	**250,000**	**285,000**	**250,000**
FINANCING:						
G. O. Bonds	2,385,000	900,000	750,000	250,000	235,000	250,000
Electric Utility Funds	100,000		50,000		50,000	
TOTAL	**2,485,000**	**900,000**	**800,000**	**250,000**	**285,000**	**250,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Streets Engineering	Public Works	375-8159-439

ASPHALT STREET PAVEMENT IMPROVEMENTS **PROJECT STATUS:** Site Change Scope Change Cost 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

2014/15	Ferndale Avenue (24th Street to 30th Street) and Coy Street (South Franklin Avenue west to end)
2015/16	No project
2016/17	Pierce Avenue and Pierce Circle
2017/18	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)
2018/19	14th Street (Burnett Avenue to Duff Avenue), Wellons Drive (Harris Street to cul-de-sac at north end), Wellons Circle, Jeffrey Lane (Harris Street north), Harris Street (Jeffrey Lane west to cul-de-sac), Beedle Drive (Aplin Road to Lincoln Way) and Aplin Road (Beedle Drive to Wellons Drive)

Reconstructing these streets will reduce maintenance costs.

The scope change is due to asphalt resurfacing (rehabilitation) being combined with this program instead of the Seal Coat Street Improvement Program as in previous years. This is anticipated to improve the cost of construction due to more similar bid items (including asphalt surface and asphalt base patching) within the programs.

The site change is due to prioritization of Coy Street in 2014/15 as supported by the pavement management data.

FISCAL YEAR PRIORITY		6		6	3	5
	TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:						
Engineering	720,000	185,000		105,000	180,000	250,000
Construction	4,270,000	1,065,000		685,000	1,020,000	1,500,000
Electric Relocation	100,000	50,000		50,000		
TOTAL	**5,090,000**	**1,300,000**		**840,000**	**1,200,000**	**1,750,000**
FINANCING:						
G.O. Bonds	4,990,000	1,250,000		790,000	1,200,000	1,750,000
Electric Utility Fund	100,000	50,000		50,000		
TOTAL	**5,090,000**	**1,300,000**		**840,000**	**1,200,000**	**1,750,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Streets Engineering	Public Works	375-8118-439 530-8118-439

MORTENSEN ROAD IMPROVEMENTS **PROJECT STATUS:** Cost Change

DESCRIPTION/JUSTIFICATION

This project includes transportation improvements to Mortensen Road between South Dakota Avenue and Dotson Drive. The roadway has experienced more consistent traffic congestion due to on-street CyRide stops in the area. Congestion will continue to worsen as Dotson Drive is eventually extended through toward Lincoln Way. Developer Agreements specify that the Dotson Drive extension will be completed by the South Fork Subdivision developer and the Ames Community School District. This widening project is included in the Long-Range Transportation Plan.

COMMENTS

The project involves constructing two additional lanes of traffic to serve as a right turn lane into Coconino Road, as a CyRide bus acceleration lane once past Coconino Road, and as a method to allow eastbound cars to pass buses using the eastbound through-lane, and westbound cars to pass buses using the dual left-turn lane. This project also includes improvements of the existing pavement and adding curb and gutter within the same area. Initial planning for this project occurred in 2013/14 ($10,000).

CyRide staff has been actively engaged during the initial planning to ensure that the roadway improvements will meet their long-term needs. Design collaboration efforts resulted in two significant changes including CyRide consolidating the number of bus stops along Mortensen Road from four to two (one on each side of the road) and eliminating the potential of a bus pullout lane.

This project will also address the high volume of pedestrians and bicyclists seen along Mortensen Road by enhancing the key north-south crossing located at both Coconino Road and Pinon Drive. This project may include completion of sidewalk along the south side of Mortensen Road.

As a result of the above comments, cost estimates for the project have been updated.

FISCAL YEAR PRIORITY			7				
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		70,000	70,000				
Construction		430,000	430,000				
	TOTAL	**500,000**	**500,000**				
FINANCING:							
Road Use Tax		110,000	110,000				
Federal/State Grants		390,000	390,000				
	TOTAL	**500,000**	**500,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Streets Engineering	Public Works	060-8188-439 320-8188-439

ARTERIAL STREET PAVEMENT IMPROVEMENTS **PROJECT STATUS:** Cost Decrease

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

2014/15	Lincoln Way (Squaw Creek to Oak Avenue)
2015/16	East Lincoln Way (South Duff Avenue to Skunk River)
2016/17	West Lincoln Way (County Line Road to west corporate limits)
2017/18	North Dakota Avenue (UPRR to Ontario Street)
2018/19	No project

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

The cost decrease is due to updated cost estimates for the 2014/15 project.

FISCAL YEAR PRIORITY		8	1	9	8	
	TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:						
Engineering	387,000	93,000	155,000	45,000	94,000	
Construction	2,838,000	607,000	1,325,000	300,000	606,000	
Street Lighting	150,000	50,000	100,000			
TOTAL	**3,375,000**	**750,000**	**1,580,000**	**345,000**	**700,000**	
FINANCING:						
G. O. Bonds	2,165,000	700,000	420,000	345,000	700,000	
Electric Utility Fund	150,000	50,000	100,000			
MPO/STP Funds	1,060,000		1,060,000			
TOTAL	**3,375,000**	**750,000**	**1,580,000**	**345,000**	**700,000**	

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Streets Engineering	Public Works	375-8146-439 530-8146-439

SEAL COAT STREET PAVEMENT IMPROVEMENTS **PROJECT STATUS:** Scope 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" of asphalt surface.

COMMENTS

The areas to be resurfaced are chosen each spring based on the current street condition inventory and on funding availability that results in a consistent 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 Americans with Disabilities Act (ADA) pedestrian improvements as recently clarified by State and Federal requirements.

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

The scope change is due to asphalt resurfacing (rehabilitation) being combined with the Asphalt Street Pavement Improvements program instead of this program as in previous years. This is anticipated to improve the cost of construction due to more similar bid items (including asphalt surface and asphalt base patching) within the programs.

FISCAL YEAR PRIORITY			9	6	10	7	6
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		909,000	100,000	150,000	233,000	163,000	263,000
Construction		5,127,000	550,000	850,000	1,317,000	923,000	1,487,000
	TOTAL	**6,036,000**	**650,000**	**1,000,000**	**1,550,000**	**1,086,000**	**1,750,000**
FINANCING:							
G.O. Bonds		3,300,000		350,000	1,050,000	650,000	1,250,000
Road Use Tax		2,736,000	650,000	650,000	500,000	436,000	500,000
	TOTAL	**6,036,000**	**650,000**	**1,000,000**	**1,550,000**	**1,086,000**	**1,750,000**

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

RIGHT-OF-WAY RESTORATION **PROJECT STATUS:** New

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. Success using these types of restoration is volatile and 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 that is specialized in vegetation establishment (instead of having this as subcontracts in each of the CIP contracts as it has been in the past).

COMMENTS
Conditions for each restoration area will be considered independently in order to select the appropriate and sustainable alternative. Some examples include sod, native turf, and pervious and standard colored concrete.

