

## COUNCIL MINUTES

April 5, 2018

The City Council of the City of Mesa met in a Study Session in the lower level meeting room of the Council Chambers, 57 East 1st Street, on April 5, 2018 at 7:30 a.m.

### COUNCIL PRESENT

John Giles  
David Luna  
Mark Freeman  
Christopher Glover  
Francisco Heredia  
Kevin Thompson  
Jeremy Whittaker

### COUNCIL ABSENT

None

### OFFICERS PRESENT

Christopher Brady  
Agnes Goodwine  
Jim Smith

1-a. Hear a presentation, discuss, and provide direction on the FY 2019-2023 Capital Improvement Program with a focus on utilities.

City Engineer Beth Huning and Budget Coordinator Scott Butler displayed a PowerPoint presentation. **(See Attachment 1)** Mr. Butler provided background information on the Capital Improvement Program and explained how projects are identified.

Ms. Huning acknowledged the water projects completed through the 2014 bond election. She pointed out the largest category of funding is customer demand in Southeast Mesa and that is due to the addition of the Signal Butte Water Treatment Plant (SBWTP). (See Pages 10 and 11 of Attachment 1)

Ms. Huning explained that major facilities are built in advance of the need in the community and water plants take years to develop and complete.

Ms. Huning presented maps identifying the electric projects and natural gas projects. She noted the City's electric service area is 5 ½ square miles and the gas service area is 90 square miles. She added the gas service area represents 42,000 customers. (See Page 18 and Page 20 of Attachment 1)

In response to a question posed by Councilmember Thompson, Water Resources Department Director Jake West advised gas lines are placed either a foot above or a foot off to the side of the waterlines.

In response to a question posed by Councilmember Thompson, Mr. West advised funds were set aside to transition certain neighborhoods from septic to sewer. He pointed out homes in Lyn Rae Square and Palm Lane / Val Vista Roads are now connected to the City system. He added some

of the remaining funds are being utilized to install sewer in East Mesa where water and gas lines are being replaced.

In response to a question posed by Councilmember Whittaker, Ms. Huning advised the Utilities Department follows an asset management program, which includes monitoring the infrastructure and aging of the pipes. She stated this information helps staff to determine the next projects and which pipes need to be replaced.

Mr. Brady clarified that staff will determine the funds needed for future projects before the next bond election. He added the funding is only identified every five years.

Mr. Butler pointed out the need for a plant in East Mesa, which was first documented in 2001, and as the Water Resource Department looked at demand and service requirements in that area, it was decided in 2014 that the plant needed to be built.

Ms. Huning commented that water and wastewater have utility master plans that include maps that identify the locations that need future pipelines, transmission mains and treatment facilities.

In response to a question posed by Mayor Giles, Mr. Brady advised the 2014 bond election included expanding the Greenfield Wastewater Treatment Plant and constructing the SBWTP. He added any additional funding needed for expansions at either plant would be requested through a subsequent bond election.

Mayor Giles thanked staff for the presentation.

1-b. Hear a presentation, discuss, and provide direction on department budgets, funds, and utility rate recommendations for the following:

Office of Management and Budget Department Director Brian Ritschel displayed a PowerPoint presentation and advised staff from each department would be presenting their respective budgets. **(See Attachment 2)** Mr. Ritschel provided background information on how the Enterprise Fund operates. (See Page 2 of Attachment 2)

1. Water Resources

Water Resources Department Director Jake West introduced Deputy Director Seth Weld and advised the City has provided safe and reliable water services to residents of Mesa for over a century.

Mr. West highlighted the Water Department's current challenges. He advised recruitment for talented staff for the newly constructed Signal Butte Water Treatment Plant (SBWTP) has been a struggle as the City is competing with Gilbert and Chandler due to the recent expansion at the San Tan Plant. He stated there is a low possibility of a future water shortage and staff is monitoring the value and status of the water on the Salt River, Verde River, and Colorado River. (See Page 6 of Attachment 2)

In response to a question posed by Mayor Giles, Mr. West advised the water cost per acre foot is determined by two factors; the cost of the water and the capital component for maintaining the infrastructure to treat and supply households with water.

Mr. West provided the metrics for the groundwater pumping. He noted the City uses the groundwater and well water as a backup source, but recently it has been utilized more due to an extended outage at the Salt River for canal maintenance. He added the groundwater usage per month is expected to go back to the target rate once the SBWTP starts operating in May. He indicated his staff does an effective job of responding to water breaks and leaks and taking care of the incidents as quickly as possible. (See Page 8 of Attachment 2)

In response to a question posed by Vice Mayor Luna, Mr. West advised the Water Resource Department is requesting another meter reader position, however, in the future it is anticipated that all the meters will be connected to the Advanced Metering Infrastructure System. He added a meter reader is needed now due to the current and expected growth in utility accounts.

In response to a question posed by Councilmember Thompson, Mr. West explained once the meters are on an automated system the meter readers will continue to monitor and maintain the meters. He added meter readers will also handle complaints and concerns from customers.

Mr. West presented the significant budget changes for the Water Department. He pointed out the chemical cost is anticipated to grow this year due to the quality of water the City will receive and the amount of additional treatment needed.

