

CITY OF TUCSON, ARIZONA

APPROVED FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM FOR FISCAL YEARS 2017-2021

















CITY OF TUCSON, ARIZONA

Approved Five-Year Capital Improvement Program Fiscal Years 2017 through 2021

Effective July 1, 2016

Mayor and Council



HONORABLE JONATHAN ROTHSCHILD Mayor



REGINA ROMERO Ward One



PAUL CUNNINGHAM Ward Two



KARIN UHLICH Ward Three



SHIRLEY SCOTT Ward Four



RICHARD FIMBRES Ward Five



STEVE KOZACHIK Ward Six

City Administration

MICHAEL ORTEGA City Manager

JOYCE GARLAND CFO/Assistant City Manager

ALBERT ELIAS
Assistant City Manager





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Section A Overview



OVERVIEW of the FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

A Capital Improvement Plan (CIP) is a community planning and fiscal management tool used to coordinate the location, timing, and financing of capital improvements over a five year period. Capital improvements refer to major, non-recurring physical expenditures such as land, buildings, public infrastructure, and equipment, all with a cost of \$100,000 or more. The CIP is necessary to improve public facilities and infrastructure assets for the economic, aesthetic, and functional viability to our City. The plan identifies our City's specific capital needs based on various long-range plans, goals, and policies and also provides analysis for decision making for City officials and strategic capital planning efforts with City departments.

The City of Tucson's practice is to develop, maintain, and revise when necessary a continuing Capital Improvement Program that covers a five-year planning horizon. This budget document covers Fiscal Years 2016/17 through 2020/21 and identifies capital projects during this timeframe to include the funding sources available for projected expenditures.

The objective of this overview is to give the reader a brief look into the CIP which contains the following financial and narrative information:

- Capital Improvement Program Process
- Budget Highlights
- Summary of Expenditures and Funding Sources
- Department Programs
- Impact on the Operating Budget

CAPITAL IMPROVEMENT PROGRAM PROCESS

Defining a Capital Improvement

To be included in the CIP, projects need to meet one of the following criteria:

- Construction of a new City asset or expansion of an existing City-owned facility, including preliminary planning
 and surveys, cost of land, staff and contractual services for design and construction, and related furnishings and
 equipment.
- Initial acquisition of a major equipment system which will become a City asset, with a cost of \$100,000 or more and a useful life of at least six years.
- Major renovation or rehabilitation of an existing City-owned facility that requires an expenditure of \$100,000 or more and will extend the life of the original City asset.

Exceptions have been made for inclusion of a few projects that do not meet the above criteria (Sun Tran buses, Sun Van paratransit vans, and street improvements) to make the planning, funding, and acquisition of these purchases more visible to the public and the governing body.

Steps from Submittal to Approval

In December 2015, the CIP process began with the Office of Budget and Internal Audit providing direction and guidelines to department liaisons. Departments were given approximately seven weeks to develop their CIP requests based on their assessment of needs, existing bond authorizations, and grant awards. Departments were directed to include only projects with secured funding. Exceptions were made for annual federal grant appropriations from the Federal Transit Administration (FTA), other pending awards that would require budget capacity (e.g., any non-federal grant or contribution), and future enterprise revenue bonds. Department requests were reviewed by the Office of Budget and Internal Audit and applicable revisions were made.

The proposed CIP was presented to the Mayor and Council on April 19, 2016, along with the Recommended Fiscal Year 2016/17 Budget. The first year of the CIP was included as part of the City's Recommended Budget.

The Mayor and Council reviewed and discussed both the operating and capital budgets at Study Sessions in May. Two public hearings were held prior to the adoption of the Fiscal Year 2016/17 budget on June 7, 2016.

BUDGET HIGHLIGHTS

This proposed Five-Year CIP totals \$849.9 million; \$269.7 million is budgeted in the first year of the CIP and is a component of the Fiscal Year 2016/17 Adopted Budget. Notable projects include the following:

Aerospace-Sonoran Corridor Transmission Main Extension. Support future expansion needs along the Sonoran Corridor by changing the relocation of the previously planned water treatment facility and modifying piping to support the new facility. Installation of a reservoir and booster facility will provide fire service flows to Section 31 and the Aerospace Parkway. A main extension along the Aerospace Parkway will provide water to World View and additional customers. This project will begin in Fiscal Year 2016/17 and will be completed in Fiscal Year 2018/19. Total project costs are estimated to be \$9.3 million with \$583,000 budgeted in Fiscal Year 2016/17.

Compressed Natural Gas (CNG) Plant. Replace the existing aged CNG Plant with a new plant that has the equipment necessary to meet industry vehicle fueling standards and provide backup emergency generator power to sustain plant operations in the event of a power outage. The project, when complete, will better serve both Sun Tran and Environmental Services' planned expansion of the CNG Fleet. Total project costs are estimated to be \$11.3 million with \$698,900 budgeted in Fiscal Year 2016/17. The project is funded with certificates of participation, Environmental Services user revenues, federal grants, and General Services Internal Services Funds.

Reid Park Zoo Health Center. Design and construct an addition to the existing veterinary facility at the Reid Park Zoo. This project is necessary as the existing facility is extremely dated (approximately 40 years old) and is no longer large enough to accommodate the zoo's current collection of animals. The facility is also needed to help meet the standards set by the Association of Zoos and Aquariums. Total project costs are estimated at \$3.5 million. The Reid Park Zoological Society is raising the funds for this project.

Street Improvements: Proposition 409. Restore, repair, and resurface streets inside Tucson City limits with the \$100 million bond program approved by voters in November 2012. Street resurfacing will be over a five-year period and approximately 85% of bond funds will be allocated to major streets and 15% will be allocated to neighborhood streets. Accordingly, the Tucson Department of Transportation's (TDOT) conservative road repair estimates and a favorable bidding environment resulting from lower material costs and falling gas prices, the arterial road mileage repairs authorized by the bond package are now roughly estimated to cost only \$60 million. As a result, the Bond Oversight Commission recommended, and the Mayor and Council unanimously adopted, an allocation of an extra \$40 million in bonded revenue to be spent on an expanded list of arterial and residential road repairs. With the additional capacity, TDOT added 550 lane miles to the program, resulting in roadway improvements to about 45 more roadway segments. Total project costs are estimated to be \$99.0 million with \$19.0 million budgeted in Fiscal Year 2016/17 (\$1.0 million is for the bond issuance costs).

Tenth Avenue Maintenance Facility. Design and construct a new facility and make improvements at the Environmental Services Container Maintenance Facility located at South Tenth Avenue. A new facility is needed for the welding, storage, and operations maintenance staff. Improvements include demolition, earthwork, infrastructure, and drainage. Safety improvements are necessary to the vacant, former transfer station building. Project design began October 2013. The construction phase started in Fiscal Year 2015/16 and is scheduled to finish in Fiscal Year 2016/17. Total project costs are estimated to be \$4.9 million with \$4.3 million budgeted in Fiscal Year 2016/17. The project is funded from the Environmental Services Fund.

SUMMARY of EXPENDITURES and FUNDING SOURCES

Only funded projects, except as noted earlier, are presented in this Five-Year CIP. The objective is to clarify for the community what the City can do to meet its needs with the limited funds available.

Expenditures

The proposed Five-Year CIP for Fiscal Years 2016/17 through 2020/21 totals \$849.9 million. The majority of the projects are in the Public Utilities category, which includes Environmental Services and Tucson Water. The majority of expenditures are in the Community Enrichment and Development category, which includes Housing and Community Development, Parks and Recreation, and Transportation.

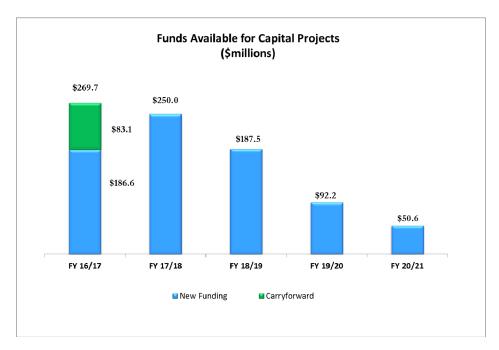
Five-Year CIP Summary of Expenditures

(in \$000s)	Adopted Year 1 FY 16/17	Projected Five- Year Program
Community Enrichment and Development	\$ 196,225.9	\$ 590,974.7
Public Safety and Justice Services	4,015.8	4,015.8
Public Utilities	66,873.0	252,381.0
Support Services	1,798.9	1,798.9
General Government	750.0	750.0
Total	\$ 269,663.6	\$ 849,920.4

This Five-Year CIP is \$166.8 million less than the approved Five-Year CIP for Fiscal Years 2015/16 through 2019/20.

Fiscal Year 2016/17 includes \$83.1 million carried forward for project expenditures not spent as planned during Fiscal Year 2015/16 and \$186.6 million in new funding. The CIP presumes that all of the Fiscal Year 2016/17 budget will be spent in that year.

CIP expenditures decrease significantly after Fiscal Year 2016/17 from \$269.7 million in Fiscal Year 2016/17 to \$50.6 million by Fiscal Year 2020/21.



For a summary of expenditures by department and fiscal year, see Table I, Five-Year CIP Summary by Department on page E-8.

Funding Sources

This five-year program of \$849.9 million is funded primarily from Capital Projects Funds.

Five-Year CIP Summary of Funding Sources

	• •	
(in \$000s)	Adopted Year 1 FY 16/17	Projected Five- Year Program
Capital Projects Funds	\$ 156,303.2	\$ 484,540.0
Enterprise Funds	67,218.0	252,726.0
General Fund	890.9	890.9
Internal Service Fund	1,453.9	1,453.9
Special Revenue Funds	43,797.6	110,309.6
Total	\$ 269,663.6	\$ 849,920.4

Capital Projects Funds. (This category, which includes the City bond funds, is 57% of the five-year CIP). These funds will provide \$484.5 million over the next five years. Regional Transportation Authority (RTA) funds of \$286.5 million account for the largest portion of this category. Next are General Obligation Street Bonds of \$53.8 million. Pima County bonds will provide \$43.9 million. Capacity of \$43.7 million was added for road, regional park, and communications improvements along with \$50.7 million from regional Highway User Revenue Funds (HURF) distributed by the Pima Association of Governments (PAG). Certificates of Participation (COPs) account for \$5.9 million.

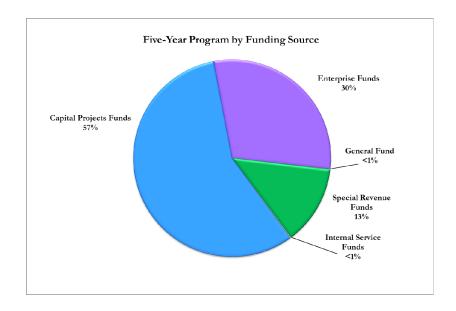
Enterprise Funds. Enterprise Funds total \$252.7 million or 30% of the Five-Year CIP. Environmental Services totals \$21.7 million. Tucson Water accounts for the remaining \$231.0 million: \$137.1 million from user revenues, \$27.0 million from Water's Obligation funds, and \$66.9 million from future Water Revenue Bonds.

General Fund. This category totals \$890,900 or less than 1% of the Five-Year CIP and is funding citywide technology upgrades.

Internal Service Funds. This category totals \$1.5 million or less than 1% of the Five-Year CIP and is funding the CNG fueling upgrade and the pipeline.

Special Revenue Funds. This category totals \$110.3 million or 13% of the Five-Year CIP. Included in this category are federal grants of \$78.0 million. The General Fund provides \$11.2 million for Mass Transit. The City's HURF allocation accounts for \$19.7 million, and \$1.4 million comes from fees/charges and civic contributions.

For more detail on funding sources, see Table II, Five-Year CIP Summary by Funding Source beginning on page E-9.



DEPARTMENT PROGRAMS

Programs are briefly presented in this section by departments which are listed alphabetically within their budget reporting categories, also known as service areas: Community Enrichment and Development, Public Safety and Justice Services, Public Utilities, Support Services, and General Government. For a further listing of the projects by departments see pages E-20 through E-34.

Community Enrichment and Development

The Community Enrichment and Development category, which accounts for 69.6% of the total Five-Year CIP, contains projects managed by Housing and Community Development, Parks and Recreation, and Transportation.

Housing and Community Development. This department's five-year program of \$1.0 million consists of one project. Funding is provided by the Community Development Block Grant Fund (CDBG).

Parks and Recreation. Parks' five-year CIP of \$8.9 million contains 21 projects. These projects are funded primarily from impact fee revenues of \$5.1 million. Civic contributions and certificates of participation provide for the remaining \$3.8 million. These funds provide for a wide range of projects: improvements at regional parks, urban greenway improvements, and amenities at neighborhood parks.

Transportation. The five-year Transportation program of \$581.0 million includes four program areas: Public Transit for \$66.6 million, Streets for \$496.0 million, Street Lighting for \$16.7 million, and Traffic Signals for \$1.7 million. Because there are insufficient funds to meet all of Transportation's needs, this CIP allocates available funding to the highest priority projects.

The largest funding source for Transportation's projects is the funding from the RTA plan which totals \$286.5 million. General Obligation Street Bonds total \$53.8 million. Federal funding provides another significant portion totaling \$75.6 million: \$55.5 million for transit projects and \$20.1 million for street projects. Other funding sources are Pima County bond funds of \$43.9 million, regional HURF from PAG of \$50.7 million, City HURF of \$19.7 million, and impact fee revenues of \$38.3 million. Park Tucson Fees/Charges account for \$1.3 million. The remaining \$11.2 million is from the General Fund for Mass Transit, which is used as the local match for federal transit grants.

Public Safety and Justice Services

The Public Safety and Justice Services category, which accounts for less than 1% of the total Five-Year CIP, contains projects managed by City Court and Tucson Fire.

City Court. City Court's five-year program of \$2.3 million consists of one project, Court building remodel. This project is funded with certificates of participation in the Capital Improvement Fund.

Tucson Fire. Tucson Fire's five-year program of \$1.7 million consists of two projects: the Alerting System and the Park Ajo Communications Center Administrative Phone System. Funding is provided by the General Fund, the Miscellaneous Federal Grant Fund, and Public Safety impact fees.

Public Utilities

The Public Utilities category, which accounts for 29.6% of the total Five-Year CIP, contains projects managed by Environmental Services and Tucson Water.

Environmental Services. The department's five-year program of seven projects totals \$21.4 million. Environmental Services' CIP is funded from Environmental Services revenues.

Tucson Water. The five-year Tucson Water CIP of \$231.0 million includes \$213.3 million of improvements to the potable water system and \$17.7 million of improvements for the reclaimed water system. Tucson Water's CIP is funded with future water revenue bond authorization of \$67.0 million, operation funds of \$137.1 million, 2015 Revenue Obligation funds of \$10.3 million, and 2016 Revenue Obligation funds of \$16.6 million.

Support Services

The Support Services category, which accounts for less than 1% of the total Five-Year CIP, contains two projects managed by General Services.

General Services. The five-year General Services program of \$1.8 million will bring to completion the CNG fueling upgrade and the CNG Pipeline Southwest Gas (SWG) Bypass. General Services' CIP is funded with Environmental Services Funds and Internal Service Funds.

General Government

The General Government category, which accounts for less than 1% of the total Five-Year CIP, contains two projects that are budgeted here because they are beyond the oversight scope of a single department. The Technology Upgrade Project will upgrade the City's multiple enterprise related systems to a current standard supported by the vendor. The Kronos Citywide System Project will implement an Enterprise Timekeeping management system to automate time keeping for all City departments. Both projects are funded by the General Fund.

IMPACT on the OPERATING BUDGET

The completion of many capital projects is the beginning of recurring costs for the operating budget. Operating and Maintenance (O&M) impacts from projects in this Five-Year CIP total \$95,900 for Fiscal Year 2016/17, increasing to a five-year total of \$3.2 million through Fiscal Year 2020/21. The General Fund O&M impacts in Fiscal Year 2016/17 are for the opening of new or expanded facilities.

For summaries and project detail of O&M impacts by department and funding source over the next five years, see Table III, Summary of CIP Impact on the Operating Budget on page E-11.

SUMMARY TABLES

Table I, Summary by Department (page E-8).

Table II, Summary by Funding Source (page E-9).

Table III, Summary of CIP Impact on the Operating Budget (page E-11).

Table IV, Projects with Pima County Fond Funding (page E-17).

Table V, projects with Development Impact Fees (page E-18).

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM Table I. Summary by Department

		Adopted Year 1 FY 16/17	Year 2 FY 17/18			ojected Re Year 3 FY 18/19	•	rements Year 4 TY 19/20	F	Year 5 FY 20/21		Five Year Total
Community Enrichment and		,		,		•		,		,		
Development Housing and Community	\$	1,000.0	\$	-0-	\$	-0-	\$	-()-	\$	-0-	\$	1,000.0
Development	"	,	"		"		"		"		"	,
Parks and Recreation		6,083.7		1,460.8		620.0		494.9		275.0		8,934.4
Transportation		189,142.2	1	196,001.4		128,944.3		51,239.3		15,713.1		581,040.3
Subtotal	\$	196,225.9	\$1	197,462.2	\$	129,564.3	\$	51,734.2	\$	15,988.1	\$	590,974.7
Public Safety and Justice Services												
City Court	\$	2,336.0	\$	-0-	\$	-0-	\$	-0-	\$	-0-	\$	2,336.0
Tucson Fire		1,679.8		-0-		-0-		-0-		-0-		1,679.8
Subtotal	\$	4,015.8	\$	-0-	\$	-0-	\$	-0-	\$	-0-	\$	4,015.8
Public Utilities												
Environmental Services	\$	10,775.0	\$	5,975.0	\$	4,603.0	\$	-0-	\$	-0-	\$	21,353.0
Tucson Water		56,098.0		46,539.0		53,297.0		40,492.0		34,602.0		231,028.0
Subtotal	\$	66,873.0	\$	52,514.0	\$	57,900.0	\$	40,492.0	\$	34,602.0	\$	252,381.0
Support Services												
General Services	\$	1,798.9	\$	-0-	\$	-0-	\$	-0-	\$	-0-	\$	1,798.9
Subtotal	\$	1,798.9	\$	-0-	\$	-0-	\$	-0-	\$	-0-	\$	1,798.9
General Government												
General Expense	\$	750.0	\$	-0-	\$	-()-	\$	-0-	\$	-()-	\$	750.0
Subtotal	\$	750.0	\$	-0-	\$	-0-	\$	-0-	\$	-0-	\$	750.0
Total	\$ 2	269,663.6	\$2	49,976.2	\$	187,464.3	\$	92,226.2	\$	50,590.1	\$	849,920.4

Table II. Summary by Funding Source (\$000)

	Adopted					Five					
	I	Year 1 FY 16/17		Year 2 Y 17/18		Year 3 FY 18/19	Year 4 Y 19/20	Year 5 FY 20/21			Year Total
Capital Projects Funds											
Capital Improvement Fund	\$	5,852.2	\$	-0-	\$	-0-	\$ -0-	\$	-0-	\$	5,852.2
Capital Agreement Fund: PAG		13,002.0		15,003.0		4,125.0	18,560.0		-0-		50,690.0
Capital Agreement Fund: Pima County Bonds		12,107.0		19,830.0		12,000.0	-()-		-()-		43,937.0
General Obligation Bonds: Series 2015		14,220.0		-0-		-()-	-()-		-()-		14,220.0
General Obligation Bonds: Series 2016		4,000.0		14,000.0		1,800.0	-0-		-()-		19,800.0
General Obligation Bonds: Series 2017		-()-		4,000.0		14,000.0	1,800.0		-()-		19,800.0
Impact Fee Fund: Central District		4,723.8		4,809.5		3,000.2	3,000.0		-0-		15,533.5
Impact Fee Fund: East District		3,167.9		2,154.4		-0-	-0-		-0-		5,322.3
Impact Fee Fund: Southeast District		3,977.3		5,176.6		2,000.0	2,000.0		-()-		13,153.9
Impact Fee Fund: Southlands District		110.0		550.0		874.7	469.9		250.0		2,254.6
Impact Fee Fund: West District		4,508.4		2,610.0		200.0	-0-		-0-		7,318.4
Impact Fee Fund: Tucson Fire		65.0		-0-		-0-	-0-		-0-		65.0
Impact Fee Fund: Tucson Police		65.0		-0-		-0-	-0-		-0-		65.0
Regional Transportation Authority Fund		90,504.6		104,725.1		73,229.4	15,069.0		3,000.0		286,528.1
Subtotal	\$	156,303.2	\$	172,858.6	\$ 1	111,229.3	\$ 40,898.9	\$	3,250.0	\$	484,540.0
Enterprise Funds											
2015 Water Revenue System Obligation Fund	\$	10,300.0	\$	-0-	\$	-()-	\$ -()-	\$	-()-	\$	10,300.0
2016 Water Revenue System Obligation Fund		16,668.0		-0-		-0-	-0-		-0-		16,668.0
Environmental Services Fund		11,120.0		5,975.0		4,603.0	-0-		-0-		21,698.0
Future Water Revenue Bonds		-0-		19,501.0		27,658.0	12,923.0		6,899.0		66,981.0
Tucson Water Revenue and Operations Fund		29,130.0		27,038.0		25,639.0	27,569.0		27,703.0		137,079.0
Subtotal	\$	67,218.0	\$	52,514.0	\$	57,900.0	\$ 40,492.0	\$	34,602.0	\$	252,726.0
General Fund	\$	890.9	\$	-0-	\$	-0-	\$ -0-	\$	-()-	\$	890.9
Subtotal	\$	890.9	\$	-0-	\$	-()-	\$ -()-	\$	-0-	\$	890.9

Table II. Summary by Funding Source (\$000)

	Adopted					ojected R	Five				
		Year 1 Y 16/17		Year 2 Y 17/18		Year 3 Y 18/19		Year 4 Y 19/20		Year 5 Y 20/21	Year Total
Internal Service Fund											
General Services Internal Service Fund	\$	1,453.9	\$	-()-	\$	-()-	\$	-0-	\$	-0-	\$ 1,453.9
Subtotal	\$	1,453.9	\$	-0-	\$	-0-	\$	-0-	\$	-0-	\$ 1,453.9
Special Revenue Funds											
Civic Contributions Fund	\$	25.0	\$	25.0	\$	25.0	\$	25.0	\$	25.0	\$ 125.0
Community Development		1,000.0		-0-		-0-		-0-		-0-	1,000.0
Block Grant Fund											
Federal Highway Administration Grants		10,217.5		5,448.4		4,442.4		-0-		-0-	20,108.3
Highway User Revenue Fund		16,577.9		3,089.4		11.6		5.0		5.0	19,688.9
Mass Transit Fund: General Fund		2,435.5		2,610.2		2,291.9		1,726.6		2,083.2	11,147.4
Mass Transit Fund: Federal Grants		10,788.0		13,430.6		11,564.1		9,078.7		10,624.9	55,486.3
Miscellaneous Federal Grants		1,408.9		-0-		-0-		-0-		-0-	1,408.9
Park Tucson: Fees and Charges		1,344.8		-0-		-0-		-0-		-0-	1,344.8
Subtotal	\$	\$ 43,797.6		24,603.6	\$ 18,335.0		\$	10,835.3	\$	12,738.1	\$ 110,309.6
Total	\$ 2	\$ 269,663.6		249,976.2	\$187,464.3		\$	92,226.2	\$	50,590.1	\$ 849,920.4

Table III. Summary of CIP Impact on the Operating Budget (\$000)

	Y	opted ear 1 16/17	Year 2	1	ojected R Year 3 Y 18/19	•	rements Year 4 Y 19/20	3	Year 5 Y 20/21	Five Year Total
SERVICE AREA/IMPACT		10/1/	 17,10	•	1 10/17	-	17/20		20,21	Total
Community Enrichment and Development										
Parks and Recreation	\$	0.5	\$ 12.2	\$	32.0	\$	34.1	\$	35.5	\$ 114.3
Transportation		26.5	84.5		155.0		263.5		263.5	793.0
Subtotal	\$	27.0	\$ 96.7	\$	187.0	\$	297.6	\$	299.0	\$ 907.3
Public Safety										
Fire Department	\$	68.9	\$ 70.3	\$	71.7	\$	73.1	\$	74.6	\$ 358.6
Subtotal	\$	68.9	\$ 70.3	\$	71.7	\$	73.1	\$	74.6	\$ 358.6
Public Utilities										
Environmental Services	\$	-()-	\$ 273.0	\$	546.0	\$	546.0	\$	546.0	\$ 1,911.0
Subtotal	\$	-0-	\$ 273.0	\$	546.0	\$	546.0	\$	546.0	\$ 1,911.0
Total	\$	95.9	\$ 440.0	\$	804.7	\$	916.7	\$	919.6	\$ 3,176.9
SOURCE OF FUNDS SUMMARY										
General Fund	\$	69.4	\$ 82.5	\$	103.7	\$	107.2	\$	110.1	\$ 472.9
Subtotal	\$	69.4	\$ 82.5	\$	103.7	\$	107.2	\$	110.1	\$ 472.9
Enterprise Fund										
Environmental Services	\$	-0-	\$ 273.0	\$	546.0	\$	546.0	\$	546.0	\$ 1,911.0
Subtotal	\$	-0-	\$ 273.0	\$	546.0	\$	546.0	\$	546.0	\$ 1,911.0
Special Revenue Funds										
Highway User Revenue Fund	\$	26.5	\$ 84.5	\$	135.0	\$	243.5	\$	243.5	\$ 733.0
Mass Transit Fund		-0-	-0-		20.0		20.0		20.0	60.0
Subtotal	\$	26.5	\$ 84.5	\$	155.0	\$	263.5	\$	263.5	\$ 793.0
Total	\$	95.9	\$ 440.0	\$	804.7	\$	916.7	\$	919.6	\$ 3,176.9

Table III. Environmental Services: CIP Impact on the Operating Budget (\$000)

The impact of this five-year CIP on future operating budgets is estimated to be \$273.0 in Fiscal Year 2017/18, increasing to \$546.0 by Fiscal Year 2020/21 for a five-year total of \$1,911.0. When the following projects in the CIP are completed, they will require funding for annual operations. The estimated impact of these projects on the operating budget over the next five years is shown in the table below.

	Adopted				Pro	jected R	equi	rements			Five		
	Ye	Year 1		Year 2		Year 3		Year 4		Year 5		Year	
	FY:	FY 16/17		FY 17/18		FY 18/19		FY 19/20		Z 20/21		Total	
Project Name													
Silverbell Landfill Water Quality Assurance Treatment Facility	\$	-0-	\$	273.0	\$	546.0	\$	546.0	\$	546.0	\$	1,911.0	
Total	\$	-0-	\$	273.0	\$	546.0	\$	546.0	\$	546.0	\$	1,911.0	
Source of Funds Summary													
Environmental Services Fund	\$	-0-	\$	273.0	\$	546.0	\$	546.0	\$	546.0	\$	1,911.0	
Total	\$	-0-	\$	273.0	\$	546.0	\$	546.0	\$	546.0	\$	1,911.0	

Table III. Parks and Recreation: CIP Impact on the Operating Budget (\$000)

The impact of this five-year CIP on future operating budgets is estimated to be \$0.5 in Fiscal Year 2016/17, increasing to \$34.5 by Fiscal Year 2020/21 for a five-year total of \$114.3. When the following projects in the CIP are completed, they will require funding for annual operations. The estimated impact of these projects on the operating budget over the next five years is shown in the table below.

	Ado	pted	Projected Requirements								Five		
	Ye	ar 1	Y	ear 2		ear 3	-	ear 4	7	Year 5		Year	
	FY ?	16/17	FY	7 17/18	FY	18/19	FY	19/20	FY	Y 20/21	,	Total	
Project Name													
A Mountain Improvement	\$	-0-	\$	1.6	\$	1.6	\$	1.7	\$	1.7	\$	6.6	
Arcadia park, Phase I		-0-		-0-		1.2		1.3		1.5		4.0	
Arroyo Chico Urban Path: Country Club to Treat		-0-		-0-		1.2		1.3		1.5		4.0	
Christopher Columbus Park Expansion		-0-		0.6		0.6		0.7		0.7		2.6	
Groves Park Playground		-0-		-0-		1.2		1.3		1.5		4.0	
Lakeside park Playground		-0-		-0-		1.2		1.3		1.5		4.0	
Limberlost Family Park ADA Improvements and Walking Path		-0-		1.1		1.2		1.3		1.5		5.1	
Lincoln Park Playground		-0-		1.1		1.2		1.3		1.5		5.1	
Purple Heart Park Expansion		-0-		0.6		0.6		0.7		0.7		2.6	
Reid Park Expansion, Phase I		-0-		-0-		1.8		2.0		2.1		5.9	
Reid Park Zoo Health Center		-0-		6.0		6.6		7.2		7.3		27.1	
Shade Structure Projects		0.5		0.6		0.6		0.7		0.7		3.1	
South Central Community Park, Phase I		-0-		-0-		12.4		12.6		12.6		37.6	
Vista del Prado Group Ramada		-()-		0.6		0.6		0.7		0.7		2.6	
Total	\$	0.5	\$	12.2	\$	32.0	\$	34.1	\$	35.5	\$	114.3	
Source of Funds Summary													
General Fund	\$	0.5	\$	12.2	\$	32.0	\$	34.1	\$	35.5	\$	114.3	
Total	\$	0.5	\$	12.2	\$	32.0	\$	34.1	\$	35.5	\$	114.3	

Table III. Transportation: CIP Impact on the Operating Budget (\$000)

The impact of this five-year CIP on future operating budgets is estimated to be \$26.5 in Fiscal Year 2016/17, increasing to \$263.5 by Fiscal Year 2020/21 for a five-year total of \$793.0. When the following projects in the CIP are completed, they will require funding for annual operations. The estimated impact of these projects on the operating budget over the next five years is shown in the table below.

	Adopted Year 1 FY 16/17	Year 2 FY 17/18	Projected Ro Year 3 FY 18/19	equirements Year 4 FY 19/20	Year 5 FY 20/21	Five Year Total
Project Name						
4th/Congress/Toole Bike Pedestrian Improvements	\$ -0-	\$ 5.0	\$ 5.0	\$ 5.0	\$ 5.0	\$ 20.0
Arroyo Chico Greenway	-0-	0.5	0.5	0.5	0.5	2.0
Broadway: Camino Seco to Houghton	-0-	-0-	7.5	7.5	7.5	22.5
Campbell and 9th HAWK	2.0	4.0	4.0	4.0	4.0	18.0
Campbell Avenue Revitalization	-0-	-0-	5.0	5.0	5.0	15.0
CNG Fueling System	-0-	-0-	20.0	20.0	20.0	60.0
Columbus Corridor Pedestrian Path	-0-	0.5	0.5	0.5	0.5	2.0
Copper Street Bike Boulevard	0.5	0.5	0.5	0.5	0.5	2.5
Craycroft and Ft. Lowell Park HAWK	2.0	4.0	4.0	4.0	4.0	18.0
El Paso and Southwestern Greenway	-0-	0.5	0.5	0.5	0.5	2.0
Fifth Street Bike Boulevard	-0-	0.5	0.5	0.5	0.5	2.0
Five Points Pedestrian Improvements	-0-	1.0	1.0	1.0	1.0	4.0
Five Points Transportation Enhancement	-0-	5.0	5.0	5.0	5.0	20.0
Gila Panther Tracks Safe Routes to School	-0-	0.5	0.5	0.5	0.5	2.0
Glenn Street Transportation Enhancement	-0-	1.0	1.0	1.0	1.0	4.0
Grant and Sahuara HAWK	2.0	4.0	4.0	4.0	4.0	18.0
Houghton Road: Bridge Replacement	-0-	-0-	5.0	5.0	5.0	15.0
Houghton Road: Irvington to Valencia	20.0	20.0	20.0	20.0	20.0	100.0
Houghton Road: Union Pacific Railroad to I-10	-0-	5.0	5.0	5.0	5.0	20.0
Houghton Road: Broadway to 22nd Street	-0-	5.0	5.0	5.0	5.0	20.0
Kolb Road Connection to Sabino Canyon	-0-	-0-	-0-	2.0	2.0	4.0
LED Street Light Conversion	-0-	15.0	15.0	15.0	15.0	60.0
Liberty Avenue Bicycle Boulevard	-0-	5.0	10.0	10.0	10.0	35.0
Park Avenue Transportation Enhancement	-0-	-0-	-0-	0.5	0.5	1.0
Pima Street Pedestrian Pathway Enhancements	-0-	-0-	-0-	1.0	1.0	2.0

Table III. Transportation: CIP Impact on the Operating Budget (\$000)

	Ad	opted	Projected Requirements									Five		
	Y	ear 1	Y	ear 2	7	Tear 3	Y	ear 4	Y	ear 5	-	Year		
	FY	16/17	FY	7 17/18	F	7 18/19	FY 19/20		FY 20/21		Total			
Project Name (Continued)														
Regional Transportation Data	\$	-0-	\$	-0-	\$	-0-	\$	100.0	\$	100.0	\$	200.0		
Network														
Rio Vista Safe Routes to School		-0-		-0-		0.5		0.5		0.5		1.5		
Robison Safe Routes to School		-0-		0.5		0.5		0.5		0.5		2.0		
Stone Ave: Drachman and Speedway		-0-		-0-		-0-		5.0		5.0		10.0		
Improvements														
Street Improvements Proposition 409		-0-		-0-		25.0		25.0		25.0		75.0		
Treat Avenue Bike Boulevard		-0-		0.5		0.5		0.5		0.5		2.0		
Valencia/Hemisphere Loop Hawk		-0-		4.0		4.0		4.0		4.0		16.0		
Valencia: Alvernon to Kolb		-0-		2.5		5.0		5.0		5.0		17.5		
Total	\$	26.5	\$	84.5	\$	155.0	\$	263.5	\$	263.5	\$	793.0		
Source of Funds Summary														
Highway User Revenue Fund	\$	26.5	\$	84.5	\$	135.0	\$	243.5	\$	243.5	\$	733.0		
Mass Transit Fund		-0-		-0-		20.0		20.0		20.0		60.0		
Total	\$	26.5	\$	84.5	\$	155.0	\$	263.5	\$	263.5	\$	793.0		

Table III. Tucson Fire: CIP Impact on the Operating Budget (\$000)

The impact of this five-year CIP on future operating budgets is estimated to be \$68.9 in Fiscal Year 2016/17, increasing to \$74.4 by Fiscal Year 2020/21 for a five-year total of \$358.6. When the following projects in the CIP are completed, they will require funding for annual operations. The estimated impact of these projects on the operating budget over the next five years is shown in the table below.