LOCATION
Various locations throughout the community (coordinated with Public Works streets and utility projects)

FISCAL YEAR PRIORITY			10	7	11	9	7
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Construction		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**
FINANCING:							
Road Use Tax		600,000	120,000	120,000	120,000	120,000	120,000
Water Utility Fund		200,000	40,000	40,000	40,000	40,000	40,000
Storm Sewer Utility Fund		200,000	40,000	40,000	40,000	40,000	40,000
	TOTAL	**1,000,000**	**200,000**	**200,000**	**200,000**	**200,000**	**200,000**

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

GRAND AVENUE EXTENSION **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION

This project is for the extension of Grand Avenue from Lincoln Way to South 16th Street. Included is a segment of South 5th Street (Grand Avenue to South Duff Avenue) as well as improvement to the South Duff Avenue (US 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 to alleviate the existing congestion and allow for easier access to area businesses along that portion of Lincoln Way and South Duff Avenue. 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. Initial planning, environmental analysis (NEPA), and grant applications for this project began in 2013/14 ($423,000).

LOCATION

2015/16 South Grand Avenue (Squaw Creek Drive to South 16th Street) and South 5th Street (Grand Avenue to South Duff Avenue) (planning and land acquisition)

2016/17 South Grand Avenue (Squaw Creek Drive to South 5th Street) and South 5th Street (Grand Avenue to South Duff Avenue) (engineering and construction)

2017/18 South Grand Avenue (South 5th Street to South 16th Street) (engineering, grading, and box culvert/golf cart passage)

2018/19 Grand Avenue (South 5th Street to South 16th Street) (engineering, bridge, paving); and South Duff Avenue (South 16th Street intersection improvements)

A Transportation Funding Study in 2012/13 identified federal and state grants that may be available for funding this project. The elimination of Federal Earmark funds and the complexity of the project (with many grants for funding) have led to the delay.

FISCAL YEAR PRIORITY				2	2	1	1
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Planning		300,000		300,000			
Engineering		2,450,000			650,000	1,000,000	800,000
Land Acquisition		700,000		700,000			
Construction		14,000,000			4,000,000	5,500,000	4,500,000
	TOTAL	**17,450,000**		**1,000,000**	**4,650,000**	**6,500,000**	**5,300,000**
FINANCING:							
G. O. Bonds		5,330,000		300,000	1,530,000	1,500,000	2,000,000
Federal/State Grants		7,820,000		700,000	2,420,000	3,700,000	1,000,000
MPO/STP Funds		4,300,000			700,000	1,300,000	2,300,000
	TOTAL	**17,450,000**		**1,000,000**	**4,650,000**	**6,500,000**	**5,300,000**

PROGRAM – ACTIVITY: Transportation – Streets Engineering

DEPARTMENT: Public Works

ACCOUNT NO.

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 a smart transportation connection for the community. By extending Cherry Avenue south and connecting both South East 3rd Street and South East 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. Planning in 2015/16 will include roadway alignment and traffic signal analysis.

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.

2015/16	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)
2016/17	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)
2017/18	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)

LOCATION
Map 6, location N-12

FISCAL YEAR PRIORITY				8	8	2	
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
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		700,000		100,000	90,000	510,000	
Electric Utility Fund		100,000				100,000	
Federal/State Grants		2,100,000			210,000	1,890,000	
	TOTAL	**2,900,000**		**100,000**	**300,000**	**2,500,000**	

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

TRANSPORTATION - STREET MAINTENANCE

	PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19	PAGE
EXPENDITURES:								
1	Bridge Rehabilitation Program	3,495,000	180,000	3,315,000				105
2	Pavement Restoration	375,000	75,000	75,000	75,000	75,000	75,000	106
3	Neighborhood Curb Replacement Program	375,000	75,000	75,000	75,000	75,000	75,000	107
4	Right-of-Way Appearance Enhancements	290,000	65,000	135,000	30,000	30,000	30,000	108
5	Shared Use Path Maintenance	250,000	50,000	50,000	50,000	50,000	50,000	109
6	Sidewalk Safety Program	500,000	100,000	100,000	100,000	100,000	100,000	110
7	Salt Brine Facility	150,000			150,000			111
	Total Expenditures	**5,435,000**	**545,000**	**3,750,000**	**480,000**	**330,000**	**330,000**	
REVENUES:								
Bonds:								
G.O. Bonds		2,495,000	180,000	2,315,000				

TRANSPORTATION - STREET MAINTENANCE, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19
REVENUES, continued:						
City:						
Road Use Tax	1,355,000	265,000	300,000	330,000	230,000	230,000
Local Option Sales Tax	500,000	100,000	100,000	100,000	100,000	100,000
Sub-Total City Funds	1,855,000	365,000	400,000	430,000	330,000	330,000
Other:						
Federal/State Grants	1,000,000		1,000,000			
Iowa State University	25,000			25,000		
Ames Community School District	25,000			25,000		
Private Contributions	35,000		35,000			
Sub-Total Other Funds	1,085,000		1,035,000	50,000		
Total Revenues	**5,435,000**	**545,000**	**3,750,000**	**480,000**	**330,000**	**330,000**

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

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 2012 Bridge Inspection and Maintenance Report highlights the recommended maintenance/improvements to the bridges in Ames at this time.

The inspection report conducted on the 6th Street bridge over Squaw Creek recommended replacing the bridge due to its current condition (as identified in the feasibility study). The project has been configured to allow for the application of grants and permitting before construction. The first phase completed was a detailed design alternative study that focused on choosing the type of bridge, preferred aesthetics, and studying ADA issues. The construction cost as shown includes the additional cost of all options related to aesthetics.

The East Lincoln Way bridge repairs were also recommended by the 2012 Bridge Inspection & Maintenance Report. With the most recent inspection, it was recommended to advance repairs to the East Lincoln Way bridge. These repairs are programmed for 2014/15 (planning/design) and 2015/16 (construction) to coordinate with the road work that will be done on East Lincoln Way. The deck replacement, structural repairs, and painting should result in 50-year design life for the bridge.

LOCATION
2014/15 6th Street bridge over Squaw Creek (final design)($105,000); and East Lincoln Way Bridge (planning/design) ($75,000)
2015/16 6th Street bridge over Squaw Creek (construction/engineering) ($2,425,000); 6th Street west of bridge (construction) ($340,000) and East Lincoln Way Bridge (construction)($550,000)

FISCAL YEAR PRIORITY			1	1			
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		400,000	180,000	220,000			
Construction		3,095,000		3,095,000			
	TOTAL	**3,495,000**	**180,000**	**3,315,000**			
FINANCING:							
G.O. Bonds		2,495,000	180,000	2,315,000			
Grants		1,000,000		1,000,000			
	TOTAL	**3,495,000**	**180,000**	**3,315,000**			

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Streets Maintenance	Public Works	375-7751-439 375-7753-439

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 allocates $75,000 annually to maintenance activities.

FISCAL YEAR PRIORITY			2	2	1	1	1
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Construction		375,000	75,000	75,000	75,000	75,000	75,000
	TOTAL	**375,000**	**75,000**	**75,000**	**75,000**	**75,000**	**75,000**
FINANCING:							
Road Use Tax		375,000	75,000	75,000	75,000	75,000	75,000
	TOTAL	**375,000**	**75,000**	**75,000**	**75,000**	**75,000**	**75,000**

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

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

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 rights-of-way aesthetics.

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

COMMENTS
Neighborhood Curb Replacement Program decision criteria approved by Council includes extent of curb deterioration, number of residential structures in the block, and longitudinal grade. This project supports Council's goal to strengthen neighborhoods.

The site change is due to the reconstruction of South Maple Avenue (South 4th Street to South 2nd Street) with Community Development Block Grant funding in 2013/14.