Mr. West outlined wastewater's success regarding the sewer lines. He remarked staff cleans approximately 26 miles of sewer lines a month and 20% of the system is inspected each year. He added additional staff is being hired to assist with customer service issues, which will allow the industrial crews to focus on keeping the system clean. He noted the City operates one camera vehicle a day to identify issues with the pipes and the goal for FY 2017/18 is to purchase a new van equipped with digital technology. (See Page 18 of Attachment 2)

In response to a question posed by Councilmember Heredia, City Manager Christopher Brady advised the funds needed for the addition of the SBWTP and expansion of the water reclamation is putting pressure on the utility finances and rates. He added the City no longer has the ability to apply impact fees to new developments and the cost is now spread across the entire system. He noted the upside is that large industrial and subdivision developments will continue to grow with no restrictions to water and wastewater.

Discussion ensued relating to how the Enterprise Fund is managed and balanced.

## 2. Environmental Management and Sustainability

Environmental Management and Sustainability Department Director Scott Bouchie provided an update to the Household Hazardous Material facility and displayed the energy efficiency projects. (See Pages 26 and 27 of Attachment 2)

Mr. Bouchie detailed the four locations with solar installations. He explained the goal is for the solar panels to produce 70-75% of the building's energy usage and since the installation all projects have had a savings on energy costs. He added the Fiesta Police Substation building is over producing solar energy because the building is operating more efficiently than anticipated. (See Page 28 of Attachment 2)

In response to a question posed by Mayor Giles, Mr. Bouchie explained the current solar installations received an incentive from the Salt River Project (SRP), which made the projects viable. He added SRP is no longer offering the incentive and therefore future renewable energy

projects could cost more than paying for conventional energy. He stated the goal is to produce renewable energy and keep the costs relatively the same.

In response to a question posed by Councilmember Whittaker, Mr. Bouchie stated the City has had conversations with SRP and at this point SRP has not expressed an interest in paying the City more than three to four cents per kilowatt hour.

In response to a question posed by Mayor Giles, City Manager Christopher Brady advised if Council has an interest in increasing the renewable energy portfolio for residents that are SRP customers then City staff could have further negotiations with SRP.

Mr. Bouchie displayed a chart depicting the change in recycling from FY 12/13 to FY 19/20 and advised recycling will become the biggest financial pressure for the Solid Waste utility. He explained through previous contracts, the City would be paid a floor price of \$26 a ton for every inbound ton of recycling brought to the recycling facility. He added that recycling facilities are no longer offering a floor price, but instead adding a processing fee per ton and revenue share, therefore recycling will become an expense for the City.

In response to a question posed by Mayor Giles, Mr. Bouchie explained it would cost the same amount to take recyclables to the landfill as it would to take recyclables to a recycling facility. He added staff will need to identify what is being placed in the blue barrels to determine what items hold a real value and are worth recycling. He noted glass is the heaviest material placed in blue barrels and could possibly cost the City more to recycle.

In response to a question posed by Vice Mayor Luna, Mr. Bouchie explained recycling has become an international issue as most of the recyclable materials are being shipped to China and vendors are unable to beat the .5% contamination rate for material that the country has allowed.

In response to a question posed by Councilmember Thompson, Mr. Bouchie advised cardboard is currently being taken to the material recycling facility, but once the contract expires staff will need to reevaluate where to take the material. He added staff continues to educate businesses on the importance of removing the packaging within boxes as the cardboard holds no value when foreign material is left inside.

Discussion ensued relating to the future costs of recycling.

In response to a question posed by Councilmember Glover, Mr. Bouchie reported there are approximately 132,000 blue barrels being utilized throughout the City and in order to inspect the barrels more often the City would need to hire five to 10 additional quality assurance inspectors.

Mr. Bouchie commented that the material being brought to the recycling facilities has a contamination rate of 12-15%, which is considered relatively clean compared to national averages.

Discussion ensued relating to the potential options in lowering the City's cost to recycle.

Mr. Bouchie advised a project identified through the Imagine Mesa Campaign was converting food to energy. He explained other cities are putting food waste into anaerobic digesters and using the biogas to produce on-site energy at wastewater treatment plants. He advised staff is currently conducting a feasibility study to see if collected material can be converted to energy for onsite use or to power vehicles. (See Page 30 of Attachment 2)



In response to a question posed by Councilmember Thompson, Deputy City Manager Scott Butler advised City staff works with a firm in Washington D.C. to stay up-to-date on legislation that could affect future renewable energy options.

### 3. Energy Resources

Energy Resources Department Director Frank McRae advised April is safe digging month and reminded residents to call 811 before digging, grading, or excavating.

Mr. McRae provided the key performance measures for electric. He noted the City compares utilities bills with SRP as an affordability benchmark and the City's customers are substantively below SRP's comparable services. (See Page 39 of Attachment 2)

Mr. McRae detailed the electric revenue history and forecast. He noted the electric costs have decreased 1% per year since FY 2004/05. He added the contributing factor to this is the reduced energy supply costs while other cost components have gone up. He remarked the spike in FY 2014/15 is a reflection of leftover funds from the light rail installation being allocated to the electric utility and not an increase in cost. (See Page 40 of Attachment 2)

Councilmember Freeman congratulated Mr. McRae on his department's safety record and thanked him for keeping his staff safe.