	Ad	Adopted Projected Requirements										
	Y	ear 1	Y	ear 2	Y	ear 3	Y	ear 4	Y	ear 5	-	Year
	FY	16/17	FY	17/18	FY	18/19	FY	19/20	FY	20/21	-	Γotal
Project Name												
Alerting System	\$	65.0	\$	66.3	\$	67.6	\$	69.0	\$	70.4	\$	338.3
Park Ajo Communications Center		3.9		4.0		4.1		4.1		4.2		20.3
Administrative Phone System												
Total	\$	68.9	\$	70.3	\$	71.7	\$	73.1	\$	74.6	\$	358.6
Source of Funds Summary												
General Fund	\$	68.9	\$	70.3	\$	71.7	\$	73.1	\$	74.6	\$	358.6
Total	\$	68.9	\$	70.3	\$	71.7	\$	73.1	\$	74.6	\$	358.6

Table IV. Projects with Pima County Bond Funding (\$000)

	Adopted		Five			
	Year 1	Year 2	Year 3	Year 4	Year 5	Year
	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	Total
Transportation						
22nd Street: I-10 to Tucson	\$ 9,000.0	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ 9,000.0
Boulevard						
Broadway Boulevard: Euclid to	-0-	12,000.0	12,000.0	-0-	-0-	24,000.0
Country Club						
Five Points Pedestrian	187.0	-0-	-0-	-0-	-0-	187.0
Improvements						
Five Points Transportation	220.0	-0-	-0-	-0-	-0-	220.0
Enhancement						
Houghton Road: Bridge	1,980.0	-0-	-0-	-0-	-0-	1,980.0
Replacement						
Houghton Road: Union Pacific	720.0	1,430.0	-0-	-0-	-0-	2,150.0
Railroad to I-10						
Silverbell Road: Grant to Ina	-0-	6,400.0	-0-	-0-	-0-	6,400.0
Total	\$ 12,107.0	\$ 19,830.0	\$ 12,000.0	\$ -0-	\$ -0-	\$ 43,937.0

Table V. Projects with Development Impact Fees (\$000)

	dopted Year 1 Y 16/17	Year 2 Y 17/18	7	jected R Year 3 Y 18/19	` }	irements Year 4 Y 19/20	Year 5	Five Year Total
Parks and Recreation								
East District								
Arcadia Park, Phase I	\$ 100.0	\$ 186.5	\$	-0-	\$	-0-	\$ -0-	\$ 286.5
Jesse Owens Park	25.0	-0-		-0-		-0-	-0-	25.0
Palo Verde Park	109.0	200.0		-0-		-0-	-0-	309.0
Parks Strategic Plan	30.0	-0-		-0-		-0-	-0-	30.0
South Central Community Park, Phase I	117.9	267.9		-0-		-0-	-0-	385.8
East District Subtotal	\$ 381.9	\$ 654.4	\$	-0-	\$	-0-	\$ -0-	\$ 1,036.3
Central District								
Arroyo Chico Urban Path:	\$ 172.7	\$ 90.0	\$	-0-	\$	-0-	\$ -0-	\$ 262.7
Country Club to Treat								
Limberlost Family Park ADA	152.0	25.0		-0-		-0-	-0-	177.0
Improvements and Walking Path								
Reid Park Expansion Phase I	 600.2	 239.8		20.3		-0-	 -0-	 860.3
Central District Subtotal	\$ 924.9	\$ 354.8	\$	20.3	\$	-0-	\$ -()-	\$ 1,300.0
Southeast District								
Groves Park Playground	\$ 175.0	\$ 25.0	\$	-0-	\$	-0-	\$ -0-	\$ 200.0
Lakeside Park Playground	175.0	25.0		-0-		-0-	-0-	200.0
Lincoln Park Playground	175.0	25.0		-0-		-0-	-0-	200.0
Purple Heart Park Expansion	140.5	-0-		-0-		-0-	-0-	140.5
South Central Community Park, Phase I	246.8	1.6		-0-		-0-	-0-	248.4
Vista del Prado Group Ramada	15.0	100.0		-0-		-0-	-0-	115.0
Southeast District Subtotal	\$ 927.3	\$ 176.6	\$	-0-	\$	-0-	\$ -0-	\$ 1,103.9
Southlands District								
Valencia and Alvernon Community Park, Phase I	\$ -0-	\$ 150.0	\$	253.3	\$	150.0	\$ 50.0	\$ 603.3
Valencia Corridor Land Acquisition, Phase I	50.0	100.0		321.4		319.9	200.0	991.3
Southlands District Subtotal	\$ 50.0	\$ 250.0	\$	574.7	\$	469.9	\$ 250.0	\$ 1,594.6
West District								
A Mountain Improvement	\$ 125.7	\$ -0-	\$	-0-	\$	-0-	\$ -0-	\$ 125.7
Christopher Columbus Park Expansion	73.9	-0-		-0-		-0-	-()-	73.9
John F. Kennedy Park	27.8	-0-		-0-		-0-	-0-	27.8
San Juan Park	31.0	-0-		-0-		-0-	-0-	31.0
West District Subtotal	\$ 258.4	\$ -0-	\$	-0-	\$	-0-	\$ -0-	\$ 258.4
Parks and Recreation Total	\$ 2,542.5	\$ 1,435.8	\$	595.0	\$	469.9	\$ 250.0	\$ 5,293.2

Table V. Projects with Development Impact Fees (\$000)

	,	dopted Year 1 Y 16/17		Year 2 Y 17/18	•	ojected Ro Year 3 Y 18/19	-,	irements Year 4 Y 19/20	Year 5		Five Year Total
Transportation		,		,		,		•	,		
East District											
Broadway: Camino Seco to Houghton	\$	1,000.0	\$	1,500.0	\$	-0-	\$	-0-	\$ -0-	\$	2,500.0
Houghton Road: 22nd to Irvington		500.0		-0-		-0-		-0-	-0-		500.0
Houghton Road: Broadway to 22nd Street		1,286.0		-0-		-0-		-0-	-0-		1,286.0
East District Subtotal	\$	2,786.0	\$	1,500.0	\$	-0-	\$	-0-	\$ -0-	\$	4,286.0
Central District											
22nd Street: I-10 to Tucson Boulevard	\$	1,298.9	\$	1,000.0	\$	2,979.9	\$	-()-	\$ -0-	\$	5,278.8
Broadway: Euclid to Country Club		1,500.0		1,500.0		-0-		-0-	-0-		3,000.0
Grant: Oracle to Swan		1,000.0		1,954.7		-0-		3,000.0	-0-		5,954.7
Central District Subtotal	\$	3,798.9	\$	4,454.7	\$	2,979.9	\$	3,000.0	\$ -0-	\$	14,233.5
Southeast District											
Houghton Road: Union Pacific Railroad to I-10	\$	550.0	\$	-0-	\$	-0-	\$	-0-	\$ -0-	\$	550.0
Valencia: Alvernon to Kolb		2,500.0		-0-		-0-		-0-	-0-		2,500.0
Valencia: Kolb to Houghton		-0-		5,000.0		2,000.0		2,000.0	-0-		9,000.0
Southeast District Subtotal	\$	3,050.0	\$	5,000.0	\$	2,000.0	\$	2,000.0	\$ -0-	\$	12,050.0
Southlands District											
Houghton Road: I-10 to Andrada Road	\$	60.0	\$	300.0	\$	300.0	\$	-0-	\$ -0-	\$	660.0
Southlands District Subtotal	\$	60.0	\$	300.0	\$	300.0	\$	-0-	\$ -0-	\$	660.0
West District											
Irving Road: Santa Cruz River to I-19	\$	1,750.0	\$	-0-	\$	-0-	\$	-0-	\$ -0-	\$	1,750.0
Silverbell Road: Grant to Ina		800.0		910.0		200.0		-0-	-0-		1,910.0
Sunset: Silverbell to I-10 to River		1,700.0		1,700.0		-0-		-0-	-0-		3,400.0
West District Subtotal	\$	4,250.0	\$	2,610.0	\$	200.0	\$	-()-	\$ -0-	\$	7,060.0
Transportation Total	\$ 1	13,944.9	\$ 1	13,864.7	\$	5,479.9	\$	5,000.0	\$ -0-	\$.	38,289.5
Tucson Fire											
Park Ajo Communications Center Administrative Phone System	\$	130.0	\$	-0-	\$	-0-	\$	-0-	\$ -0-	\$	130.0
Tucson Fire Total	\$	130.0	\$	-0-	\$	-0-	\$	-0-	\$ -0-	\$	130.0
Total	\$	16,617.4	\$	15,300.5	\$	6,074.9	\$	5,469.9	\$ 250.0	\$	43,712.7

CITY COURT

	dopted Year 1 Y 16/17	 ear 2 17/18	Y	jected Ro Year 3 Y 18/19	```	rements Year 4 Y 19/20	7	Year 5 Y 20/21	Five Year Total
Project Name									
Court Building Remodel	\$ 2,336.0	\$ -0-	\$	-0-	\$	-0-	\$	-0-	\$ 2,336.0
Total	\$ 2,336.0	\$ -0-	\$	-0-	\$	-0-	\$	-0-	\$ 2,336.0
Source of Funds Summary Capital Improvement Fund	\$ 2,336.0	\$ -0-	\$	-()-	\$	-()-	\$	-0-	\$ 2,336.0
Total	\$ 2,336.0	\$ -0-	\$	-0-	\$	-0-	\$	-0-	\$ 2,336.0

ENVIRONMENTAL SERVICES

	Adopted Year 1	Year 2	Projected Requirements Year 3 Year 4		Year 5	Five Year	
	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	Total	
Project Name							
Los Reales Landfill Buffer-Northeastern	\$ 505.0	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ 505.0	
Berm and Landscape Los Reales Landfill East Property	320.0	-0-	-0-	-0-	-0-	320.0	
Acquisition							
Los Reales Landfill Self Hauler Facility	2,150.0	2,950.0	-()-	-0-	-()-	5,100.0	
Replacement Utility Billing and	200.0	500.0	1,800.0	-0-	-0-	2,500.0	
Operations System							
Silverbell Landfill Final Cover	-0-	225.0	2,803.0	-0-	-()-	3,028.0	
System - South Cell							
Silverbell Landfill Water Quality Assurance Treatment Facility	3,300.0	2,300.0	-0-	-0-	-0-	5,600.0	
Tenth Avenue Maintenance Facility	4,300.0	-0-	-0-	-0-	-0-	4,300.0	
Total	\$ 10,775.0	\$ 5,975.0	\$ 4,603.0	\$ -0-	\$ -0-	\$ 21,353.0	
Source of Funds Summary							
Environmental Services Fund	\$ 10,775.0	\$ 5,975.0	\$ 4,603.0	\$ -0-	\$ -0-	\$ 21,353.0	
Total	\$ 10,775.0	\$ 5,975.0	\$ 4,603.0	\$ -0-	\$ -0-	\$ 21,353.0	

GENERAL SERVICES

		Adopted Year 1 Y 16/17		ear 2 17/18	Ý	ected Ro Year 3 Y 18/19	Y	rements ear 4 19/20	_	ear 5 20/21		Five Year Total
Project Name												
CNG Fueling Plant Upgrade	\$	698.9	\$	-0-	\$	-0-	\$	-0-	\$	-0-	\$	698.9
CNG Pipeline SWG Bypass Project		1,100.0		-()-		-0-		-0-		-0-		1,100.0
Total	\$	1,798.9	\$	-0-	\$	-0-	\$	-0-	\$	-0-	\$	1,798.9
Source of Funds Summary	4	245.0	#	0	Ф.	0	dh.	0	Ф.	0	•	245.0
Environmental Services Fund	\$	345.0	\$	-0-	\$	-0-	\$		\$	-0-	\$	345.0
General Services Internal Service Fund		1,453.9		-0-		-0-		-0-		-()-		1,453.9
Total	\$	1,798.9	\$	-0-	\$	-0-	\$	-0-	\$	-0-	\$	1,798.9

HOUSING and COMMUNITY DEVELOPMENT (\$000)

	dopted Year 1 Y 16/17	_	ear 2 17/18	7	jected Ro Year 3 Y 18/19	Ì	rements Year 4 Y 19/20	_	Year 5 Y 20/21	Five Year Total
Project Name										
Community Development Block Grant Master CIP	\$ 1,000.0	\$	-0-	\$	-0-	\$	-0-	\$	-0-	\$ 1,000.0
Total	\$ 1,000.0	\$	-0-	\$	-0-	\$	-0-	\$	-0-	\$ 1,000.0
Source of Funds Summary Community Development	\$ 1,000.0	\$	-0-	\$	-0-	\$	-0-	\$	-()-	\$ 1,000.0
Block Grant Fund										
Total	\$ 1,000.0	\$	-0-	\$	-0-	\$	-0-	\$	-0-	\$ 1,000.0

PARKS and RECREATION (\$000)

	Adopte Year 1 FY 16/2		Year 2 FY 17/18	Ýe	cted R ear 3 18/19	equirement Year 4 FY 19/20	Year 5	Five Year Total
Project Name								
A Mountain Improvement	\$ 125	.7 \$	-0-	\$	-0-	\$ -0-	-0-	\$ 125.7
Arcadia Park, Phase I	100	.0	186.5		-0-	-0-	-0-	286.5
Arroyo Chico Urban Path:	172	.7	90.0		-0-	-0-	-0-	262.7
Country Club to Treat								
Christopher Columbus Park	73	.9	-0-		-0-	-0-	-0-	73.9
Expansion								
Groves Park Playground	175	.0	25.0		-0-	-0-	-0-	200.0
Jesse Owens Park	25	.0	-0-		-0-	-0-	-0-	25.0
John F. Kennedy Park	27	.8	-0-		-0-	-0-	-0-	27.8
Lakeside Park Playground	175	0.	25.0		-0-	-0-	-0-	200.0
Limberlost Family Park ADA	152	.0	25.0		-0-	-0-	-0-	177.0
Improvements and Walking Path								
Lincoln Park Playground	175	0.	25.0		-0-	-0-	-0-	200.0
Palo Verde Park	109	.0	200.0		-0-	-0-	-0-	309.0
Parks Strategic Plan	30	.0	-0-		-0-	-0-	-0-	30.0
Purple Heart Park Expansion	140	.5	-0-		-0-	-0-	-0-	140.5
Reid Park Expansion, Phase 1	600	.2	239.8		20.3	-0-	-0-	860.3
Reid Park Zoo Health Center	3,510	.2	-0-		-0-	-0-	-0-	3,516.2
San Juan Park	31	.0	-0-		-0-	-0-	-0-	31.0
Shade Structure Projects	25	.0	25.0		25.0	25.0	25.0	125.0
South Central Community Park,	364	.7	269.5		-0-	-0-	-0-	634.2
Phase I								
Valencia and Alvernon	-	0-	150.0		253.3	150.0	50.0	603.3
Community Park, Phase I								
Valencia Corridor Land	50	.0	100.0		321.4	319.9	200.0	991.3
Acquisition, Phase I								
Vista del Prado Group Ramada	15	.0	100.0		-0-	-0-	-0-	115.0
Total	\$ 6,083	.7	1,460.8	\$	620.0	\$ 494.9	\$ 275.0	\$ 8,934.4

PARKS and RECREATION (\$000)

	Adopted Year 1 FY 16/17	Year 2 FY 17/18	Projected R Year 3 FY 18/19	equirements Year 4 FY 19/20	Year 5 FY 20/21	Five Year Total
Source of Funds Summary						
Capital Improvement Fund	\$ 3,516.2	\$ 200.0	\$ -0-	\$ -0-	\$ -0-	\$ 3,716.2
Civic Contributions Fund	25.0	25.0	25.0	25.0	25.0	125.0
Impact Fee Fund: Central	924.9	354.8	20.3	-0-	-0-	1,300.0
Benefit District						
Impact Fee Fund: East Benefit	381.9	654.4	-0-	-0-	-0-	1,036.3
District						
Impact Fee Fund: Southeast	927.3	176.6	-0-	-0-	-0-	1,103.9
Benefit District						
Impact Fee Fund: Southlands	50.0	50.0	574.7	469.9	250.0	1,394.6
Benefit District						
Impact Fee Fund: West Benefit	258.4	-0-	-0-	-0-	-0-	258.4
District						
Total	\$ 6,083.7	\$ 1,460.8	\$ 620.0	\$ 494.9	\$ 275.0	\$ 8,934.4

TRANSPORTATION

	Adopted Year 1	Year 2	Projected R Year 3 FY 18/19	equirements Year 4	Year 5	Five Year
Project Name	FY 16/17	FY 17/18	F1 10/19	FY 19/20	FY 20/21	Total
4th /Congress/Toole Bike Pedestrian	\$ 330.2	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ 330.2
Improvements						
22nd Street: I-10 to Tucson	14,749.5	21,000.0	34,753.8	-0-	-0-	70,503.3
Boulevard						
ADA Transition Plan	316.4	822.0	-0-	-0-	-0-	1,138.4
Arroyo Chico Greenway	1,034.0	-0-	-0-	-0-	-0-	1,034.0
Arroyo Chico MUP, Tucson Boulevard	73.3	-0-	-0-	-0-	-0-	73.3
Associated Transit Improvements	1,909.7	172.4	172.4	172.4	172.4	2,599.3
Broadway Boulevard: Camino Seco to Houghton	9,048.0	4,162.0	-0-	-0-	-0-	13,210.0
Broadway Boulevard: Euclid to Country Club	18,505.0	23,505.0	18,125.5	-0-	-0-	60,135.5
Campbell and 9th HAWK	79.3	-0-	-0-	-0-	-0-	79.3
Campbell Avenue Revitalization	52.5	17.5	-0-	-0-	-0-	70.0
CNG Fueling System - NW Expansion	4,500.0	4,000.0	-0-	-0-	-0-	8,500.0
Columbus Corridor Pedestrian Path	225.0	-0-	-0-	-0-	-0-	225.0
Copper Street Bike Boulevard	833.0	-0-	-0-	-0-	-0-	833.0
Craycroft and Ft. Lowell Park HAWK	79.3	-0-	-0-	-0-	-0-	79.3
Downtown Links Barraza-Aviation	8,058.0	30,053.1	10,000.0	1,100.0	-0-	49,211.1
El Paso and Southwestern Greenway	713.0	217.0	-0-	-0-	-0-	930.0
Fifth Street Bike Boulevard	178.0	-0-	-0-	-0-	-0-	178.0
First Avenue: Grant to River	981.0	3,000.0	-0-	7,000.0	-0-	10,981.0
Five Points Pedestrian Improvements	681.0	-0-	-0-	-0-	-0-	681.0
Five Points Transportation Enhancement	420.0	-0-	-0-	-0-	-0-	420.0
Gila Panther Tracks Safe Routes to School	255.4	-0-	-0-	-0-	-0-	255.4
Glenn Street Transportation Enhancement	411.0	-0-	-0-	-0-	-0-	411.0
Grant and Sahuara HAWK	79.3	-0-	-0-	-0-	-0-	79.3
Grant: Oracle to Swan	23,155.0	33,954.7	11,000.0	24,769.0	-0-	92,878.7
Houghton Road: 22nd to Irvington	2,000.0	1,500.0	3,500.0	3,500.0	3,000.0	13,500.0
Houghton Road: Bridge Replacement	7,572.0	2,225.0	-0-	-0-	-0-	9,797.0
Houghton Road: Broadway to 22nd Street	6,823.0	20.0	-0-	-0-	-0-	6,843.0
Houghton Road: I-10 to Andrada Road	60.0	300.0	300.0	-0-	-0-	660.0
Houghton Road: Irvington to Valencia	26.0	-0-	-0-	-0-	-0-	26.0
Houghton Road: Union Pacific Railroad to I-10	2,058.0	3,235.0	-0-	-0-	-0-	5,293.0

TRANSPORTATION

	Adopted Year 1 FY 16/17	Year 2 FY 17/18	Projected R Year 3 FY 18/19	equirements Year 4 FY 19/20	Year 5 FY 20/21	Five Year Total
Project Name (Continued)						
Houghton: Valencia to Mary Ann Cleveland Way	\$ -0-	\$ 300.0	\$ -0-	\$ -0-	\$ -0-	\$ 300.0
Houghton Road: Wildlife Crossing	76.1	-0-	-0-	-0-	-0-	76.1
Irvington Road: Santa Cruz River to I-19	1,750.0	-0-	-0-	-0-	-0-	1,750.0
Kolb Road Connection to Sabino Canyon	11,931.0	8,785.0	6,000.0	-0-	-0-	26,716.0
Kolb Road: Irvington to Valencia	243.0	-0-	2,114.0	-0-	-0-	2,357.0
LED Street Light Conversion	16,650.1	-0-	-0-	-0-	-0-	16,650.1
Liberty Avenue Bicycle Boulevard	130.0	1,137.0	-0-	-0-	-0-	1,267.0
Park Avenue Transportation Enhancement	488.0	14.0	14.0	-0-	-0-	516.0
Pima Street Pedestrian Pathway Enhancements	422.8	15.0	15.0	-0-	-()-	452.8
Regional Transportation Data Network	778.5	250.0	250.0	-0-	-()-	1,278.5
Rio Vista Safe Routes to School	253.9	117.3	-0-	-0-	-0-	371.2
Robison Safe Routes to School	32.5	338.0	-0-	-0-	-0-	370.5
Ronstadt Transit Center	412.0	-0-	-0-	-0-	-0-	412.0
Safe Routes to School Program	236.6	27.0	-0-	-0-	-0-	263.6
Security for Transit	172.4	172.4	172.4	172.4	172.4	862.0
Silverbell: Ina to Grant Road	10,701.0	18,255.0	11,205.0	265.0	5.0	40,431.0
Speedway Boulevard at Union Pacific Underpass	224.0	-0-	-0-	-0-	-0-	224.0
Stone Ave: Drachman and Speedway Improvements	2,521.0	11.0	11.0	-0-	-0-	2,543.0
Street Improvements: Proposition 409	19,020.0	18,000.0	15,800.0	1,800.0	-0-	54,620.0
Sun Tran Replacement Busses 40 ft.	-0-	11,696.0	10,907.0	8,280.0	8,532.0	39,415.0
Sun Tran South Park Facility Bus Wash Replacement	-0-	-0-	450.0	-0-	-0-	450.0
Sun Van Replacement Buses <30 ft.	4,229.4	-0-	2,154.2	2,180.5	3,831.3	12,395.4
Sunset: Silverbell I-10 to River	1,700.0	1,700.0	-0-	-0-	-0-	3,400.0
Transit Facility Improvements South Park Stormwater Yard	2,000.0	-0-	-0-	-0-	-0-	2,000.0
Treat Avenue Bike Boulevard	649.0	-0-	-0-	-0-	-0-	649.0
Valencia: Alvernon to Kolb	7,510.0	1,000.0	-0-	-0-	-0-	8,510.0
Valencia: Hemisphere Loop HAWK	200.0	-0-	-0-	-0-	-0-	200.0
Valencia: Kolb to Houghton	1,605.0	6,000.0	2,000.0	2,000.0	-0-	11,605.0
Total	\$ 189,142.2	\$ 196,001.4	\$ 128,944.3	\$ 51,239.3	\$ 15,713.1	\$ 581,040.3

TRANSPORTATION

	Adopted			Five		
	Year 1	Year 2	Year 3	Year 4	Year 5	Year
	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	Total
Source of Funds Summary						
2015 General Obligation Street Bonds	\$ 14,220.0	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ 14,220.0
2016 General Obligation Street Bonds	4,000.0	14,000.0	1,800.0	-0-	-0-	19,800.0
2017 General Obligation Street Bonds	-0-	4,000.0	14,000.0	1,800.0	-0-	19,800.0
Capital Agreement Fund: PAG	13,002.0	15,003.0	4,125.0	18,560.0	-0-	50,690.0
Capital Agreement Fund: Pima	12,107.0	19,830.0	12,000.0	-0-	-0-	43,937.0
County Bonds						
Federal Highway Administration	10,217.5	5,448.4	4,442.4	-0-	-0-	20,108.3
Grants						
Highway User Revenue Fund	16,577.9	3,089.4	11.6	5.0	5.0	19,688.9
Impact Fee Fund: Central District	3,798.9	4,454.7	2,979.9	3,000.0	-0-	14,233.5
Impact Fee Fund: East District	2,786.0	1,500.0	-0-	-0-	-0-	4,286.0
Impact Fee Fund: Southeast District	3,050.0	5,000.0	2,000.0	2,000.0	-0-	12,050.0
Impact Fee Fund: Southlands District	60.0	300.0	300.0	-0-	-0-	660.0
Impact Fee Fund: West District	4,250.0	2,610.0	200.0	-0-	-0-	7,060.0
Mass Transit Fund: Federal Grants	10,788.0	13,430.6	11,564.1	9,078.7	10,624.9	55,486.3
Mass Transit Fund: General Fund	2,435.5	2,610.2	2,291.9	1,726.6	2,083.2	11,147.4
Park Tucson: Fees and Charges	1,344.8	-0-	-0-	-0-	-0-	1,344.8
Regional Transportation	90,504.6	104,725.1	73,229.4	15,069.0	3,000.0	286,528.1
Authority Fund						
Total	\$ 189,142.2	\$ 196,001.4	\$ 128,944.3	\$ 51,239.3	\$ 15,713.1	\$ 581,040.3

TUCSON FIRE

	Adopted Year 1 Y 16/17	_	ear 2 7 17/18	Ý	jected Ro Year 3 Y 18/19	Ŋ	irements Year 4 Y 19/20	Year 5	Five Year Total
Project Name									
Alerting System	\$ 1,549.8	\$	-0-	\$	-0-	\$	-0-	\$ -0-	\$ 1,549.8
Park Ajo Communications Center	130.0		-0-		-0-		-0-	-0-	130.0
Administrative Phone System									
Total	\$ 1,679.8	\$	-0-	\$	-0-	\$	-0-	\$ -0-	\$ 1,679.8
Source of Funds Summary									
General Fund	\$ 140.9	\$	-0-	\$	-0-	\$	-0-	\$ -()-	\$ 140.9
Miscellaneous Federal Grants	1,408.9		-0-		-0-		-0-	-0-	1,408.9
Fire Impact Fees	65.0		-0-		-0-		-0-	-()-	65.0
Police Impact Fees	65.0		-0-		-0-		-0-	-0-	65.0
Total	\$ 1,679.8	\$	-0-	\$	-0-	\$	-0-	\$ -0-	\$ 1,679.8

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM TUCSON WATER

	Adopted		•	equirements		Five
	Year 1 FY 16/17	Year 2 FY 17/18	Year 3 FY 18/19	Year 4 FY 19/20	Year 5 FY 20/21	Year Total
Project Name	1 1 10/1/	11 1//10	11 10/17	11 17/20	11 20/21	Total
24 CCP Roger Road Reclaimed Crossing	\$ 100.0	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ 100.0
48" Aviation/3rd Ave Cathodic Protection System	200.0	-0-	-0-	-0-	-0-	200.0
Academy Reservoir	500.0	-0-	-0-	-0-	-0-	500.0
Advanced Metering Infrastructure	1,651.0	872.0	927.0	1,016.0	391.0	4,857.0
Aerospace-Sonoran Corridor Transmission Main Extension	583.0	1,744.0	6,970.0	-0-	-0-	9,297.0
Arc Flash Service Upgrades	1,165.0	1,162.0	1,162.0	1,239.0	1,305.0	6,033.0
Arizona Avenue Main Replacement	58.0	-0-	-0-	-0-	-0-	58.0
ASR at F-008 Equipping	-0-	-0-	290.0	2,478.0	-0-	2,768.0
AV-020B/SA-013A Recovery Well Drilling	250.0	-0-	-0-	-()-	-0-	250.0
Bailey Sleeve Valve Replacement	70.0	-0-	-0-	-0-	-0-	70.0
Calle Santa Cruz Transmission Main Replacement	2,506.0	-0-	-0-	-0-	-0-	2,506.0
Camino de Oeste Pressure Reducing Valve at Thornydale	50.0	-0-	-0-	-0-	-0-	50.0
CAP Basin Well 24" Transmission Main, Old Nogales Highway	-0-	-0-	-0-	-0-	196.0	196.0
Cathodic Protection for	699.0	697.0	697.0	743.0	783.0	3,619.0
Critical Pipelines						
Cavalier Estates Phase I	58.0	416.0	-0-	-0-	-0-	474.0
CAVSARP Well Pump Improvements	350.0	349.0	349.0	372.0	391.0	1,811.0
Clearwell Reservoir Rehabilitation	7,886.0	6,180.0	139.0	-0-	-0-	14,205.0
Cocio Road Main Replacement Phase II	200.0	-0-	-0-	-0-	-0-	200.0
Control Panel Replacements: Potable	117.0	116.0	116.0	124.0	130.0	603.0
Control Panels: Reclaimed System	175.0	174.0	174.0	186.0	196.0	905.0
Craycroft Addition Subdivision, Phase I	554.0	-0-	-0-	-0-	-0-	554.0
Developer-Financed Reclaimed Systems	70.0	70.0	70.0	74.0	78.0	362.0
Drexel I-19 Crossing 24 Main	-0-	-0-	-0-	62.0	1,240.0	1,302.0
Drill Production Wells	-0-	-0-	-0-	-0-	1,957.0	1,957.0
Effluent Pump Station Expansion	1,560.0	-0-	-0-	-0-	-0-	1,560.0
Emergency Main Replacement	233.0	232.0	232.0	248.0	261.0	1,206.0
Equip Well A-061	-0-	-0-	-0-	62.0	457.0	519.0
Equip Well W-006	466.0	-0-	-0-	-0-	-0-	466.0
Escalante Reservoir	12.0	12.0	174.0	805.0	848.0	1,851.0
Extensions for New Services	117.0	116.0	116.0	124.0	130.0	603.0
Facility Safety and Security Infrastructure	1,165.0	581.0	581.0	619.0	652.0	3,598.0

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM TUCSON WATER

	Adopted Year 1 FY 16/17	Year 2 FY 17/18	Projected R Year 3 FY 18/19	equirements Year 4 FY 19/20	Year 5 FY 20/21	Five Year Total
Project Name (Continued)						
Fifth Street Distribution Main	\$ 100.0	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ 100.0
Filtration Modifications at	200.0	-0-	-0-	619.0	913.0	1,732.0
Reclaimed Plant						
Fire Hydrants in Annexation Areas	117.0	116.0	116.0	124.0	130.0	603.0
Fire Services	2,039.0	2,034.0	2,033.0	2,168.0	2,283.0	10,557.0
Gas Engines	437.0	436.0	436.0	465.0	489.0	2,263.0
Golf Links Main Replacement Phase II	340.0	-0-	-0-	-0-	-0-	340.0
Golf Links Phase V	68.0	581.0	-0-	-0-	-0-	649.0
Houghton Road Reclaimed Reservoir	29.0	2,836.0	-0-	-0-	-0-	2,865.0
La Entrada Electrical Service Modernization	370.0	-0-	-0-	-0-	-0-	370.0
Magee Road (410E) PRV	-0-	-0-	-0-	-0-	98.0	98.0
Manzanita Tank Lining	12.0	12.0	35.0	805.0	-0-	864.0
Maryvale Manor Subdivision, Phase I	-0-	58.0	918.0	-0-	-0-	976.0
Maryvale Manor Subdivision, Phase III	-0-	-0-	58.0	520.0	-0-	578.0
Meter Upgrade and Replacement	7,020.0	7,002.0	6,854.0	2,973.0	-0-	23,849.0
Program	,,020.0	7,002.0	0,00 110	_,,,,,,,	•	
Miscellaneous Land and	12.0	12.0	12.0	12.0	13.0	61.0
Right-of-Way Acquisitions						
Nebraska Road Distribution Main	-0-	-0-	58.0	248.0	-0-	306.0
New Metered Services	58.0	58.0	58.0	62.0	65.0	301.0
Nogales Highway 36" Transmission	932.0	2,554.0	-0-	-0-	-0-	3,486.0
Main Replacement Phase I		,				,
Northgate Subdivision, Phase I	900.0	-0-	-0-	-0-	-0-	900.0
Northgate Subdivision, Phase II	-0-	58.0	918.0	-0-	-0-	976.0
Old Vail Steel Tank Upgrades (Rehab)	562.0	-0-	-0-	-0-	-0-	562.0
Payments to Developers for Oversized Systems	117.0	116.0	116.0	124.0	130.0	603.0
Pima Mine Road Production Well Drilling	-0-	-0-	-0-	-0-	3,262.0	3,262.0
Plant 2 Relocation	50.0	-0-	-0-	-0-	-0-	50.0
Potable MOV at Thornydale	40.0	-0-	-0-	-0-	-0-	40.0
Reclaimed Reservoir					•	
Pressure Tank Replacement	175.0	174.0	174.0	186.0	196.0	905.0
Production Well Sites	87.0	87.0	87.0	93.0	98.0	452.0
Rauscher Reservoir Rehabilitation	712.0	-0-	-0-	-0-	-0-	712.0
Recycled Water Program	1,165.0	1,162.0	1,162.0	1,239.0	1,305.0	6,033.0
RE-Equip Well C-049	198.0	-0-	-0-	-0-	-0-	198.0