LOCATION
2014/15 Brookridge Avenue (Park Way to Ridgewood Avenue)
2015/16 South Maple Avenue (Lincoln Way to South 2nd Street)
2016/17 South 2nd Street (South Maple Avenue to South Oak Avenue)
2017/18 South 2nd Street (South Maple Avenue to South Hazel Avenue)
2018/19 South 3rd Street (South Russell Avenue to South Hazel Avenue)

FISCAL YEAR PRIORITY			3	3	3	2	2
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		62,500	12,500	12,500	12,500	12,500	12,500
Construction		312,500	62,500	62,500	62,500	62,500	62,500
	TOTAL	**375,000**	**75,000**	**75,000**	**75,000**	**75,000**	**75,000**
FINANCING:							
Road Use Tax		375,000	75,000	75,000	75,000	75,000	75,000
	TOTAL	**375,000**	**75,000**	**75,000**	**75,000**	**75,000**	**75,000**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Streets Maintenance	Public Works	060-7773-439

RIGHT-OF-WAY APPEARANCE ENHANCEMENTS **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION
This project provides funding 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
The Lincoln Way medians project has been combined with other opportunities to beautify our rights-of-way including retaining walls, right-of-way restoration, and entryway enhancements. The right-of-way restoration portion will be used to replant or revitalize parking areas or medians that are in need of it. This program will also be used to capture any areas of entryway improvements in the City.

This program has combined the "Retaining Wall Reconstruction" and the "Lincoln Way Median Improvements" pages from the previous 2013/14 to 2017/18 Capital Improvements Plan.

LOCATION
2014/15 Airport Road Retaining Wall ($35,000)
2015/16 Lincoln Way medians (Beach Avenue to Sheldon Avenue - Engineering) ($70,000); Maxwell Avenue Retaining Wall ($35,000); and various other locations ($30,000)
2016/17 Various locations
2017/18 Various locations
2018/19 Various locations

FISCAL YEAR PRIORITY		4	4	2	3	3
	TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:						
Engineering	80,000	5,000	75,000			
Construction	60,000	30,000	30,000			
Right-of-Way Restoration	150,000	30,000	30,000	30,000	30,000	30,000
TOTAL	**290,000**	**65,000**	**135,000**	**30,000**	**30,000**	**30,000**
FINANCING:						
Road Use Tax	255,000	65,000	100,000	30,000	30,000	30,000
Private Funding	35,000		35,000			
TOTAL	**290,000**	**65,000**	**135,000**	**30,000**	**30,000**	**30,000**

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

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

DESCRIPTION/JUSTIFICATION
The shared use path 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 of the causes for the need to improve the pavement. This annual program provides for those improvements.

COMMENTS
A completed pavement management system for shared use paths provided information to identify segments of the shared use path system that are in need of repair and will prioritize those segments accordingly.

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.

FISCAL YEAR PRIORITY			5	5	4	4	4
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		32,500	6,500	6,500	6,500	6,500	6,500
Construction		217,500	43,500	43,500	43,500	43,500	43,500
	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: Transportation – Streets Maintenance
DEPARTMENT: Public Works
ACCOUNT NO. 030-7711-439

SIDEWALK SAFETY PROGRAM **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
This is the annual program to remove and replace sidewalk intersection crosswalk panels and handicap ramps at locations that fail to meet the City Sidewalk Improvement Program requirements or are required by the Americans with Disabilities Act (ADA) to have truncated dome warning panels installed at crosswalks.

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

COMMENTS
This money may be used in conjunction with roadway or shared use path improvement projects for the pedestrian ramp reconstruction. In 2013/14, the inventory of the ramps was modified to align with the new changes. Staff will begin looking at the best way to prioritize the replacement of ramps that are not part of a construction project. Road Use Tax funding has been introduced to help cover the increase in cost of this program.

This project has no direct impact on the operating budget.

FISCAL YEAR PRIORITY			6	6	5	5	5
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		100,000	20,000	20,000	20,000	20,000	20,000
Construction		400,000	80,000	80,000	80,000	80,000	80,000
	TOTAL	**500,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**
FINANCING:							
Road Use Tax		250,000	50,000	50,000	50,000	50,000	50,000
Local Option Sales Tax		250,000	50,000	50,000	50,000	50,000	50,000
	TOTAL	**500,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation - Streets Maintenance	Public Works	030-7744-439 060-7744-439

SALT BRINE FACILITY **PROJECT STATUS:** Delayed

DESCRIPTION/JUSTIFICATION
Currently, the City works in partnership with the Iowa Department of Transportation (IDOT) for brine. The City's increasing demand for salt brine may eventually outpace Iowa DOT's ability to provide it. Iowa State University (ISU) and the Ames Community School District (ACSD) are willing to discuss the potential for a partnership among those two organizations and the City of Ames to build a new facility.

LOCATION
To be determined

FISCAL YEAR PRIORITY					6		
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Building		150,000			150,000		
	TOTAL	**150,000**			**150,000**		
FINANCING:							
Road Use Tax		100,000			100,000		
Iowa State University		25,000			25,000		
Ames Community School District		25,000			25,000		
	TOTAL	**150,000**			**150,000**		

PROGRAM – ACTIVITY: Transportation – Streets Maintenance
DEPARTMENT: Public Works
ACCOUNT NO.

TRANSPORTATION - TRANSIT

PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19	PAGE
EXPENDITURES:							
1 Building Expansion and Modernization	2,164,000	1,140,000	250,000	204,000	220,000	350,000	113
2 Vehicle Replacement	2,035,000	1,376,000	155,000	185,000	164,000	155,000	114
3 CyRide Shop/Office Equipment	257,000	49,000	52,000	52,000	52,000	52,000	115
4 Bus Stop Improvements	230,000	46,000	46,000	46,000	46,000	46,000	116
5 Technology Improvements	417,340	141,170	141,170	45,000	45,000	45,000	117
Total Expenditures	**5,103,340**	**2,752,170**	**644,170**	**532,000**	**527,000**	**648,000**	
REVENUES:							
City:							
Transit Fund	2,913,570	805,770	511,200	495,200	490,200	611,200	
Other:							
Federal Transit Administration	1,013,430	1,013,430					
Federal/State Grants	984,000	836,800	36,800	36,800	36,800	36,800	
Iowa State University GSB	192,340	96,170	96,170				
Sub-Total Other Funds	2,189,770	1,946,400	132,970	36,800	36,800		
Total Revenues	**5,103,340**	**2,752,170**	**644,170**	**532,000**	**527,000**	**611,200**	

BUILDING EXPANSION & MODERNIZATION **PROJECT STATUS:** Scope Change

DESCRIPTION/JUSTIFICATION

In the spring of 2014, the CyRide major facility construction project to protect the facility from flooding, expand bus storage, and increase the ceiling height for all buses will be completed. Therefore, the following plan has been developed to keep the facility in a state of good repair:

2014/15 – Replace three of the seven HVAC units heating the bus storage area ($60,000); replace portions of the exterior concrete not part of the 2013/14 facility construction project ($75,000); architectural/engineering services for pit replacement ($5,000); bus storage expansion ($1,000,000)
2015/16 – Replace the seven oil/water separation pits in the original section of CyRide's facility ($250,000)
2016/17 – Replace three of the seven HVAC units heating the bus storage area ($64,000); replace a portion of CyRide's bus storage roof ($140,000)
2017/18 – Replace four of the seven HVAC units heating the bus storage area ($80,000); replace a portion of CyRide's bus storage roof ($140,000)
2018/19 – Bus washer replacement ($350,000)

COMMENTS

The HVAC units will be 25-30 years old and at the end of their useful life at the time of replacement; the warranty on CyRide's current bus storage roofs expired in 1994 on the oldest section and in 2010 on the newest section; and CyRide's current bus washer will be 16 years old at the time of replacement.