### 4. Economic Investment Fund

Office of Management and Budget Director Candace Cannistraro detailed how rate adjustments are implemented and provided the revenue impact. (See Pages 50 and 51 of Attachment 2)

Ms. Cannistraro advised staff put together three utility rate adjustment scenarios (A, B, and C). (See Pages 53 through 55 of Attachment 2) She pointed out staff's utility rate adjustment recommendation to the Audit, Finance and Enterprise Committee is scenario A. She added when deciding rate adjustment amounts staff makes sure the combined ending reserve balance is at least 8 to 10% over the forecast period and the goal is to smooth rates so there is not a spike in rates from one year to the next.

Ms. Cannistraro detailed scenarios B and C and pointed out those scenarios account for an ending reserve balance of 8% over the forecast periods.

In response to a question posed by Mayor Giles, Office of Management and Budget Department Director Brian Ritschel advised staff is planning for a 3-4% impact in 2021 to the general governmental funds and a 1.5% impact to the utility funds.

Councilmember Glover commented he supports a 2% reduction in rates.

Ms. Cannistraro pointed out a 2% reduction in rates to FY 2018/19 would cause a 6% increase to future rates.

In response to questions posed by Councilmember Whittaker, City Manager Christopher Brady advised staff has included a six million dollar a year placeholder in the general funds for the improvements needed in order to bring Arizona State University (ASU) to the downtown area and he advised this will not impact future utility rates. He added the cost for ASU is being absorbed

into the existing rate plan due to recent savings from debt and additional growth higher than anticipated.

Councilmember Thompson commented if an economic downturn is expected in 2021 it would be best to smooth the rates instead of the rates potentially spiking in the future.

Councilmember Whittaker indicated that if utility rate adjustments are going to be compared, a scenario should be presented that does not include ASU. He stated the opinion that it is not fiscally responsible to decrease the rates this year and substantially increase future utility rates.

Mayor Giles pointed out allocating six million dollars to ASU will not provoke a utility rate increase and would instead promote economic development to the downtown area and produce additional utility customers. He acknowledged that water costs are more than what is desirable and he advised it is important to only increase rates when it is absolutely necessary. He suggested strengthening utility assistance programs through the ABC fund to support low-income residents struggling to pay utility bills. He agreed that if utility rates need to be increased that it is done in a way that will not cause a spike in future utility rates and therefore favors scenario C.

Vice Mayor Luna concurred with Mayor Giles and expressed his support for scenario C.

Councilmember Thompson expressed his support for scenario A and stated scenario A provides long-term stability in utility rates.

Discussion ensued relating to the Public Safety Personnel Retirement System.

Councilmembers Freeman and Heredia expressed their support for scenario C.

Councilmember Whittaker stated the opinion that continually raising the rates will make it harder for residents to pay their utility bills.

Mr. Brady replied to Councilmember Whittaker's comment and stated staff is sensitive to the issue of raising rates, however the City continues to grow and therefore the future cost will be spread out over a larger base.

Mayor Giles requested that the economic investment fund overview be presented to Council at a future meeting. **(See Attachment 3)**

Mayor Giles thanked staff for the presentation.

1-c. Information pertaining to the Council's Strategic Priority for Community Safety including projects, statistics, and key performance indicators.

City Manager Christopher Brady advised that the community safety key performance indicators are available for review and a more formal public safety presentation will occur at future Council meetings. **(See Attachment 4)**

2. Acknowledge receipt of minutes of various boards and committees.

2-a. Human Relations Advisory Board meeting held on February 28, 2018

It was moved by Councilmember Freeman, seconded by Councilmember Thompson, that receipt of the above-listed minutes be acknowledged.

Carried unanimously.

3. Hear reports on meetings and/or conferences attended.

There were no reports on meetings and/or conferences attended.

4. Scheduling of meetings and general information.

City Manager Christopher Brady stated that the schedule of meetings is as follows:

Saturday, April 7, 2018, 9:00 a.m. – CycloMesa Festival

Thursday, April 12, 2018, 7:30 a.m. – Study Session

5. Adjournment.

Without objection, the Study Session adjourned at 10:39 a.m.



  
JOHN GILES, MAYOR

ATTEST:

  
DEE ANN MICKELSEN, CITY CLERK

I hereby certify that the foregoing minutes are a true and correct copy of the minutes of the Study Session of the City Council of Mesa, Arizona, held on the 5<sup>th</sup> day of April 2018. I further certify that the meeting was duly called and held and that a quorum was present.

  
DEE ANN MICKELSEN, CITY CLERK



# FY 2019 – 2023 Utilities CIP Overview

## City Council Study Session April 5, 2018

Beth Huning | City  
Engineer

Scott Butler | Office of Management &  
Budget

# Major Capital Projects



Water Resources



Energy Resources



Parks



Public Safety



Transportation

**Utilities  
(April 5)**

**General  
Government  
(April 26)**



# Agenda

- Discuss Five Year Capital Improvement Program (CIP)
- Review CIP Funding
- Review Current Bond Authorization
- Review Significant Projects

# Capital Improvement Program

- Multi-year plan for capital infrastructure
- Projects identified through staff analysis, contractual obligation, or council direction
- City Council appropriates funding for first year as part of the annual budget adoption process
- Individual construction contracts are brought to Council for approval throughout the year

# Project Types

## Funded

- Funding identified & allocated
- Programmed within five-year period

## Planned

- Funding not identified
- A need to complete within the five-year period



# CIP Utility Funding

- **Local Revenues**
  - Revenue generated from City utility operations

## Utility Revenue Bonds

- Approved by voters, debt service repaid with revenues generated from City utility operations