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM TUCSON WATER

	Adopted		Projected R	equirements		Five
	Year 1	Year 2	Year 3	Year 4	Year 5	Year
Project Name (Continued)	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	Total
Project Name (Continued)	\$ 50.0	¢	¢ 0	¢	c	¢ 50.0
Relocate Aeropark Teton PRV Relocate Anklam Road PRV	\$ 50.0 -0-	\$ -0- -0-	\$ -0- -0-	\$ -0- -0-	\$ -0- 228.0	\$ 50.0 228.0
	-0-	-0-	-0-	279.0	-0-	279.0
Relocate Craycroft Shadow Ridge			-0-			
Relocate Glenn/Campbell PRV	-0- -0-	-0-		248.0 217.0	-0-	248.0
Relocate Via Velazquez PRV		-0-	-0-		-0-	217.0
Responsive Meter Replacement	583.0	581.0	581.0	619.0	-0- 1 240 0	2,364.0
Review Developer-Financed Potable Projects	1,107.0	1,104.0	1,104.0	1,177.0	1,240.0	5,732.0
Rita Road F2 to G2 Zone Booster Station	-0-	1,046.0	-0-	-0-	-0-	1,046.0
River Road 12-Inch Main	-0-	35.0	697.0	-0-	-0-	732.0
Road Improvement Main	4,663.0	4,653.0	5,226.0	4,336.0	5,834.0	24,712.0
Replacements						
SA-012A Recovery Well Drilling	100.0	-0-	-0-	-0-	-0-	100.0
Sahuarita Supply Line Slip Liner	-0-	81.0	1,205.0	6,686.0	-0-	7,972.0
San Paulo Village Main Replacement Phase I	79.0	165.0	-0-	-0-	-0-	244.0
San Paulo Village Main Replacement	58.0	116.0	1,317.0	-0-	-0-	1,491.0
Phase II			,			,
San Paulo Village Main Replacement	29.0	58.0	476.0	-0-	-0-	563.0
Phase III						
Santa Cruz SC-008 Well Collector	-0-	232.0	-0-	-0-	-0-	232.0
Line						
Santa Cruz Transmission Main Replacement Phase 2	-0-	6.0	99.0	-0-	-0-	105.0
Santa Cruz Well SC-001/04/14	-0-	-0-	-0-	-0-	196.0	196.0
Equipping						-, -, -
Santa Cruz Wellfield Chemical	466.0	174.0	2,788.0	-0-	-0-	3,428.0
Feed/Monitoring Facility			,			,
Santa Cruz Wellfield Facility Pipeline	-0-	46.0	639.0	-0-	-0-	685.0
Santa Cruz Wells Re-Equipping	100.0	709.0	-0-	-0-	-0-	809.0
Santa Rita Ranch/Houghton	200.0	-()-	-0-	-0-	-0-	200.0
Road 12" Main						
SAVSARP Collector Lines, Phase II	1,299.0	-0-	-0-	-0-	-0-	1,299.0
SAVSARP Raw Water Revrd	150.0	-0-	-0-	-0-	-0-	150.0
Cathodic Protection	130.0	0	· ·	Ü	0	130.0
SC Well Replacement SC-001,	-0-	-0-	-0-	186.0	1,566.0	1,752.0
SC-004, SC-014	O	O	O	100.0	1,500.0	1,732.0
SC-001 and SC-004 Well	-0-	58.0	244.0	-0-	-0-	302.0
Transmission Lines	-0-	50.0	۷٦٦٠∪	-0-	-0-	302.0
SC-005 Well Transmission Line	-0-	116.0	-0-	-0-	-0-	116.0
SC-003 Well Transmission Line SC-013 Well Transmission Line	-0-	105.0	-0-	-0-	-0-	105.0
50-015 WCII TTAIISIIIISSIOII LIIIC	-0-	103.0	-0-	-0-	-0-	105.0

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM TUCSON WATER

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	Adopted Year 1 Y 16/17	F	Year 2 FY 17/18	rojected Ro Year 3 FY 18/19	•	irements Year 4 Y 19/20	Year 5 Y 20/21	Five Year Total
Project Name (Continued)								
SCADA Potable Upgrades	\$ 5,004.0	\$	2,763.0	\$ 2,723.0	\$	2,909.0	\$ 2,610.0	\$ 16,009.0
SCADA Reclaimed	341.0		250.0	141.0		266.0	-0-	998.0
Silverbell/Orange Grove 12 PRV	130.0		-0-	-0-		-0-	-0-	130.0
Source Meter Replacement	254.0		256.0	256.0		273.0	287.0	1,326.0
Southeast Houghton Area	-0-		-0-	7,377.0		-0-	-0-	7,377.0
Recharge Project (SHARP)								
System Enhancements: Reclaimed	291.0		291.0	290.0		310.0	326.0	1,508.0
Tanque Verde to Wentworth 8-Inch	28.0		260.0	-0-		-0-	-0-	288.0
Main								
TARP R-009A Well	500.0		-0-	-0-		-0-	-0-	500.0
Tierra Del Sol Main Replacement Phase I	65.0		488.0	-0-		-0-	-0-	553.0
Tierra Del Sol Main Replacement Phase II	-0-		-0-	58.0		520.0	-0-	578.0
Tierra Del Sol Main Replacement Phase III	-0-		-0-	58.0		768.0	-0-	826.0
Tierra Del Sol Main Replacement Phase IV	-0-		-0-	58.0		613.0	-0-	671.0
Trails End Reservoir Rehabilitation	-0-		12.0	12.0		186.0	1,044.0	1,254.0
Valve Access Vault	583.0		581.0	581.0		619.0	652.0	3,016.0
Water Services	1,760.0		1,755.0	1,754.0		1,871.0	1,970.0	9,110.0
Wellfield Upgrades	583.0		581.0	581.0		619.0	652.0	3,016.0
Well W-006 Transmission Main	320.0		-0-	-0-		-0-	-0-	320.0
Wilmot Main Replacement	820.0		-0-	-0-		-0-	-0-	820.0
Total	\$ 56,098.0	\$	46,539.0	\$ 53,297.0	\$	40,492.0	\$ 34,602.0	\$ 231,028.0
Source of Funds Summary								
2015 Water Revenue System Obligation Fund	\$ 10,300.0	\$	-0-	\$ -0-	\$	-0-	\$ -0-	\$ 10,300.0
2016 Water Revenue System Obligation Fund	16,668.0		-0-	-0-		-0-	-0-	16,668.0
Future Water Revenue Bonds	-0-		19,501.0	27,658.0		12,923.0	6,899.0	66,981.0
Tucson Water Revenue and	29,130.0		27,038.0	25,639.0		27,569.0	27,703.0	137,079.0
Operations Fund			27,000.0	20,007.0		27,507.0	21,100.0	101,010.0
Total	\$ 56,098.0	\$	46,539.0	\$ 53,297.0	\$	40,492.0	\$ 34,602.0	\$ 231,028.0

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

General Government (\$000)

	}	dopted Year 1 Y 16/17	_	ear 2 7 17/18	Š	jected Ro Year 3 Y 18/19	Y	rements ear 4 7 19/20	Y	ear 5 20/21	Five Year Total
Project Name Kronos Citywide System Enterprise Resource System (ERP) Upgrades	\$	250.0 500.0	\$	-0- -0-	\$	-0- -0-	\$	-0- -0-	\$	-0- -0-	\$ 250.0 500.0
Total	\$	750.0	\$	-0-	\$	-0-	\$	-0-	\$	-0-	\$ 750.0
Source of Funds Summary General Fund	\$	750.0	\$	-0-	\$	-0-	\$	-0-	\$	-0-	\$ 750.0
Total	\$	750.0	\$	-0-	\$	-0-	\$	-0-	\$	-0-	\$ 750.0



Section B Department Programs





City Court



Capital Improvement Program Department Statement

FY 2016/17 through FY 2020/21

Department: City Court Five-Year Total: \$2,336,000

The City Court five-year Capital Improvement Program of \$2.3 million addresses the need of renovating and upgrading the City Court building. Renovations include resurfacing of all exterior walkways; exterior wall sealing of the entire building to eliminate water leaks during rain; improvements to the entrance of the building to facilitate traffic flow; interior painting and carpet replacement. Upgrades are being made to boiler systems and Public Service counters to meet Americans with Disabilities Act (ADA) compliance.

City Court

(\$000)

Court Building Remodel

Description:

Renovate and upgrade the existing court building. Renovations would include resurfacing of all exterior walkways; exterior wall sealing of the entire building to eliminate water leaks during rain; improvements to the entrance of the building to facilitate traffic flow; interior painting and carpet replacement. Upgrading boiler systems and public service counters to meet Americans with Disabilities Act (ADA) compliance.

Project ID: C106 Start Date: 7/14 End Date: 6/17 Location: Ward 1

Justification:

Repair and improve the existing city court building to keep it operational for the next 15 years.

City-Wide Priorities: Customer Service and Maintenance and Renovation of City Assets.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5	Five		
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Capital Improvement Fund	1,464.0	1,600.0	736.0	2,336.0	0.0	0.0	0.0	0.0	2,336.0	0.0	3,800.0
Total	1,464.0	1,600.0	736.0	2,336.0	0.0	0.0	0.0	0.0	2,336.0	0.0	3,800.0



Environmental Services



Capital Improvement Program Department Statement

FY 2016/17 through FY 2020/21

Department: Environmental Services Five-Year Total: \$21,353,000

The CIP is Environmental Services' avenue to plan, establish and fund the City's need to safeguard the community from environmental impacts, improve department and landfill facilities, create future landfill capacity, and comply with environmental protection regulations. Projects directly reflect the City's efforts in meeting the long-term needs of the community, enhancing neighborhoods and downtown by restoring the natural environment and removing environmental barriers to redevelopment.

The Los Reales Landfill is a regional facility serving residents and businesses of Tucson and Pima County. It is the only active landfill owned and managed by the City of Tucson. Improvements to the landfill were master planned in phases and include perimeter fencing, utility infrastructure and site facilities for scales, landfill administration, self-haulers, recycling, household hazardous waste, and a learning center.

The five-year program is funded solely from the department's revenues. Projects are divided into the following categories:

Administration. The Replacement Utility Billing and Operations System is a collaborative project with the City of Tucson Water Department to upgrade the current Naviline billing system.

Facilities and Landfill Construction. Projects in this category include improvements to the department's Container Maintenance Facility, construction of the Self Hauler Facility, and a landfill buffer on the northeastern berm with landscaping at the Los Reales Landfill.

Environmental Capital. The Silverbell Landfill Water Quality Revolving Fund Pump and Treat System is a regulatory project to remove landfill contamination from the groundwater that will protect down gradient wells and the Sweetwater Recharge Facility.

Environmental Services

(\$000)

Los Reales Landfill Buffer - Northeastern Berm and Landscape

Description:

Design and construct an earthen berm to include desert landscaping for the northeastern buffer adjacent to the landfill entrance on Craycroft Road.

Project ID: Q334
Start Date: 4/16
End Date: 6/17
Location: Ward 5

Project ID: Q413

Start Date: 7/13

End Date:

Location:

6/17

Ward 5

Justification:

The construction of the earthen berm with landscaping will provide a buffer along the Craycroft Road landfill entrance. The berm will provide a visual screen for undeveloped property to the east of the landfill entrance and act as a noise reduction barrier for traffic entering the landfill.

City-Wide Priorities: Health and Safety and Maintenance and Renovation of Existing City Assets.

			Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
						Year 2	Year 3	Year 4	Year 5	Five		
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Environmental Services Fund		75.0	0.0	505.0	505.0	0.0	0.0	0.0	0.0	505.0	0.0	580.0
	Total	75.0	0.0	505.0	505.0	0.0	0.0	0.0	0.0	505.0	0.0	580.0

Los Reales Landfill East Property Acquisition

Description:

Purchase land located south of Los Reales Road and east of Craycroft Road.

Justification:

The land will serve as a buffer for neighboring homes.

City-Wide Priorities: Health and Safety and Maintenance and Renovation of Existing City Assets.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5	Five		
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Environmental Services Fund	2,680.0	320.0	0.0	320.0	0.0	0.0	0.0	0.0	320.0	0.0	3,000.0
Tota	2,680.0	320.0	0.0	320.0	0.0	0.0	0.0	0.0	320.0	0.0	3,000.0

Los Reales Landfill Self Hauler Facility

Description:

Design and construct a residential self-hauler facility. The design and construction will begin in Fiscal Year 2017. This is the second phase of the 80-acre development.

 Project ID:
 Q329

 Start Date:
 7/15

 End Date:
 6/18

 Location:
 Ward 5

Justification:

Having a dedicated location for customer drop-off, away from the landfill's working face will increase landfill safety and efficiency, reduce litter and dust and accommodate future recycling programs.

City-Wide Priorities: Balanced Budget, Customer Service, and Health and Safety.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5	Five		
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Environmental Services Fund	0.0	2,150.0	0.0	2,150.0	2,950.0	0.0	0.0	0.0	5,100.0	0.0	5,100.0
Tota	1 0.0	2,150.0	0.0	2,150.0	2,950.0	0.0	0.0	0.0	5,100.0	0.0	5,100.0

Replacement Utility Billing and Operations System

Description:

Collaborative partnership with the City of Tucson Water Department to upgrade the Naviline Billing System. The Naviline Billing System tracks services and bills for potable water, city refuse and wastewater. The system handles related functions such as work management, call management and interfaces to the City Enterprise Resource Planning (ERP) systems.

Project ID: Q501 Start Date: 1/16 End Date: 6/19 Location: Citywide

Justification:

Replace current utility billing and operations system to obtain greater capacity, more versatility, and modernization.

City-Wide Priorities: Balanced Budget and Customer Service.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5	Five		
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Environmental Services Fund	0.0	0.0	200.0	200.0	500.0	1,800.0	0.0	0.0	2,500.0	0.0	2,500.0
Tot	al 0.0	0.0	200.0	200.0	500.0	1,800.0	0.0	0.0	2,500.0	0.0	2,500.0

Silverbell Landfill Final Cover System - South Cell

Description:

Design and construct the final landfill cover system for the South Cell at the Silverbell Landfill. Design will begin in Fiscal Year 2018, followed by construction to be completed in Fiscal Year 2019. Security fencing will be installed to secure the groundwater treatment system compound and to prevent illegal dumping in the future.

Project ID: U319 Start Date: 7/16 End Date: 6/19 Location: Ward 1

Justification:

This landfill closure project will comply with the Arizona Department of Environmental Quality (ADEQ) closure/post closure municipal solid waste landfill requirements. Final landfill closure will protect against the release of hazardous constituents to the environment per ADEQ guidelines

City-Wide Priorities: Health and Safety.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5	Five		
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Environmental Services Fund	0.0	0.0	0.0	0.0	225.0	2,803.0	0.0	0.0	3,028.0	0.0	3,028.0
Tota	0.0	0.0	0.0	0.0	225.0	2,803.0	0.0	0.0	3,028.0	0.0	3,028.0

Silverbell Landfill Water Quality Assurance Treatment Facility

Description:

Design and construct groundwater treatment facility and associated infrastructure at the closed Silverbell Landfill. Improvements include extraction wells, treatment plant and conveyance structures. Final project design to begin in late 2016. Construction phase is scheduled for 2018, with facility operation spanning 20 years.

Project ID: U320 Start Date: 7/15 End Date: 6/18 Location: Ward 1

Justification:

This project will meet state regulatory requirements to remove landfill volatile organic compound contamination from the groundwater. In addition, it will protect down gradient wells and the City's Sweetwater Recharge Facility.

City-Wide Priorities: Balanced Budget, Health and Safety, and Maintenance and Renovation of Existing City Assets.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5	Five		
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Environmental Services Fund	0.0	3,300.0	0.0	3,300.0	2,300.0	0.0	0.0	0.0	5,600.0	0.0	5,600.0
Total	0.0	3,300.0	0.0	3,300.0	2,300.0	0.0	0.0	0.0	5,600.0	0.0	5,600.0

Tenth Avenue Maintenance Facility

Description:

Design and construct improvements at the Container Maintenance Facility located at South Tenth Avenue. Improvements include demolition, earthwork, infrastructure, drainage, and installation of a new building.

Project ID: Q412 Start Date: 10/13 End Date: 6/17 Location: Ward 6

Justification:

Safety improvements are necessary to the vacant, former transfer station building. A new facility is needed for the welding, storage, and operations of the container maintenance staff.

City-Wide Priorities: Balanced Budget and Maintenance and Renovation of Existing City Assets.

			Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
						Year 2	Year 3	Year 4	Year 5	Five		
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Environmental Services Fund		641.5	2,600.0	1,700.0	4,300.0	0.0	0.0	0.0	0.0	4,300.0	0.0	4,941.5
	Total	641.5	2,600.0	1,700.0	4,300.0	0.0	0.0	0.0	0.0	4,300.0	0.0	4,941.5



General Services



Capital Improvement Program Department Statement

FY 2016/17 through FY 2020/21

Department: General Services Five-Year Total: \$1,798,900

The General Services CIP of \$1.8 million consists of two projects: The Compressed Natural Gas (CNG) Plant replacement and the CNG Pipeline Southwest Gas (SWG) Bypass Project. Completing the existing aged CNG Plant with a new plant that has the equipment necessary to meet industry vehicle fueling standards and provide for backup emergency generator power to sustain plant operations in the event of a power outage. The new natural gas pipeline from the El Paso gas pipeline will be connected to the new CNG plant.

This work is funded through the Environmental Services Fund, the General Services Internal Service Fund, and the Fleet Services Internal Services Fund.

General Services

(\$000)

Compressed Natural Gas (CNG) Plant

Description:

This project will replace the existing aged CNG Plant with a new plant that has the equipment necessary to meet industry vehicle fueling standards and provide for backup emergency generator power to sustain plant operations in the event of a power outage. The project, when complete, will better serve both Sun Tran and Environmental Services' planned expansion of the CNG fleet.

Project ID: M896 Start Date: 7/13 End Date: 6/17 Location: Ward 5

Justification:

An analysis of fuel types determined CNG-fueled buses and refuse trucks will cost less to operate over the life cycle compared to non-CNG fleet and will provide the reliability and stability needed to protect the integrity of public service.

City-Wide Priorities: Balanced Budget, Customer Service, and Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
Source of Funds Summary	Prior Years	Carry Forward	New Funding	Year 1 Total	Year 2 FY 2017/18	Year 3 FY 2018/19	Year 4 FY 2019/20	Year 5 FY 2020/21	Five Year Total	Future Years	Total Project
Fleet Services Internal Services Fund	305.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	305.9
Environmental Services Fund	5,123.5	345.0	0.0	345.0	0.0	0.0	0.0	0.0	345.0	0.0	5,468.5
General Services Internal Service Fund	1,230.0	353.9	0.0	353.9	0.0	0.0	0.0	0.0	353.9	0.0	1,583.9
Mass Transit Fund	3,920.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,920.0
Total	10,579.4	698.9	0.0	698.9	0.0	0.0	0.0	0.0	698.9	0.0	11,278.3

CNG Pipeline Southwest Gas (SWG) Bypass Project

Project ID: B813 Start Date: 1/17 End Date: 6/17

Ward 5

Location:

Description:

This project covers the design, construction, and connection of a new City of Tucson natural gas pipeline from El Paso gas pipeline to the new CNG Plant. As a result, this pipeline will bypass the SWG pipeline.

Justification:

City of Tucson CNG consumption is increasing due to the replacement of diesel-powered Sun Tran buses and refuse trucks with CNG vehicles. The City pays SWG to transport natural gas through their pipeline to the City of Tucson CNG plant. The cost of transportation is calculated based on usage; therefore, the greater the volume used, the higher the aggregate transport cost. Installing a City-owned pipeline would decrease the transportation cost of natural gas to the City's CNG plant over the long-term.

City-Wide Priorities: Balanced Budget.

		Adopted	l Fiscal Year	Pr	ojected Re	equireme	nts				
					Year 2	Year 3	Year 4	Year 5	Five		
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Fleet Services Internal Services Fund	0.0	0.0	1,100.0	1,100.0	0.0	0.0	0.0	0.0	1,100.0	0.0	1,100.0
Total	0.0	0.0	1,100.0	1,100.0	0.0	0.0	0.0	0.0	1,100.0	0.0	1,100.0



Housing and Community Development



Capital Improvement Program Department Statement

FY 2016/17 through FY 2020/21

Department: Housing and Community Development Five-Year Total: \$1,000,000

The Housing and Community Development Department's CIP consists of one project:

The Community Development Block Grant for Parks and Transportation projects enhance neighborhood recreation areas, addresses traffic and street issues, complies with the ADA, and meets the U.S. Department of Housing and Urban Development Consolidated Annual Action Plan.

The Housing and Community Development Department's five-year CIP is funded with \$1,000,000 in federal grants.

Housing and Community Development

(\$000)

CDBG Master CIP

Description:

Community Development Block Grant (CDBG) Public Facilities Neighborhood Enhancements for Parks and/or Transportation. Provide and meet the Consolidated Annual Action Plan's objective of availability and accessibility as submitted to the U.S. Department of Housing and Urban Development.

Project ID: H158 Start Date: Annual End Date: Annual Location: Citywide

Justification:

To enhance neighborhood recreation areas, such as parks and walking paths. To address safety and access issues for streets, such as bus shelters, traffic calming, street lighting and compliance with the Americans with Disabilities Act.

City-Wide Priorities: Health and Safety.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
	ъ.		3.7	Ŧ7. 4	Year 2	Year 3	Year 4	Year 5	Five		
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Community Development Block Grant	0.0	0.0	1,000.0	1,000.0	0.0	0.0	0.0	0.0	1,000.0	0.0	1,000.0
Total	0.0	0.0	1,000.0	1,000.0	0.0	0.0	0.0	0.0	1,000.0	0.0	1,000.0



Parks and Recreation



Capital Improvement Program Department Statement

FY 2016/17 through FY 2020/21

Department: Parks and Recreation Five-Year Total: \$8,934,400

The Parks and Recreation Department's CIP is based on the Parks, Recreation, and Open Space component of Plan Tucson; the adopted City of Tucson Parks and Recreation Ten-Year Strategic Service Plan; and Mayor and Council direction. The CIP implements Mayor and Council policy by developing facilities that provide for family, youth, and senior adult recreation, while supporting inner-city revitalization, public art, and using arid and semi-arid landscaping wherever possible to conserve water.

The five-year capital program of \$8.9 million is funded from Impact Fees, Capital Improvement Funds, and civic contributions.

Parks and Recreation

(\$000)

Project ID: R990

Start Date: 12/07

End Date:

Location:

6/17

Ward 1

A Mountain Improvement

Description:

Design, and construct Americans with Disabilities Act (ADA) and other improvements to public facilities in Sentinel Peak Park at A Mountain.

Justification:

A Mountain Park has regional significance, and this project will benefit and address the community's need for open space, passive recreation, and natural/historic resource preservation and interpretation.

City-Wide Priorities: Maintenance and Renovation of Existing City Assets.

			Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
						Year 2	Year 3	Year 4	Year 5	Five		
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
General Obligation Bonds		95.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	95.8
General Fund		20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0
General Fund: Restricted		195.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	195.0
Impact Fee Fund		89.0	0.0	125.7	125.7	0.0	0.0	0.0	0.0	125.7	0.0	214.7
,	Fotal	399.8	0.0	125.7	125.7	0.0	0.0	0.0	0.0	125.7	0.0	525.5

Arcadia Park, Phase I

Description:

Acquire land, plan, and design the initial phase of a multi-purpose path that provides connectivity between parks, schools, residential areas, workplaces, commercial districts and other destinations. This project is part of a multiphase development; construction is contingent upon future funding.

 Project ID:
 RM01

 Start Date:
 7/08

 End Date:
 6/18

 Location:
 Ward 6

Justification:

This project is needed to increase capacity in our parks and recreation system and to address the demands placed on it by new development.

City-Wide Priorities: Customer Service.

			Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
						Year 2	Year 3	Year 4	Year 5	Five		
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Impact Fee Funds		505.5	59.0	41.0	100.0	186.5	0.0	0.0	0.0	286.5	0.0	792.0
	Total	505.5	59.0	41.0	100.0	186.5	0.0	0.0	0.0	286.5	0.0	792.0

Arroyo Chico Urban Path: Country Club to Treat

Description:

Design and construct urban greenway improvements along the Arroyo Chico Urban Path including a pedestrian/bicyclist activated street crossing. This project is in conjunction with a Transportation project in the amount of \$600,000 funded by the Regional Transportation Authority (RTA).

Project ID: RP1C
Start Date: 7/14
End Date: 6/18
Location: Wards 5
and 6

Justification:

Development of these improvements will address the community's need for connectivity and a more complete urban pathway system.

City-Wide Priorities: Customer Service and Maintenance and Renovation of Existing City Assets.

		Adopted	d Fiscal Year	2016/17	Pı	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5	Five		
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Impact Fee Funds	144.	166.9	5.8	172.7	90.0	0.0	0.0	0.0	262.7	0.0	407.5
To	tal 144.	166.9	5.8	172.7	90.0	0.0	0.0	0.0	262.7	0.0	407.5

Christopher Columbus Park Expansion

Description:

Design and construct improvements to the north end of Christopher Columbus Park.

 Project ID:
 RM03

 Start Date:
 3/07

 End Date:
 6/17

 Location:
 Ward 3

Justification:

This project is needed to increase capacity in our parks and recreation system and to address the demands placed on it by new development.

City-Wide Priorities: Customer Service and Maintenance and Renovation of Existing City Assets.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5	Five		
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Civic Contributions Fund	142.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	142.0
Impact Fee Funds	673.4	0.0	73.9	73.9	0.0	0.0	0.0	0.0	73.9	0.0	747.3
Total	815.4	0.0	73.9	73.9	0.0	0.0	0.0	0.0	73.9	0.0	889.3

Groves Park Playground

Description:

Design and construct a new playground at Groves Park.

Project ID: RM23 Start Date: 6/18 End Date: 6/18 Location: Ward 4

Justification:

This project is needed to increase capacity in our parks and recreation system and to address the demands placed on it by new development.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5	Five		
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Impact Fee Funds	0.0	0.0	175.0	175.0	25.0	0.0	0.0	0.0	200.0	0.0	200.0
Total	0.0	0.0	175.0	175.0	25.0	0.0	0.0	0.0	200.0	0.0	200.0

Jesse Owens Park

Description:

Develop a park master plan to guide future park expansion needs.

 Project ID:
 RM19

 Start Date:
 7/16

 End Date:
 6/17

 Location:
 Ward 2

Justification:

This project is needed to increase capacity in our parks and recreation system to meet future demands placed on it by new development.

City-Wide Priorities: Customer Service.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5	Five		
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Impact Fee Funds	0.0	0.0	25.0	25.0	0.0	0.0	0.0	0.0	25.0	0.0	25.0
Tota	0.0	0.0	25.0	25.0	0.0	0.0	0.0	0.0	25.0	0.0	25.0

John F. Kennedy Park

Description:

Develop a park master plan to guide future park expansion needs.

Project ID: RM17 Start Date: 7/15 End Date: 6/17 Location: Ward 1

Justification:

This project is needed to increase capacity in our parks and recreation system to meet future demands placed on it by new development.

			Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
						Year 2	Year 3	Year 4	Year 5	Five		
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Impact Fee Funds		15.0	20.0	7.8	27.8	0.0	0.0	0.0	0.0	27.8	0.0	42.8
	Total	15.0	20.0	7.8	27.8	0.0	0.0	0.0	0.0	27.8	0.0	42.8

Lakeside Park Playground

Description:

Design and construct a new playground at Lakeside Park.

 Project ID:
 RM20

 Start Date:
 7/16

 End Date:
 6/18

 Location:
 Ward 4

Justification:

This project is needed to increase capacity in our parks and recreation system to meet future demands placed on it by new development.

City-Wide Priorities: Customer Service and Maintenance and Renovation of Existing City Assets.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5	Five		
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Impact Fee Funds	0.0	0.0	175.0	175.0	25.0	0.0	0.0	0.0	200.0	0.0	200.0
Total	0.0	0.0	175.0	175.0	25.0	0.0	0.0	0.0	200.0	0.0	200.0

Limberlost Family Park ADA Improvements and Walking Path

Description:

Design and construct a walking path around the perimeter of Limberlost Family Park including ADA improvements.

 Project ID:
 RM22

 Start Date:
 7/17

 End Date:
 6/18

 Location:
 Ward 3

Justification:

This project is needed to increase capacity in our parks and recreation system to meet future demands placed on it by new development.

City-Wide Priorities: Customer Service and Maintenance and Renovation of Existing City Assets.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5	Five		
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Impact Fee Funds	0.0	0.0	152.0	152.0	25.0	0.0	0.0	0.0	177.0	0.0	177.0
Total	0.0	0.0	152.0	152.0	25.0	0.0	0.0	0.0	177.0	0.0	177.0

Lincoln Park Playground

Description:

Design and construct a new playground at Lincoln Park.

 Project ID:
 RM21

 Start Date:
 7/16

 End Date:
 6/18

 Location:
 Ward 4

Justification:

This project is needed to increase capacity in our parks and recreation system to meet future demands placed on it by new development.

City-Wide Priorities: Customer Service.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5	Five		
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Impact Fee Funds	0.0	0.0	175.0	175.0	25.0	0.0	0.0	0.0	200.0	0.0	200.0
Total	0.0	0.0	175.0	175.0	25.0	0.0	0.0	0.0	200.0	0.0	200.0

Palo Verde Park

Description:

Develop a park master plan to guide future park expansion needs. Design and construct a sports field lighting system on existing softball field.

Start Date: 7/16 End Date: 6/18 Location: Ward 2

Project ID: RM18

Justification:

This project is needed to increase capacity in our parks and recreation system to meet future demands placed on it by new development. Improve through investments in enhanced delivery of services that directly impact citizens.

					1							
			Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
						Year 2	Year 3	Year 4	Year 5	Five		
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Impact Fee Funds		0.0	0.0	109.0	109.0	200.0	0.0	0.0	0.0	309.0	0.0	309.0
	Total	0.0	0.0	109.0	109.0	200.0	0.0	0.0	0.0	309.0	0.0	309.0

Parks Strategic Plan

Description:

Update the City of Tucson Parks and Recreation Department's 10-Year Strategic Plan including developing and utilizing Geographic Information Systems (GIS) to support the plan update.

Project ID: R111 Start Date: 7/12

End Date: 6/17 Location: Citywide

Project ID: RM08

Start Date: 7/07

6/17

Ward 4

End Date:

Location:

Justification:

This project is needed to revise and update the Parks and Recreation Department's Strategic Plan in accordance with accreditation requirements and to meet the current and future demands for public recreation.

City-Wide Priorities: Balanced Budget and Customer Service.

			Adontod	l Fiscal Year	2016 /17	D.,	oioatad D	eguireme	ato			
			Adopted	i Fiscai Tear	2010/17							
						Year 2	Year 3	Year 4	Year 5	Five		
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Impact Fee Funds		253.0	30.0	0.0	30.0	0.0	0.0	0.0	0.0	30.0	0.0	283.0
	Total	253.0	30.0	0.0	30.0	0.0	0.0	0.0	0.0	30.0	0.0	283.0

Purple Heart Park Expansion

Description:

Design and construct additional amenities outlined in the current master plan for the park including two new shade structures over the playground.

Justification:

This project is needed to increase capacity in our parks and recreation system and to address the demands placed on it by new development.

City-Wide Priorities: Customer Service and Maintenance and Renovation of Existing City Assets.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5	Five		
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
General Obligation Bonds	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0
General Fund	150.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	150.0
Impact Fee Funds	1,428.6	25.6	114.9	140.5	0.0	0.0	0.0	0.0	140.5	0.0	1,569.1
Total	1,603.6	25.6	114.9	140.5	0.0	0.0	0.0	0.0	140.5	0.0	1,744.1

Reid Park Expansion, Phase I

Description:

Design and construct a grassy open space, a large-event venue, ADA improvements and a new restroom. This project is part of a multi-phase development. Future phases will include capacity-building improvements to Reid Park.

 Project ID:
 RM09

 Start Date:
 7/07

 End Date:
 6/19

 Location:
 Ward 6

Project ID: R994

Start Date: 7/14

End Date: 6/17

Ward 6

Location:

Justification:

This project is needed to increase capacity in our parks and recreation system and to address the demands placed on it by new development.

City-Wide Priorities: Customer Service and Health and Safety.

			Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
						Year 2	Year 3	Year 4	Year 5	Five		
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
General Obligation Bond Funds		46.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.5
Impact Fee Funds		608.9	241.4	358.8	600.2	239.8	20.3	0.0	0.0	860.3	0.0	1,469.2
	Total	655.4	241.4	358.8	600.2	239.8	20.3	0.0	0.0	860.3	0.0	1,515.7

Reid Park Zoo Health Center

Description:

Design, permit and construct an addition to the existing veterinary facility at the Reid Park Zoo.

Justification:

This project is necessary as the existing 40-year old facility is extremely dated and is no longer large enough to accommodate the zoo's current collection of animals. The facility is also needed to help meet the standards set by the Association of Zoos and Aquariums.

City-Wide Priorities: Maintenance and Renovation of Existing City Assets.

		Adopted	d Fiscal Year	2016/17	Pı	ojected R	equireme	nts					
					Year 2	Year 3	Year 4	Year 5	Five				
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total		
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project		
Capital Improvement Fund	0.	2,344.1	1,172.1	3,516.2	0.0	0.0	0.0	0.0	3,516.2	0.0	3,516.2		
Civic Contributions Fund	15.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0		
То	al 15.	2,344.1	1,172.1	3,516.2	0.0	0.0	0.0	0.0	3,516.2	0.0	3,531.2		

San Juan Park

Description:

Develop a park master plan to guide future park expansion needs.

Project ID: RM16 Start Date: 7/16 **End Date:** 6/17 Ward 1 Location:

Project ID: R112

Start Date: Annual

Justification:

This project is needed to increase capacity in our parks and recreation system to meet future demands placed on it by new development.

City-Wide Priorities: Customer Service.

		Adopted	d Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5	Five		
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Impact Fee Funds	0.	0.0	31.0	31.0	0.0	0.0	0.0	0.0	31.0	0.0	31.0
To	tal 0.	0.0	31.0	31.0	0.0	0.0	0.0	0.0	31.0	0.0	31.0

Shade Structure Projects

Description:

End Date: Annual Location: Citywide Design and construct new shade structures within the City of Tucson parks system. Funding is contingent from funding from the Tucson Parks Foundation and the Tohono O'odam Nation Proposition 202 Grant Program; budget includes capacity purpose should funding become available.