When the new bus storage expansion is completed, 11 buses currently parked outside will able to be housed in this new building; however six additional buses will remain parked outside. Additionally, CyRide is in the process of purchasing five additional buses for anticipated ridership increases in 2014/15, which will require a total of 11 buses to be housed outside in 2014/15. This project will build additional storage either at CyRide's existing site or at a satellite location based upon Transit Board of Trustee decisions.

LOCATION

1700 University Boulevard

FISCAL YEAR PRIORITY		1	1	1	1	1
	TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:						
Architect/Engineering	5,000	5,000				
Storage Expansion	1,000,000	1,000,000				
Repairs/Modifications	1,159,000	135,000	250,000	204,000	220,000	350,000
TOTAL	**2,164,000**	**1,140,000**	**250,000**	**204,000**	**220,000**	**350,000**
FINANCING:						
Transit Fund	1,364,000	340,000	250,000	204,000	220,000	350,000
Iowa DOT Grant	800,000	800,000				
TOTAL	**2,164,000**	**1,140,000**	**250,000**	**204,000**	**220,000**	**350,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Transit	CyRide	552-1159-439
		552-1170-439

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

DESCRIPTION/JUSTIFICATION

CyRide has scheduled two to three bus replacements each year in this five-year Capital Improvements Plan. The number of vehicles is reduced from previous Capital Improvements Plans because CyRide will receive no federal capital funds for bus replacements after the 2014/15 budget year. Purchases of buses, administrative vehicles, and maintenance trucks after this date will 100% funded by local dollars. These purchases are scheduled as follows:

2014/15 – Purchase three new large buses ($1,221,000); purchase five used buses ($125,000); replace administrative vehicle 905 - Impala ($30,000)
2015/16 – Purchase five used buses ($125,000); replace administrative vehicle 906 - Prius ($30,000)
2016/17 – Purchase five used buses ($125,000); replace maintenance truck 999 ($60,000)
2017/18 – Purchase five used buses ($125,000); replace maintenance truck 007 ($39,000)
2018/19 – Purchase five used buses ($125,000); replace administrative vehicle 294 – Escape ($30,000)

COMMENTS
The 2014/15 new bus purchase uses the last federal grant available for new buses. After that point, CyRide will need to budget 100% local dollars to replace vehicles. The cost of new buses is $425,000 each; therefore, used buses from other transit systems around the nation will be purchased and refurbished at a cost of approximately $25,000 each.

LOCATION
1700 University Boulevard

FISCAL YEAR PRIORITY			2	2	2	2	2
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Large Buses – 40' new		1,221,000	1,221,000				
Used Buses		625,000	125,000	125,000	125,000	125,000	125,000
Administrative Vehicles		189,000	30,000	30,000	60,000	39,000	30,000
	TOTAL	**2,035,000**	**1,376,000**	**155,000**	**185,000**	**164,000**	**155,000**
FINANCING:							
Transit Fund		1,021,570	362,570	155,000	185,000	164,000	155,000
Federal Transit Administration		1,013,430	1,013,430				
	TOTAL	**2,035,000**	**1,376,000**	**155,000**	**185,000**	**164,000**	**155,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Transit	CyRide	552-1159-439 552-1165-439

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

DESCRIPTION/JUSTIFICATION

This project is to address replacement of shop and office equipment used for CyRide operations. Because 2015/16 – 2018/19 shop purchases in this category are smaller items where replacement need is less predictable, they have been generally described in this document. 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 approximately $40,000 per year. Additionally, four to seven computers and equipment will be funded each year at an estimated cost of $12,000 per year.

The 2014/15 shop and office equipment expenditures include the replacement of four computers and the following shop equipment:

- Storage racks – ($10,000)
- AC refrigerant reclamation system ($7,000)
- Eye wash and shower station ($5,000)
- Railing replacement ($7,000)
- Sign post installer/remover ($4,300)
- 2-stage snow blower ($1,500)
- Wheelbarrow hoist ($1,200)
- Customer e-motor mount ($1,000)

LOCATION
1700 University Boulevard

FISCAL YEAR PRIORITY		3	3	3	3	3
	TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:						
Computers	60,000	12,000	12,000	12,000	12,000	12,000
Other Shop Equipment	197,000	37,000	40,000	40,000	40,000	40,000
TOTAL	**257,000**	**49,000**	**52,000**	**52,000**	**52,000**	**52,000**
FINANCING:						
Transit Fund	257,000	49,000	52,000	52,000	52,000	52,000
TOTAL	**257,000**	**49,000**	**52,000**	**52,000**	**52,000**	**52,000**

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

BUS STOP IMPROVEMENTS **PROJECT STATUS:** Scope Change Cost Change

DESCRIPTION/JUSTIFICATION

One of the most frequently received customer suggestions received by CyRide is regarding the condition or lack of amenities at its more than 425 bus stop locations throughout the city. Therefore, over the next five-year period (2014/15 through 2018/19), CyRide will install two new bus shelters and move one to two 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. Funding for these shelter replacements and new locations will be provided by 80% federal dollars administered by the State of Iowa and 20% local funding from CyRide's budget.

COMMENTS

An earlier project developed a new prototype shelter (located at Dickinson and Mortensen) that will be implemented in new locations with this project.

FISCAL YEAR PRIORITY			4	4	4	4	4
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Pads, Benches, Shelters		230,000	46,000	46,000	46,000	46,000	46,000
	TOTAL	**230,000**	**46,000**	**46,000**	**46,000**	**46,000**	**46,000**
FINANCING:							
Transit Fund		46,000	9,200	9,200	9,200	9,200	9,200
Federal 5310 Grants		184,000	36,800	36,800	36,800	36,800	36,800
	TOTAL	**230,000**	**46,000**	**46,000**	**46,000**	**46,000**	**46,000**

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

TECHNOLOGY IMPROVEMENTS **PROJECT STATUS:** New

DESCRIPTION/JUSTIFICATION

CyRide has equipped its bus fleet with two types of technology that have improved customer safety and information, bus video systems and NextBus. CyRide has developed a bus video replacement system that replaces the video system on five buses each year at an annual cost of $45,000. 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. The 2014/15 purchases will replace all of the oldest systems.

The second technology project is the Next Bus real-time vehicle tracking system that was installed in February 2013. The annual capital and warranty cost is included in the Capital Improvements Plan. This system provides customers with actual bus arrival times at bus stop locations utilizing a Global Positioning System.

LOCATION
1700 University Boulevard

FISCAL YEAR PRIORITY		5	5	5	5	5
	TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:						
Security Cameras	225,000	45,000	45,000	45,000	45,000	45,000
NextBus	192,340	96,170	96,170			
TOTAL	**417,340**	**141,170**	**141,170**	**45,000**	**45,000**	**45,000**
FINANCING:						
Transit Fund	225,000	45,000	45,000	45,000	45,000	45,000
Iowa State University (GSB)	192,340	96,170	96,170			
TOTAL	**417,340**	**141,170**	**141,170**	**45,000**	**45,000**	**45,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Transportation – Transit	CyRide	552-1159-439 552-1166-439

TRANSPORTATION - AIRPORT

PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19	PAGE
EXPENDITURES:							
1 Airport Improvements	4,358,000		3,200,000	170,000	200,000	788,000	119
Total Expenditures	**4,358,000**		**3,200,000**	**170,000**	**200,000**	**788,000**	
REVENUES:							
Bonds:							
G.O. Bonds	867,000		867,000				
City:							
Airport Construction Fund	208,800			20,000	110,000	78,800	
Other:							
Federal Aviation Administration	1,399,200		450,000	150,000	90,000	709,200	
State Grant Funds	150,000		150,000				
Iowa State University	867,000		867,000				
Private Funds	866,000		866,000				
Sub-Total Other Funds	3,282,200		2,333,000	150,000	90,000	709,200	
Total Revenues	**4,358,000**		**3,200,000**	**170,000**	**200,000**	**788,000**	

AIRPORT IMPROVEMENTS **PROJECT STATUS:** Cost Change

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.