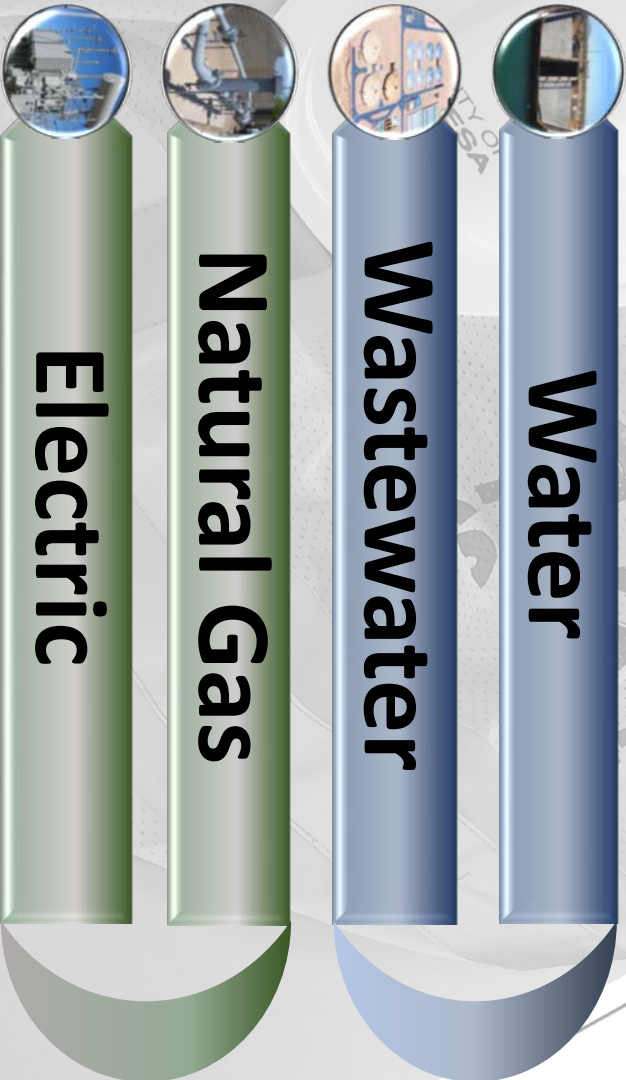
# Operations & Maintenance

- Reviewed throughout the CIP project lifecycle
- Budgeted to ensure City can meet the operational requirements of capital improvements

## Examples:

- New positions to operate Signal Butte Water Treatment Plant
- Chemical cost to treat wastewater

# Status of 2014 Utility Bond Projects



**WATER**

**RESOURCES**

**ENERGY**

**RESOURCES**



# 2014 Utility Bond Programs

Water, Wastewater, Natural Gas & Electric

	Water	Wastewater	Natural Gas	Electric
Lifecycle Replacement/Reliability	\$63.3M	\$24.4M	\$19.2M	\$7.2M
Contractual Obligations	\$46.5 M	\$20.4M	-----	-----
Customer Demand in Southeast Mesa	\$197.3M	\$131.0M	-----	-----
Customer Demand Citywide	\$8.6M	\$2.4M	\$27.5M	\$2.9M
System Reinforcement	-----	-----	\$12.4M	\$16.9M
<b>Total</b>	<b>\$315.7M</b>	<b>\$178.2M</b>	<b>\$59.1M</b>	<b>\$27.0M</b>

# Water

## Lifecycle Replacement

\$63.3M

- 10 Quarter Section Waterline Replacement Projects
- 4 Well Projects
- Brown Road Water Plant Misc. Improvements

## Contractual Obligations

\$46.5M

- Val Vista Pipeline Phases II & III
- Val Vista Water Plant Contract w/Phoenix
- Water Settlement Contract