Justification:

This project is needed to construct new and/or replace aged shade structures within the parks system.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5	Five		
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Civic Contributions Fund	0.0	0.0	25.0	25.0	25.0	25.0	25.0	25.0	125.0	0.0	125.0
Miscellaneous Non-Federal Grants	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.3
Total	0.0	0.0	25.0	25.0	25.0	25.0	25.0	25.0	125.0	0.0	174.3

South Central Community Park/ Robert A. Price, Sr. Park, Phase I

Description:

Plan, design, and construct the initial development of a new community park along the Valencia Road Corridor. This project is part of a multiphase development. Future phases are contingent upon future bonds or other revenues. This park has been renamed Robert A. Price, Sr. Park.

 Project ID:
 RM11

 Start Date:
 7/07

 End Date:
 6/18

 Location:
 Wards 4

 and 5

Project ID: RM12

Start Date: 7/07

6/21

Ward 5

End Date:

Location:

Justification:

This project is needed to increase capacity in our parks and recreation system and to address the demands placed on it by new development.

City-Wide Priorities: Customer Service.

			Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
						Year 2	Year 3	Year 4	Year 5	Five		
	Pr	ior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary	Ye	ars	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Impact Fee Funds		26.1	95.7	269.0	364.7	269.5	0.0	0.0	0.0	634.2	0.0	660.3
To	tal	26.1	95.7	269.0	364.7	269.5	0.0	0.0	0.0	634.2	0.0	660.3

Valencia and Alvernon Community Park, Phase I

Description:

Plan and design the initial phase of a new community park in the vicinity of Valencia and Alvernon. Construction of this project is a proposed partnership between the Pima County Flood Control District and the City of Tucson.

Justification:

This project is needed to increase capacity in our parks and recreation system and to address the demands placed on it by new development.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5	Five		
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Impact Fee Funds	82.4	0.0	0.0	0.0	150.0	253.3	150.0	50.0	603.3	0.0	685.7
Total	82.4	0.0	0.0	0.0	150.0	253.3	150.0	50.0	603.3	0.0	685.7

Valencia Corridor Land Acquisition, Phase I

Description:

Acquire land identified in the Valencia Corridor Parks and Recreation Facilities Plan. This project is part of a multi-phase development. Future acquisitions are contingent upon future revenues.

 Project ID:
 RM13

 Start Date:
 7/07

 End Date:
 6/21

 Location:
 Wards 4

 and 5

Project ID: RM24

Start Date: 7/17

End Date: 6/18

Ward 4

Location:

Justification:

This project is needed to increase capacity in our parks and recreation system and to address the demands placed on it by new development.

City-Wide Priorities: Customer Service.

			Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
						Year 2	Year 3	Year 4	Year 5	Five		
]	Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary	Ŋ	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Impact Fee Funds		2.1	50.0	0.0	50.0	100.0	321.4	319.9	200.0	991.3	0.0	993.4
To	otal	2.1	50.0	0.0	50.0	100.0	321.4	319.9	200.0	991.3	0.0	993.4

Vista del Prado Group Ramada

Description:

Design and construct a group ramada at Vista del Prado Park.

Justification:

This project is needed to increase capacity in our parks and recreation system and to address the demands placed on it by new development.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5	Five		
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Impact Fee Funds	0.0	0.0	15.0	15.0	100.0	0.0	0.0	0.0	115.0	0.0	115.0
Tota	1 0.0	0.0	15.0	15.0	100.0	0.0	0.0	0.0	115.0	0.0	115.0



Transportation



Capital Improvement Program Department Statement

FY 2016/17 through FY 2020/21

Department: Transportation Five-Year Total: \$581,040,300

Transportation's CIP of \$581.0 million funds improvements for a multi-modal transportation system and infrastructure designed to attract industry and protect neighborhoods. The program is divided into four areas: Public Transit, Streets, Street Lighting, and Traffic Signals.

Public Transit. The Public Transit Program of \$66.6 million replaces and upgrades Sun Tran and Sun Van fleet vehicles and constructs facilities to support transit operations, including Park-and-Ride facilities, ADA access improvements, security improvements, and the Regional Seamless Fare system.

Streets. The Streets Program of \$496.0 million will upgrade the arterial, collector, and residential transportation network, including streets, sidewalks, and bikeways, with the primary goal of maintaining an arterial street system that permits a safe and unimpeded flow of traffic. The program is funded primarily with Regional Transportation Authority (RTA) funds and general obligation street bonds. Other funding sources include capital agreement funds, federal highway grants, impact fees, Pima County bonds, and HURF revenues.

Street Lighting. The Street Lighting Program of \$16.7 million will convert the current lighting with light emitting diode (LED) technology which will save energy usage by 31% to 51%. This project will be funded by HURF revenues.

Traffic Signals. The Traffic Signals Program of \$1.7 million constructs traffic signals, improvements to the Intelligent Transportation System, pedestrian crossing improvements, signal upgrades, and the Regional Transportation Data Network (RTDN). Projects are primarily funded with federal grants and RTA funds.

Transportation

(\$000)

22nd Street: I-10 to Tucson Boulevard

Description:

Design and construct improvements along this segment of the 22nd Street corridor. Improvements will include widening 22nd Street to a six-lane, divided roadway with full urban amenities.

Project ID: SR5A Start Date: 7/07 End Date: 6/19 Location: Wards 1 and 5

Justification:

This project was approved by Mayor and Council on December 5, 2006 for RTA funding and will enhance the carrying capacity of the corridor. Pima Association of Governments (PAG) 5-Year Regional Transportation Improvement Program (TIP) 131.00.

City-Wide Priorities: Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			ı
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Capital Agreement Fund	0.0	0.0	9,000.0	9,000.0	0.0	0.0	0.0	0.0	9,000.0	0.0	9,000.0
Federal Grant Funds	0.0	0.0	0.0	0.0	0.0	2,415.0	0.0	0.0	2,415.0	0.0	2,415.0
General Fund: Restricted	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7
Highway User Revenue Fund	32.2	0.0	5.0	5.0	0.0	0.0	0.0	0.0	5.0	0.0	37.2
Impact Fee Funds	387.5	298.9	1,000.0	1,298.9	1,000.0	2,979.9	0.0	0.0	5,278.8	0.0	5,666.3
Regional Transportation Authority Fund	42,908.9	1,445.6	3,000.0	4,445.6	20,000.0	29,358.9	0.0	0.0	53,804.5	0.0	96,713.4
Total	43,333.3	1,744.5	13,005.0	14,749.5	21,000.0	34,753.8	0.0	0.0	70,503.3	0.0	113,836.6

4th/Congress: Toole Bike Pedestrian Improvements

Description:

Enhance the roadway elements within the 4th Avenue/Congress/Toole area to improve pedestrian and bicycle safety and motorist wayfinding.

Justification:

Federal safety funds have been allocated through the PAG TIP process. PAG 5-Year TIP 3.12.

Total

Total

City-Wide Priorities: Health and Safety											
		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Federal Grant Funds	59.1	11.6	300.0	311.6	0.0	0.0	0.0	0.0	311.6	0.0	370.7
Highway User Revenue Fund	5.8	0.6	18.0	18.6	0.0	0.0	0.0	0.0	18.6	0.0	24.4

330.2

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

318.0

5.7

105.7

ADA Transition Plan

Description:

Develop a plan that categorizes all City right-of-ways and prioritizes needed Americans with Disabilities Act (ADA) improvements.

11.4

210.7

12.2

64.9

95.3

1,719.9

Justification:

Highway User Revenue Fund

This plan is required by Federal law. PAG 5-Year Regional TIP 27.11.

City-Wide Priorities: Health and Safety.

		Adopted Fiscal Year 2016/17			Projected Requirements						
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Federal Grant Funds	1,624.6	199.3	100.0	299.3	775.0	0.0	0.0	0.0	1,074.3	0.0	2,698.9

47.0

822.0

17.1

316.4

Project ID: S211 Start Date: 7/12 **End Date:** 6/17

330.2

64.1

1,138.4

Location: Ward 6

0.0

Project ID: S112

Start Date: 7/12

End Date: 6/18

0.0

0.0

Ward 6

Location:

395.1

159.4

2,858.3

Arroyo Chico Greenway

Description:

Construct the portion of the Arroyo Chico Greenway between Reid Park and Robison Elementary School.

Justification:

This project was approved for RTA funds in December 2012. PAG 5-Year Regional TIP 76.12.

City-Wide Priorities: Health and Safety.

Pr	oject ID:	SP09
St	art Date:	7/13
Eı	nd Date:	6/17
Lo	ocation:	Wards 5
		and 6

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Regional Transportation Authority Fund	96.4	500.0	534.0	1,034.0	0.0	0.0	0.0	0.0	1,034.0	0.0	1,130.4
Total	96.4	500.0	534.0	1,034.0	0.0	0.0	0.0	0.0	1,034.0	0.0	1,130.4

Arroyo Chico, Multi-Use Path (MUP), Tucson Boulevard

Description:

Plan for extension of Arroyo Chico west from Campbell Avenue into Downtown.

Justification

Federal Transportation Alternative Program funds have been allocated for this planning effort.

Project ID:	SP15
Start Date:	1/15
End Date:	6/17
Location:	Wards 5
	and 6

		Adopted	Fiscal Year	Fiscal Year 2016/17		Projected Requiremen					
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Impact Fee Funds	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
Federal Grant Funds	44.3	50.0	23.3	73.3	0.0	0.0	0.0	0.0	73.3	0.0	117.6
Total	44.9	50.0	23.3	73.3	0.0	0.0	0.0	0.0	73.3	0.0	118.2

Associated Transit Improvements

Description:

Design and construct various transit improvements that are designed to enhance public transportation services.

Start Date: 12/16 End Date: 6/21 Location: Citywide

Project ID: M190

Project ID: SR10

Start Date: 7/14

End Date: 6/18

Ward 2

Location:

Justification:

Eligible improvements include bus shelters, bus benches, street lights, pedestrian access and walkways, bicycle access including bicycle storage and bicycle racks for buses, signage or enhances access for persons with disabilities to public transportation.

City-Wide Priorities: Customer Service and Health and Safety.

		Adopted	Fiscal Year	2016/17	Projected Requirements			nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Mass Transit Funds	0.0	737.3	1,172.4	1,909.7	172.4	172.4	172.4	172.4	2,599.3	0.0	2,599.3
Tota	0.0	737.3	1,172.4	1,909.7	172.4	172.4	172.4	172.4	2,599.3	0.0	2,599.3

Broadway: Camino Seco to Houghton

Description:

Widen Broadway to a four-lane, divided roadway with bike lanes and sidewalks.

Justification:

This project was approved as part of the May 2006 RTA Plan and will improve the traffic carrying capacity for Broadway Boulevard. PAG 5-Year Regional TIP 36.00.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Capital Agreement Fund: PAG	0.0	0.0	2,000.0	2,000.0	2,662.0	0.0	0.0	0.0	4,662.0	0.0	4,662.0
Highway User Revenue Fund	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0
Regional Transportation Authority Fund	418.4	0.0	6,048.0	6,048.0	0.0	0.0	0.0	0.0	6,048.0	0.0	6,466.4
Impact Fee Funds	0.0	0.0	1,000.0	1,000.0	1,500.0	0.0	0.0	0.0	2,500.0	0.0	2,500.0
Total	423.4	0.0	9,048.0	9,048.0	4,162.0	0.0	0.0	0.0	13,210.0	0.0	13,633.4

Broadway: Euclid to Country Club

Description:

Design and construct a corridor project that will widen Broadway to six lanes, plus bus lanes.

Justification:

This project was approved by Mayor and Council on January 23, 2007 for RTA funding, and will enhance the carrying capacity of the corridor. PAG 5-Year Regional TIP 22.05.

City-Wide Priorities: Maintenance and Renovation of Existing City Assets.

| Project ID: SR3A | Start Date: 1/07 | End Date: 6/19 | Location: Wards 5 | and 6

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
Source of Funds Summary	Prior Years	Carry Forward	New Funding	Year 1 Total	Year 2 FY 2017/18	Year 3 FY 2018/19	Year 4 FY 2019/20	Year 5 FY 2020/21	Five Year Total	Future Years	Total Project
Capital Agreement Fund	0.0	0.0	0.0	0.0	12,000.0	12,000.0	0.0	0.0	24,000.0	0.0	24,000.0
Highway User Revenue Fund	22.2	0.0	5.0	5.0	5.0	5.0	0.0	0.0	15.0	0.0	37.2
Highway User Revenue Fund: In-Lieu Fees	44.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.2
Impact Fee Funds	1.9	1,500.0	0.0	1,500.0	1,500.0	0.0	0.0	0.0	3,000.0	0.0	3,001.9
Regional Transportation Authority Fund	8,938.8	1,000.0	16,000.0	17,000.0	10,000.0	6,120.5	0.0	0.0	33,120.5	0.0	42,059.3
Total	9,007.1	2,500.0	16,005.0	18,505.0	23,505.0	18,125.5	0.0	0.0	60,135.5	0.0	69,142.6

Campbell and 9th HAWK

Description:

Design and construct HAWK signal at the intersection.

Justification:

Improve pedestrian safety.

City-Wide Priorities: Health and Safety.

Project ID: SH27 Start Date: 7/13 End Date: 6/17 Location: Ward 5

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme				
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Regional Transportation Authority Fund	74.8	79.3	0.0	79.3	0.0	0.0	0.0	0.0	79.3	0.0	154.1
Total	74.8	79.3	0.0	79.3	0.0	0.0	0.0	0.0	79.3	0.0	154.1

Campbell Avenue Revitalization

Description:

Design and construct streetscape improvements along Campbell Avenue between Ft. Lowell and Grant Roads.

Start Date: 7/06 End Date: 6/18 Location: Ward 3

Project ID: S237

Justification:

These improvements will promote the revitalization of this commercial corridor.

City-Wide Priorities: Maintenance and Renovation of Existing City Assets.

		Adopted Fiscal Year 2016/17			Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY		Five Year		Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Federal Grant Funds	933.6	35.0	0.0	35.0	0.0	0.0	0.0	0.0	35.0	0.0	968.6
Highway User Revenue Fund	134.0	0.0	17.5	17.5	17.5	0.0	0.0	0.0	35.0	0.0	169.0
Regional Transportation Authority Fund	92.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	92.7
Total	1,160.3	35.0	17.5	52.5	17.5	0.0	0.0	0.0	70.0	0.0	1,230.3

CNG Fueling System (N.W. Expansion)

Description:

Design and construct a Compressed Natural Gas (CNG) fueling facility at Sun Tran's northwest maintenance facility.

 Start Date:
 7/15

 End Date:
 6/18

 Location:
 Ward 3

Project ID: M931

Justification:

To maximize operational flexibility and meet an eight hour window for fueling CNG buses due to the number of CNG fleet that will be replaced in Fiscal Year 2018 and to increase the number of CNG fleet as additional replacement and expansion buses are acquired.

City-Wide Priorities: Customer Service.

		Adopted	Fiscal Year	2016/17	Projected Requirements			nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Mass Transit Funds	0.0	500.0	4,000.0	4,500.0	4,000.0	0.0	0.0	0.0	8,500.0	0.0	8,500.0
Total	0.0	500.0	4,000.0	4,500.0	4,000.0	0.0	0.0	0.0	8,500.0	0.0	8,500.0

Columbus: Corridor Pedestrian Path

Description:

Design and construct an off-street pedestrian path along Columbus Boulevard between Timrod Street and 22nd Street.

 Project ID:
 \$189

 Start Date:
 7/09

 End Date:
 6/17

 Location:
 Ward 6

Justification:

A federal Transportation Enhancement grant was awarded for this project improving pedestrian safety. Funds from RTA are being used for local match and for expenditures not covered by the grant. PAG 5-Year Regional TIP 105.08.

City-Wide Priorities: Health and Safety.

		Adopted	Fiscal Year 2016/17		Projected Requirements						
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Federal Grant Funds	190.0	0.0	210.0	210.0	0.0	0.0	0.0	0.0	210.0	0.0	400.0
Highway User Revenue Fund	22.9	0.0	15.0	15.0	0.0	0.0	0.0	0.0	15.0	0.0	37.9
Regional Transportation Authority Fund	27.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.2
Total	240.1	0.0	225.0	225.0	0.0	0.0	0.0	0.0	225.0	0.0	465.1

Copper Street Bike Boulevard

Description:

Construct Bike Boulevard improvements along the Copper Street alignment, paralleling the Grant Road Corridor. This will provide a low-stress bicycling alternative to Grant Road.

Start Date: 7/13 End Date: 6/17 Location: Ward 3

Project ID: SP10

Justification:

This project was approved for RTA funds in December 2012. PAG 5-Year Regional TIP 77.12.

City-Wide Priorities: Health and Safety.

		Adopted	Fiscal Year 2016/17		Pr	ojected R	equireme				
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Highway User Revenue Fund	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
Regional Transportation Authority Fund	99.9	400.0	433.0	833.0	0.0	0.0	0.0	0.0	833.0	0.0	932.9
Total	100.5	400.0	433.0	833.0	0.0	0.0	0.0	0.0	833.0	0.0	933.5

Craycroft and Ft. Lowell Park HAWK

Description:

Design and construct HAWK signal at the intersection.

Justification:

Improve pedestrian safety.

City-Wide Priorities: Health and Safety and Maintenance and Renovation of Existing City Assets.

Project ID:	SH28
Start Date:	7/13
End Date:	12/16
Location:	Ward 2

Project ID: S30N

Start Date: 7/06

End Date: 6/20

Wards

1 and 6

		Adopted Fiscal Year 2016/17			Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Highway User Revenue Fund	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Regional Transportation Authority Fund	80.7	79.3	0.0	79.3	0.0	0.0	0.0	0.0	79.3	0.0	160.0
Total	80.8	79.3	0.0	79.3	0.0	0.0	0.0	0.0	79.3	0.0	160.1

Downtown Links Barraza-Aviation

Description:

Design and construct a four-lane roadway from 6th to Broadway Boulevard east of the railroad tracks. The local match requirement for RTA funding has been satisfied by prior expenditures on other segments of the Barraza-Aviation Parkway.

Justification:

These improvements will support downtown revitalization, improve traffic flow, and support the Barraza-Aviation Parkway. PAG TIP 81.04.

		Adopted	Adopted Fiscal Year 2016/17			ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Capital Agreement Fund	1,783.2	0.0	500.0	500.0	4,000.0	2,000.0	1,100.0	0.0	7,600.0	0.0	9,383.2
General Fund	197.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	197.2
Highway User Revenue Fund	299.5	5.0	5.0	10.0	5.0	0.0	0.0	0.0	15.0	0.0	314.5
Regional Transportation Authority Fund	36,721.7	5,400.0	2,148.0	7,548.0	26,048.1	8,000.0	0.0	0.0	41,596.1	0.0	78,317.8
Total	39,001.6	5,405.0	2,653.0	8,058.0	30,053.1	10,000.0	1,100.0	0.0	49,211.1	0.0	88,212.7

El Paso and Southwestern Greenway

Description:

Design and construct a multi-use recreational greenway along the former El Paso and Southwestern Railroad tracks. Improvements will include a dual Location: path system, landscaping, pedestrian-level lighting, and enhanced crossings at major streets.

Project ID: SP01 Start Date: 7/08 **End Date:** 6/18 Wards 1 and 5

Justification:

This project is intended to promote the use of alternative modes of transportation. PAG 5-Year Regional TIP 72.07 and 83.07.

City-Wide Priorities: Health and Safety.

		Adopted Fiscal Year 2016/17			Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Federal Grant Funds	0.0	0.0	458.0	458.0	0.0	0.0	0.0	0.0	458.0	0.0	458.0
Highway User Revenue Fund	8.8	5.0	0.0	5.0	0.0	0.0	0.0	0.0	5.0	0.0	13.8
Regional Transportation Authority Fund	1,883.4	250.0	0.0	250.0	217.0	0.0	0.0	0.0	467.0	0.0	2,350.4
Total	1,892.2	255.0	458.0	713.0	217.0	0.0	0.0	0.0	930.0	0.0	2,822.2

Fifth Street Bike Boulevard

Description:

Construct Bike Boulevard improvements along the Fifth Street alignment between Stone Avenue and Highland Avenue, paralleling the Sun Link Streetcar Corridor. This will provide a low-stress bicycling alternative to the Streetcar route.

Justification:

This project was approved for RTA Categorical funds in December 2012.

City-Wide Priorities: Health and Safety and Maintenance and Renovation of Existing City Assets.

		Adopted Fiscal Year 2016/17			Pr	ojected R	equireme				
		1			Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Regional Transportation Authority Fund	382.6	178.0	0.0	178.0	0.0	0.0	0.0	0.0	178.0	0.0	560.6
Total	382.6	178.0	0.0	178.0	0.0	0.0	0.0	0.0	178.0	0.0	560.6

Project ID: SP11

Start Date: 7/13 **End Date:** 6/17

Location: Ward 6

First Avenue: Grant to River

Description:

Widen First Avenue to a six-lane, divided roadway with bike lanes and sidewalks.

 Project ID:
 SR11

 Start Date:
 7/15

 End Date:
 6/20

 Location:
 Ward 3

Project ID: S355

Start Date: 7/09

End Date: 6/17

Wards 5

and 6

Location:

Justification:

This project was approved as part of the May 2006 RTA Plan and will improve the traffic carrying capacity for First Avenue. PAG 5-Year Regional TIP 81.06.

City-Wide Priorities: Health and Safety and Maintenance and Renovation of Existing City Assets.

		Adopted Fiscal Year 2016/17			Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Capital Agreement Fund	0.0	0.0	0.0	0.0	0.0	0.0	7,000.0	0.0	7,000.0	0.0	7,000.0
Highway User Revenue Fund	0.0	0.0	0.0	0.0	3,000.0	0.0	0.0	0.0	3,000.0	0.0	3,000.0
Regional Transportation Authority Fund	6,810.6	0.0	981.0	981.0	0.0	0.0	0.0	0.0	981.0	0.0	7,791.6
Total	6,810.6	0.0	981.0	981.0	3,000.0	0.0	7,000.0	0.0	10,981.0	0.0	17,791.6

Five Points Pedestrian Improvements

Description:

Design pedestrian and streetscape improvements in the vicinity of the Stone Avenue/6th Avenue/18th Street intersection. (Construction for this project will appear in project S196 - Five Points Transportation Enhancement.)

Justification:

A federal Transportation Enhancement grant was awarded for this project, which will improve access to alternate modes of transportation.

City-Wide Priorities: Customer Service and Maintenance and Renovation of Existing City Assets.

		Adopted	l Fiscal Year	2016/17	6/17 Projected Requirements			nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Capital Agreement Fund	4.8	0.0	187.0	187.0	0.0	0.0	0.0	0.0	187.0	0.0	191.8
Federal Grant Funds	605.1	0.0	494.0	494.0	0.0	0.0	0.0	0.0	494.0	0.0	1,099.1
Highway User Revenue Fund	21.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.4
Regional Transportation Authority Fund	17.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.2
Total	648.5	0.0	681.0	681.0	0.0	0.0	0.0	0.0	681.0	0.0	1,329.5

Five Points Transportation Enhancement

Description:

Construct pedestrian and streetscape improvements in the vicinity of the Stone Avenue/6th Avenue/18th Street intersection.

Justification:

A Federal Transportation Enhancement Grant was awarded for this project which will improve access to alternate modes of transportation.

City-Wide Priorities: Customer Service and Maintenance and Renovation of Existing City Assets.

Project I	D : S196
Start Dat	e: 7/08
End Dat	e: 6/17
Location	: Wards 5
	and 6

Project ID: SP07

Start Date: 7/12

End Date: 12/16

Location: Ward 2

		Adopted	Adopted Fiscal Year 2016/17			ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Capital Agreement Fund	93.0	220.0	0.0	220.0	0.0	0.0	0.0	0.0	220.0	0.0	313.0
Federal Grant Funds	301.1	0.0	200.0	200.0	0.0	0.0	0.0	0.0	200.0	0.0	501.1
Highway User Revenue Fund	30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0
Regional Transportation Authority Fund	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total	424.3	220.0	200.0	420.0	0.0	0.0	0.0	0.0	420.0	0.0	844.3

Gila Panther Tracks Safe Routes to School

Description:

Design and construct pedestrian improvements around Henry Elementary School including sidewalk improvements.

Justification:

A federal Safe-Routes-to-School Grant has been received to fund these improvements, which will enhance pedestrian safety. PAG 5-Year Regional TIP 18.11.

		Adopted Fiscal Year 2016/17			Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Federal Grant Funds	110.4	255.4	0.0	255.4	0.0	0.0	0.0	0.0	255.4	0.0	365.8
Highway User Revenue Fund	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total	110.6	255.4	0.0	255.4	0.0	0.0	0.0	0.0	255.4	0.0	366.0

Glenn Street Transportation Enhancement

Description:

Design and construct pedestrian improvements along Glenn Street from Columbus Boulevard to Country Club Road.

Start Date: 7/10 End Date: 6/17 Location: Ward 3

Project ID: S01H

Justification:

A federal Transportation Enhancement Grant was received to provide a major portion of the funding for these improvements. RTA funding is being used as a local match and for expenditures not covered by the grant.

City-Wide Priorities: Health and Safety and Maintenance and Renovation of Existing City Assets.

		Adopted Fiscal Year 2016/17			Pr	ojected R	equireme	nts			
				***	Year 2	Year 3	Year 4	Year 5	T. T.	_	·
Source of Funds Summary	Prior Years	Carry Forward	New Funding	Year 1 Total	FY 2017/18	FY 2018/19	FY 2019/20		Five Year Total	Years	Total Project
Federal Grant Funds	104.0	389.0	0.0	389.0	0.0	0.0	0.0	0.0	389.0	0.0	493.0
Highway User Revenue Fund	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Regional Transportation Authority Fund	77.1	15.0	7.0	22.0	0.0	0.0	0.0	0.0	22.0	0.0	99.1
Total	181.3	404.0	7.0	411.0	0.0	0.0	0.0	0.0	411.0	0.0	592.3

Grant and Sahuara HAWK

Description:

Design and construct HAWK signal at the intersection.

Justification:

Improve pedestrian safety.

City-Wide Priorities: Health and Safety.

Project ID:	SH29
Start Date:	7/13
End Date:	12/16
Location	Ward 3

		Adopted	Fiscal Year	2016/17	Projected Requirements						
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Regional Transportation Authority Fund	51.3	79.3	0.0	79.3	0.0	0.0	0.0	0.0	79.3	0.0	130.6
Total	51.3	79.3	0.0	79.3	0.0	0.0	0.0	0.0	79.3	0.0	130.6

Grant: Oracle to Swan

Description:

Design and construct the improvements along Grant Road from Oracle to Swan Road. Improvements will include widening Grant Road to a six-lane divided cross section with full urban amenities and will include an alignment approved by the Mayor and Council.

 Project ID:
 SR2A

 Start Date:
 1/07

 End Date:
 6/20

 Location:
 Wards 2,

 3, and 6

Justification:

This project was approved by Mayor and Council on January 23, 2007 for RTA funding; it will improve the corridor's traffic-carrying capacity. PAG 5-Year Regional TIP 55.06.

City-Wide Priorities: Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	Projected Requirements						
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Capital Agreement Fund	3,031.0	1,000.0	2,650.0	3,650.0	0.0	0.0	10,200.0	0.0	13,850.0	0.0	16,881.0
Highway User Revenue Fund	86.0	0.0	5.0	5.0	0.0	0.0	0.0	0.0	5.0	0.0	91.0
Highway User Revenue Fund: In-Lieu Fees	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Impact Fee Funds	594.5	100.0	900.0	1,000.0	1,954.7	0.0	3,000.0	0.0	5,954.7	0.0	6,549.2
Regional Transportation Authority Fund	52,517.7	5,500.0	13,000.0	18,500.0	32,000.0	11,000.0	11,569.0	0.0	73,069.0	0.0	125,586.7
Total	56,229.3	6,600.0	16,555.0	23,155.0	33,954.7	11,000.0	24,769.0	0.0	92,878.7	0.0	149,108.0

Houghton Road: 22nd to Irvington

Description:

Design and construct the widening of Houghton Road to Irvington, to a six-lane divided arterial in accordance with the RTA plans. Completion of construction is contingent upon addition RTA funding.

Project ID: SR1J Start Date: 7/15 End Date: 6/22 Location: Ward 4

Justification:

Increase the traffic capacity to reduce roadway congestion and improve safety on Houghton Road.

		Adopted	Fiscal Year	Pr	ojected R	equireme	nts				
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Impact Fee Funds	0.0	500.0	0.0	500.0	0.0	0.0	0.0	0.0	500.0	0.0	500.0
Regional Transportation Authority fund	0.0	0.0	1,500.0	1,500.0	1,500.0	3,500.0	3,500.0	3,000.0	13,000.0	19,000.0	32,000.0
Total	0.0	500.0	1,500.0	2,000.0	1,500.0	3,500.0	3,500.0	3,000.0	13,500.0	19,000.0	32,500.0

Houghton Road: Bridge Replacement

Description:

Design and construct the replacement of a widened Houghton Bridge over the Union Pacific Railroad tracks.

Start Date: 7/09 End Date: 6/18 Location: Ward 4

Project ID: SR1D

Justification:

This project will increase the traffic carrying capacity of the bridge and reduce roadway congestion, which will improve motorist safety on this stretch of Houghton Road.

City-Wide Priorities: Health and Safety and Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	6/17 Projected Require			nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Capital Agreement Fund	750.0	1,000.0	980.0	1,980.0	0.0	0.0	0.0	0.0	1,980.0	0.0	2,730.0
Federal Grant Funds	1,461.9	1,000.0	4,200.0	5,200.0	2,225.0	0.0	0.0	0.0	7,425.0	0.0	8,886.9
Highway User Revenue Fund	6.6	0.0	5.0	5.0	0.0	0.0	0.0	0.0	5.0	0.0	11.6
Regional Transportation Authority Fund	9,499.8	387.0	0.0	387.0	0.0	0.0	0.0	0.0	387.0	0.0	9,886.8
Total	11,718.3	2,387.0	5,185.0	7,572.0	2,225.0	0.0	0.0	0.0	9,797.0	0.0	21,515.3

Houghton Road: Broadway to 22nd Street

Description:

Design and construct improvements to Houghton Road between Broadway Boulevard and 22nd Street, in accordance with the RTA plan.

Start Date: 7/12 End Date: 6/17 Location: Ward 2

Project ID: SR1F

Justification:

Funding has been identified through the RTA.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
Source of Funds Summary	Prior Years	Carry Forward	New Funding	Year 1 Total	Year 2 FY 2017/18	Year 3 FY 2018/19	Year 4 FY 2019/20	Year 5 FY 2020/21	Five Year Total	Future Years	Total Project
Capital Agreement Fund	77.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.9
General Fund: Restricted	105.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	105.0
Highway User Revenue Fund	20.3	0.0	5.0	5.0	0.0	0.0	0.0	0.0	5.0	0.0	25.3
Impact Fee Funds	1,619.3	1,286.0	0.0	1,286.0	0.0	0.0	0.0	0.0	1,286.0	0.0	2,905.3
Regional Transportation Authority Fund	22,433.4	2,532.0	3,000.0	5,532.0	20.0	0.0	0.0	0.0	5,552.0	0.0	27,985.4
Total	24,255.9	3,818.0	3,005.0	6,823.0	20.0	0.0	0.0	0.0	6,843.0	0.0	31,098.9

Houghton Road: I-10 to Andrada Road

Description:

Design and construct spot capacity improvements along Houghton Road south of I-10.

Justification:

Spot improvements will be identified and addressed in collaboration with Pima County Department of Transportation.

0.0

0.0

City-Wide Priorities: Health and Safety and Maintenance and Renovation of Existing City Assets.												
		Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts				
					Year 2	Year 3	Year 4	Year 5				
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total	
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project	
Impact Fee Funds	0.0	0.0	60.0	60.0	300.0	300.0	0.0	0.0	660.0	0.0	660.0	

60.0

300.0

300.0

0.0

0.0

660.0

60.0

Houghton Road: Irvington to Valencia

Description:

Widen Houghton Road to a six-lane, divided arterial in accordance with the RTA plan.

Total

Justification:

Funding has been identified through the RTA. PAG 5-Year Regional TIP 17.12.

City-Wide Priorities: Health and Safety and Maintenance and Renovation of Existing City Assets.

Project ID	: SR1E
Start Date:	7/12
End Date:	6/17
Location:	Ward 4

0.0

660.0

Project ID: SR17

Start Date: 7/16

End Date: 6/19

Ward 4

Location:

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremen	quirements			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Capital Agreement Fund	7,003.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7,003.5
General Fund: Restricted Revenues	50.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.2
Highway User Revenue Fund	942.2	1.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	943.2
Highway User Revenue Fund: In-Lieu Fees	2,007.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,007.8
Impact Fee Funds	1,395.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,395.6
Regional Transportation Authority Fund	9,463.4	20.0	5.0	25.0	0.0	0.0	0.0	0.0	25.0	0.0	9,488.4
Total	20,862.7	21.0	5.0	26.0	0.0	0.0	0.0	0.0	26.0	0.0	20,888.7

Houghton Road: Union Pacific Railroad to I-10

Description:

Widen Houghton Road to a six-lane, divided arterial in accordance with the RTA plan.

Justification:

Funding has been identified through the RTA. PAG 5-Year Regional TIP 108.09.

City-Wide Priorities: Health and Safety and Maintenance and Renovation of Existing City Assets.