2015/16	Replace Terminal Building and add jet hangar(design and construction)
2016/17	Master Plan partial update and runway extension justification
2017/18	Runway Extension (environment assessment and engineering design report)
2018/19	Runway Extension (land acquisition)

The FY 2015/16 terminal building replacement project will update the current aged facility. After receiving initial input from airport users, the new facility is anticipated to have an attached hangar space that will improve the economic viability of the Ames Airport. The initial input from the airport users indicates that a larger and more user friendly terminal building is needed to meet customer requirements.

Cost change in 2017/18 is due to new FAA requirements. These new requirements involve the creation of an Engineering Design Report (as designated in the Airport Improvement Program (AIP) Sponsors Guide), which takes a project through 30% completion.

LOCATION
Ames Municipal Airport

FISCAL YEAR PRIORITY			1	1	1	1
COST:	**TOTAL**	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
Engineering	898,000		528,000	170,000	200,000	
Land Acquisition	788,000					788,000
Construction	2,672,000		2,672,000			
TOTAL	**4,358,000**		**3,200,000**	**170,000**	**200,000**	**788,000**
FINANCING:						
G.O. Bonds	867,000		867,000			
Airport Construction Fund	208,800			20,000	110,000	78,800
FAA Funding	1,399,200		450,000	150,000	90,000	709,200
State Grant Funds	150,000		150,000			
Iowa State University	867,000		867,000			
Private Funding	866,000		866,000			
TOTAL	**4,358,000**		**3,200,000**	**170,000**	**200,000**	**788,000**

PROGRAM – ACTIVITY: Transportation – Airport
DEPARTMENT: Public Works
ACCOUNT NO.

Carr's Pool, built by R.E.(Dad) Carr in 1926. Note the diving platform at the north end of the pool and the large fountain in the pool's south end where children gathered. The tower at the left of the old bath house supported the pressure tank when Carr relied on his own well. In this photo, the diving platform had been extended to a height of 50 feet. On two occasions, Fred Poole and Bill McLaughlin made high dives from that tower adding a real thrill to swimming and diving exhibitions. When McLaughlin scraped the bottom, he was not seriously injured, but Dad Carr said, "No more high dives!"

COMMUNITY ENRICHMENT

THE ARLINGTON HOTEL

Looking north up Douglas Avenue from the northwest corner of Onondaga in 1907. Tilden Grocery has people standing in front. O. K. Barber-shop (5 chairs) with downstairs entrance is shown on left. Arlington Hotel (formerly West House) is in the center beyond Tilden's and the newspaper office.

COMMUNITY ENRICHMENT/INTERNAL SERVICES - SUMMARY

PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19	PAGE
EXPENDITURES:							
Parks and Recreation	4,389,500	1,106,500	848,000	825,000	815,000	795,000	122
City Manager	250,000	50,000	50,000	50,000	50,000	50,000	136
Planning and Housing	250,000	50,000	50,000	50,000	50,000	50,000	138
Public Works	200,000	65,000	65,000	70,000			140
Internal Services/Facilities	618,500	172,500	161,000	185,000	50,000	50,000	142
Total Expenditures	**5,708,000**	**1,444,000**	**1,174,000**	**1,180,000**	**965,000**	**945,000**	
REVENUES:							
City:							
Local Option Sales Tax	5,014,500	1,081,500	1,038,000	985,000	965,000	945,000	
Ice Arena Capital Reserve Funds	300,000	215,000	25,000	60,000			
Road Use Tax	92,125	30,625	27,750	33,750			
Water Utility Fund	92,125	30,625	27,750	33,750			
Sewer Utility Fund	92,125	30,625	27,750	33,750			
Fleet Services Fund	92,125	30,625	27,750	33,750			
Sub-Total City Funds	5,683,000	1,419,000	1,174,000	1,180,000	965,000	945,000	
Other:							
Ames Community School District	25,000	25,000					
Total Revenues	**5,708,000**	**1,444,000**	**1,174,000**	**1,180,000**	**965,000**	**945,000**	

COMMUNITY ENRICHMENT - PARKS AND RECREATION

	PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19	PAGE
EXPENDITURES:								
1	Municipal Pool Maintenance	250,000	50,000	50,000	50,000	50,000	50,000	124
2	Parks and Recreation Facility Improvements	1,460,000	212,000	178,000	275,000	150,000	645,000	125
3	Playground/Park Equipment Improvements	202,500	62,500	35,000	40,000	40,000	25,000	126
4	Ada Hayden Heritage Park	559,000	284,000	200,000		75,000		127
5	Community Gymnasiums	220,000	110,000	110,000				128
6	Furman Aquatic Center	548,000	48,000			500,000		129
7	Ames/ISU Ice Arena	300,000	215,000	25,000	60,000			130
8	Tennis Court Improvements	95,000	45,000		50,000			131
9	Roosevelt Neighborhood Park Development	80,000	80,000					132
10	Inis Grove Park Restroom Replacement	250,000		250,000				133
11	Moore Memorial Park	350,000			350,000			134
12	Brookside Park Improvements	75,000					75,000	135
	Total Expenditures	**4,389,500**	**1,106,500**	**848,000**	**825,000**	**815,000**	**795,000**	

COMMUNITY ENRICHMENT - PARKS AND RECREATION, continued

PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19
REVENUES:						
City:						
Local Option Sales Tax	4,064,500	866,500	823,000	765,000	815,000	795,000
Ice Arena Capital Reserve Funds	300,000	215,000	25,000	60,000		
Sub-Total City Funds	4,364,500	1,081,500	848,000	825,000	815,000	795,000
Other:						
Ames Community School District	25,000	25,000				
Total Revenues	**4,389,500**	**1,106,500**	**848,000**	**825,000**	**815,000**	**795,000**

MUNICIPAL POOL MAINTENANCE **PROJECT STATUS:** Funding Change

DESCRIPTION/JUSTIFICATION
In 2006, 2009 and in 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 that substantial improvements, totaling $450,000, were needed between 2013 and 2017. It was also suggested that these improvements be made as soon as possible. The consultants also stated in their report that following **2017**, the cost of 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 **April 30, 2015.** All capital costs are shared equally by the City and Ames Community School District. Over a 19-year period (FY 95/96 and continuing through FY 14/15), the City and School District will have invested approximately $1,900,000 ($100,000 per year average) in capital improvements at this facility. The School District is moving forward with plans to build a competitive pool with a minimum water depth of six feet. When their facility is built, all capital and operational expenses related to Municipal Pool will become the responsibility of the City.