## Customer Demand in

\$197.3M

- Signal Butte Water Plant
- CAP Raw Water Main
- 3 Transmission Main Projects

• 8 Well Projects

• 8 Pipeline Projects

• Gateway Infrastructure

## Customer Demand-

\$8.6M

- Transfer Station 3 Upgrade
- Misc. Waterlines

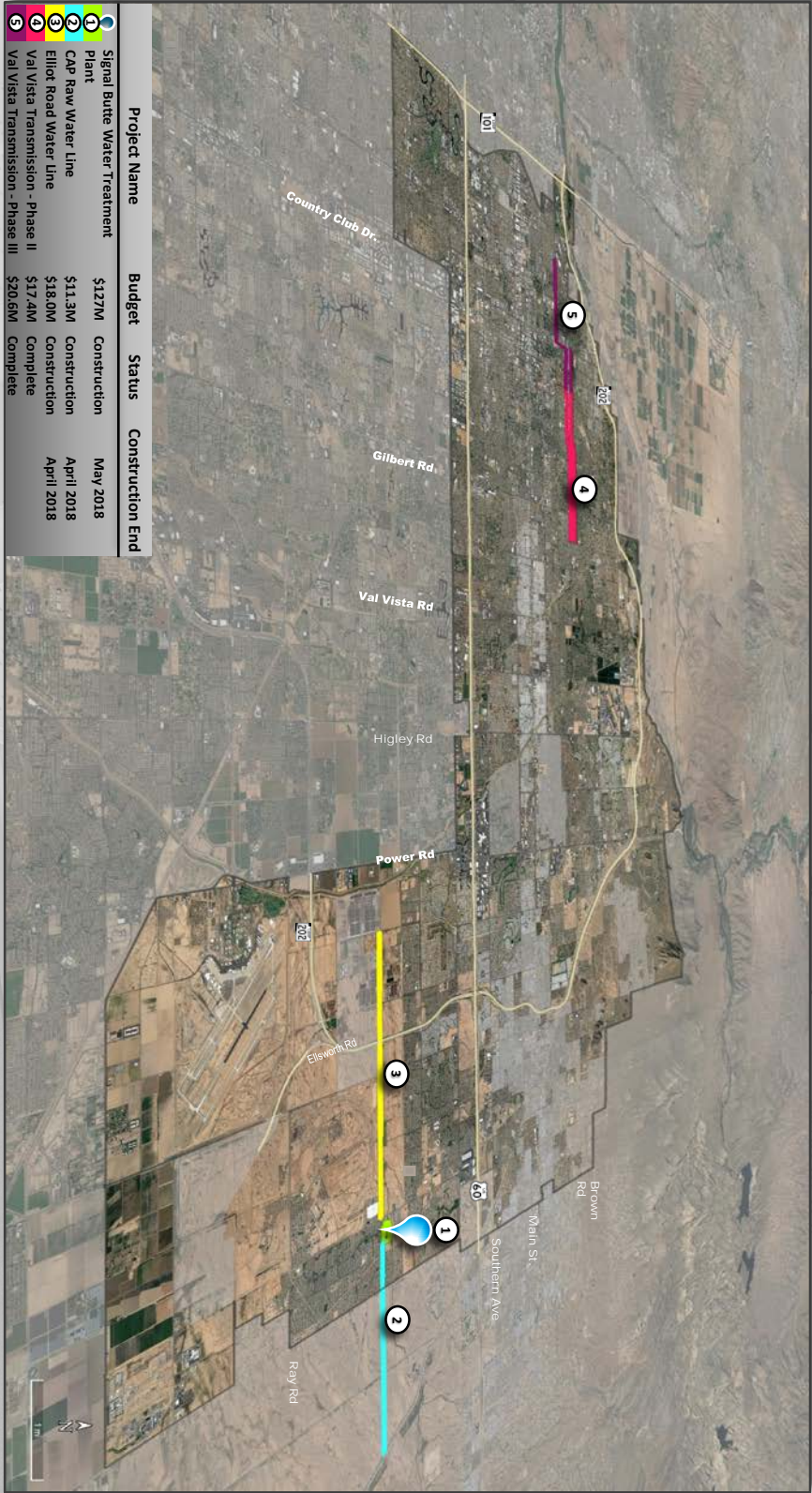
## Citywide

**Total \$315.7M**



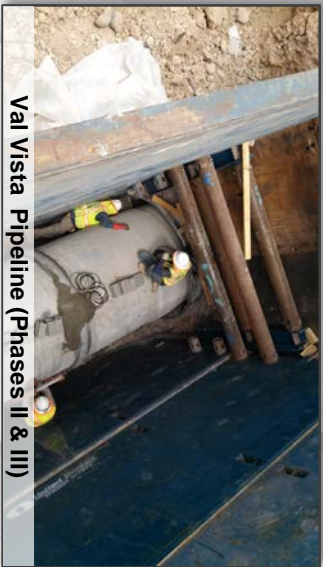


# 5 Major Water Projects = \$194.3 of Total Bonds





# Major Water Projects



Val Vista Pipeline (Phases II & III)