Project ID:	SR1G
Start Date:	7/11
End Date:	6/18
Location:	Ward 4

Project ID: SR1H

Start Date: 7/15

End Date: 6/18 Location: Ward 4

0.0

0.0

1,000.0

1,000.0

300.0

300.0

0.0

0.0

		Adopted	Fiscal Year	2016/17	Pr	ojected Re	equireme	nts			
Source of Funds Summary	Prior Years	Carry Forward	New Funding	Year 1 Total	Year 2 FY 2017/18	Year 3 FY 2018/19	Year 4 FY 2019/20	Year 5 FY 2020/21	Five Year Total	Future Years	Total Project
Capital Agreement Fund	0.0	720.0	0.0	720.0	2,320.0	0.0	0.0	0.0	3,040.0	0.0	3,040.0
Federal Grant Funds	735.3	140.0	0.0	140.0	915.0	0.0	0.0	0.0	1,055.0	0.0	1,790.3
Highway User Revenue Fund	11.0	0.0	5.0	5.0	0.0	0.0	0.0	0.0	5.0	0.0	16.0
Impact Fee Funds	0.0	220.0	330.0	550.0	0.0	0.0	0.0	0.0	550.0	0.0	550.0
Regional Transportation Authority Fund	3,259.6	643.0	0.0	643.0	0.0	0.0	0.0	0.0	643.0	0.0	3,902.6
Total	4,005.9	1,723.0	335.0	2,058.0	3,235.0	0.0	0.0	0.0	5,293.0	0.0	9,298.9

Houghton Road: Valencia to Mary Ann Cleveland Way

Description:

Design and construct capacity improvements to Valencia Road in accordance with the RTA Plan.

Justification:

Source of Funds Summary

Regional Transportation Authority Fund

Funding h

City-Wide

Total

700.0

700.0

g has been identified through the RTA ide Priorities: Health and Safety and		and Renovat	ion of Existin	ng City Assets	3.								
		Adopted	Adopted Fiscal Year 2016/17 Projected Requirements										
					Year 2	Year 3	Year 4	Year 5				i	
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total	i	
of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project	i	

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300.0

300.0

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Houghton Road: Wildlife Crossing

Description:

Mitigate bats under the bridge prior to the demolition and replacement of the bridge.

 Start Date:
 7/15

 End Date:
 6/17

 Location:
 Ward 4

Project ID: SR1W

Justification:

Remove bats from the existing bridge prior to demolition, test various types of bat boxes, provide new bat boxes on the new bridge, and analyze the data for future use.

City-Wide Priorities: Health and Safety.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
		C	Carry New Year 1			Year 3 FY	Year 4 FY	Year 5 FY	Five Year	Entura	Total
Source of Funds Summary	Prior Years	3	New Funding		FY 2017/18					Years	Project
Regional Transportation Authority Fund	82.8	76.1	0.0	76.1	0.0	0.0	0.0	0.0	76.1	0.0	158.9
Total	82.8	76.1	0.0	76.1	0.0	0.0	0.0	0.0	76.1	0.0	158.9

Irvington Road - Santa Cruz River to I-19

Description:

Widening Irvington Road between Santa Cruz River and Interstate 19 which will provide additional roadway capacity and access opportunities.

Project ID: SR18 Start Date: 7/16 End Date: 6/17 Location: Ward 1

Justification:

These improvements will address existing congestion issues and proposed development in the area.

City-Wide Priorities: Economic Development, Health and Safety, and Maintenance and Renovation of Existing City Assets.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Impact Fee Funds	0.0	0.0	1,750.0	1,750.0	0.0	0.0	0.0	0.0	1,750.0	0.0	1,750.0
Tota	1 0.0	0.0	1,750.0	1,750.0	0.0	0.0	0.0	0.0	1,750.0	0.0	1,750.0

Kolb Road Connection to Sabino Canyon

Description:

Design and construct a new road stretching from the intersection of Sabino Canyon and Tanque Verde to just north of the intersection at Kolb Road and Speedway Boulevard.

Project ID: SR8A Start Date: 7/09 End Date: 6/19 Location: Ward 2

Project ID: SR15

Start Date: 1/15

End Date: 6/19

Ward 4

Location:

Justification:

This project was approved as part of the May 2006 RTA Plan and will improve regional traffic circulation. PAG 5-Year TIP 787.00.

City-Wide Priorities: Health and Safety and Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Capital Agreement Fund	0.0	350.0	1,771.0	2,121.0	0.0	0.0	0.0	0.0	2,121.0	0.0	2,121.0
Federal Grant Funds	14,591.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14,591.2
General Fund: Restricted Revenues	193.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	193.8
Highway User Revenue Fund	35.7	0.0	10.0	10.0	0.0	0.0	0.0	0.0	10.0	0.0	45.7
Regional Transportation Authority Fund	9,651.7	1,200.0	8,600.0	9,800.0	8,785.0	6,000.0	0.0	0.0	24,585.0	0.0	34,236.7
Total	24,472.4	1,550.0	10,381.0	11,931.0	8,785.0	6,000.0	0.0	0.0	26,716.0	0.0	51,188.4

Kolb Road: Irvington to Valencia

Description:

Widen Kolb Road to six lanes between Irvington Road and Valencia Road.

Justification:

Federal Highway Association (FHWA) funds have been allocated to this project through the PAG TIP. PAG 5-Year Regional TIP 83.04.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Capital Agreement Fund	0.0	0.0	0.0	0.0	0.0	114.0	0.0	0.0	114.0	0.0	114.0
Federal Grant Funds	15.8	230.0	0.0	230.0	0.0	2,000.0	0.0	0.0	2,230.0	0.0	2,245.8
Highway User Revenue Fund	17.7	13.0	0.0	13.0	0.0	0.0	0.0	0.0	13.0	0.0	30.7
Total	33.5	243.0	0.0	243.0	0.0	2,114.0	0.0	0.0	2,357.0	0.0	2,390.5

LED Lighting Conversion

Description:

Design and install Light Emitting Diode (LED) technology for existing Tucson street and garage lights, including adaptive controls to create a network to remotely operate the lighting.

Project ID: S604 Start Date: 7/15 End Date: 6/17 Location: Citywide

Project ID: SP04

Start Date: 7/10

End Date: 6/18

Location: Ward 5

Justification:

LED lighting provides a 31% - 51% reduction in energy usage and LED lights have a life expectancy five times greater than existing lighting. Additional energy savings are made possible with adaptive controls to remotely monitor each light for on/off and dimming control. LED's white light provides optimal color rendering to improve visibility and public safety.

City-Wide Priorities: Health and Safety and Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Highway User Revenue Fund	0.0	1,500.0	13,805.3	15,305.3	0.0	0.0	0.0	0.0	15,305.3	0.0	15,305.3
Park Tucson: Fees and Charges	0.0	0.0	1,344.8	1,344.8	0.0	0.0	0.0	0.0	1,344.8	0.0	1,344.8
Total	0.0	1,500.0	15,150.1	16,650.1	0.0	0.0	0.0	0.0	16,650.1	0.0	16,650.1

Liberty Avenue: Bicycle Boulevard

Description:

Design and build bicycle boulevard improvements along the Liberty Avenue alignment.

Justification:

Bicycle boulevards enhance safety and convenience for commuter bicyclists and encourage the use of alternate modes of transportation.

		Adopted	Fiscal Year	2016/17	Pr	ojected Re	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY		Five Year		Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Federal Grant Funds	1,134.6	10.0	100.0	110.0	1,032.0	0.0	0.0	0.0	1,142.0	0.0	2,276.6
Highway User Revenue Fund	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9
Regional Transportation Authority Fund	161.7	20.0	0.0	20.0	105.0	0.0	0.0	0.0	125.0	0.0	286.7
Total	1,300.2	30.0	100.0	130.0	1,137.0	0.0	0.0	0.0	1,267.0	0.0	2,567.2

Park Avenue: Transportation Enhancements

Description:

Construct various pedestrian and streetscape improvements along Park Avenue between Glenn Street and Speedway Boulevard.

Justification:

A Federal Transportation Enhancement Grant was awarded for this project, which will enhance pedestrian safety and enjoyment.

City-Wide Priorities: Health and Safety.

Project ID:	S194
Start Date:	7/09
End Date:	6/19
Location:	Ward 3

Project ID: S01J

Start Date: 7/10

End Date: 6/19

Ward 6

Location:

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Federal Grant Funds	137.8	368.0	0.0	368.0	13.2	13.2	0.0	0.0	394.4	0.0	532.2
Highway User Revenue Fund	21.0	30.0	0.0	30.0	0.8	0.8	0.0	0.0	31.6	0.0	52.6
Regional Transportation Authority Fund	25.6	0.0	90.0	90.0	0.0	0.0	0.0	0.0	90.0	0.0	115.6
Total	184.4	398.0	90.0	488.0	14.0	14.0	0.0	0.0	516.0	0.0	700.4

Pima Street: Pedestrian Pathway Enhancements

Description:

Design and construct pedestrian improvements along Pima Street between Alvernon Way and Columbus Boulevard.

Justification:

A Federal Transportation Enhancement Grant was awarded for these improvements, which will improve pedestrian safety and enjoyment.

,				0)							
		Adopted	Fiscal Year	2016/17	Pr	ojected Ro	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Federal Grant Funds	108.8	400.0	0.0	400.0	14.2	14.2	0.0	0.0	428.4	0.0	537.2
Highway User Revenue Fund	71.8	22.8	0.0	22.8	0.8	0.8	0.0	0.0	24.4	0.0	96.2
Tot	al 180.6	422.8	0.0	422.8	15.0	15.0	0.0	0.0	452.8	0.0	633.4

Regional Transportation Data Network (RTDN)

Description:

Plan, design, and construct a regionally integrated data and communications network to be known as the RTDN. This project will determine the new infrastructure needed to improve region-wide data exchange.

Project ID: S701 Start Date: 7/06 End Date: 6/19 Location: Citywide

Justification:

Establishment of the RTDN will facilitate the exchange of data and information between jurisdictions, improve traffic flow, and reduce future utility costs.

City-Wide Priorities: Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Federal Grant Funds	2,507.0	500.0	0.0	500.0	0.0	0.0	0.0	0.0	500.0	0.0	3,007.0
Highway User Revenue Fund	32.4	0.0	28.5	28.5	0.0	0.0	0.0	0.0	28.5	0.0	60.9
Regional Transportation Authority Fund	500.0	250.0	0.0	250.0	250.0	250.0	0.0	0.0	750.0	0.0	1,250.0
Total	3,039.4	750.0	28.5	778.5	250.0	250.0	0.0	0.0	1,278.5	0.0	4,317.9

Rio Vista Safe Routes to School

Description:

Design and construct pedestrian improvements near Rio Vista Elementary School including a shared-use path on Limberlost Road. Completion of project is contingent upon additional FHWA funding.

Project ID: SP06 Start Date: 7/12 End Date: 6/18 Location: Ward 3

Justification:

A federal Safe-Routes-to-School Grant has been received to fund these improvements, which will enhance pedestrian safety. PAG 5-Year Regional TIP 19.11.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Federal Grant Funds	296.0	42.5	200.0	242.5	111.0	0.0	0.0	0.0	353.5	0.0	649.5
Highway User Revenue Fund	0.4	0.0	11.4	11.4	6.3	0.0	0.0	0.0	17.7	0.0	18.1
Total	296.4	42.5	211.4	253.9	117.3	0.0	0.0	0.0	371.2	0.0	667.6

Robinson Safe Routes to School

Description:

Construct sidewalks and safe pedestrian crossings in the vicinity of Robison Elementary School to encourage walking and biking activities.

Completion of project is contingent upon obtaining additional funding.

 Start Date:
 7/13

 End Date:
 6/18

 Location:
 Wards 5 and 6

Project ID: SP08

Project ID: M611

Start Date: 7/05

End Date: 6/17

Ward 6

Location:

Justification:

The City received a Federal Safe Routes to School grant for these improvements.

City-Wide Priorities: Health and Safety.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Federal Grant Funds	374.7	27.5	0.0	27.5	338.0	0.0	0.0	0.0	365.5	0.0	740.2
Highway User Revenue Fund	0.0	0.0	5.0	5.0	0.0	0.0	0.0	0.0	5.0	0.0	5.0
	374.7	27.5	5.0	32.5	338.0	0.0	0.0	0.0	370.5	0.0	745.2

Ronstadt Transit Center

Description:

Design and construct modifications to the Rodstadt Transit Center to improve circulation and create space for a mixed use facility on the southern edge (Congress Street frontage). This project will also include circulation studies to identify any required modifications.

Justification:

This project will ensure the positive future of the Ronstadt Transit Center for transit vehicles as a component of the pedestrian, housing, retail, and restaurant district along Congress Street.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Mass Transit Funds	2,500.5	412.0	0.0	412.0	0.0	0.0	0.0	0.0	412.0	0.0	2,912.5
Total	2,500.5	412.0	0.0	412.0	0.0	0.0	0.0	0.0	412.0	0.0	2,912.5

Safe Routes to School Program

Description:

Develop a program that encourages and educates school-age children to walk and bike to school.

Start Date: 7/14 End Date: 6/18 Location: Citywide

Project ID: SP13

Justification:

Funding has been allocated by the FHWA for this program.

City-Wide Priorities: Health and Safety.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Federal Grant Funds	221.3	150.0	73.9	223.9	25.0	0.0	0.0	0.0	248.9	0.0	470.2
Highway User Revenue Fund	14.1	8.5	4.2	12.7	2.0	0.0	0.0	0.0	14.7	0.0	28.8
Total	235.4	158.5	78.1	236.6	27.0	0.0	0.0	0.0	263.6	0.0	499.0

Security for Transit

Description:

Security equipment for new replacement buses, including security cameras, Automatic Vehicle Locator (AVL) systems, radio equipment and digital video recorder (DVR) upgrades.

Project ID: M023 Start Date: 7/12 End Date: 6/21 Location: Citywide

Justification:

In order to comply with Federal Transit Administration (FTA) terms and conditions, the City must spend at least 1% of Urbanized Area formula funds on security projects for the transit system.

City-Wide Priorities: Health and Safety.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Mass Transit Funds	170.8	0.0	172.4	172.4	172.4	172.4	172.4	172.4	862.0	0.0	1,032.8
Tota	170.8	0.0	172.4	172.4	172.4	172.4	172.4	172.4	862.0	0.0	1,032.8

Silverbell Road: Grant to Ina

Description:

Design and construct improvements to this segment of Silverbell Road by widening the street to a four-lane divided roadway from Grant Road to Ina Road.

Project ID: SR6A Start Date: 7/08 End Date: 6/21 Location: City and County

Project ID: S190

Start Date: 7/09

End Date: 6/17

Ward 1

Location:

Justification:

This project was approved as part of the May 2006 RTA Plan and will improve the traffic carrying capacity of Silverbell Road. PAG 5-Year Regional TIP 56.06.

City-Wide Priorities: Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
		Carry	New	Year 1	Year 2 FY	Year 3 FY	Year 4 FY	Year 5 FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	,	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Capital Agreement Fund	76.3	2,000.0	710.0	2,710.0	13,840.0	2,000.0	260.0	0.0	18,810.0	0.0	18,886.3
Highway User Revenue Fund	15.4	0.0	5.0	5.0	5.0	5.0	5.0	5.0	25.0	0.0	40.4
Impact Fee Funds	1,090.0	0.0	800.0	800.0	910.0	200.0	0.0	0.0	1,910.0	0.0	3,000.0
Regional Transportation Authority Fund	9,426.3	6,500.0	686.0	7,186.0	3,500.0	9,000.0	0.0	0.0	19,686.0	0.0	29,112.3
Total	10,608.0	8,500.0	2,201.0	10,701.0	18,255.0	11,205.0	265.0	5.0	40,431.0	0.0	51,039.0

Speedway Boulevard at Union Pacific Underpass

Description:

Replace the existing bridge structure for the Speedway Boulevard underpass at the Union Pacific Railroad crossing.

Justification:

Replacement of the bridge structure will improve motorist safety.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Federal Grant Funds	1,405.4	0.0	50.0	50.0	0.0	0.0	0.0	0.0	50.0	0.0	1,455.4
Highway User Revenue Fund	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0
Regional Transportation Authority Fund	103.8	0.0	174.0	174.0	0.0	0.0	0.0	0.0	174.0	0.0	277.8
Total	1,512.2	0.0	224.0	224.0	0.0	0.0	0.0	0.0	224.0	0.0	1,736.2

Stone Ave: Drachman and Speedway Improvements

Description:

Design and construct gateway and intersection improvements along Stone Avenue from Drachman to Speedway Boulevard.

Justification:

This improvement will enhance this northern gateway into downtown.

City-Wide Priorities: Maintenance and Renovation of Existing City Assets.

Project ID:	S14W
Start Date:	7/00
End Date:	6/19
Location:	Wards 1,
	3, and 6

Project ID: S409

Start Date: 7/13

End Date: 6/20

Citywide

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Capital Agreement Fund	2,284.2	2,000.0	21.0	2,021.0	11.0	11.0	0.0	0.0	2,043.0	0.0	4,327.2
Highway User Revenue Fund	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Regional Transportation Authority Fund	0.0	485.8	14.2	500.0	0.0	0.0	0.0	0.0	500.0	0.0	500.0
Total	2,284.3	2,485.8	35.2	2,521.0	11.0	11.0	0.0	0.0	2,543.0	0.0	4,827.3

Street Improvements: Proposition 409

Description:

Continue to restore, repair, and resurface streets inside Tucson City limits with the \$100 million bond program. Street resurfacing is in its third year of a 5-year plan and approximately 85% of bond funds will be allocated to major streets and 15% will be allocated to neighborhood streets. All work will be competitively bid out to private sector contractors.

Justification:

Approximately 130 miles of major streets and 114 miles of neighborhood streets will be resurfaced as part of the bond program.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
General Obligation Bonds	46,656.2	8,000.0	10,220.0	18,220.0	18,000.0	15,800.0	1,800.0	0.0	53,820.0	0.0	100,476.2
Highway User Revenue Fund	2,007.4	800.0	0.0	800.0	0.0	0.0	0.0	0.0	800.0	0.0	2,807.4
Regional Transportation Authority Fund	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4
Total	48,667.0	8,800.0	10,220.0	19,020.0	18,000.0	15,800.0	1,800.0	0.0	54,620.0	0.0	103,287.0

Sun Tran Replacement Buses

Description:

Purchase replacement vehicles for fixed-route fleet for Sun Tran. The vehicles being replaced will have exceeded FTA guidelines for replacement. It takes 12 to 24 months to build heavy duty transit buses. Funds are programmed in the year of expenditure.

Project ID: M150 Start Date: Annual End Date: Annual Location: Citywide

Justification:

To continue to provide the required service levels buses are replaced after exceeding their useful service life. Failure to replace buses that have outlived their useful service life results in increased maintenance and operational costs.

City-Wide Priorities: Customer Service.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Mass Transit Funds	0.0	0.0	0.0	0.0	11,696.0	10,907.0	8,280.0	8,532.0	39,415.0	0.0	39,415.0
Total	0.0	0.0	0.0	0.0	11,696.0	10,907.0	8,280.0	8,532.0	39,415.0	0.0	39,415.0

Sun Tran South Park Facility Bus Wash Replacement

Description:

Design and construct a new automated bus wash at Sun Tran's South Park Maintenance Facility. Maintaining the transit system in a state of good repair is essential for delivering safe and reliable service to thousands of daily riders and is a collaborative effort between the FTA and local governments.

Project ID: M952 Start Date: 7/16 End Date: 6/19 Location: Ward 5

Justification:

Existing bus wash at the Sun Tran's South Park maintenance facility was built in 1995 and is nearing the end of its useful life. This project focuses on the replacement of the existing bus wash.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			1
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Mass Transit Funds	0.0	0.0	0.0	0.0	0.0	450.0	0.0	0.0	450.0	0.0	450.0
Total	0.0	0.0	0.0	0.0	0.0	450.0	0.0	0.0	450.0	0.0	450.0

Sun Van Replacement Buses

Description:

Purchase replacement vehicles for paratransit fleet for Sun Van. The vehicles being replaced will have exceeded FTA guidelines for replacement.

Start Date: Annual End Date: Annual Location: Citywide

Project ID: M140

Justification:

To maximize operational efficiency, vehicles are scheduled for replacement at the end of their useful service life. Useful life has been defined as five years or 150,000 miles.

City-Wide Priorities: Customer Service.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Mass Transit Funds	0.0	2,480.0	1,749.4	4,229.4	0.0	2,154.2	2,180.5	3,831.3	12,395.4	0.0	12,395.4
Total	0.0	2,480.0	1,749.4	4,229.4	0.0	2,154.2	2,180.5	3,831.3	12,395.4	0.0	12,395.4

Sunset: Silverbell to I-10 to River

Description:

Construct a new three-lane roadway between Silverbell Road and River Road, including a new bridge over the Santa Cruz River.

Project ID: SR12 Start Date: 7/16 End Date: 6/18 Location: Ward 1

Justification:

This project was approved as part of the May 2006 RTA Plan and will re-establish Sunset Road. Pima County has been identified as the lead agency and this funding will provide the City of Tucson's local contribution.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Impact Fee Funds	1,700.0	0.0	1,700.0	1,700.0	1,700.0	0.0	0.0	0.0	3,400.0	0.0	5,100.0
To	al 1,700.0	0.0	1,700.0	1,700.0	1,700.0	0.0	0.0	0.0	3,400.0	0.0	5,100.0

Transit Facility Improvements (South Park Stormwater Yard)

Description:

Design and construct a stormwater conveyance system to capture stormwater flows entering the bus storage yard from adjacent east and south properties with additional catch basins throughout the south yard. Repave the yard with new asphalt.

 Project ID:
 M951

 Start Date:
 7/15

 End Date:
 6/17

 Location:
 Ward 5

Project ID: SP12

Start Date: 7/13

End Date: 6/17

Wards 3, 5, and 6

Location:

Justification:

Significantly reduce surface flow of stormwater through the storage yard and eliminate ponding which has degraded the existing asphalt pavement.

City-Wide Priorities: Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Mass Transit Funds	2,000.0	2,000.0	0.0	2,000.0	0.0	0.0	0.0	0.0	2,000.0	0.0	4,000.0
Total	2,000.0	2,000.0	0.0	2,000.0	0.0	0.0	0.0	0.0	2,000.0	0.0	4,000.0

Treat Avenue Bike Boulevard

Description:

Construct bike boulevard improvements along the Treat Avenue alignment providing a low stress north/south bicycle route through midtown.

Justification:

This project was approved for RTA funds in December 2012.

City-Wide Priorities: Health and Safety.

		Adopted	Fiscal Year	2016/17	Projected Requirements						
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Regional Transportation Authority Fund	227.3	200.0	449.0	649.0	0.0	0.0	0.0	0.0	649.0	0.0	876.3
Total	227.3	200.0	449.0	649.0	0.0	0.0	0.0	0.0	649.0	0.0	876.3

Valencia: Alvernon to Kolb

Description:

Widen Valencia to a six-lane, divided roadway with bike lanes and sidewalks.

Justification:

This project was approved as part of the May 2006 RTA Plan.

City-Wide Priorities: Health and Safety and Maintenance and Renovation of Existing City Assets.

Project ID:	SR13
Start Date:	7/13
End Date:	6/18
Location:	Wards 4
	and 5

		Adopted	Fiscal Year	2016/17	Pre	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
S	D : 37	Carry	New	Year 1	FY (10	FY 2010 /10	FY 2010 (20	FY	Five Year		Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
General Fund	51.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.5
Highway User Revenue Fund	0.0	0.0	10.0	10.0	0.0	0.0	0.0	0.0	10.0	0.0	10.0
Impact Fees Fund	3,000.0	0.0	2,500.0	2,500.0	0.0	0.0	0.0	0.0	2,500.0	0.0	5,500.0
Regional Transportation Authority Fund	0.0	0.0	5,000.0	5,000.0	1,000.0	0.0	0.0	0.0	6,000.0	0.0	6,000.0
Total	3,051.5	0.0	7,510.0	7,510.0	1,000.0	0.0	0.0	0.0	8,510.0	0.0	11,561.5

Valencia/Hemisphere Loop HAWK

Description:

Design and construct a HAWK signal at the Valencia/Hemisphere Loop intersection.

Justification:

This work is being performed to fulfill an annexation agreement.

City-Wide Priorities: Health and Safety.

 Project ID:
 SH30

 Start Date:
 7/15

 End Date:
 6/17

 Location:
 Ward 5

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Highway User Revenue Fund	20.0	10.0	190.0	200.0	0.0	0.0	0.0	0.0	200.0	0.0	220.0
Total	20.0	10.0	190.0	200.0	0.0	0.0	0.0	0.0	200.0	0.0	220.0

Valencia: Kolb to Houghton

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			_
ncia: Kolb to Houghton	Project ID:	SR14	1
9	Start Date:	7/15	
ription:	End Date:	6/20	Į
n Valencia to a six-lane, divided roadway with bike lanes and sidewalks.	Location:	Ward 4	ļ
ication:			
project was approved as part of the May 2006 RTA Plan. PAG 5-Year Regional TIP 59.06.			

		Adopted	Fiscal Year	,, '			nts				
					Year 2	Year 3	Year 4	Year 5			
		Carry	New	Year 1	\mathbf{FY}	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Prior Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Highway User Revenue Fund	0.0	5.0	5.0	10.0	0.0	0.0	0.0	0.0	10.0	0.0	10.0
Impact Fee Funds	0.0	0.0	0.0	0.0	5,000.0	2,000.0	2,000.0	0.0	9,000.0	0.0	9,000.0
Regional Transportation Authority Fund	0.0	300.0	1,295.0	1,595.0	1,000.0	0.0	0.0	0.0	2,595.0	0.0	2,595.0
Total	0.0	305.0	1,300.0	1,605.0	6,000.0	2,000.0	2,000.0	0.0	11,605.0	0.0	11,605.0



Tucson Fire



Capital Improvement Program Department Statement

FY 2016/17 through FY 2020/21

Department: Tucson Fire Five Year Total: \$1,679,800

The Fire Department's CIP establishes improvements needed to sustain adequate levels of emergency services for fire protection and medical needs through the Alerting System and the Park Ajo Communication Center Administrative Phone System.

The five-year capital program is funded by \$130,000 of Police and Fire Impact fee and the department applied for the FY 2014/15 Assistance to Firefighters Grant (AFG) to fund the Alerting System project for \$1,408,900. The project also includes \$140,900 in General Funds as the local match.

Tucson Fire

(\$000)

Alerting System

Description:

Fund, purchase, and install a complete National Fire Protection Association (NFPA) compliant fire station alerting system through the FY 2015 Assistance to Firefighters Grant (AFG). The system will be managed from the Tucson Fire Department consolidated dispatch center serving Tucson Fire Department and eight partner Fire Districts.

Project ID: F830 Start Date: 3/16 End Date: 3/17 Location: Citywide

Justification:

The new station alerting system will be installed in 51 regional fire stations and is expandable to meet future demand. A complete NFPA compliant system will enhance the safety of the public and firefighters by improving operational deficiencies and decreasing response times.

City-Wide Priorities: Health and Safety.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5	Five		
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
General Fund	0.0	0.0	140.9	140.9	0.0	0.0	0.0	0.0	140.9	0.0	140.9
Miscellaneous Federal Grants	0.0	0.0	1,408.9	1,408.9	0.0	0.0	0.0	0.0	1,408.9	0.0	1,408.9
Tota	1 0.0	0.0	1,549.8	1,549.8	0.0	0.0	0.0	0.0	1,549.8	0.0	1,549.8

Park Ajo Communications Center Administrative Phone System

Description:

Design and implement a new administrative phone system for Tucson Fire and Police Emergency Communication Center located at the Thomas O. Price Service Center (TOPSC). State funded NextGen911 managed services will be implemented at TOPSC in the near future. The State funded project does not include administrative phones which must be implemented simultaneously. The current administrative telephones will not integrate with new services or meet public safety needs.

Project ID: F820 Start Date: 7/16 End Date: 6/17 Location: Ward 5

Justification:

Administrative phone implementation is critical for direct hospital communication, fire station phones, panic phones, law enforcement and medical alarm company communications, and direct lines to other Communications Centers providing 911 services to the Tucson and Pima County region.

City-Wide Priorities: Health and Safety.

		Adopted	l Fiscal Year	Pr	ojected R	equireme	nts				
						Year 3	Year 4	Year 5	Five		
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Public Safety Impact Fees	0.0	0.0	130.0	130.0	0.0	0.0	0.0	0.0	130.0	0.0	130.0
Total	0.0	0.0	130.0	130.0	0.0	0.0	0.0	0.0	130.0	0.0	130.0



Tucson Water



Capital Improvement Program Department Statement

FY 2016/17 through FY 2020/21

Department: Tucson Water Five-Year Total: \$231,028,000

Tucson Water's CIP is a cornerstone in a long-term water supply plan for the community. Major areas of focus include advanced metering; RTA and other roadway agency work relocating water facilities; Santa Cruz Wellfield and Aerospace/Sonoran Corridor construction; control system upgrades; reservoir rehabilitation; recycled water, and necessary infrastructure replacement.

The Tucson Water CIP is divided into two program groups: Potable Water System and Reclaimed Water System. Improvements to both water systems will ensure that:

- potable and reclaimed customers are provided high quality water
- the water supply is reliable
- the safe yield and assured water supply requirements of the Arizona State Groundwater Management Act are met

The five-year capital program of \$231 million includes improvements to both the potable and reclaimed water systems. The program will be funded with a combination of water revenues, water system revenue obligation funds, and is contingent on the utility's ability to obtain debt financing.

Potable Water System – These projects total \$213.3 million over the next five years. The focus of the potable system program is construction of projects needed to secure, store, recover and deliver long term renewable water resources for the community. Projects include:

- \$31.1M for advanced metering;
- \$24.7M for water line relocations in roadway projects;
- \$24.1M for Santa Cruz wellfield upgrades and new facilities for the Sonoran Corridor;
- \$17.0M for critical communications infrastructure upgrades;
- \$14.2M for Clearwell reservoir rehabilitation;
- \$6.0M for recycled water projects;
- \$12.9M for distribution system main replacement;
- \$12.6M for other infrastructure, including cathodic protection of critical transmission mains, arc flash compliance measures, and valve vaults;
- \$3.6M for physical security measures.

Reclaimed Water System - These projects total \$17.7 million over the next five years. The proposed CIP reclaimed projects include:

- \$7.4M for Southwest Houghton Area Recharge Project (SHARP);
- \$2.8M for Houghton Reclaimed Reservoir Rehabilitation

Tucson Water

(\$000)

24" Concrete Cylinder Pipe (CCP) Roger Road Reclaimed Crossing

Description:

Replace existing 24-inch CCP with Ductile Iron Pipe (DIP) within the Roger and Sweetwater Washes. The new pipe will be placed 14-feet below the scour depth (per report) and one in-line 24-inch butterfly valve will be replaced and relocated away from the scour limits.

Project ID: W043 Start Date: 7/15 End Date: 6/17 Location: Ward 1

Project ID: W048

Start Date: 11/13

End Date: 6/17

County

Location:

Justification:

Failure to perform this project will allow rain and flooding to erode and expose the existing pipeline, subjecting the pipe to a possible failure and release of reclaimed water.

City-Wide Priorities: Balanced Budget, Customer Service, Economic Development, Health and Safety, and Maintenance and Renovation of Existing City Assets.

		Adopted	l Fiscal Year	2016/17	Pı	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	46.	100.0	0.0	100.0	0.0	0.0	0.0	0.0	100.0	0.0	146.6
Tucson Water Operating Funds	196.	4 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	196.4
To	tal 243.	100.0	0.0	100.0	0.0	0.0	0.0	0.0	100.0	0.0	343.0

48" Aviation/3rd Avenue Cathodic Protection (CP) System

Description:

Design and construct the CP to the existing 48-inch 3rd Avenue pipeline. Applied cathodic protection will increase the original life span.

Justification:

Failure to apply CP to the pipeline will allow corrosion and over time will degrade and raise the risk of potential pipeline water leaks and possible failures

		Adopted	Fiscal Year	Pr	ojected R	equiremer	nts				
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	247.9	200.0	0.0	200.0	0.0	0.0	0.0	0.0	200.0	0.0	447.9
Tucson Water Operating Funds	158.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	158.7
Total	406.6	200.0	0.0	200.0	0.0	0.0	0.0	0.0	200.0	0.0	606.6

Academy Reservoir

Description:

Design and construct a new reservoir liner at the Police and Fire Academy Reservoir. A billing meter, backflow assembly, and fire pump will also be installed. Modifications and new operational controls will be added to the well PV-001A so that operators can turn the well on and off remotely.

 Project ID:
 W091

 Start Date:
 07/14

 End Date:
 6/17

 Location:
 Ward 4

Justification:

Modifications and new operational controls will be added to the well PV-001A so that operators can turn the well on and off remotely.

City-Wide Priorities: Balanced Budget and Maintenance and Renovation of Existing City Assets.

			Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
						Year 2	Year 3	Year 4	Year 5			
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds		238.3	500.0	0.0	500.0	0.0	0.0	0.0	0.0	500.0	0.0	738.3
Tucson Water Operating Funds		81.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.8
	Total	320.1	500.0	0.0	500.0	0.0	0.0	0.0	0.0	500.0	0.0	820.1

Advanced Metering Infrastructure

Description:

This project will set up the network software, cost of the repeaters, and collectors needed to read meters.

Justification:

This project will increase meter reading efficiency and reduce energy/fuel consumption. It could provide the customers with timely data to assist them with managing their water use and can be used to notify customers that they may have a leak.

City-Wide Priorities: Balanced Budget and Customer Service.

			Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
						Year 2	Year 3	Year 4	Year 5			
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds		0.0	800.0	712.0	1,512.0	730.0	793.0	830.0	295.0	4,160.0	0.0	4,160.0
Tucson Water Operating Funds		1,114.1	0.0	139.0	139.0	142.0	134.0	186.0	96.0	697.0	0.0	1,811.1
	Total	1,114.1	800.0	851.0	1,651.0	872.0	927.0	1,016.0	391.0	4,857.0	0.0	5,971.1

Project ID: W138

Start Date: 07/15 End Date: 6/21 Location: City and County

Aerospace-Sonoran Corridor TM Ext

Description:

This project will support the future expansion needs along the Sonoran Corridor by relocating the previously planned water treatment facility to Section 31, modifying piping to support the new facility.