COMMENTS
2014/15: Total $50,000 – To be determined
2015/16: Total $50,000 – To be determined
2016/17: Total $50,000 – To be determined
2017/18: Total $50,000 – To be determined
2018/19: Total $50,000 – To be determined

LOCATION
Ames High School

FISCAL YEAR PRIORITY		1	1	1	1	1
	TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:						
Construction	225,000	45,000	45,000	45,000	45,000	45,000
Architects/Engineering	25,000	5,000	5,000	5,000	5,000	5,000
TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**
FINANCING:						
Local Option Sales Tax	225,000	25,000	50,000	50,000	50,000	50,000
Ames School District	25,000	25,000				
TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**

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

PARKS AND RECREATION FACILITY IMPROVEMENTS **PROJECT STATUS:** Scope Change Cost Change

DESCRIPTION/JUSTIFICATION

To maintain City facilities in a safe and quality manner, the FY 2013 to 2018 projects listed below address maintenance issues at various facilities within the Parks and Recreation Department.

COMMENTS

2014/15: Total = $212,000

Administrative Office and Park Maintenance Facility: Replace air conditioners and furnaces ($32,000) at two locations: Gateway Administrative Office, and Park Maintenance Facility
Homewood Golf Course: Install asphalt cart paths ($20,000)
River Valley Softball Complex: Replace the field irrigation system ($90,000); replace two scoreboards on fields 5 and 6 ($15,000)
Bandshell at Bandshell Park: Weatherproof the domed roof ($55,000)

2015/16: Total = $178,000

Community Center: Installation of new volleyball standards ($15,000); replace gymnasium separation curtain ($10,000)
Auditorium: Replace carpet in the aisles; install new ceiling in restrooms on the second floor; replace the sound shell ($30,000)
Inis Grove Park: Replace stair system ($25,000)
North River Valley Park: Install irrigation on youth sport fields ($35,000); remove baseball field ($15,000)
Brookside Park: Renovate the restroom ($48,000)

2016/17: Total = 275,000

Bandshell: Replace stage lighting ($50,000); Inis Grove Park: Renovate restroom adjacent to Duff Avenue ($25,000)
North River Valley Park: Install parking lot at North River Valley sports fields ($200,000)

2017/18: Total = $150,000

Community Center: Refinish wood gymnasium floor ($30,000); Inis Grove Park: Install irrigation on sport fields ($30,000)
Carr Park: Remove bath house and construct new shelter ($60,000)
Gateway Hills Park: Install erosion control at Carroll Marty Disc Golf Course ($30,000)

2018/19: Total = $645,000

Administrative Office: Exterior building improvements/repairs ($35,000)
Homewood Golf Course: Replace the current clubhouse with a new building ($300,000)
River Valley Softball Complex: Renovate softball diamond infields ($60,000)
Brookside Park: Remove wading pool and construct a spray pad out of the flood plain ($250,000)

FISCAL YEAR PRIORITY			2	2	2	2	2
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		137,000	17,000	15,000	35,000	10,000	60,000
Construction		1,323,000	195,000	163,000	240,000	140,000	585,000
	TOTAL	**1,460,000**	**212,000**	**178,000**	**275,000**	**150,000**	**645,000**
FINANCING:							
Local Option Sales Tax		1,460,000	212,000	178,000	275,000	150,000	645,000
	TOTAL	**1,460,000**	**212,000**	**178,000**	**275,000**	**150,000**	**645,000**

PROGRAM – ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO:**
Community Enrichment	Parks and Recreation	030-4902-459 030-4905-459 030-4906-459

PLAYGROUND/PARK EQUIPMENT IMPROVEMENTS **PROJECT STATUS:** Cost Change Site 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.

In 2011, the City of Ames and the Ames Community School District entered into an agreement to share the funding of new play equipment at six elementary school sites (Edwards, Fellows, Meeker, Mitchell, Northwood and Sawyer). Upon Council approval, Miller Elementary School would be added to this agreement. In exchange for the funding, the school sites are promoted as a neighborhood park to be used by the public when school is not in session.

COMMENTS

2014/15: Duff Avenue Park ($20,000) replacement; Greenbriar Park ($20,000) new installation; Miller Elementary School ($22,500) cost sharing with Ames Community School District
2015/16: Daley Park ($35,000) replacement
2016/17: Teagarden Park ($20,000) new installation; Hutchison Park ($20,000) replacement
2017/18: Inis Grove Park ($40,000) replacement adjacent to Shagbark Shelter
2018/19: Christopher Gartner Park ($25,000) replacement

FISCAL YEAR PRIORITY			3	3	3	3	3
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Construction		202,500	62,500	35,000	40,000	40,000	25,000
	TOTAL	**202,500**	**62,500**	**35,000**	**40,000**	**40,000**	**25,000**
FINANCING:							
Local Option Sales Tax		202,500	62,500	35,000	40,000	40,000	25,000
	TOTAL	**202,500**	**62,500**	**35,000**	**40,000**	**40,000**	**25,000**

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Enrichment	Parks and Recreation	030-4967-459

ADA HAYDEN HERITAGE PARK **PROJECT STATUS:** Scope Change

DESCRIPTION/JUSTIFICATION

The Master Plan for this park, developed in 2004, includes a hard surfaced parking lot at the northwest corner after Grant Road is paved. Construction of the parking lot will coincide with City Council action to support development in north Ames. Park visitors who want to use the northwest part of the park currently have to walk a mile to enjoy the overlook features that have been installed by three civic organizations. A parking lot in the northwest area would also provide residents with mobility issues the opportunity to access one of the best vistas of this 437-acre parcel.

Currently, 25 acres on the north portion of the park are comprised of pasture vegetation which is cut for hay every year. The property adjacent to this section of the park (to the north) will be developed in the near future. It is important to establish this area of the park with prairie. Due to its deep root system, prairie will minimize storm water runoff from this housing development, thus reducing potential pollution to the lake. Prairie will also increase wildlife habitat.

COMMENTS

2014/15: Resurface the south loop trail adjacent to the lake (1.6 miles / $200,000); construct a small parking lot in the northwest corner of this park ($84,000)
2015/16: Resurface the north loop trail adjacent to the lake (1.6 miles / $200,000)
2017/18: Establish prairie on north portion of the park ($75,000)

LOCATION

Ada Hayden Heritage Park

FISCAL YEAR PRIORITY			4	4		4	
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering		53,400	28,400	20,000		5,000	
Contracted Work		70,000				70,000	
Construction		435,600	255,600	180,000			
	TOTAL	**559,000**	**284,000**	**200,000**		**75,000**	
FINANCING:							
Local Option Sales Tax		475,000	200,000	200,000		75,000	
Local Option Sales Tax (Park Development Reserve)		84,000	84,000				
	TOTAL	**559,000**	**284,000**	**200,000**		**75,000**	

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Enrichment	Parks and Recreation	030-4925-459
		030-4927-459

CITY/SCHOOL DISTRICT PARTNERSHIP: GYMNASIUMS **PROJECT STATUS:** Scope Change Advanced

DESCRIPTION/JUSTIFICATION

In April 2012, residents approved a $55 million bond issue to construct three new elementary schools (Miller, Fellows, and Meeker) and to refurbish two others (Mitchell and Sawyer). Each school will include a high school regulation-size basketball court within its gymnasium. In anticipation of the City sharing these facilities, the School Board increased each gymnasium's footprint by 10' in depth. This will allow portable bleachers to be used by spectators during Parks and Recreation league play.