CAP Raw Water Line



Elliot Road Water Line

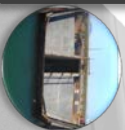
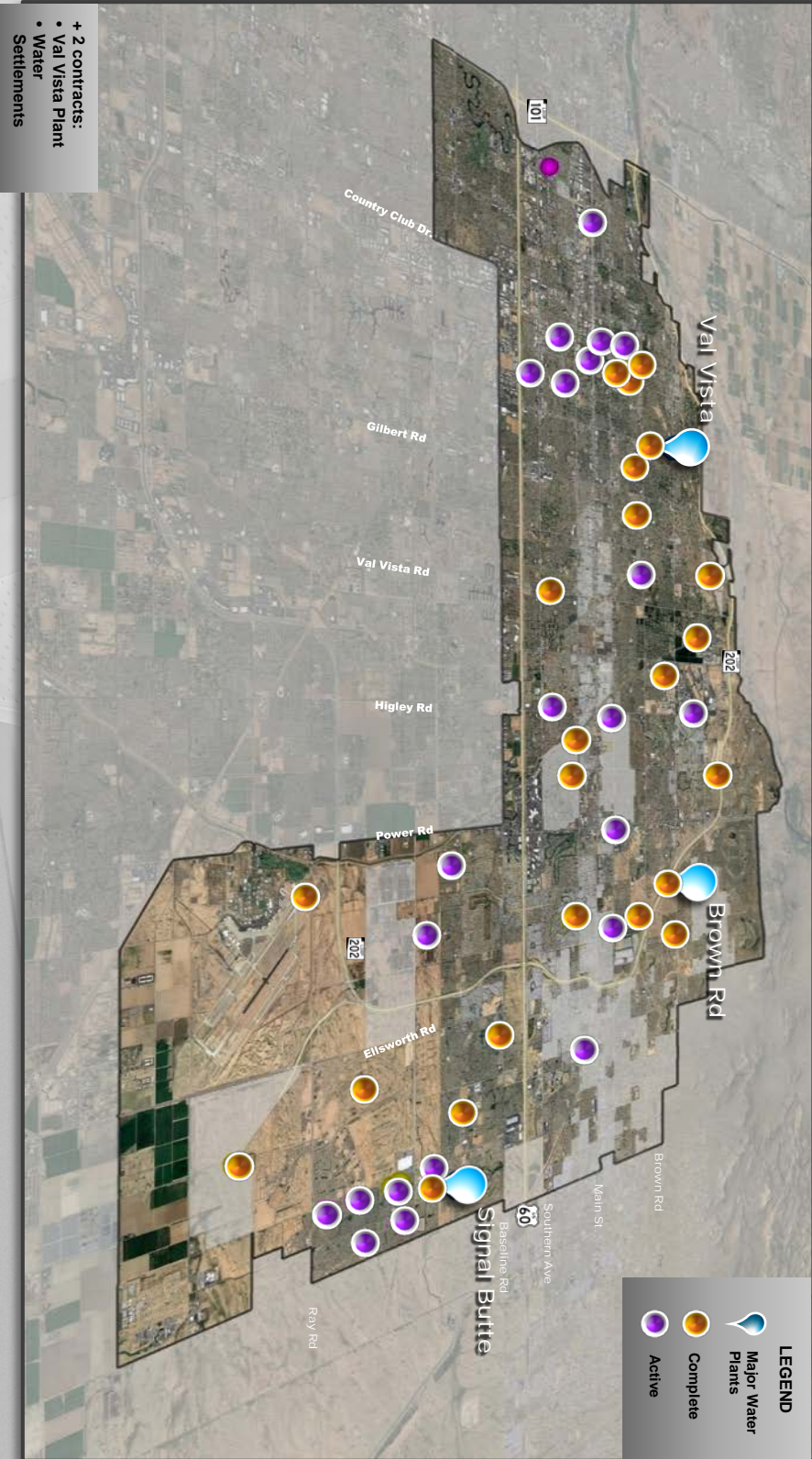


Signal Butte WRP





# All Water Projects





# Wastewater

## Lifecycle Replacement

- M
- \$24.4      • Miscellaneous Greenfield Water Reclamation Plant Improvements
  - Lift Station, Pipeline & Manhole Projects
  - Southeast Plant Rehabilitation Projects

## Contractual Obligations

- M
- \$20.4      • 91<sup>st</sup> Avenue WW Plant Mesa Share

## Customer Demand in

- \$131.0      • 8 Sewer Projects

## Southeast Mesa

- M
- Greenfield WRP Expansion

## Customer Demand-Citywide

- M
- \$2.4      • Septic to Sewer Program

**Total      \$178.2M**



# One Major Wastewater Project = \$125M of Total Bonds

## Greenfield Water Reclamation Plant



### Status

Partners: Town of Gilbert

Town of Queen

Creek

In Design Phase

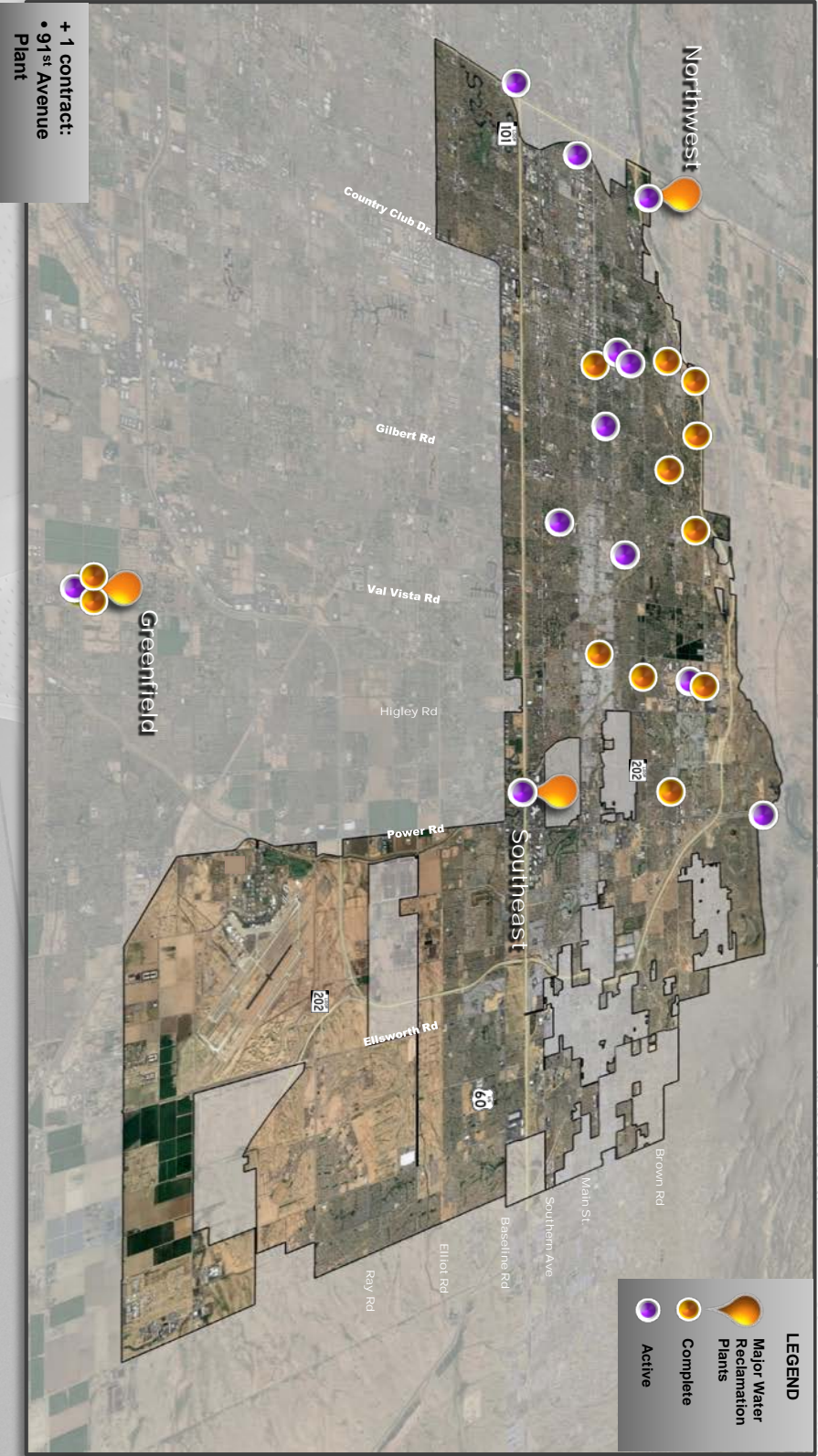
Est. Construction Start:  
1<sup>st</sup> Quarter 2018