 Project ID:
 W210

 Start Date:
 7/16

 End Date:
 6/19

 Location:
 Ward 5

Justification:

Installation of a reservoir and booster facility will provide fire service flows to Section 31 and the Aerospace Parkway. A main extension along the Aerospace Parkway will provide water to World View and additional customers.

City-Wide Priorities: Balanced Budget, Customer Service, and Economic Development.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	0.0	0.0	470.0	470.0	1,460.0	6,080.0	0.0	0.0	8,010.0	0.0	8,010.0
Tucson Water Operating Funds	0.0	0.0	113.0	113.0	284.0	890.0	0.0	0.0	1,287.0	0.0	1,287.0
Total	0.0	0.0	583.0	583.0	1,744.0	6,970.0	0.0	0.0	9,297.0	0.0	9,297.0

Arc Flash Service Upgrades

Description:

Purchase and install on-site power interrupt switches, new label plates warning of potential arc flash hazard, and new protective equipment for personnel visiting water sites.

Project ID: W668 Start Date: 7/06 End Date: 6/21 Location: City and County

Justification:

Occupational Safety and Health Administration (OSHA) regulation NFPA-70E on electrical safety, requires all non-occupied Water Department sites containing electrical breakers or switchgear to be brought into compliance.

City-Wide Priorities: Health and Safety.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme:	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	598.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	598.2
Tucson Water Operating Funds	358.8	0.0	1,165.0	1,165.0	1,162.0	1,162.0	1,239.0	1,305.0	6,033.0	0.0	6,391.8
Tota	957.0	0.0	1,165.0	1,165.0	1,162.0	1,162.0	1,239.0	1,305.0	6,033.0	0.0	6,990.0

Arizona Avenue Main Replacement

Description:

Remove and replace 250 feet of 12-inch concrete-asbestos pipe in Arizona Avenue between Broadway and Congress with new ductile iron pipe. Encase the pipe per SD-800 as needed to compensate for insufficient utility separation.

Project ID: W155 Start Date: 7/14 End Date: 6/17 Location: Ward 6

Justification:

The existing pipe exceeds its 60-year life expectancy and bears the foundation of an adjacent building and power pole. Construction of the AC Marriott Hotel will increase stresses. Sustained undetected leakage could undermine foundations.

City-Wide Priorities: Customer Service and Economic Development.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	340.0	0.0	45.0	45.0	0.0	0.0	0.0	0.0	45.0	0.0	385.0
Tucson Water Operating Funds	43.4	0.0	13.0	13.0	0.0	0.0	0.0	0.0	13.0	0.0	56.4
Tota	1 383.4	0.0	58.0	58.0	0.0	0.0	0.0	0.0	58.0	0.0	441.4

ASR at F-008 Equipping

Description:

Re-equip well F-008 as an Aquifer Storage and Recovery (ASR) well, providing the ability to inject renewable Central Arizona Project (CAP) supplies into the Tucson basin aquifer where it will be available for recovery during peak demand or infrastructure outage periods. This is an additional step in providing renewable supply redundancy to the 96" Clearwell pipeline. This project includes installation of an ASR system pump, valves, piping, down hole gearing and packers in production well F-008.

 Project ID:
 W194

 Start Date:
 7/18

 End Date:
 6/21

 Location:
 Ward 4

Justification:

This project will test the ability for additional ASR projects that will extend the life of our existing CAVSARP/SAVSARP storage facilities. Failure to do this project will result in the possibility of CAVSARP/SAVSARP storage facilities reaching their maximum capacity and the City being unable to bring all of its CAP resource into the Tucson area, unless other storage and recovery projects can be identified and built, at a higher cost. Failure to bring our CAP water resources to Tucson could adversely affect our future ability to provide water to customers during drought or reduced CAP supply conditions.

City-Wide Priorities: Balanced Budget, Customer Service, Economic Development, Health and Safety, and Maintenance and Renovation of Existing City Assets.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	0.0	0.0	0.0	0.0	0.0	226.0	687.0	0.0	913.0	0.0	913.0
Tucson Water Operating Funds	0.0	0.0	0.0	0.0	0.0	64.0	1,791.0	0.0	1,855.0	0.0	1,855.0
Tota	0.0	0.0	0.0	0.0	0.0	290.0	2,478.0	0.0	2,768.0	0.0	2,768.0

AV-020B/SA-013A Recovery Well Drilling

Description:

Design and drill water recovery wells AV-020B and SA-013A. Project scope provides for the drilling and constructing stainless steel casing to prevent corrosion.

Project ID: W081 Start Date: 7/15 End Date: 6/17 Location: County

Justification:

New wells are needed to meet demand, to replace wells or supplement well capacities, and to provide back-up system capacity.

City-Wide Priorities: Customer Service, Economic Development, Health and Safety, and Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	512.2	250.0	0.0	250.0	0.0	0.0	0.0	0.0	250.0	0.0	762.2
Tucson Water Operating Funds	750.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	750.6
Tota	1,262.8	250.0	0.0	250.0	0.0	0.0	0.0	0.0	250.0	0.0	1,512.8

Bailey Sleeve Valve Replacement

Description:

Design and construct necessary piping modifications and replacements of Bailey Sleeve Valves at the high pressure reducing valve (PRV) stations (H1, H2, H3, and H4) on Tucson Water's CAP distribution system.

Project ID: W856 Start Date: 7/12 End Date: 6/17 Location: City and County

Justification:

These critical transfer valves have in excess of 30 years of service, and are demanding a significant amount of maintenance. Replacing and rebuilding these valves allow continued use of renewable CAP water in the central water system.

City-Wide Priorities: Balanced Budget and Maintenance and Renovation of Existing City Assets.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	1,815.2	0.0	50.0	50.0	0.0	0.0	0.0	0.0	50.0	0.0	1,865.2
Tucson Water Operating Funds	191.4	0.0	20.0	20.0	0.0	0.0	0.0	0.0	20.0	0.0	211.4
То	al 2,006.6	0.0	70.0	70.0	0.0	0.0	0.0	0.0	70.0	0.0	2,076.6

Calle Santa Cruz Transmission Main Replacement

Description:

Design and construct two miles of 24-inch transmission main replacement on Calle Santa Cruz between Valencia and Irvington. The main will be in City of Tucson property B1 water service area.

Project ID: W151 Start Date: 10/14 End Date: 6/17 Location: Ward 1

Justification:

This replacement maintains existing water pressure in emergency situations.

City-Wide Priorities: Customer Service, Health and Safety, and Maintenance and Renovation of Existing City Assets.

	1	1									
		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	73.4	0.0	1,444.2	1,444.2	0.0	0.0	0.0	0.0	1,444.2	0.0	1,517.6
Tucson Water Operating Funds	16.1	0.0	1,061.8	1,061.8	0.0	0.0	0.0	0.0	1,061.8	0.0	1,077.9
Tot	al 89.5	0.0	2,506.0	2,506.0	0.0	0.0	0.0	0.0	2,506.0	0.0	2,595.5

Camino de Oeste PRV at Thornydale

Description:

Design and construct an 8-inch PRV and create a ZA+ zone to alleviate low pressure fluctuations. This project will also install a 12-inch valve to serve as a zone boundary valve.

Project ID: W862 Start Date: 7/13 End Date: 6/17 Location: County

Project ID: W161

Start Date: 7/20

End Date: 6/23

County

Location:

Justification:

This will improve fire flow reliability for the Quail Run Elementary School.

City-Wide Priorities: Customer Service and Health and Safety.

			Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
						Year 2	Year 3	Year 4	Year 5			
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds		192.9	50.0	0.0	50.0	0.0	0.0	0.0	0.0	50.0	0.0	242.9
Tucson Water Operating Funds		42.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.0
Т	otal	234.9	50.0	0.0	50.0	0.0	0.0	0.0	0.0	50.0	0.0	284.9

CAP Basin Well 24" Transmission Main, Old Nogales Hwy

Description:

Design and install 1.75 miles of 24-inch transmission main on Old Nogales Highway Right-of-Way or purchased/leased easement.

Justification:

This main will convey water from the Central Arizona Project Basin wells along Old Nogales Highway starting 0.75 miles north of Pima Mine Road to Lumber Street.

City-Wide Priorities: Customer Service, Economic Development, Health and Safety, and Maintenance and Renovation of Existing City Assets.

			Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
						Year 2	Year 3	Year 4	Year 5			
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds		0.0	0.0	0.0	0.0	0.0	0.0	0.0	145.0	145.0	2,050.0	2,195.0
Tucson Water Operating Funds		0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.0	51.0	0.0	51.0
T	otal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	196.0	196.0	2,050.0	2,246.0

Cathodic Protection for Critical Pipelines

Description:

Design and construct CP and corrosion monitoring facilities. These critical pipelines range from 16 to 96-inches in diameter and are located throughout Tucson Water's service area.

Project ID: W320 Start Date: Annual End Date: Annual Location: City and County

Justification:

This project is necessary to prevent corrosion related failures of the City's largest and most critical potable water pipelines.

City-Wide Priorities: Maintenance and Renovation of Existing City Assets.

			Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
		Prior	C	NI	Van 1	Year 2	Year 3	Year 4	Year 5	Five Year	Future	Total
Source of Funds Summary		Years	Carry Forward	New Funding	Year 1 Total	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21		Years	Project
Tucson Water Obligation Bonds		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tucson Water Operating Funds		0.0	0.0	699.0	699.0	697.0	697.0	743.0	783.0	3,619.0	3,000.0	6,619.0
ר	otal	0.0	0.0	699.0	699.0	697.0	697.0	743.0	783.0	3,619.0	3,000.0	6,619.0

Cavalier Estates Phase I

Description:

Design and install 3,600 feet of 8-inch pipe in Wilmot, Zuni Avenue, 31st, and 29th Street. This project will relocate 85 water meters from alleys into streets and replace four existing fire hydrants.

Start Date: 7/16 End Date: 6/18 Location: Ward 4

Project ID: W859

Justification:

This area has been identified as having an above average amount of main breaks according to records from Tucson Water's Customer Service and Maintenance Divisions. Much of the pipe in this neighborhood was installed in the 1950s and 1960s and has reached the end of its useful life.

City-Wide Priorities: Customer Service, Economic Development, Health and Safety, and Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	2.8	0.0	45.0	45.0	326.0	0.0	0.0	0.0	371.0	0.0	373.8
Tucson Water Operating Funds	4.8	0.0	13.0	13.0	90.0	0.0	0.0	0.0	103.0	0.0	107.8
Total	7.6	0.0	58.0	58.0	416.0	0.0	0.0	0.0	474.0	0.0	481.6

CAVSARP Well Pump Improvements

Description:

Upgrade existing line shafts on Central Avra Valley Storage and Recovery Project (CAVSARP) wells, upgrade well pumps, change product lubrication systems, and re-equip wells with new materials.

Project ID: W553 Start Date: Annual End Date: Annual Location: County

Justification:

Evaluating and upgrading wells will reduce maintenance and improve operating efficiency and reliability.

City-Wide Priorities: Balanced Budget, Customer Service, Economic Development, and Maintenance and Renovation of Existing City Assets.

			Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
		Prior	Carry	New	Year 1	Year 2 FY	Year 3 FY	Year 4 FY	Year 5 FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tucson Water Operating Funds		0.0	0.0	350.0	350.0	349.0	349.0	372.0	391.0	1,811.0	1,500.0	3,311.0
Т	otal	0.0	0.0	350.0	350.0	349.0	349.0	372.0	391.0	1,811.0	1,500.0	3,311.0

Clearwell Reservoir Rehabilitation

Description:

Design and construct new interior shear walls, roof and interior lining. The work will be performed one cell at a time to minimize disruption to water system operation.

Start Date: 7/14 End Date: 6/19 Location: County

Project ID: W056

Justification:

Review of the reservoir revealed a need for structural improvements to comply with seismic code requirements; and the liner and roof have reached the end of their service life and are in need of replacement.

City-Wide Priorities: Customer Service and Maintenance and Renovation of Existing City Assets.

			Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
						Year 2	Year 3	Year 4	Year 5			
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds		142.4	80.0	200.0	280.0	4, 917.0	112.0	0.0	0.0	5,309.0	0.0	5,451.4
Tucson Water Operating Funds		34.6	0.0	7,606.0	7,606.0	1,263.0	27.0	0.0	0.0	8,896.0	0.0	8,930.6
,	Total	177.0	80.0	7,806.0	7,886.0	6,180.0	139.0	0.0	0.0	14,205.0	0.0	14,382.0

Cocio Road Main Replacement Phase II

Description:

Design and install 6,200 feet of 6-inch pipe, valves, and pavement replacement in El Cerrito Lane, Cocoraque Lane, Waterman Lane, Redrock Lane, Quemado Lane, and Wolcott Lane east of Cocio Road between Silverbell Road and Trico-Marana Road.

Project ID: W076 Start Date: 7/14 End Date: 6/17 Location: County

Justification:

This area has experienced numerous main breaks and customer outages.

City-Wide Priorities: Customer Service, Economic Development, Health and Safety, and Maintenance and Renovation of Existing City Assets.

			Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
						Year 2	Year 3	Year 4	Year 5			
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds		332.6	200.0	0.0	200.0	0.0	0.0	0.0	0.0	200.0	0.0	532.6
Tucson Water Operating Funds		64.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64.4
Т	otal	397.0	200.0	0.0	200.0	0.0	0.0	0.0	0.0	200.0	0.0	597.0

Control Panel Replacements: Potable

Description:

Install new control panels and electronic equipment at existing production facilities such as wells, boosters, reservoirs, and pressure reducing valve facilities.

Start Date: Annual End Date: Annual Location: City and County

Project ID: W045

Justification:

The existing control panels are approaching the end of their service life and need to be replaced to ensure system reliability.

City-Wide Priorities: Customer Service and Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tucson Water Operating Funds	0.0	0.0	117.0	117.0	116.0	116.0	124.0	130.0	603.0	500.0	1,103.0
Tota	0.0	0.0	117.0	117.0	116.0	116.0	124.0	130.0	603.0	500.0	1,103.0

Control Panels: Reclaimed System

Description:

Design and construct controls for reclaimed water facilities, and modify existing controls at booster stations, reservoirs, and storage facilities.

Justification:

These controls are needed to electronically monitor and transmit pressure, flow rates, and other site condition data to the reclaimed water treatment plant where it is used to make operational decisions.

City-Wide Priorities: Customer Service and Maintenance and Renovation of Existing City Assets.

Project ID:	W959
Start Date:	Annual
End Date:	Annual
Location:	City and
	County

Project ID: W793

Start Date: 7/14

End Date: 6/17

Ward 4

Location:

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	.equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tucson Water Operating Funds	0.0	0.0	175.0	175.0	174.0	174.0	186.0	196.0	905.0	750.0	1,655.0
Total	0.0	0.0	175.0	175.0	174.0	174.0	186.0	196.0	905.0	750.0	1,655.0

Craycroft Addition Subdivision, Phase I

Description:

Design and install 11,900 feet of 6-inch pipe in the Craycroft Addition Subdivision Phase I, bordered by 23rd Street, 30th Street, Van Buren and Sahuara Avenue. This project will also relocate 46 water meters from alleys to the street and replace 14 existing fire hydrants.

Justification:

This area has been identified as having an above average amount of main breaks according to records from Tucson Water's Customer Service and Maintenance Divisions. Much of the pipe in this neighborhood was installed in the 1950s and 1960s and has reached the end of its useful life.

City-Wide Priorities: Customer Service, Economic Development, Health and Safety, and Maintenance and Renovation of Existing City Assets.

			Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
						Year 2	Year 3	Year 4	Year 5			
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds		77.2	30.0	410.0	440.0	0.0	0.0	0.0	0.0	440.0	0.0	517.2
Tucson Water Operating Funds		15.4	0.0	114.0	114.0	0.0	0.0	0.0	0.0	114.0	0.0	129.4
Т	otal	92.6	30.0	524.0	554.0	0.0	0.0	0.0	0.0	554.0	0.0	646.6

Developer-Financed Reclaimed Systems

Description:

Review plans and inspect developer constructed reclaimed water systems. These systems are donated to the City upon completion. Associated costs are recovered from developer fees.

Project ID: W130 Start Date: Annual End Date: Annual Location: City and County

Justification:

The review and inspection ensure compliance with Tucson Water's standards.

City-Wide Priorities: Balanced Budget, Customer Service, and Economic Development.

			Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
						Year 2	Year 3	Year 4	Year 5			
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Operating Funds		0.0	0.0	70.0	70.0	70.0	70.0	74.0	78.0	362.0	300.0	662.0
	Total	0.0	0.0	70.0	70.0	70.0	70.0	74.0	78.0	362.0	300.0	662.0

Drexel I-19 Crossing 24 Main

Description:

Install 800 feet of 24-inch main on Drexel under I-19, replacing the existing 8-inch main. Install 50 feet of 6-inch main on Calle Pinta and connect to the 24-inch main.

Project ID: W187 Start Date: 7/19 End Date: 6/21 Location: Ward 1

Justification:

The existing 8-inch main provides insufficient back-up capability to customers. Increasing this main to a 24-inch line will provide sufficient alternate sources of water to customers in the area if we experience a supply failure from another source. Failures can include main breaks, well failures, booster pump failures, etc.

City-Wide Priorities: Customer Service, Health and Safety, and Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	0.0	0.0	0.0	0.0	0.0	0.0	47.0	913.0	960.0	0.0	960.0
Tucson Water Operating Funds	0.0	0.0	0.0	0.0	0.0	0.0	15.0	327.0	342.0	0.0	342.0
Total	0.0	0.0	0.0	0.0	0.0	0.0	62.0	1,240.0	1,302.0	0.0	1,302.0

Drill Production Wells

Description:

Drilling of two replacement production wells per year in well fields other than the CAVSARP, Southern Avra Valley Storage and Recovery and the Tucson Airport Remediation Project. Replacements will be focused on wells beyond repair, or which are more economical to replace by installing stainless steel constructed wells.

Project ID: W101 Start Date: 7/13 End Date: 6/22 Location: City and County

Justification:

This on-going project will equip wells to pump historic production levels of the original wells and will contribute to maintaining 90 million gallons per day (mgd) of redundant well field pumping capacity in the event of a failure of the 96-inch Clearwell pipeline.

City-Wide Priorities: Balanced Budget, Customer Service, and Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	564.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	564.8
Tucson Water Operating Funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,957.0	1,957.0	7,500.0	9,457.0
Total	564.8	0.0	0.0	0.0	0.0	0.0	0.0	1,957.0	1,957.0	7,500.0	10,021.8

Effluent Pump Station Expansion

Description:

This project expands the existing Tertiary/Secondary Effluent Pumping Station (T/SEPS) wetwell at Roger Road to match the filtration system upgrade (W774).

Start Date: 7/13 End Date: 6/17 Location: Ward 1

Project ID: W049

Justification:

Pumping capacity will be increased, a new pipeline will deliver the increased flow to the existing chlorine contact basin, and a secondary gravity pipeline will be added from the basin to the existing reclaimed reservoir to reduce the likelihood of basin overflow.

City-Wide Priorities: Customer Service.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	1,581.4	1,560.0	0.0	1,560.0	0.0	0.0	0.0	0.0	1,560.0	0.0	3,141.4
Tucson Water Operating Funds	151.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	151.8
Total	1,733.2	1,560.0	0.0	1,560.0	0.0	0.0	0.0	0.0	1,560.0	0.0	3,293.2

Emergency Main Replacement

Description:

Replace approximately 3,000 feet of 2-inch, 4-inch, and 6-inch mains on an as-needed, emergency basis.

Start Date: Annual
End Date: Annual
Location: City and
County

Project ID: W186

Justification:

Immediate response to requests for emergency main replacements is required to reduce water loss, ensure system reliability, and maintain water quality.

City-Wide Priorities: Customer Service, Economic Development, Health and Safety, and Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tucson Water Operating Funds	0.0	0.0	233.0	233.0	232.0	232.0	248.0	261.0	1,206.0	1,000.0	2,206.0
Total	0.0	0.0	233.0	233.0	232.0	232.0	248.0	261.0	1,206.0	1,000.0	2,206.0

Equip Well A-061

Description:

Design and equip Well A-061. Equipping of wells is necessary to put a newly drilled well into service.

Justification:

Well A-061 is needed to supplement water supply in the northwest portion of Tucson Water's system.

City-Wide Priorities: Customer Service and Maintenance and Renovation of Existing City Assets.

Project ID: W061

Start Date: 7/19

End Date: 6/21

Location: County

		Adopted	Adopted Fiscal Year 2016/17			Projected Requirements					
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	0.0	0.0	0.0	0.0	0.0	0.0	46.0	0.0	46.0	0.0	46.0
Tucson Water Operating Funds	0.0	0.0	0.0	0.0	0.0	0.0	16.0	457.0	473.0	0.0	473.0
Total	0.0	0.0	0.0	0.0	0.0	0.0	62.0	457.0	519.0	0.0	519.0

Equip Well W-006

Description:

Design and equip Well W-006. The existing water column (WC) service area is an isolated system and is supplied by only one well, W-001.

Start Date: 7/14 End Date: 6/17 Location: County

Project ID: W062

Justification:

This new well would provide a level of redundancy in the event of failure or maintenance requirements of Well W-001.

City-Wide Priorities: Customer Service, Health and Safety, and Maintenance and Renovation of Existing City Assets.

		Adopted Fiscal Year			Projected Requirements						
				***	Year 2	Year 3	Year 4	Year 5		-	
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	20.7	0.0	380.0	380.0	0.0	0.0	0.0	0.0	380.0	0.0	400.7
Tucson Water Operating Funds	12.9	0.0	86.0	86.0	0.0	0.0	0.0	0.0	86.0	0.0	98.9
Tota	33.6	0.0	466.0	466.0	0.0	0.0	0.0	0.0	466.0	0.0	499.6

Escalante Reservoir

Description:

Design and construct improvements as developed through the condition assessment to bring this reservoir up to current standards.

Start Date: 7/14 End Date: 6/21 Location: County

Project ID: W051

Justification:

This project must be completed to continue to provide long-term reliability and prevent water loss.

City-Wide Priorities: Maintenance and Renovation of Existing City Assets.

		Adopted	Adopted Fiscal Year 2016/17			ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	7.6	0.0	6.0	6.0	9.1	139.0	614.0	624.0	1,392.1	0.0	1,399.7
Tucson Water Operating Funds	11.9	0.0	6.0	6.0	2.9	35.0	191.0	224.0	458.9	0.0	470.8
Tota	19.5	0.0	12.0	12.0	12.0	174.0	805.0	848.0	1,851.0	0.0	1,870.5

Extensions for New Services

Description:

Design and install minor extensions from the distribution system as requested by customers. Associated costs are reimbursed by the customer.

Justification:

Extensions allow Tucson Water to install (or upgrade piping in order to install) new services in an expedient manner. This project ensures that piping is suitable in strength and durability and is available to connect to the distribution system.

City-Wide Priorities: Balanced Budget, Customer Service, Economic Development, Health and Safety, and Maintenance and Renovation of Existing City Assets.

Project ID:	W107
Start Date:	
End Date:	Annual
Location:	City and
	County

			Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
						Year 2	Year 3	Year 4	Year 5			
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Operating Funds		0.0	0.0	117.0	117.0	116.0	116.0	124.0	130.0	603.0	500.0	1,103.0
ר	Γotal	0.0	0.0	117.0	117.0	116.0	116.0	124.0	130.0	603.0	500.0	1,103.0

Facility Safety and Security Infrastructure

Description:

Implementation of an enterprise-wide security system for Tucson Water. This project will include ongoing security analysis, acquisition and installation of security system hardware and software, video cameras, and sensor equipment, as well as building modifications including wiring, access card reader installations and remodel work.

Justification:

This long-range project will provide security for approximately 794 parcels owned by Tucson Water.

City-Wide Priorities: Health and Safety and Maintenance and Renovation of Existing City Assets.

		Adopted	l Fiscal Year	2016/17	Projected Requirements						
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tucson Water Operating Funds	0.0	0.0	1,165.0	1,165.0	581.0	581.0	619.0	652.0	3,598.0	2,500.0	6,098.0
Tota	1 0.0	0.0	1,165.0	1,165.0	581.0	581.0	619.0	652.0	3,598.0	2,500.0	6,098.0

Project ID: W381 Start Date: Annual

End Date: Annual Location: City and

County

Fifth Street Distribution Main

Description:

Design and install approximately 250 feet of 8-inch pipe in Fifth Street connecting an existing 20-inch main with an existing 6-inch main.

Start Date: 7/15 End Date: 6/17 Location: Ward 4

Project ID: W150

Justification:

This distribution main is for redundancy and fire flow.

City-Wide Priorities: Health and Safety and Maintenance and Renovation of Existing City Assets.

		Adopted	Adopted Fiscal Year 2016/17			ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	31.0	100.0	0.0	100.0	0.0	0.0	0.0	0.0	100.0	0.0	131.0
Tucson Water Operating Funds	23.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.3
Tota	1 54.3	100.0	0.0	100.0	0.0	0.0	0.0	0.0	100.0	0.0	154.3

Filtration Modifications at Reclaimed Plant

Description:

Filters must be expanded for the reclaimed water plant at Roger Road because Pima County has permitted its new "Agua Nueva" wastewater treatment plant as a B+ facility. The existing filter plant will be reconfigured to increase the capacity from 10 mgd to 15 mgd with provision for eventual expansion to 20 mgd.

Project ID: W774 Start Date: 7/13 End Date: 6/21 Location: Ward 1

Justification:

This will provide additional reliability for the reclaimed plant. Needed programming upgrades will be coordinated with ongoing Supervisory Control and Data Acquisition (SCADA) work, and the wetwell will be expanded as a separate project (W049).

City-Wide Priorities: Customer Service and Maintenance and Renovation of Existing City Assets.

			Adopted	Fiscal Year	2016/17	Projected Requirements						
						Year 2	Year 3	Year 4	Year 5			
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds		684.5	200.0	0.0	200.0	0.0	0.0	490.0	702.0	1,392.0	0.0	2,076.5
Tucson Water Operating Funds		75.8	0.0	0.0	0.0	0.0	0.0	129.0	211.0	340.0	0.0	415.8
	Total	760.3	200.0	0.0	200.0	0.0	0.0	619.0	913.0	1,732.0	0.0	2,492.3

Fire Hydrants in Annexation Areas

Description:

On-going installation of fire hydrants in areas of annexation.

Start Date: Annual End Date: Annual Location: City and County

Project ID: W163

Justification:

The City of Tucson is annexing various adjacent and outlying areas some of which do not have fire service. As a condition of annexation, fire service may be required and 6-inch fire hydrants will need to be installed at locations specified by the Tucson Fire Department.

City-Wide Priorities: Customer Service, Economic Development, and Health and Safety.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tucson Water Operating Funds	0.0	0.0	117.0	117.0	116.0	116.0	124.0	130.0	603.0	0.0	603.0
Total	0.0	0.0	117.0	117.0	116.0	116.0	124.0	130.0	603.0	0.0	603.0

Fire Services

Description:

Design and install fire hydrants and fire sprinkler service connections in areas needed upon customer request and payment of connection fees.

Justification:

This project is required to provide for the installation of new fire hydrants and fire services to customers upon request.

City-Wide Priorities: Customer Service and Health and Safety.

Project ID:	W124
Start Date:	Annual
End Date:	Annual
Location:	City and
	County

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Location:	City and
	County

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Operating Funds	0.0	0.0	2,039.0	2,039.0	2,034.0	2,033.0	2,168.0	2,283.0	10,557.0	8,750.0	19,307.0
То	al 0.0	0.0	2,039.0	2,039.0	2,034.0	2,033.0	2,168.0	2,283.0	10,557.0	8,750.0	19,307.0

Gas Engines

Description:

This project will install five natural gas engines per year in the CAVSARP well field area. The current engines are approaching the 100,000 hour service hour life span.

 Project ID:
 W140

 Start Date:
 7/14

 End Date:
 6/25

 Location:
 City and County

Justification:

The upgraded engines will have the latest technology needed to meet the emissions control permit requirements, making it more cost effective and advantageous to upgrade to new engines rather than rebuild the existing engines.

City-Wide Priorities: Balanced Budget and Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
Source of Funds Summary	Prior Years	Carry Forward	New Funding	Year 1 Total	Year 2 FY 2017/18	Year 3 FY 2018/19	Year 4 FY 2019/20	Year 5 FY 2020/21	Five Year Total	Future Years	Total Proiect
Tucson Water Obligation Bonds	1,396.2				, ,	, ,	, ,	,			-,
Tucson Water Operating Funds	185.6	0.0	387.0	387.0	185.0	210.0	230.0	489.0	1,501.0	0.0	1,686.6
Total	1,581.8	0.0	437.0	437.0	436.0	436.0	465.0	489.0	2,263.0	1,500.0	5,344.8

Golf Links Main Replacement Phase II

Description:

Design and install 1,600 feet of 8-inch pipe in 33rd, 34th Streets, Calle Silvosa, Sahuara and Zuni Avenue. This project will relocate 70 water meters from alleys into streets.

Justification:

This area has been identified as having an above average amount of main breaks according to records from Tucson Water's Customer Service and Maintenance Divisions. Much of the pipe in this neighborhood was installed in the 1950s and 1960s and has reached the end of its useful life.

City-Wide Priorities: Customer Service, Health and Safety, and Maintenance and Renovation of Existing City Assets.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	.equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	43.0	340.0	0.0	340.0	0.0	0.0	0.0	0.0	340.0	0.0	383.0
Tucson Water Operating Funds	43.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.8
Tot	al 86.8	340.0	0.0	340.0	0.0	0.0	0.0	0.0	340.0	0.0	426.8

Project ID: W849

Start Date: 7/14 End Date: 6/17 Location: Ward 4

Golf Links Phase V

Description:

Design and install 8,550 feet of 8-inch pipe in Golf Links, Wilmot, Zuni Avenue and 32nd Street. This project will relocate 131 water meters from alleys into streets and replace two existing fire hydrants.

 Project ID:
 W858

 Start Date:
 7/15

 End Date:
 6/18

 Location:
 Ward 4

Project ID: W135

Start Date: 7/14

6/18

County

End Date:

Location:

Justification:

This area has been identified as having an above average amount of main breaks according to records from Tucson Water's Customer Service and Maintenance Divisions. Much of the pipe in this neighborhood was installed in the 1950s and 1960s and has reached the end of its useful life.

City-Wide Priorities: Customer Service, Health and Safety, and Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
	Prior	Carry	New	Year 1	Year 2 FY	Year 3 FY	Year 4 FY	Year 5 FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total			2019/20			Years	Project
Tucson Water Obligation Bonds	44.0	0.0	52.0	52.0	456.0	0.0	0.0	0.0	508.0	0.0	552.0
Tucson Water Operating Funds	10.7	0.0	16.0	16.0	125.0	0.0	0.0	0.0	141.0	0.0	151.7
Total	54.7	0.0	68.0	68.0	581.0	0.0	0.0	0.0	649.0	0.0	703.7

Houghton Road Reclaimed Reservoir

Description:

Design and construct solutions to increase site security, redesign the reservoir roof for water-tightness, and add a new roof and structural

ustification:

Site work will be performed to address access road repairs and general site renewal.

City-Wide Priorities: Maintenance and Renovation of Existing City Assets.

			Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
						Year 2	Year 3	Year 4	Year 5			1
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds		44.1	0.0	22.5	22.5	2,240.0	0.0	0.0	0.0	2,262.5	0.0	2,306.6
Tucson Water Operating Funds		10.8	0.0	6.5	6.5	596.0	0.0	0.0	0.0	602.5	0.0	613.3
	Total	54.9	0.0	29.0	29.0	2,836.0	0.0	0.0	0.0	2,865.0	0.0	2,919.9

La Entrada Electrical Service Modernization

Description:

This project will include a new electrical service entrance as well as other work to ensure National Electrical Code (NEC) and building code compliance.

 Project ID:
 W800

 Start Date:
 7/11

 End Date:
 6/17

 Location:
 Ward 1

Justification:

Following a building assessment it was determined that several structural and electrical modifications were needed.

City-Wide Priorities: Customer Service and Maintenance and Renovation of Existing City Assets.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	1,356.4	100.0	211.0	311.0	0.0	0.0	0.0	0.0	311.0	0.0	1,667.4
Tucson Water Operating Funds	196.9	0.0	59.0	59.0	0.0	0.0	0.0	0.0	59.0	0.0	255.9
To	al 1,553.3	100.0	270.0	370.0	0.0	0.0	0.0	0.0	370.0	0.0	1,923.3

Magee Road (410E) PRV Replacement

Description:

Installation of solar SCADA to monitor flow and water pressures of the new 8-inch PRV which is the sole source of water for approximately 1,300 customers. SCADA will allow quicker response to maintenance issues.

Project ID: W181 Start Date: 7/20 End Date: 6/21 Location: County

Justification:

SCADA will allow quicker response to maintenance issues.

City-Wide Priorities: Maintenance and Renovation of Existing City Assets.

		Adopted Fiscal Year 2016/17										
			Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
						Year 2	Year 3	Year 4	Year 5			
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds		0.0	0.0	0.0	0.0	0.0	0.0	0.0	68.0	68.0	0.0	68.0
Tucson Water Operating Funds		0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	30.0	0.0	30.0
	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	98.0	98.0	0.0	98.0

Manzanita Tank Lining

Description:

Design and construct a new liner at the Manzanita steel tank.

Start Date: 7/16 End Date: 6/20 Location: County

Project ID: W054

Justification:

The coatings and linings of the tank have reached the end of their service life and require replacement to prevent accelerated deterioration of the tank.

City-Wide Priorities: Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremen	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	0.0	0.0	9.0	9.0	9.0	28.0	614.0	0.0	660.0	0.0	660.0
Tucson Water Operating Funds	0.0	0.0	3.0	3.0	3.0	7.0	191.0	0.0	204.0	0.0	204.0
Total	0.0	0.0	12.0	12.0	12.0	35.0	805.0	0.0	864.0	0.0	864.0

Maryvale Manor Subdivision, Phase I

Description:

Design and install 4,100 feet of 6-inch pipe in the Maryvale Manor Subdivision bordered by 32nd Street, 36th Street, Van Buren and Jefferson Avenue. This project will also relocate 92 water meters from alleys into streets and replace 12 existing fire hydrants.