An agreement will be prepared for School Board and City Council approval to allow Parks and Recreation to coordinate activities when school is not in session. However, for the overall community to utilize these facilities to full potential (Parks and Recreation youth and adult sport leagues, open gym) competitive grade basketball and volleyball standards are required. The District's usage for elementary school children does not warrant this level of standards to be installed. The cost of this equipment is estimated at $55,000 per site.

COMMENTS

2014/15: $110,000 – Meeker Elementary; Mitchell Elementary
2015/16: $110,000 – Fellows Elementary; Sawyer Elementary

FISCAL YEAR PRIORITY			5	5			
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Construction		220,000	110,000	110,000			
	TOTAL	**220,000**	**110,000**	**110,000**			
FINANCING:							
Local Option Sales Tax		220,000	110,000	110,000			
	TOTAL	**220,000**	**110,000**	**110,000**			

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Enrichment	Parks and Recreation	030-4904-459

FURMAN AQUATIC CENTER **PROJECT STATUS:** Scope Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION
This facility opened in May 2010. It has been operational for four seasons with an average of over 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.

Pool consultants have stated that a new, major feature should be installed every five years to ensure that admissions remain high. This will reduce the need to subsidize the operation. The Master Plan for the site allows for three major features to be added: speed slides adjacent to the Lazy River, and a family slide and water bowl adjacent to the 50-meter pool. When the project was bid in 2007, the speed slides were identified as the first of the three features to be installed and they were included as a bid alternate. Funding at that time did not allow for this alternate to be included.

COMMENTS
2014/15: Paint the black and white areas of the three basins - fall of 2014 ($48,000)
2017/18: Install an additional water feature ($500,000)

LOCATION
1365 13th Street

FISCAL YEAR PRIORITY			6			5	
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering/Design		30,000	5,000			25,000	
Construction		518,000	43,000			475,000	
	TOTAL	**548,000**	**48,000**			**500,000**	
FINANCING:							
Local Option Sales Tax		548,000	48,000			500,000	
	TOTAL	**548,000**	**48,000**			**500,000**	

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

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

DESCRIPTION/JUSTIFICATION
The Ames/ISU Ice Arena is twelve years old (opened in April 2001). With the goal of maintaining a quality facility, numerous items need to be replaced as listed below.

An energy efficiency study was conducted in 2012. The assessment identified energy conservation enhancements that have been incorporated into the 5-year plan.

Funding for capital improvement projects is provided through the Ice Arena Capital Reserve Fund. Each year, the City and Iowa State University each contribute $20,000 to this fund to ensure that the facility is well-maintained. As of June 30, 2013, this fund totaled $358,493.

COMMENTS
2014/15: Replace rubber flooring in hallway and locker rooms ($175,000); replace lighting above the ice and throughout the building ($40,000)
2015/16: Install surge protection throughout the Ice Arena ($25,000)
2016/17: Replace dasher board system ($60,000)

LOCATION
Ames/ISU Ice Arena, 1505 Gateway Hills Park Drive

FISCAL YEAR PRIORITY			7	6	5		
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Equipment		60,000			60,000		
Construction		230,000	205,000	25,000			
Engineering/Design		10,000	10,000				
	TOTAL	**300,000**	**215,000**	**25,000**	**60,000**		
FINANCING:							
Ice Arena Capital Reserve Funds		300,000	215,000	25,000	60,000		
	TOTAL	**300,000**	**215,000**	**25,000**	**60,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Enrichment	Parks and Recreation	571-4928-459
		572-4928-459

TENNIS COURT IMPROVEMENTS **PROJECT STATUS:** Cost Decrease

DESCRIPTION/JUSTIFICATION:
This project is to maintain and improve existing tennis courts throughout the city.

Inis Grove: The tennis courts were resurfaced in 2000 and crack filling and resurfacing will be required in FY14/15.

Emma McCarthy Lee: These courts were reconstructed in 2004. It is estimated that they will need to be resurfaced in FY16/17.

COMMENTS
2014/15: Resurface the courts at Inis Grove Park ($45,000)
2016/17: Resurface the courts at Emma McCarthy Lee Park ($50,000)

LOCATION
Brookside Park; Inis Grove Park; and Emma McCarthy Lee Park

FISCAL YEAR PRIORITY			8		6		
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering / Design		10,000	5,000		5,000		
Reconstruction / Resurfacing		85,000	40,000		45,000		
	TOTAL	**95,000**	**45,000**		**50,000**		
FINANCING:							
Local Option Sales Tax		95,000	45,000		50,000		
	TOTAL	**95,000**	**45,000**		**50,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Enrichment	Parks and Recreation	030-4942-459

ROOSEVELT NEIGHBORHOOD PARK DEVELOPMENT **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
The Ames Community School District gifted an approximate 1.3 acre parcel of green open space to the City in 2013. This space will be developed into a neighborhood park. Standard amenities in neighborhood parks include: basketball pad with goals, a small shelter, a play structure and swings, and utilities. The estimated costs for these improvements will total $80,000.

COMMENTS
FY14/15: Develop the Roosevelt Neighborhood Park ($80,000)

LOCATION
9th Street and Roosevelt Avenue

FISCAL YEAR PRIORITY			9				
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Park Development		80,000	80,000				
	TOTAL	**80,000**	**80,000**				
FINANCING:							
Local Option Sales Tax (Park Development Reserve)		80,000	80,000				
	TOTAL	**80,000**	**80,000**				

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Enrichment	Parks and Recreation	030-4909-459

INIS GROVE PARK RESTROOM REPLACEMENT **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION
The existing restroom, adjacent to Shagbark Shelter in the northeast portion of the park, is over 50 years old. The water service has experienced problems and a sanitary sewer installation will soon be required to replace the aging septic system. The location of this facility is not convenient for tennis and basketball court players. The new restroom will be constructed in a more convenient location for all park users (north of the tennis courts, adjacent to the parking lot, and south of Shagbark Shelter).

COMMENTS
2015/16: Inis Grove Park – Construct a new restroom (north of tennis courts) to replace the existing restroom (west of Shagbark Shelter) - $250,000

LOCATION
Inis Grove Park

FISCAL YEAR PRIORITY				7			
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering/Design		20,000		20,000			
Construction		230,000		230,000			
	TOTAL	**250,000**		**250,000**			
FINANCING:							
Local Option Sales Tax		250,000		250,000			
	TOTAL	**250,000**		**250,000**			

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

MOORE MEMORIAL PARK **PROJECT STATUS:** Funding Change

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. This improvement has become viable because ISU recently acquired the YMCA grounds located adjacent the City's 40-acre parcel. In the event ISU allows public access through their 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
2016/17: Install a pedestrian bridge across Squaw Creek at Moore Memorial Park ($350,000)

LOCATION
Moore Memorial Park

FISCAL YEAR PRIORITY					7		
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Engineering/Design		40,000			40,000		
Construction		310,000			310,000		
	TOTAL	**350,000**			**350,000**		
FINANCING:							
Local Option Sales Tax		350,000			350,000		
	TOTAL	**350,000**			**350,000**		

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

BROOKSIDE PARK IMPROVEMENTS **PROJECT STATUS:** Scope Change Cost Change

City of Ames, Iowa
Capital Improvements Plan

DESCRIPTION/JUSTIFICATION
Park security lighting needs to be replaced due to age. It is anticipated that an additional six to eight poles with lighting will be required because hard surface trails have been increased within the park.