Est. Construction End:  
3<sup>rd</sup> Quarter 2020





# All Wastewater Projects



# Electric

## Lifecycle Replacement

\$7.2M

- Distribution – Overhead
- Transmission
- Substation Improvements
- Metering

## System Reinforcement

\$16.9M

- Mesa Drive Phase II
- Distribution-Underground
- Generation
- Horne Utility Replacement
- Gilbert Road Light Rail Extension

## Customer Demand

\$2.9M

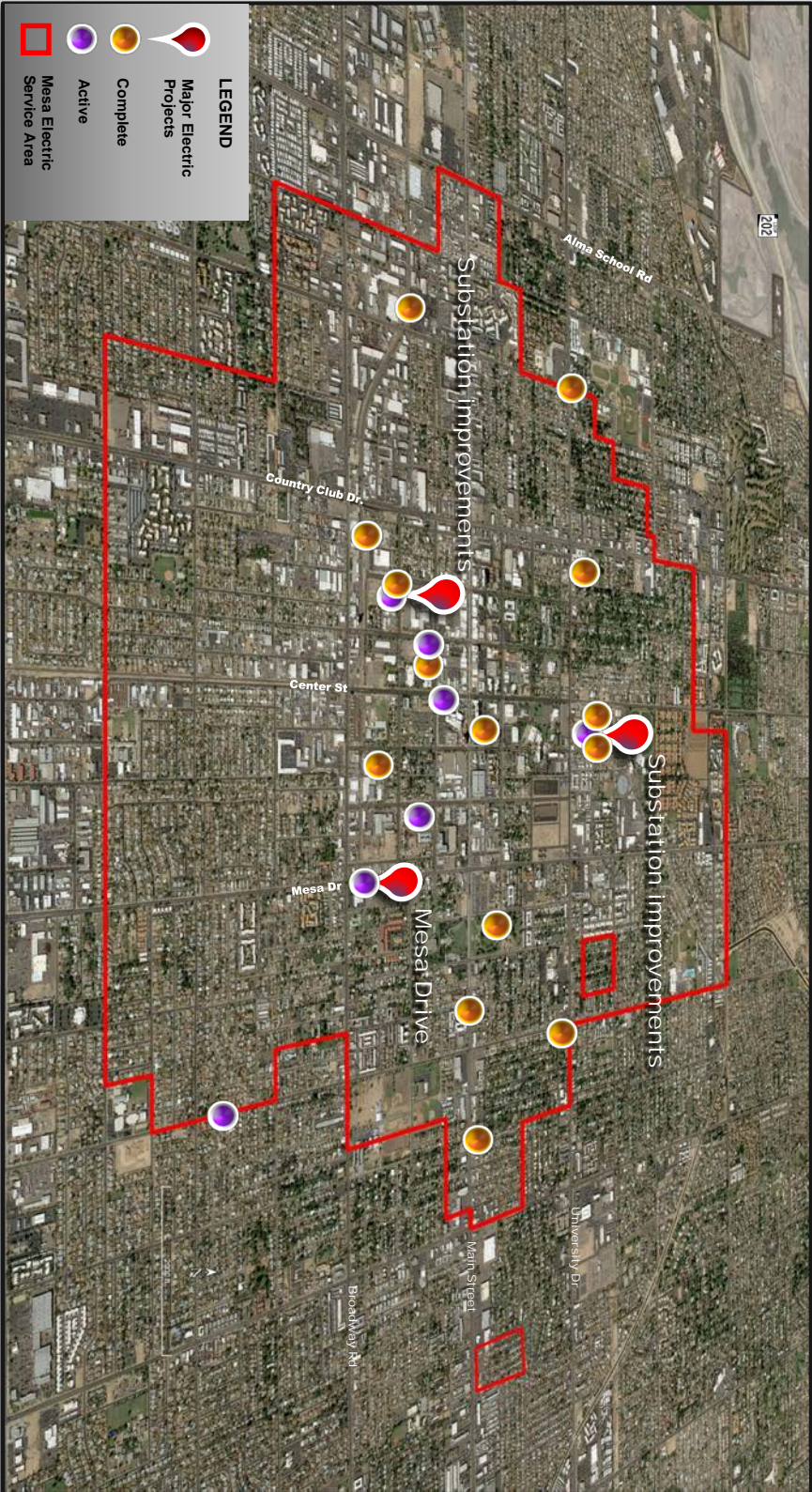
- New Services
- Substation to Park Conversion