Project ID: W791 Start Date: 7/12 End Date: 6/17 Location: Ward 4

Justification:

This area has been identified as having an above average amount of main breaks according to records from Tucson Water's Customer Service and Maintenance Divisions. Much of the pipe in this neighborhood was installed in the 1950s and 1960s and has reached the end of its useful life.

City-Wide Priorities: Customer Service, Health and Safety, and Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	15.9	0.0	0.0	0.0	45.0	729.0	0.0	0.0	774.0	0.0	789.9
Tucson Water Operating Funds	28.8	0.0	0.0	0.0	13.0	189.0	0.0	0.0	202.0	0.0	230.8
Total	44.7	0.0	0.0	0.0	58.0	918.0	0.0	0.0	976.0	0.0	1,020.7

Maryvale Manor Subdivision, Phase III

Description:

Project ID: W846 Start Date: 7/11 **End Date:** 6/20

Project ID: W435

Start Date: Annual

Design and install approximately 4,450 feet of 6-inch pipe and 1,000 feet of 8-inch pipe in 34th, 35th, 36th Street, Van Buren and Sahuara Avenue. Location: Ward 4 This project will relocate 58 water meters from alleys into streets.

Justification:

This area has been identified as having an above average amount of main break records from Tucson Water's Customer Service and Maintenance Divisions. Much of the pipe in this neighborhood was installed in the 1950s and 1960s and has reached the end of its useful life.

City-Wide Priorities: Customer Service, Health and Safety, and Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
	Prior	Carry	New	Year 1	Year 2 FY	Year 3 FY	Year 4 FY	Year 5 FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	69.7	0.0	0.0	0.0	0.0	48.0	391.0	0.0	439.0	0.0	508.7
Tucson Water Operating Funds	6.5	0.0	0.0	0.0	0.0	10.0	129.0	0.0	139.0	0.0	145.5
Total	76.2	0.0	0.0	0.0	0.0	58.0	520.0	0.0	578.0	0.0	654.2

Meter Upgrade and Replacement Program

Description:

Upgra

Justif

	End Date:	Annual
rrade and install replacement meters system-wide on an annual basis.	Location:	City and
tification:		County
er meters become inefficient and tend to under-read water usage, and affect compliance with water loss regulations.		
y-Wide Priorities: Customer Service and Maintenance and Renovation of Existing City Assets.		
Adopted Figgal Vegs 2016 /17 Projected Paguisaments	П	

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	0.0	0.0	3,197.0	3,197.0	720.0	2,243.0	385.0	0.0	6,545.0	0.0	6,545.0
Tucson Water Operating Funds	0.0	0.0	3,823.0	3,823.0	6,282.0	4,611.0	2,588.0	0.0	17,304.0	0.0	17,304.0
Total	0.0	0.0	7,020.0	7,020.0	7,002.0	6,854.0	2,973.0	0.0	23,849.0	0.0	23,849.0

Miscellaneous Land and Right-of-Way Acquisitions

Description:

Budget capacity for preliminary real estate services necessary prior to determining the feasibility of a well, booster station, reservoir, or pipeline project. Services include the determination of the need for, and acquisition of, right-of-way or easements.

Project ID: W126 Start Date: Annual End Date: Annual Location: City and County

Project ID: W175

Start Date: 7/19

End Date: 6/20

County

Location:

Justification:

This project saves public money by determining the suitability of particular sites or routes prior to investing money in place-based design.

City-Wide Priorities: Economic Development and Balanced Budget.

			Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
						Year 2	Year 3	Year 4	Year 5			
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Operating Funds		0.0	0.0	12.0	12.0	12.0	12.0	12.0	13.0	61.0	50.0	111.0
	Total	0.0	0.0	12.0	12.0	12.0	12.0	12.0	13.0	61.0	50.0	111.0

Nebraska Road Distribution Main

Description:

Installation of 2,100 feet of 8-inch main on Nebraska from Sunset to 800 feet West of Spencer, connecting to the existing 2-inch main.

Justification:

This distribution main will replace two vault PRVs (Spencer and Sheridan). The main will be in the Nebraska (unpaved) Right-of-Way. New customers will be added to this main.

City-Wide Priorities: Customer Service, Economic Development, Health and Safety, and Maintenance and Renovation of Existing City Assets.

			Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
						Year 2	Year 3	Year 4	Year 5			
	Pr	or	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Ye	ars	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds		0.0	0.0	0.0	0.0	0.0	48.0	194.0	0.0	242.0	0.0	242.0
Tucson Water Operating Funds		0.0	0.0	0.0	0.0	0.0	10.0	54.0	0.0	64.0	0.0	64.0
To	otal	0.0	0.0	0.0	0.0	0.0	58.0	248.0	0.0	306.0	0.0	306.0

New Metered Services

Description:

Install new metered reclaimed water services upon customer request and payment of connection fees.

Justification:

This project allows for the installation of new metered reclaimed water services upon customer request.

City-Wide Priorities: Customer Service and Economic Development.

Project ID:	W131
Start Date:	Annual
End Date:	Annual
Location:	City and
	County

Project ID: W153

Start Date: 7/14

End Date: 6/18

Location: Ward 5

		Adopted Fiscal Year 2016/17			Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tucson Water Operating Funds	0.0	0.0	58.0	58.0	58.0	58.0	62.0	65.0	301.0	250.0	551.0
Total	0.0	0.0	58.0	58.0	58.0	58.0	62.0	65.0	301.0	250.0	551.0

Nogales Hwy 36" Transmission Main Replacement Phase I

Description:

Design and install approximately 4,000 feet of 36-inch ductile iron pipe to replace a section of 36-inch concrete cylinder pipe which has been out of service since 2010.

Justification:

This new main will convey flow from the Santa Cruz Well Field Treatment Facility to the future Phase II replaced main, with an objective of delivering 20 mgd to the Martin Reservoir. This is in lieu of slip-lining the existing 36-inch main which would reduce capacity the main can convey.

City-Wide Priorities: Customer Service, Health and Safety, and Maintenance and Renovation of Existing City Asset.

		Adopted	Projected Requirements								
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	50.1	0.0	728.3	728.3	2,000.2	0.0	0.0	0.0	2,728.5	0.0	2,778.6
Tucson Water Operating Funds	16.6	0.0	203.7	203.7	553.8	0.0	0.0	0.0	757.5	0.0	774.1
Total	66.7	0.0	932.0	932.0	2,554.0	0.0	0.0	0.0	3,486.0	0.0	3,552.7

Northgate Subdivision, Phase I

Description:

Design and install approximately 8,000 feet of 6-inch pipe in the Northgate subdivision bordered by 22nd Street, Van Buren Ave., 25th Street and Craycroft Road. This project will also relocate 124 water meters from alleys into streets and replace eight existing fire hydrants.

 Project ID:
 W789

 Start Date:
 7/11

 End Date:
 6/17

 Location:
 Ward 4

Project ID: W790

Start Date: 7/11

End Date: 6/19

Location:

Ward 4

Justification:

This area has been identified as having an above average amount of main breaks according to records from Tucson Water's Customer Service and Maintenance Divisions. Much of the pipe in this neighborhood was installed in the 1950s and 1960s and has reached the end of its useful life.

City-Wide Priorities: Customer Service, Health and Safety, and Maintenance and Renovation of Existing City Asset.

			Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
						Year 2	Year 3	Year 4	Year 5			
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds		726.3	900.0	0.0	900.0	0.0	0.0	0.0	0.0	900.0	0.0	1,626.3
Tucson Water Operating Funds		143.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	143.5
Т	otal	869.8	900.0	0.0	900.0	0.0	0.0	0.0	0.0	900.0	0.0	1,769.8

Northgate Subdivision, Phase II

Description:

Design and install approximately 12,900 feet of 6-inch pipe in the Northgate Subdivision bordered by Craycroft Road, 26th Street, 32nd Street, and Van Buren. This project will also relocate 73 water meters from alleys into streets and replace 14 existing fire hydrants.

Justification:

This area has been identified as having an above average amount of main breaks according to records from Tucson Water's Customer Service and Maintenance Divisions. Much of the pipe in this neighborhood was installed in the 1950s and 1960s and has reached the end of its useful life.

City-Wide Priorities: Customer Service, Health and Safety, and Maintenance and Renovation of Existing City Asset.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	23.4	0.0	0.0	0.0	47.0	736.0	0.0	0.0	783.0	0.0	806.4
Tucson Water Operating Funds	1.2	0.0	0.0	0.0	11.0	182.0	0.0	0.0	193.0	0.0	194.2
Total	24.6	0.0	0.0	0.0	58.0	918.0	0.0	0.0	976.0	0.0	1,000.6

Old Vail Steel Tank Upgrades (Rehab)

Description:

Design and construct improvements to the Old Vail Steel Tank which include the design and construction of a back-up storage tank. The interior and exterior of the 200,000 gallon tank will also be removed and recoated.

 Project ID:
 W168

 Start Date:
 7/15

 End Date:
 6/17

 Location:
 City and County

Justification:

Failure to rehabilitate this tank, and provide back-up storage will result in failure of the tanks ability to hold water. This will result in the inability to adequately serve customers in the area, and we will be unable to provide needed fire flow to customers. In addition to normal customer use needs, reservoirs provide the necessary capacity to provide fire flow required by the fire department. Back-up storage is required due to the lack of water resources in the area, and the possibility of outages if another source of water should fail. Failures can include main breaks, well failures, booster pump failures, etc.

City-Wide Priorities: Customer Service and Maintenance and Renovation of Existing City Assets.

			Adopted Fiscal Year 2016/17			Pr	ojected R	equiremer	nts			
						Year 2	Year 3	Year 4	Year 5			
	P	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Y	ears	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds		390.0	200.0	283.0	483.0	0.0	0.0	0.0	0.0	483.0	0.0	873.0
Tucson Water Operating Funds		66.8	0.0	79.0	79.0	0.0	0.0	0.0	0.0	79.0	0.0	145.8
Т	otal	456.8	200.0	362.0	562.0	0.0	0.0	0.0	0.0	562.0	0.0	1,018.8

Payments to Developers for Oversized Systems

Description:

Reimburse developers for the cost of oversizing water system components (pipes, mains, and boosters) when Tucson Water requests a capacity greater than needed by the development.

Project ID: W108 Start Date: Annual End Date: Annual Location: City and County

Justification:

Oversizing is sometimes required to supply future projected demands consistent with Tucson Water's long range planning and to avoid more expensive replacement in the future, after buildings and streets are constructed.

City-Wide Priorities: Balanced Budget, Customer Service, and Economic Development.

			Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
						Year 2	Year 3	Year 4	Year 5			
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tucson Water Operating Funds		0.0	0.0	117.0	117.0	116.0	116.0	124.0	130.0	603.0	500.0	1,103.0
	Total	0.0	0.0	117.0	117.0	116.0	116.0	124.0	130.0	603.0	500.0	1,103.0

Pima Mine Road Production Well Drilling

Description:

Drilling of three production wells at Pima Mine Road, which will assist the utility in reaching its goal of 20 mgd of production capacity from the Santa Cruz Well Field.

Project ID: W166 Start Date: 7/20 End Date: 6/21 Location: County

Project ID: W137

Start Date: 7/14

End Date: 6/17

Location: County

Justification:

These wells will ensure water levels remain below the alert levels for the underground storage facility permit and help resolve water quality issues in the Santa Cruz Well Field. Each well will be between 500 and 600 feet below land surface and eventually be equipped to pump approximately 1,500 gallons per minute (gpm).

City-Wide Priorities: Balanced Budget, Customer Service, and Maintenance and Renovation of Existing City Assets.

			Adopted Fiscal Year 2016/17			Pr	ojected R	equiremen	its			
	١,	Prior	Carry	New	Year 1	Year 2 FY	Year 3 FY	Year 4 FY	Year 5 FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total			2019/20			Years	Project
Tucson Water Obligation Bonds		0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,043.0	1,043.0	0.0	1,043.0
Tucson Water Operating Funds		0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,219.0	2,219.0	0.0	2,219.0
To	tal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,262.0	3,262.0	0.0	3,262.0

Plant 2 Relocation

Description:

Design and construct buildings, storage, and parking for a new facility in the undeveloped area at Hayden Udall.

Justification:

The proposed sale of City of Tucson property at the current home of Water's Property Management and Well Maintenance Sections will result in the relocation of these Maintenance Division work groups to another site.

City-Wide Priorities: Balanced Budget, Economic Development, and Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	Projected Requirements						
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	2,651.1	50.0	0.0	50.0	0.0	0.0	0.0	0.0	50.0	0.0	2,701.1
Tucson Water Operating Funds	271.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	271.1
Total	2,922.2	50.0	0.0	50.0	0.0	0.0	0.0	0.0	50.0	0.0	2,972.2

Potable Motor Operated Valve (MOV) at Thornydale Reclaimed Reservoir

Description:

Replace the 12-inch flow meter with a 12-inch magnetic meter. Add a MOV to allow water operations to control the valve from the reclaimed plant.

Project ID: W086 Start Date: 7/14 End Date: 6/17 Location: County

Justification:

This will enable reclaimed operators to deliver reclaimed water credits to the reclaimed system, via potable water piping remotely. This will save time by not having to dispatch personnel to this site and assure faster response time.

City-Wide Priorities: Balanced Budget and Maintenance and Renovation of Existing City Assets.

		Adopted	Adopted Fiscal Year 2016/17			ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	60.9	40.0	0.0	40.0	0.0	0.0	0.0	0.0	40.0	0.0	100.9
Tucson Water Operating Funds	20.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.4
To	al 81	40.0	0.0	40.0	0.0	0.0	0.0	0.0	40.0	0.0	121.3

Pressure Tank Replacement

Description:

Design and construct replacement pressure tanks at water wells and booster stations. As funds become available on an annual basis, uncertified tanks will be replaced and the remaining uncertified tanks prioritized.

Project ID: W075 Start Date: Annual End Date: Annual Location: City and County

Justification:

Safety requirements mandate tank replacement for those not meeting code or lacking certification from the American Society of Mechanical Engineers.

City-Wide Priorities: Maintenance and Renovation of Existing City Assets.

		Adopted	Pr	ojected R	equiremer	nts					
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tucson Water Operating Funds	0.0	0.0	175.0	175.0	174.0	174.0	186.0	196.0	905.0	750.0	1,655.0
Total	0.0	0.0	175.0	175.0	174.0	174.0	186.0	196.0	905.0	750.0	1,655.0

Production Well Sites

Description:

Acquire property for new production well sites.

Justification:

Well sites are needed to meet future demand and to replace obsolete wells.

City-Wide Priorities: Customer Service and Maintenance and Renovation of Existing City Assets.

Project ID:	W087
Start Date:	Annual
End Date:	Annual
Location:	City and
	County

Project ID: W092

Start Date: 7/14

End Date: 6/17

Location: Ward 4

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tucson Water Operating Funds	0.0	0.0	87.0	87.0	87.0	87.0	93.0	98.0	452.0	375.0	827.0
Total	0.0	0.0	87.0	87.0	87.0	87.0	93.0	98.0	452.0	375.0	827.0

Rauscher Reservoir Rehabilitation

Description:

Design and construct the reservoir roof superstructure, replace the roof covering, and add a liner.

Justification:

This work will reduce leakage. Site work will also be performed to address security and general site renewal.

City-Wide Priorities: Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	3,791.2	700.0	0.0	700.0	0.0	0.0	0.0	0.0	700.0	0.0	4,491.2
Tucson Water Operating Funds	781.6	0.0	12.0	12.0	0.0	0.0	0.0	0.0	12.0	0.0	793.6
Total	4,572.8	700.0	12.0	712.0	0.0	0.0	0.0	0.0	712.0	0.0	5,284.8

Recycled Water Program

Description:

Plan development for the full utilization of the City's effluent entitlement. Effluent quality and quantity, methods of treatment, existing and future uses of effluent will be addressed. Continued expansion of the non-potable reclaimed water and recharge, capital improvement projects and costs needed to implement is included.

Project ID: W176 Start Date: 7/15 End Date: 6/26 Location: City and County

Justification:

The 2011-2015 Action Plan for Water Sustainability Report identified preparation and implementation of the Recycled Water Master Plan as a water resource task.

City-Wide Priorities: Balanced Budget and Customer Service.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	2,090.0	0.0	900.0	900.0	900.0	920.0	940.0	814.0	4,474.0	18,925.0	25,489.0
Tucson Water Operating Funds	208.7	0.0	265.0	265.0	262.0	242.0	299.0	491.0	1,559.0	0.0	1,767.7
Tota	2,298.7	0.0	1,165.0	1,165.0	1,162.0	1,162.0	1,239.0	1,305.0	6,033.0	18,925.0	27,256.7

Re-Equip Well C-049

Description:

Existing well C-049 has been out of service due to failed, antiquated equipment. The well site requires re-equipping of the above ground facilities in order to bring it back into production. This will involve replacing the electrical and control equipment, hydro pneumatic tank, production flow meter, disinfection equipment, modifying and upgrading the site enclosure.

Start Date: 7/15 End Date: 6/17 Location: Ward 2

Project ID: W199

Justification:

Failure to re-equip this well will mean that an additional well will be needed to be drilled and outfitted in order to maintain an appropriate amount of well capacity to serve our customers. If the well is not re-equipped, and we do not have another source of water to replace this well, then we may not be able to meet our customers' water demands in that area of town during outages of our CAP supply. Outages of that supply occur yearly, due to regular maintenance activities needed on major reservoirs and pipelines.

City-Wide Priorities: Customer Service and Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	0.0	0.0	160.0	160.0	0.0	0.0	0.0	0.0	160.0	0.0	160.0
Tucson Water Operating Funds	0.0	0.0	38.0	38.0	0.0	0.0	0.0	0.0	38.0	0.0	38.0
Total	0.0	0.0	198.0	198.0	0.0	0.0	0.0	0.0	198.0	0.0	198.0

Relocate Aeropark Teton PRV

Description:

Relocate the current 6-inch PRV to an above ground 8-inch PRV at well site SC-007.

 Project ID:
 W169

 Start Date:
 7/15

 End Date:
 6/17

 Location:
 City and County

Justification:

This PRV is critical for fire flow in the C1 WSA area. The current 6-inch PRV is located in a vault and the site has access issues. Relocating and upgrading will improve operating efficiency, improve reliability, improve public service and resolves safety issues.

City-Wide Priorities: Balanced Budget and Customer Service.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	190.0	50.0	0.0	50.0	0.0	0.0	0.0	0.0	50.0	0.0	240.0
Tucson Water Operating Funds	33.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.7
То	al 223.7	50.0	0.0	50.0	0.0	0.0	0.0	0.0	50.0	0.0	273.7

Relocate Anklam Road (2000 W) PRV

Description:

Relocate the current PRV and construct an above ground 6-inch C-A PRV at the La Cholla Booster Station.

Start Date: 7/20 End Date: 6/21 Location: Ward 1

Project ID: W170

Justification:

The current PRV is located in a vault and the site has access issues. Relocating will improve operating efficiency, improve reliability, improve public service and resolve safety issues. The supply and discharge mains will be 8-inch.

City-Wide Priorities: Balanced Budget and Customer Service.

					_						1	
			Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
						Year 2	Year 3	Year 4	Year 5			
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Operating Funds		0.0	0.0	0.0	0.0	0.0	0.0	0.0	169.0	169.0	0.0	169.0
Tucson Water Obligation Bonds		0.0	0.0	0.0	0.0	0.0	0.0	0.0	59.0	59.0	0.0	59.0
	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	228.0	228.0	0.0	228.0

Relocate Craycroft Shadow Ridge PRV

Description:

Relocate the current PRV and construct an above ground 6-inch I-H PRV at the Craycroft Booster Station.

Project ID: W172 Start Date: 7/19 End Date: 6/20 Location: County

Justification:

The current PRV is located in a vault and the site has access and safety issues. Relocating will improve operating efficiency, reliability, public service and resolve safety issues. Supply and discharge mains will be 8-inch. Approximately 300 feet of "H4" discharge main will be needed on Craycroft.

City-Wide Priorities: Balanced Budget, Customer Service, and Maintenance and Renovation of Existing City Assets.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	0.0	0.0	0.0	0.0	0.0	0.0	214.0	0.0	214.0	0.0	214.0
Tucson Water Operating Funds	0.0	0.0	0.0	0.0	0.0	0.0	65.0	0.0	65.0	0.0	65.0
Tot	al 0.0	0.0	0.0	0.0	0.0	0.0	279.0	0.0	279.0	0.0	279.0

Relocate Glenn/Campbell PRV to Conner Park

Description:

Relocate the current PRV and construct an above ground 6-inch B-A PRV at the NE corner of Conner Park at Glenn and Plumer.

Justification:

The current PRV is located in a vault and the site has access and safety issues. Relocating will improve operating efficiency, reliability, public service and resolve safety issues. Supply and discharge mains will be 8-inch. This PRV is critical when the 1st Ave. 42-inch main is out of service.

City-Wide Priorities: Balanced Budget, Customer Service, and Maintenance and Renovation of Existing City Assets.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equiremen	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	0.0	0.0	0.0	0.0	0.0	0.0	182.0	0.0	182.0	0.0	182.0
Tucson Water Operating Funds	0.0	0.0	0.0	0.0	0.0	0.0	66.0	0.0	66.0	0.0	66.0
Tot	al 0.0	0.0	0.0	0.0	0.0	0.0	248.0	0.0	248.0	0.0	248.0

Project ID: W173

Start Date: 7/19 End Date: 6/20 Location: Ward 3

Relocate Spencer PRV

Description:

Construct a 6-inch D-C PRV to replace the PRV at the current site.

Project ID: W198 Start Date: 7/22 End Date: 6/23 Location: County

Project ID: W174

Start Date: 7/19

End Date: 6/20

County

Location:

Justification:

The current PRV is located in a vault and the site has safety issues. Relocating and upgrading will improve operating efficiency, reliability, public service and resolves safety issues.

City-Wide Priorities: Balanced Budget, Customer Service, and Maintenance and Renovation of Existing City Assets.

			Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
						Year 2	Year 3	Year 4	Year 5			
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	150.0	150.0
	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	150.0	150.0

Relocate Via Velazquez PRV

Description:

Relocate and upgrade the current PRV to an above ground 6-inch F-D PRV near the current Via Velazquez site. The current PRV is located in a vault and the site has safety issues. Relocating and upgrading will improve operating efficiency, reliability, public service and resolves safety issues.

Iustification:

The current PRV is located in a vault and the site has safety issues. Relocating and upgrading will improve operating efficiency, reliability, public service and resolves safety issues. Supply and discharge mains will be 8-inch. They will be connected to the 12-inch main in Via Velazquez Road. This site will need to have walls.

City-Wide Priorities: Balanced Budget, Customer Service, and Health and Safety.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equiremen	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	0.0	0.0	0.0	0.0	0.0	0.0	166.0	0.0	166.0	0.0	166.0
Tucson Water Operating Funds	0.0	0.0	0.0	0.0	0.0	0.0	51.0	0.0	51.0	0.0	51.0
Tot	al 0.0	0.0	0.0	0.0	0.0	0.0	217.0	0.0	217.0	0.0	217.0

Responsive Meter Replacement

Description:

Budget capacity to replace meters that are not included in the ongoing residential meter replacement program.

Start Date: Annual
End Date: Annual
Location: City and
County

Project ID: W716

Justification:

This project will increase efficiency and revenues by replacing meters that under-read or fail to read consumption properly as they are discovered.

City-Wide Priorities: Balanced Budget, Customer Service, and Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tucson Water Operating Funds	0.0	0.0	583.0	583.0	581.0	581.0	619.0	0.0	2,364.0	0.0	2,364.0
Total	0.0	0.0	583.0	583.0	581.0	581.0	619.0	0.0	2,364.0	0.0	2,364.0

Review Developer-Financed Potable Projects

Description:

Conduct plan reviews and construction inspection of developer financed water system infrastructure projects. Associated costs are recovered by fees paid by the developer. These systems are donated to Tucson Water upon completion.

Project ID: W109 Start Date: Annual End Date: Annual Location: City and County

Justification:

The review and inspection of developer-financed water system infrastructure projects ensure compliance with Tucson Water requirements.

City-Wide Priorities: Balanced Budget, Customer Service, and Economic Development.

			Adopted	Fiscal Year	Pr	ojected R	equiremer	nts				
						Year 2	Year 3	Year 4	Year 5			
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Operating Funds		0.0	0.0	1,107.0	1,107.0	1,104.0	1,104.0	1,177.0	1,240.0	5,732.0	4,750.0	10,482.0
Т	otal	0.0	0.0	1,107.0	1,107.0	1,104.0	1,104.0	1,177.0	1,240.0	5,732.0	4,750.0	10,482.0

Rita Road "F2" to "G2" Zone Booster Station

Description:

Construct a booster station of 1.5 mgd capacity. This project involves land acquisition, design, permitting, procurement and testing of pumps and associated equipment. Work includes, but is not limited to, pumps, motors, meters, valves, monitoring and controlling equipment, tank, control center rack, below and above ground pipe and other appurtenances.

Project ID: W200 Start Date: 7/17 End Date: 6/18 Location: County

Project ID: W146

Start Date: 7/17

End Date: 6/19

Location: County

Justification:

This booster station will provide renewable resources to meet water system demand in the Rita Ranch G-Zone area and to provide renewable water resources to wheel water to Vail.

City-Wide Priorities: Balanced Budget, Customer Service, and Economic Development.

		Adopte	d Fiscal Year	2016/17	Pı	ojected R	equiremer	nts			
	Prio	Carry	New	Year 1	Year 2 FY	Year 3 FY	Year 4 FY	Year 5 FY	Five Year	Future	Total
Source of Funds Summary	Year		Funding	Total			2019/20			Years	Project
Tucson Water Obligation Bonds		0.0	0.0	0.0	810.0	0.0	0.0	0.0	810.0	0.0	810.0
Tucson Water Operating Funds		0.0	0.0	0.0	236.0	0.0	0.0	0.0	236.0	0.0	236.0
To	tal	.0 0.0	0.0	0.0	1,046.0	0.0	0.0	0.0	1,046.0	0.0	1,046.0

River Road 12-Inch Main

Description:

Design and install 5,500 feet of 12-inch pipe on River Road between Craycroft and Avenida Del Cazador. This main will connect to three existing main segments on River Road in its distribution capacity.

Iustification:

This water main will serve as a redundancy C-Zone distribution main and as an emergency transmission main when the Columbus 54-inch main is out of service. In an emergency, this main will deliver C-zone well water to the Valley View Booster Station.

City-Wide Priorities: Customer Service, Health and Safety, and Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	Pr	ojected R	equiremer	nts				
Source of Funds Summary	Prior Years	Carry Forward	New Funding	Year 1 Total	Year 2 FY 2017/18	Year 3 FY 2018/19	Year 4 FY 2019/20	Year 5 FY 2020/21		Future Years	Total Project
Tucson Water Obligation Bonds	0.0	0.0	0.0	0.0	27.0	556.0	0.0	0.0	583.0	0.0	583.0
Tucson Water Operating Funds	0.0	0.0	0.0	0.0	8.0	141.0	0.0	0.0	149.0	0.0	149.0
Tota	0.0	0.0	0.0	0.0	35.0	697.0	0.0	0.0	732.0	0.0	732.0

Road Improvement Main Replacements

Description:

Relocate water mains during road improvement projects of the City of Tucson, Pima County, Arizona Department of Transportation and other agencies, including Regional Transportation Authority (RTA) projects. Intergovernmental agreements determine the City of Tucson cost allocation for each project.

Project ID: W111
Start Date: Annual
End Date: Annual
Location: City and
County

Project ID: W082

Start Date: 7/15

6/18

County

End Date:

Location:

Justification:

Replacing water mains during roadway projects allows Tucson Water to maintain system capacity while saving money on the cost of pavement removal and replacement.

City-Wide Priorities: Balanced Budget, Customer Service, Health and Safety, and Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	0.0	0.0	2,001.0	2,001.0	0.0	0.0	0.0	0.0	2,001.0	0.0	2,001.0
Tucson Water Operating Funds	0.0	0.0	2,662.0	2,662.0	4,653.0	5,226.0	4,336.0	5,834.0	22,711.0	17,500.0	40,211.0
Tota	0.0	0.0	4,663.0	4,663.0	4,653.0	5,226.0	4,336.0	5,834.0	24,712.0	17,500.0	42,212.0

SA-012A Recovery Well Drilling

Description:

Design and drill water recovery wells SA-012A. Project scope provides for the drilling and constructing stainless steel casing to prevent corrosion. Additional wells will allow the Southern Avra Valley Storage and Recovery Project (SAVSARP) well field to be operated more efficiently.

Justification: This will enable more complete utilization of the recharged CAP water allowing additional withdrawals as recharge capacity increases, as well as

This will enable more complete utilization of the recharged CAP water allowing additional withdrawals as recharge capacity increases, as well as reliability while other wells are down for maintenance.

City-Wide Priorities: Balanced Budget, Customer Service, and Maintenance and Renovation of Existing City Assets.

			Adopted	Pr	ojected R	equiremer	nts					
						Year 2	Year 3	Year 4	Year 5			
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds		923.0	100.0	0.0	100.0	0.0	0.0	0.0	0.0	100.0	0.0	1,023.0
Tucson Water Operating Funds		107.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.7
Т	otal	1,030.7	100.0	0.0	100.0	0.0	0.0	0.0	0.0	100.0	0.0	1,130.7

Sahuarita Supply Line Slip Liner

Description:

Design and install a high-density polyethylene pipe (HDPE) slip liner in the existing 30-inch and 36-inch CCP Sahuarita Supply Line from Lumber Street and Old Nogales Highway to Medina Road and Nogales Highway.

Project ID: W796 Start Date: 7/12 **End Date:** 6/20 Location: Ward 1

Project ID: W850

Start Date: 7/15

End Date: 6/18

Location:

Ward 4

Justification:

This project will increase the capacity available from the Santa Cruz Well Field from 12 mgd to 20 mgd.

City-Wide Priorities: Customer Service, Health and Safety, and Maintenance and Renovation of Existing City Assets.

		Adopted Fiscal Year 2016/17			Pı	ojected R	equiremer	nts			
	١.,.				Year 2	Year 3	Year 4	Year 5	T. T.	-	
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	109.9	0.0	0.0	0.0	66.0	1,049.0	4,859.0	0.0	5,974.0	0.0	6,083.9
Tucson Water Operating Funds	54.5	0.0	0.0	0.0	15.0	156.0	1,827.0	0.0	1,998.0	0.0	2,052.5
Tot	վ 164.4	0.0	0.0	0.0	81.0	1,205.0	6,686.0	0.0	7,972.0	0.0	8,136.4

San Paulo Village Main Replacement Phase I

Description:

Design and install 1,600 feet of 6-inch pipe in alleys bordered by Sylvane and 28th Street, Sonoita and Alamo Avenue.

Justification:

This area has been identified as having an above average amount of main break records from Tucson Water's Customer Service and Maintenance Divisions. Much of the pipe in this neighborhood was installed in the 1950s and 1960s and has reached the end of its useful life.

City-Wide Priorities: Customer Service, Health and Safety, and Maintenance and Renovation of Existing City Assets.

		Adopted	l Fiscal Year	Pr	ojected R	equiremer	nts				
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	30.0	50.0	21.0	71.0	127.0	0.0	0.0	0.0	198.0	0.0	228.0
Tucson Water Operating Funds	8.7	0.0	8.0	8.0	38.0	0.0	0.0	0.0	46.0	0.0	54.7
То	al 38.7	50.0	29.0	79.0	165.0	0.0	0.0	0.0	244.0	0.0	282.7

San Paulo Village Main Replacement Phase II

Description:

Design and install 6,200 feet of 6-inch pipe in Sahuara, 28th Street, 22nd Street, and Wilmot Road.

 Project ID:
 W041

 Start Date:
 7/16

 End Date:
 6/19

 Location:
 Ward 4

Project ID: W071

Start Date: 7/17

End Date: 6/19

Ward 4

Location:

Justification:

This area has been identified as having an above average amount of main break records from Tucson Water's Customer Service and Maintenance Divisions. Much of the pipe in the neighborhood was installed in the 1950s and 1960s and has reached the end of its useful life.

City-Wide Priorities: Customer Service, Health and Safety, and Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	0.0	0.0	46.0	46.0	92.0	1,056.0	0.0	0.0	1,194.0	0.0	1,194.0
Tucson Water Operating Funds	0.0	0.0	12.0	12.0	24.0	261.0	0.0	0.0	297.0	0.0	297.0
Tota	0.0	0.0	58.0	58.0	116.0	1,317.0	0.0	0.0	1,491.0	0.0	1,491.0

San Paulo Village Main Replacement Phase III

Description:

Design and install 4,800 feet of 6-inch pipe in alleys near Alamo, 25th Street, 22nd Street, and Wilmot Road.

Justification:

This area has been identified as having an above average amount of main break records from Tucson Water's Customer Service and Maintenance Divisions. Much of the pipe in the neighborhood was installed in the 1950s and 1960s and has reached the end of its useful life.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	0.0	0.0	23.0	23.0	45.0	388.0	0.0	0.0	456.0	0.0	456.0
Tucson Water Operating Funds	0.0	0.0	6.0	6.0	13.0	88.0	0.0	0.0	107.0	0.0	107.0
To	tal 0.0	0.0	29.0	29.0	58.0	476.0	0.0	0.0	563.0	0.0	563.0

Santa Cruz SC-008 Well Collector Line

Description:

Design and install 3,500 feet of 12-inch HDPE collector line from existing Well SC-008 to existing 30-inch transmission main.

 Project ID:
 W039

 Start Date:
 7/13

 End Date:
 6/18

 Location:
 County

Justification:

This will increase flow from the Santa Cruz Well Field from 10 mgd to 20 mgd.

City-Wide Priorities: Customer Service, Health and Safety, and Maintenance and Renovation of Existing City Assets.

			Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
						Year 2	Year 3	Year 4	Year 5			
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds		96.3	0.0	0.0	0.0	182.0	0.0	0.0	0.0	182.0	0.0	278.3
Tucson Water Operating Funds		24.4	0.0	0.0	0.0	50.0	0.0	0.0	0.0	50.0	0.0	74.4
	Total	120.7	0.0	0.0	0.0	232.0	0.0	0.0	0.0	232.0	0.0	352.7

Santa Cruz Transmission Main Replacement Phase II

Description:

Install approximately 1,400 feet of 36-inch main -S. Nogales Highway, east to Park Avenue to the Martin Reservoir. The main will be in B1 water service area and in the City of Tucson right-of-way.

Project ID: W154 Start Date: 7/15 End Date: 6/19 Location: Ward 5

Justification:

This new main will convey flow from the Phase I replaced 36-inch main. Tucson Water's objective is to increase capacity of the Santa Cruz Well Field water delivered to the Martin Reservoir to 20 mgd.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	3.0	0.0	0.0	0.0	3.0	79.0	0.0	0.0	82.0	0.0	85.0
Tucson Water Operating Funds	2.5	0.0	0.0	0.0	3.0	20.0	0.0	0.0	23.0	0.0	25.5
Tota	1 5.5	0.0	0.0	0.0	6.0	99.0	0.0	0.0	105.0	0.0	110.5

Santa Cruz Well SC-001/04/14 Equipping

Description:

Equip production wells SC-001/SC-004/SC-014. Wells will be 16" diameter stainless steel louvered screen and blank casing construction. Total depth will be between 500 and 600 feet.

Project ID: W189 Start Date: 7/20 End Date: 6/22 Location: County

Justification:

These wells will be equipped to pump approximately 1,000 gpm each and will assist the Utility's goal of reaching 20 mgd of production capacity from the Santa Cruz Wellfield.

City-Wide Priorities: Customer Service and Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	145.0	145.0	1,200.0	1,345.0
Tucson Water Operating Funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.0	51.0	0.0	51.0
Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	196.0	196.0	1,200.0	1,396.0

Santa Cruz Wellfield Chemical Feed/Monitoring Facility

Description:

This project consists of a land acquisition and design and construction of a Chemical Feed and Water Quality Monitoring Facility to provide pH adjustment, disinfection, and water quality monitoring through SCADA.

 Project ID:
 W759

 Start Date:
 7/09

 End Date:
 6/19

 Location:
 City and County

Justification:

This facility will ensure that pH adjustment, disinfection, and water quality monitoring will be performed in an integrated way in providing water to approximately 50,000 customers.

City-Wide Priorities: Maintenance and Renovation of Existing City Assets.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	1,850.6	0.0	388.0	388.0	145.0	2,378.0	0.0	0.0	2,911.0	0.0	4,761.6
Tucson Water Operating Funds	274.7	0.0	78.0	78.0	29.0	410.0	0.0	0.0	517.0	0.0	791.7
Total	2,125.3	0.0	466.0	466.0	174.0	2,788.0	0.0	0.0	3,428.0	0.0	5,553.3

Santa Cruz Wellfield Facility Pipeline

Description:

Design and construct two 155 foot long 30 and 36-inch header pipelines with butterfly valves (BFV).

Start Date: 7/14 End Date: 6/19 Location: Ward 1

Project ID: W089

Project ID: W857

Start Date: 7/13

End Date: 6/18

County

Location:

Justification:

This will connect the proposed Santa Cruz Well Field Treatment Facility to the existing transmission main and proposed sliplined transmission main piplines that convey water from the Santa Cruz Wellfield to the Martin Reservoir and the water distribution system.

City-Wide Priorities: Customer Service, Health and Safety, and Maintenance and Renovation of Existing City Assets.

			Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremen	nts			
	Pri	or	Carry	New	Year 1	Year 2 FY	Year 3 FY	Year 4 FY	Year 5 FY	Five Year	Future	Total
Source of Funds Summary	Yea		Forward	Funding	Total		2018/19	2019/20			Years	Project
Tucson Water Obligation Bonds		68.6	0.0	0.0	0.0	36.0	512.0	0.0	0.0	548.0	0.0	616.6
Tucson Water Operating Funds		13.6	0.0	0.0	0.0	10.0	127.0	0.0	0.0	137.0	0.0	150.6
To	tal	82.2	0.0	0.0	0.0	46.0	639.0	0.0	0.0	685.0	0.0	767.2

Santa Cruz Wells Re-Equipping

Description:

Design and construct well equipping of four existing production wells in the Santa Cruz Wellfield. Due to the higher groundwater elevations, this well field provides the most cost-effective access to our renewable water resource.

Justification:

By returning these wells to service, the production of this well field can be increased to approximately 15 mgd.

City-Wide Priorities: Balanced Budget, Customer Service, and Maintenance and Renovation of Existing City Assets.

			Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremen	nts			
						Year 2	Year 3	Year 4	Year 5			
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds		647.1	100.0	0.0	100.0	556.0	0.0	0.0	0.0	656.0	0.0	1,303.1
Tucson Water Operating Funds		101.5	0.0	0.0	0.0	153.0	0.0	0.0	0.0	153.0	0.0	254.5
	Total	748.6	100.0	0.0	100.0	709.0	0.0	0.0	0.0	809.0	0.0	1,557.6

Santa Rita Ranch/Houghton Road 12" Main

Description:

Design and install approximately 3,800 feet of 12-inch pipe on Houghton Road between Tallahassee Road and Forrest Freezor Street with a connection to the existing 8-inch pipeline at Vista Monte Drive.

Project ID: W768 Start Date: 7/10 End Date: 6/17 Location: County

Justification:

The new pipeline will connect two existing 12-inch mains providing increased reliability between the South Houghton Booster Station, the Santa Rita Booster Station and the Sycamore Canyon Reservoir.

City-Wide Priorities: Customer Service, Health and Safety, and Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	740.8	200.0	0.0	200.0	0.0	0.0	0.0	0.0	200.0	0.0	940.8
Tucson Water Operating Funds	139.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	139.7
Tota	1 880.5	200.0	0.0	200.0	0.0	0.0	0.0	0.0	200.0	0.0	1,080.5

SAVSARP Collector Lines Phase II

Description:

Design and install approximately 3,710 feet of 16-inch pipe and 2,000 feet of 36-inch pipe including appurtenances.

Start Date: 7/12 End Date: 6/17 Location: County

Project ID: W781

Justification:

This will provide collector lines to convey water from wells SA-003A, SA-010A, SA-017A, SA-018A, SA-020A, to the SAVSARP reservoir. This schedule will match the drilling and equipping schedule of the SAVSARP recovery wells.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	497.6	600.0	546.0	1,146.0	0.0	0.0	0.0	0.0	1,146.0	0.0	1,643.6
Tucson Water Operating Funds	114.9	0.0	153.0	153.0	0.0	0.0	0.0	0.0	153.0	0.0	267.9
Tota	612.5	600.0	699.0	1,299.0	0.0	0.0	0.0	0.0	1,299.0	0.0	1,911.5

SAVSARP Raw Water Rcvrd Cathodic Protection

Description:

Design and construct the CP to the CAVSARP and SAVSARP pipelines.

Start Date: 7/13 **End Date:** 6/17 Location: County

Project ID: W046

Project ID: W167

Start Date: 7/19

Justification:

Applied cathodic protection will increase the original life span. Failure to apply CP to the pipeline will allow corrosion and over time will degrade and raise the risk of potential pipeline water leaks and possible failures.

City-Wide Priorities: Balanced Budget and Maintenance and Renovation of Existing City Assets.

		Adopted	l Fiscal Year	Pr	ojected R	equiremer	nts				
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	301.3	150.0	0.0	150.0	0.0	0.0	0.0	0.0	150.0	0.0	451.3
Tucson Water Operating Funds	175.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	175.0
То	al 476.3	150.0	0.0	150.0	0.0	0.0	0.0	0.0	150.0	0.0	626.3

SC Well Replacement SC-001, SC-004, SC-014

Description:

Drilling for the replacement of inactive wells SC-001, SC-004 and SC-014.

End Date: 6/21 Location: County **Justification:**

These replacement wells will add to the collective production capacity necessary to meet the utility's goal of 20 mgd from the Santa Cruz Wellfield. Additionally, these wells will help resolve water quality issues in the Santa Cruz Wellfield.

		Adopted	Adopted Fiscal Year 2016/17				equireme	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	0.0	0.0	0.0	0.0	0.0	0.0	143.0	1,113.0	1,256.0	0.0	1,256.0
Tucson Water Operating Funds	0.0	0.0	0.0	0.0	0.0	0.0	43.0	453.0	496.0	0.0	496.0
Tota	0.0	0.0	0.0	0.0	0.0	0.0	186.0	1,566.0	1,752.0	0.0	1,752.0

SC-001 and SC-004 Well Transmission Lines

Description:

Install 2,400 feet of 12-inch and 200 feet of 16-inch PVC collector line, connecting to the 30-inch existing main.

Start Date: 7/17 End Date: 7/19 Location: Ward 5

Project ID: W183

Justification:

This collector line will allow wells SC-001 and SC-004 to convey water into the Tucson Water system.

City-Wide Priorities: Customer Service, Health and Safety, and Maintenance and Renovation of Existing City Assets.

			Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
						Year 2	Year 3	Year 4	Year 5			
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds		0.0	0.0	0.0	0.0	45.0	194.0	0.0	0.0	239.0	0.0	239.0
Tucson Water Operating Funds		0.0	0.0	0.0	0.0	13.0	50.0	0.0	0.0	63.0	0.0	63.0
Т	'otal	0.0	0.0	0.0	0.0	58.0	244.0	0.0	0.0	302.0	0.0	302.0

SC-005 Well Transmission Line

Description:

Install 140 feet of 12-inch PVC collector line, connecting to the 24-inch existing main and leaving a 12-inch T&S for future connection to the parallel main.

Project ID: W184 Start Date: 7/15 End Date: 7/18 Location: County

Justification:

This collector line will allow well SC-005 to convey water into the Tucson Water system.

			Adopted	Adopted Fiscal Year 2016/17			ojected R	equiremer	nts			
						Year 2	Year 3	Year 4	Year 5			
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds		44.0	0.0	0.0	0.0	91.0	0.0	0.0	0.0	91.0	0.0	135.0
Tucson Water Operating Funds		10.7	0.0	0.0	0.0	25.0	0.0	0.0	0.0	25.0	0.0	35.7
	Total	54.7	0.0	0.0	0.0	116.0	0.0	0.0	0.0	116.0	0.0	170.7

SC-013 Well Transmission Line

Description:

Install 140 feet of 12-inch PVC transmission lateral, connecting to the 24-inch existing main.

Start Date: 7/15 End Date: 6/18 Location: County

Project ID: W185

Justification:

This transmission lateral will allow well SC-013 to convey water into the Tucson Water system.

City-Wide Priorities: Customer Service, Health and Safety, and Maintenance and Renovation of Existing City Assets.

			Adopted	Adopted Fiscal Year 2016/17				equiremer	nts			
						Year 2	Year 3	Year 4	Year 5		_	
Commence of Francis and Commence		Prior	Carry	New	Year 1	FY (40	FY 2010 /10	FY 2010 /20	FY 2020 (24	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds		44.0	0.0	0.0	0.0	82.0	0.0	0.0	0.0	82.0	0.0	126.0
Tucson Water Operating Funds		10.7	0.0	0.0	0.0	23.0	0.0	0.0	0.0	23.0	0.0	33.7
	Total	54.7	0.0	0.0	0.0	105.0	0.0	0.0	0.0	105.0	0.0	159.7

SCADA Potable Upgrades

Description:

The SCADA communication infrastructure has become obsolete and needs to be updated. This project will provide for the installation of field instrumentation, controllers, and communications equipment necessary to communicate water system flows, levels, and pressures to system operators.

Project ID: W782 Start Date: 7/12 End Date: 6/26 Location: City and County

Justification:

The existing Master Station hardware and software will be replaced with improved technology. The budget includes construction of a new control center in an existing Tucson Water facility which will allow control operations of the water system from a central location.

		Adopted	Adopted Fiscal Year 2016/17			ojected R	equiremer	nts			
	Prior	Carry	New	Year 1	Year 2 FY	Year 3 FY	Year 4 FY	Year 5 FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total		2018/19		2020/21		Years	Project
Tucson Water Obligation Bonds	6,172.9	1,000.0	3,336.0	4,336.0	1,801.7	2,000.0	0.0	0.0	8,137.7	12,505.0	26,815.6
Tucson Water Operating Funds	697.7	0.0	668.0	668.0	961.3	723.0	2,909.0	2,610.0	7,871.3	0.0	8,569.0
То	al 6,870.6	1,000.0	4,004.0	5,004.0	2,763.0	2,723.0	2,909.0	2,610.0	16,009.0	12,505.0	35,384.6

SCADA Reclaimed

Description:

The SCADA communication infrastructure has become obsolete and needs to be upgraded. This project will provide for the installation of field instrumentation, controllers, and communications equipment necessary to communicate reclaimed water system flows, levels, and pressures to the system operators. The existing Master Station hardware and software will be replaced with improved technology.

 Project ID:
 W783

 Start Date:
 7/12

 End Date:
 6/20

 Location:
 City and County

Project ID: W159

Start Date: 7/15

6/17

City and County

End Date:

Location:

Justification:

This project will allow the utility to control operations of the reclaimed water system from a central location, thereby ensuring operational efficiency.

City-Wide Priorities: Balanced Budget, Customer Service, and Maintenance and Renovation of Existing City Assets.

		Adopted	Adopted Fiscal Year 2016/17				equiremen	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	1,113.5	200.0	106.0	306.0	190.0	106.0	198.0	0.0	800.0	0.0	1,913.5
Tucson Water Operating Funds	133.5	0.0	35.0	35.0	60.0	35.0	68.0	0.0	198.0	0.0	331.5
То	al 1,247.0	200.0	141.0	341.0	250.0	141.0	266.0	0.0	998.0	0.0	2,245.0

Silverbell/Orange Grove 12" PRV

Description:

Construct a 12-inch A-Z PRV at the current Silverbell/Orange Grove site to replace the two 8-inch PRVs at this location.

Justification:

Both 8-inch PRVs have reliability and maintenance issues and one is located in a vault. The supply main and the discharge main will be 16-inches.

City-Wide Priorities: Maintenance and Renovation of Existing City Assets.

			Adopted	Adopted Fiscal Year 2016/17				equiremer	nts			
						Year 2	Year 3	Year 4	Year 5			
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds		0.0	130.0	0.0	130.0	0.0	0.0	0.0	0.0	130.0	0.0	130.0
Tucson Water Operating Funds		34.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.2
	Total	34.2	130.0	0.0	130.0	0.0	0.0	0.0	0.0	130.0	0.0	164.2

Source Meter Replacement

Description:

Install new magnetic meters at the wellheads to improve the accounting of how much potable water is produced.

Project ID: W715
Start Date: Annual
End Date: Annual
Location: Citywide

Justification:

This project will assist in determining the amount of real losses versus apparent losses of water, and improve compliance with water loss regulations.

City-Wide Priorities: Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	16/17 Projected R			nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tucson Water Operating Funds	0.0	0.0	254.0	254.0	256.0	256.0	273.0	287.0	1,326.0	1,100.0	2,426.0
Total	0.0	0.0	254.0	254.0	256.0	256.0	273.0	287.0	1,326.0	1,100.0	2,426.0

Southeast Houghton Area Recharge Project (SHARP)

Description:

Tucson Water and Pima County are engaged in a jointly funded reclaimed water recharge project in the southeast Houghton Road area.

Justification:

The project is planned to provide the capability to recharge reclaimed water that would ordinarily be discharged into the Santa Cruz River, resulting in beneficial use of this water within the metropolitan area.

Project ID:	W797
Start Date:	7/10
End Date:	6/19
Location:	City and
	County

		Adopted	Pr	ojected R	equiremer	nts					
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	1,201.7	0.0	0.0	0.0	0.0	6,357.0	0.0	0.0	6,357.0	0.0	7,558.7
Tucson Water Operating Funds	198.3	0.0	0.0	0.0	0.0	1,020.0	0.0	0.0	1,020.0	0.0	1,218.3
Total	1,400.0	0.0	0.0	0.0	0.0	7,377.0	0.0	0.0	7,377.0	0.0	8,777.0

System Enhancements: Reclaimed

Description:

Design and construct reclaimed water mains during city, county, state, and other agency road improvement projects, including RTA funded projects. Intergovernmental agreements determine the City of Tucson cost allocated for each project.

Project ID: W645
Start Date: Annual
End Date: Annual
Location: City and
County

Project ID: W040

Start Date: 7/16

End Date: 6/18

County

Location:

Justification:

This project will increase system capacity while reducing the cost of pavement removal and replacement by coordinating construction with the roadway projects.

City-Wide Priorities: Balanced Budget, Customer Service, Health and Safety, and Maintenance and Renovation of Existing City Assets.

			Adopted Fiscal Year 2016/17			Projected Requirements						
						Year 2	Year 3	Year 4	Year 5			
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tucson Water Operating Funds		0.0	0.0	291.0	291.0	291.0	290.0	310.0	326.0	1,508.0	1,250.0	2,758.0
	Total	0.0	0.0	291.0	291.0	291.0	290.0	310.0	326.0	1,508.0	1,250.0	2,758.0

Tanque Verde to Wentworth 8-Inch Main

Description:

Design and install 2,900 feet of 8-inch pipe in Redington Road from Wentworth to Camino La Cebadilla connecting to the existing 8-inch mains.

Justification: This main will improve water distribution and fire flow capacity in the E1 and G8 water service areas.

City-Wide Priorities: Customer Service, Health and Safety and Maintenance and Renovation of Existing City Assets.

Adopted Fiscal Year 2016/17 **Projected Requirements** Year 2 Year 3 Year 4 Year 5 Five Year Prior Carry New Year 1 FY FY FY FY Future Total Funding 2018/19 2019/20 2020/21 Project Source of Funds Summary Years Forward Total 2017/18 Total Years Tucson Water Obligation Bonds 0.0 0.0 24.0 24.0 204.0 0.0 0.0 0.0 228.0 0.0 228.0 Tucson Water Operating Funds 0.0 0.0 4.0 4.0 56.0 0.0 0.0 0.0 60.0 0.0 60.0 Total 0.0 0.0 288.0 0.0 0.0 28.0 28.0 260.0 0.0 0.0 288.0

TARP R-009A Well

Description:

Design and construct a replacement well at R-009A. The Tucson Airport Remediation Project (TARP) remediation system is operated by Tucson Water in accordance with the 1991 Consent Decree with the United States Environmental Protection Agency (USEPA) to contain and treat groundwater contaminated with trichlorethylene (TCE).

Project ID: W090 Start Date: 7/14 End Date: 6/17 Location: Citywide

Project ID: W072

Start Date: 6/17

End Date: 6/18

Ward 4

Location:

Justification:

This replacement well is required to ensure future capture of the TCE plume at the TARP facility.

City-Wide Priorities: Customer Service, Health and Safety, and Maintenance and Renovation of Existing City Assets.

		Adopted	Projected Requirements								
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	1,292.4	500.0	0.0	500.0	0.0	0.0	0.0	0.0	500.0	0.0	1,792.4
Tucson Water Operating Funds	108.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	108.0
Tota	1,400.4	500.0	0.0	500.0	0.0	0.0	0.0	0.0	500.0	0.0	1,900.4

Tierra Del Sol Main Replacement Phase I

Description:

Design and install 5,000 feet of 8-inch pipe and 4,130 feet of 6-inch pipe in Alamo Road, Calle Bellatrix, 22nd Street, and Fordham Road.

Justification:

This area has been identified as having an above average amount of main break records from Tucson Water's Customer Service and Maintenance Divisions. Much of the pipe in the neighborhood was installed in the 1950s and 1960s and has reached the end of its useful life.

		Adopted	Fiscal Year	Pr	ojected R	equiremer	nts				
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	0.0	0.0	51.0	51.0	383.0	0.0	0.0	0.0	434.0	0.0	434.0
Tucson Water Operating Funds	0.0	0.0	14.0	14.0	105.0	0.0	0.0	0.0	119.0	0.0	119.0
Total	0.0	0.0	65.0	65.0	488.0	0.0	0.0	0.0	553.0	0.0	553.0

Tierra Del Sol Main Replacement Phase II

Description:

Design and install 3,177 feet of 8-inch pipe and 3,832 feet of 6-inch pipe in Calle Bellatrix, Avenida Regulo, Avenida Planeta, and Calle Marte.

 Project ID:
 W147

 Start Date:
 7/18

 End Date:
 6/20

 Location:
 Ward 4

Project ID: W148

Start Date: 7/18

End Date: 6/20

Location:

Ward 4

Justification:

This area has been identified as having an above average amount of main break records from Tucson Water's Customer Service and Maintenance Divisions. Much of the pipe in the neighborhood was installed in the 1950s and 1960s and has reached the end of its useful life.

City-Wide Priorities: Customer Service, Health and Safety, and Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	0.0	0.0	0.0	0.0	0.0	46.0	396.0	0.0	442.0	0.0	442.0
Tucson Water Operating Funds	0.0	0.0	0.0	0.0	0.0	12.0	124.0	0.0	136.0	0.0	136.0
Tot	մ 0.0	0.0	0.0	0.0	0.0	58.0	520.0	0.0	578.0	0.0	578.0

Tierra Del Sol Main Replacement Phase III

Description:

Design and install 1,682 feet of 8-inch pipe and 10,000 feet of 6-inch pipe in Calle Betelguex, Calle Canis, Avenida Planeta, and Kolb Road.

Justification:

This area has been identified as having an above average amount of main break records from Tucson Water's Customer Service and Maintenance Divisions. Much of the pipe in the neighborhood was installed in the 1950s and 1960s and has reached the end of its useful life.

			Adopted	Fiscal Year	2016/17	Pı	ojected R	equiremen	nts			
						Year 2	Year 3	Year 4	Year 5			
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds		0.0	0.0	0.0	0.0	0.0	46.0	586.0	0.0	632.0	0.0	632.0
Tucson Water Operating Funds		0.0	0.0	0.0	0.0	0.0	12.0	182.0	0.0	194.0	0.0	194.0
,	Total	0.0	0.0	0.0	0.0	0.0	58.0	768.0	0.0	826.0	0.0	826.0

Tierra Del Sol Main Replacement Phase IV

Description:

Design and install 3,742 feet of 8-inch pipe and 1,200 feet of 6-inch pipe in Calle Marte, Calle Denebola, Avenida Planeta, and Kolb Road.

 Start Date:
 7/18

 End Date:
 6/20

 Location:
 Ward 4

Project ID: W149

Justification:

This area has been identified as having an above average amount of main break records from Tucson Water's Customer Service and Maintenance Divisions. Much of the pipe in the neighborhood was installed in the 1950s and 1960s and has reached the end of its useful life.

City-Wide Priorities: Customer Service, Health and Safety, and Maintenance and Renovation of Existing City Assets.

			Adopted	Fiscal Year	2016/17	Projected Requirements						
		Prior	Carry	New	Year 1	Year 2 FY	Year 3 FY	Year 4 FY	Year 5 FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total			2019/20			Years	Project
Tucson Water Obligation Bonds		0.0	0.0	0.0	0.0	0.0	47.0	515.0	0.0	562.0	0.0	562.0
Tucson Water Operating Funds		0.0	0.0	0.0	0.0	0.0	11.0	98.0	0.0	109.0	0.0	109.0
Т	otal	0.0	0.0	0.0	0.0	0.0	58.0	613.0	0.0	671.0	0.0	671.0

Trails End Reservoir Rehabilitation

Description:

Design and construct improvements as developed through the condition assessment to bring this reservoir up to current standards.

End Date: 6/21 dards. Location: County

Project ID: W050

Start Date: 7/16

Justification:

This project must be completed to continue to provide long-term reliability and prevent water loss.

City-Wide Priorities: Balanced Budget and Maintenance and Renovation of Existing City Assets.

												,
			Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
						Year 2	Year 3	Year 4	Year 5			
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds		0.0	0.0	0.0	0.0	5.0	6.0	141.0	818.0	970.0	0.0	970.0
Tucson Water Operating Funds		0.0	0.0	0.0	0.0	7.0	6.0	45.0	226.0	284.0	0.0	284.0
Т	otal	0.0	0.0	0.0	0.0	12.0	12.0	186.0	1,044.0	1,254.0	0.0	1,254.0

Valve Access Vault

Description:

Design and construct vaults over BFV actuators to allow safe access for BFV actuator repair, refurbishment or replacement. The project will install up to five vaults per year prioritizing the largest and most critical BFV actuators.

Project ID: W060 Start Date: Annual End Date: Annual Location: City and County

Justification:

Installing vaults to grade will eliminate the need to excavate roadways, reduce overall maintenance costs, and improve safety.

City-Wide Priorities: Balanced Budget, Health and Safety, and Maintenance and Renovation of Existing City Assets.

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
Source of Funds Summary	Prior Years	Carry Forward	New Funding	Year 1 Total	Year 2 FY 2017/18	Year 3 FY 2018/19	Year 4 FY 2019/20	Year 5 FY 2020/21	Five Year Total	Future Years	Total Project
Tucson Water Obligation Bonds	0.0	0.0	500.0	500.0	500.0	510.0	50.0	50.0	1,610.0	0.0	1,610.0
Tucson Water Operating Funds	0.0	0.0	83.0	83.0	81.0	71.0	569.0	602.0	1,406.0	0.0	1,406.0
Tota	0.0	0.0	583.0	583.0	581.0	581.0	619.0	652.0	3,016.0	0.0	3,016.0

Water Services

Description:

Install new metered potable water services upon customer request and payment of connection fees. These services include minor main connections, extensions, and meters to new services.

Project ID: W114 Start Date: Annual End Date: Annual Location: City and County

Justification:

This project is required to provide for the installation of new metered services to customers upon request.

City-Wide Priorities: Balanced Budget, Customer Service, Economic Development, and Maintenance and Renovation of Existing City Assets.

		Adopted Fiscal Year 2016/17 Projected Requirements										
			Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
						Year 2	Year 3	Year 4	Year 5			
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Operating Funds		0.0	0.0	1,760.0	1,760.0	1,755.0	1,754.0	1,871.0	1,970.0	9,110.0	7,550.0	16,660.0
	Total	0.0	0.0	1,760.0	1,760.0	1,755.0	1,754.0	1,871.0	1,970.0	9,110.0	7,550.0	16,660.0

Wellfield Upgrades

Description:

Upgrade pumps and motors at production wells.

Justification:

To maximize efficiency and production capacity, and minimize repair and maintenance costs.

City-Wide Priorities: Balanced Budget and Customer Service.

W077
Annual
Annual
City and
County

Project ID: W074

Start Date: 7/14

End Date: 6/17

Location: County

		Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
					Year 2	Year 3	Year 4	Year 5			
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tucson Water Operating Funds	0.0	0.0	583.0	583.0	581.0	581.0	619.0	652.0	3,016.0	2,500.0	5,516.0
Total	0.0	0.0	583.0	583.0	581.0	581.0	619.0	652.0	3,016.0	2,500.0	5,516.0

Well W-006 Transmission Main

Description:

Design and construct approximately 800 feet of 8-inch main from Booster W-001 to Insun Street along Luckett Road. The new main will tie into the existing 8-inch main.

Justification:

This will solve a local water delivery problem.

			Adopted	Fiscal Year	2016/17	Pr	ojected R	equiremer	nts			
						Year 2	Year 3	Year 4	Year 5			
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds		31.3	0.0	251.0	251.0	0.0	0.0	0.0	0.0	251.0	0.0	282.3
Tucson Water Operating Funds		11.6	0.0	69.0	69.0	0.0	0.0	0.0	0.0	69.0	0.0	80.6
Т	otal	42.9	0.0	320.0	320.0	0.0	0.0	0.0	0.0	320.0	0.0	362.9

Wilmot Main Replacement

Description:

Design and install approximately 4,700 feet of 12-inch pipe in Wilmot, 22nd Street to Golf Links Road. This project will replace 14 existing fire hydrants.

Project ID: W861 Start Date: 7/14 End Date: 6/17 Location: Ward 4

Justification:

This area has been identified as having an above average amount of main break records from Tucson Water's Customer Service and Maintenance Divisions. Much of the pipe in this neighborhood was installed in the 1950s and 1960s and has reached the end of its useful life.

			Adopted Fiscal Year 2016/17				Projected Requirements					
			P ***			Year 2	Year 3	Year 4	Year 5			
		Prior	Carry	New	Year 1	FY	FY	FY	FY	Five Year	Future	Total
Source of Funds Summary		Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
Tucson Water Obligation Bonds		254.0	820.0	0.0	820.0	0.0	0.0	0.0	0.0	820.0	0.0	1,074.0
Tucson Water Operating Funds		56.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.5
	Total	310.5	820.0	0.0	820.0	0.0	0.0	0.0	0.0	820.0	0.0	1,130.5



General Government



Capital Improvement Program Department Statement

FY 2016/17 through FY 2020/21

Department: General Government – General Expense **Five-Year Total:** \$750,000

The General Expense five-year CIP of \$750,000 has two projects in Fiscal Year 2016/17:

- The Technology Upgrade Project will enhance the City's multiple enterprise related systems to a current standard supported by the vendor.
- The Kronos Citywide System Project will implement an Enterprise Timekeeping management system to automate time keeping for all City departments.

General Government: General Expense

(\$000)

Kronos Citywide System

Description:

Implement an Enterprise Timekeeping management system (Kronos) to automate time keeping for all City departments with the goal of significantly reducing manual processes, increasing efficiencies, and assuring better accuracy of payroll data.

Project ID: N117 Start Date: 7/14 End Date: 6/17 Location: Citywide

Justification:

The City's timekeeping and payroll processes are manual and subject to error. This puts the City at risk for non compliance from state and federal Department of Labor policies. Implementing Kronos will enable the City to better manage these risks.

City-Wide Priorities: Balanced Budget.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5	Five		
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
General Fund	1,209.1	0.0	250.0	250.0	0.0	0.0	0.0	0.0	250.0	0.0	1,459.1
Total	1,209.1	0.0	250.0	250.0	0.0	0.0	0.0	0.0	250.0	0.0	1,459.1

Technology Upgrade

Description:

Upgrade the City's multiple enterprise related business computer system (Enterprise Resource Planning (ERP) system) to a current standard to be supported by a single vendor that will provide system administrative functions.

Project ID: N118 Start Date: 7/15 End Date: 6/17 Location: Citywide

Justification:

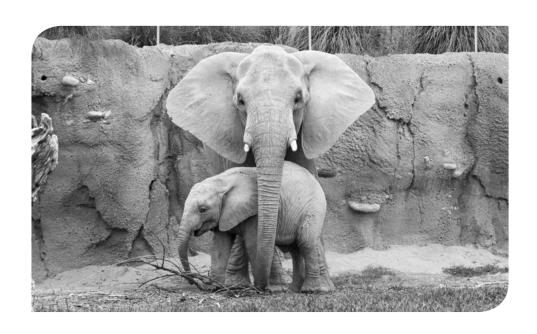
The ERP vendor's contract dictates the City must stay on with two versions of their current release in order to be supported.

City-Wide Priorities: Balanced Budget and Customer Service.

		Adopted	l Fiscal Year	2016/17	Pr	ojected R	equireme	nts			
					Year 2	Year 3	Year 4	Year 5	Five		
	Prior	Carry	New	Year 1	FY	FY	FY	FY	Year	Future	Total
Source of Funds Summary	Years	Forward	Funding	Total	2017/18	2018/19	2019/20	2020/21	Total	Years	Project
General Fund	500.0	0.0	500.0	500.0	0.0	0.0	0.0	0.0	500.0	0.0	1,000.0
Tota	1 500.0	0.0	500.0	500.0	0.0	0.0	0.0	0.0	500.0	0.0	1,000.0



Acronyms



ACRONYMS and INITIALISMS

ADA AFG ASSISTANCE TO Firefighters Grant ASR AVL AVL Automatic Vehicle Locator BFV Butterfly Valves	oject
ASR Aquifer Storage and Recovery AVL Automatic Vehicle Locator	iject
ASR Aquifer Storage and Recovery AVL Automatic Vehicle Locator	iject
AVL Automatic Vehicle Locator	oject
	oject
BFV Butterfly Valves	vject
	oject
CAP Central Arizona Project	oject
CAVSARP Central Avra Valley Storage and Recovery Pro	,
CCP Concrete Cylinder Pipe	
CDBG Community Development Block Grant	
CIP Capital Improvement Plan	
CNG Compressed Natural Gas	
COPs Certificates of Participation	
CP Cathodic Protection	
Cathodic Flotection	
DIP Ductile Iron Pipe	
DVR Digital Video Recorder	
Digital video Recolder	
ERP Enterprise Resource Program	
FHWA Federal Highway Association	
FTA Federal Transit Administration	
1 111 Todala Hallott Hallington	
GIS Geographic Information Systems	
GPM Gallons Per Minute	
HDPE High-Density Polyethylene Pipe	
HURF Highway User Revenue Fund	
U ,	
LED Light Emitting Diode	
MGD Million Gallons per Day	
MOV Motor Operated Valve	
MUP Multi-Use Path	
NEC National Electrical Code	
NFPA National Fire Protection Association	
O&M Operating and Maintenance	
OSHA Occupational Safety and Health Administration	n
PAG Pima Association of Governments	
PRV Pressure Reducing Valve	
RTA Regional Transportation Authority	
RTDN Regional Transportation Data Network	
SAVSARP Southern Avra Valley Storage and Recovery F	roject
SC Security Certified	

ACRONYMS and INITIALISMS

Acronym/Initialisms	Definitions
SCADA SHARP	Supervisory Control and Data Acquisition Southeast Houghton Area Recharge Project
TARP TCE TIP TOPSC	Tucson Airport Remediation Project Trichlorethylene Transportation Improvement Program Thomas O. Price Service Center
USEPA	United States Environmental Protection Agency
WC	Water Column



















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