COMMENTS
2018/19: Replace light fixtures and add additional poles with fixtures ($75,000)

LOCATION
Brookside Park

FISCAL YEAR PRIORITY 4

		TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19
COST:							
Engineering / Design		5,000					5,000
Construction		70,000					70,000
	TOTAL	**75,000**					**75,000**
FINANCING:							
Local Option Sales Tax		75,000					75,000
	TOTAL	**75,000**					**75,000**

PROGRAM – ACTIVITY: Community Enrichment
DEPARTMENT: Parks and Recreation
ACCOUNT NO. 030-4941-459

COMMUNITY ENRICHMENT - CITY MANAGER

PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19	PAGE
EXPENDITURES:							
1 Neighborhood Improvement Program	250,000	50,000	50,000	50,000	50,000	50,000	137
Total Expenditures	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**	
REVENUES:							
CITY:							
Local Option Sales Tax	250,000	50,000	50,000	50,000	50,000	50,000	
Total Revenues	**250,000**	**50,000**	**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, 116 neighborhood projects have been funded by the City, totaling $347,752. 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," 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.

FISCAL YEAR PRIORITY			1	1	1	1	1
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Construction		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	City Manager's Office	030-0420-459

COMMUNITY ENRICHMENT - PLANNING & HOUSING

PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19	PAGE
EXPENDITURES:							
1 Downtown Facade Program	250,000	50,000	50,000	50,000	50,000	50,000	139
Total Expenditures	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**	
REVENUES:							
City:							
Local Option Sales Tax	250,000	50,000	50,000	50,000	50,000	50,000	
Total Revenues	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**	

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. However, with the establishment of the Main Street Cultural District, excitement in this commercial area increased along with requests for façade improvement 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 fiscal year 2011/12, the City Council expanded the program guidelines, where applications will be reviewed and awarded in the spring of 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 November 2013, the program has awarded thirty-three (33) grants to thirty-two (32) property owners for a total amount of $438,674. All funding has currently been committed, and 2014/15 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.

LOCATION
Downtown Ames

FISCAL YEAR PRIORITY			1	1	1	1	1
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
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

COMMUNITY ENRICHMENT - PUBLIC WORKS

PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19	PAGE
EXPENDITURES:							
1 Municipal Cemetery Improvements	200,000	65,000	65,000	70,000			141
Total Expenditures	**200,000**	**65,000**	**65,000**	**70,000**			
REVENUES:							
City:							
Local Option Sales Tax	200,000	65,000	65,000	70,000			
Total Revenues	**200,000**	**65,000**	**65,000**	**70,000**			

AMES MUNICIPAL CEMETERY IMPROVEMENTS **PROJECT STATUS:** No Change

DESCRIPTION/JUSTIFICATION

This project provides funding to restore and improve lanes at the Cemetery. This five-year program for restoration and improvement maintenance, which began in 2011/12, will enhance the rideability and appearance of all paved lanes within the cemetery for at least ten years. Funding in 2016/17 will be used to replace water lines in the Cemetery. The water lines are currently galvanized pipe that experience several breaks per year. New piping will allow for consistent water service to Cemetery visitors.

COMMENTS

There are nearly two miles of paved lanes north of 9th Street within the Ames Municipal Cemetery boundaries. These lanes provide public access for visitors to gravesites and for funerals as well as for access for crews and equipment for funeral preparations and maintenance of the sites and grounds. Prior to 2008/09, endowed care funds were used for surface maintenance of the cemetery lanes. Beginning in 2008/09, state regulations were put into place that prohibited the use of these funds for all cemetery costs. As a result of these new regulations and loss of funding created by them, maintenance of the lanes was stopped. Continued use created structural and surface deterioration of the lanes. Bumpy rides and messy appearance of the lanes detract from the tranquility and value of this City-owned asset. In meeting with a Cemetery Focus Group, the condition of the lanes and access to water were mentioned as needed improvements, along with the need to upgrade benches and trash cans which were placed in the operating budget.

2014/15	Lane construction/maintenance
2015/16	Lane construction/maintenance
2016/17	Water line replacement

FISCAL YEAR PRIORITY			1	1	1		
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Construction		200,000	65,000	65,000	70,000		
	TOTAL	**200,000**	**65,000**	**65,000**	**70,000**		
FINANCING:							
Local Option Sales Tax		200,000	65,000	65,000	70,000		
	TOTAL	**200,000**	**65,000**	**65,000**	**70,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Community Enrichment	Public Works	030-9524-469

INTERNAL SERVICES - FACILITIES/FLEET SERVICES

PROJECT/REVENUE DESCRIPTION	TOTAL	2014/15	2015/16	2016/17	2017/18	2018/19	PAGE
EXPENDITURES:							
1 City Hall Improvements	250,000	50,000	50,000	50,000	50,000	50,000	143
2 City Maintenance Facility Improvements	368,500	122,500	111,000	135,000			144
Total Expenditures	**618,500**	**172,500**	**161,000**	**185,000**	**50,000**	**50,000**	
REVENUES:							
City:							
Local Option Sales Tax	250,000	50,000	50,000	50,000	50,000	50,000	
Road Use Tax	92,125	30,625	27,750	33,750			
Water Utility Fund	92,125	30,625	27,750	33,750			
Sewer Utility Fund	92,125	30,625	27,750	33,750			
Fleet Services Fund	92,125	30,625	27,750	33,750			
Total Revenues	**618,500**	**172,500**	**161,000**	**185,000**	**50,000**	**50,000**	

CITY HALL IMPROVEMENTS **PROJECT STATUS:** No 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 maintenance budget.

LOCATION

City Hall, 515 Clark Avenue

FISCAL YEAR PRIORITY			1	1	1	1	1
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
COST:							
Maintenance		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.**
Internal Services	Facilities	030-2930-419

CITY MAINTENANCE FACILITY ROOF REPLACEMENT **PROJECT STATUS:** Delayed Cost Change
Scope Change

DESCRIPTION/JUSTIFICATION
This project replaces the roof of the City Maintenance Facility on Edison Street in east Ames. This facility is shared by Public Works and Fleet Services.

The current roof was installed in two phases, one in 1986 and one in 1993. Flat roofs have a 20-year life cycle, and these roofs are 27 and 20 years old respectively. The warranties expired in 1996 and 2003. Holes and rips are now being repaired as they occur. Staff suspects that roofing materials may contain asbestos; therefore the engineer's estimates include asbestos abatement for these two roofs.

COMMENTS

2013/14	Engineering & Construction Admin for Phase I - $8,900
2014/15	Construction for Phase I - $122,500
2015/16	Roof Replacement for Phase II - $111,000
2016/17	Roof Replacement for Phase III - $135,000

LOCATION
City Maintenance Facility, 2207 Edison Street - East Ames, north of Lincoln Way, just west of Dayton Avenue

FISCAL YEAR PRIORITY			2	2	2		
		TOTAL	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/198**
COST:							
Engineering		5,000		2,500	2,500		
Construction Administration		5,000		2,500	2,500		
Asbestos Abatement		33,500	17,500	16,000			
Construction		325,000	105,000	90,000	130,000		
	TOTAL	**368,500**	**122,500**	**111,000**	**135,000**		
FINANCING:							
Road Use Tax		92,125	30,625	27,750	33,750		
Water Utility Fund		92,125	30,625	27,750	33,750		
Sewer Utility Fund		92,125	30,625	27,750	33,750		
Fleet Services Fund		92,125	30,625	27,750	33,750		
	TOTAL	**368,500**	**122,500**	**111,000**	**135,000**		

PROGRAM - ACTIVITY:	**DEPARTMENT:**	**ACCOUNT NO.**
Internal Services	Fleet Services	810-2970-529