**Totals      \$27.0M**





# Electric Projects





# Natural Gas

## Lifecycle Replacement

\$19.2M

- Coordinated Projects
- Main Replacements
- Service Replacements
- Meter Replacements

## System Reinforcement

\$12.4M

- Mains
- HP Mains
- Pressure Regulation Stations
- SCADA
- Cross Ties

## Customer Demand

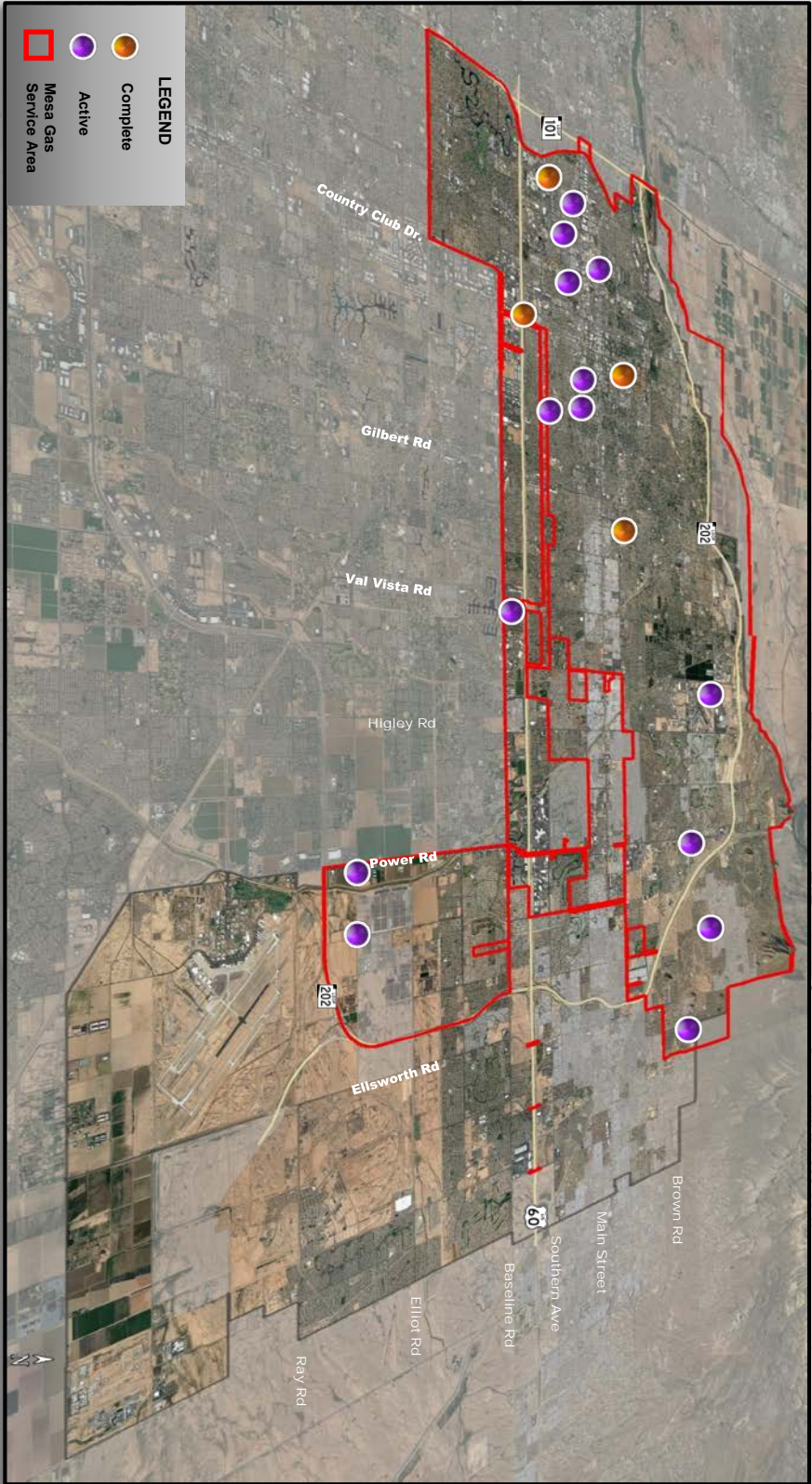
\$27.5M

- New Mains
- New Meters
- New Service

**Totals \$59.1M**

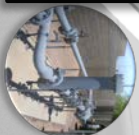
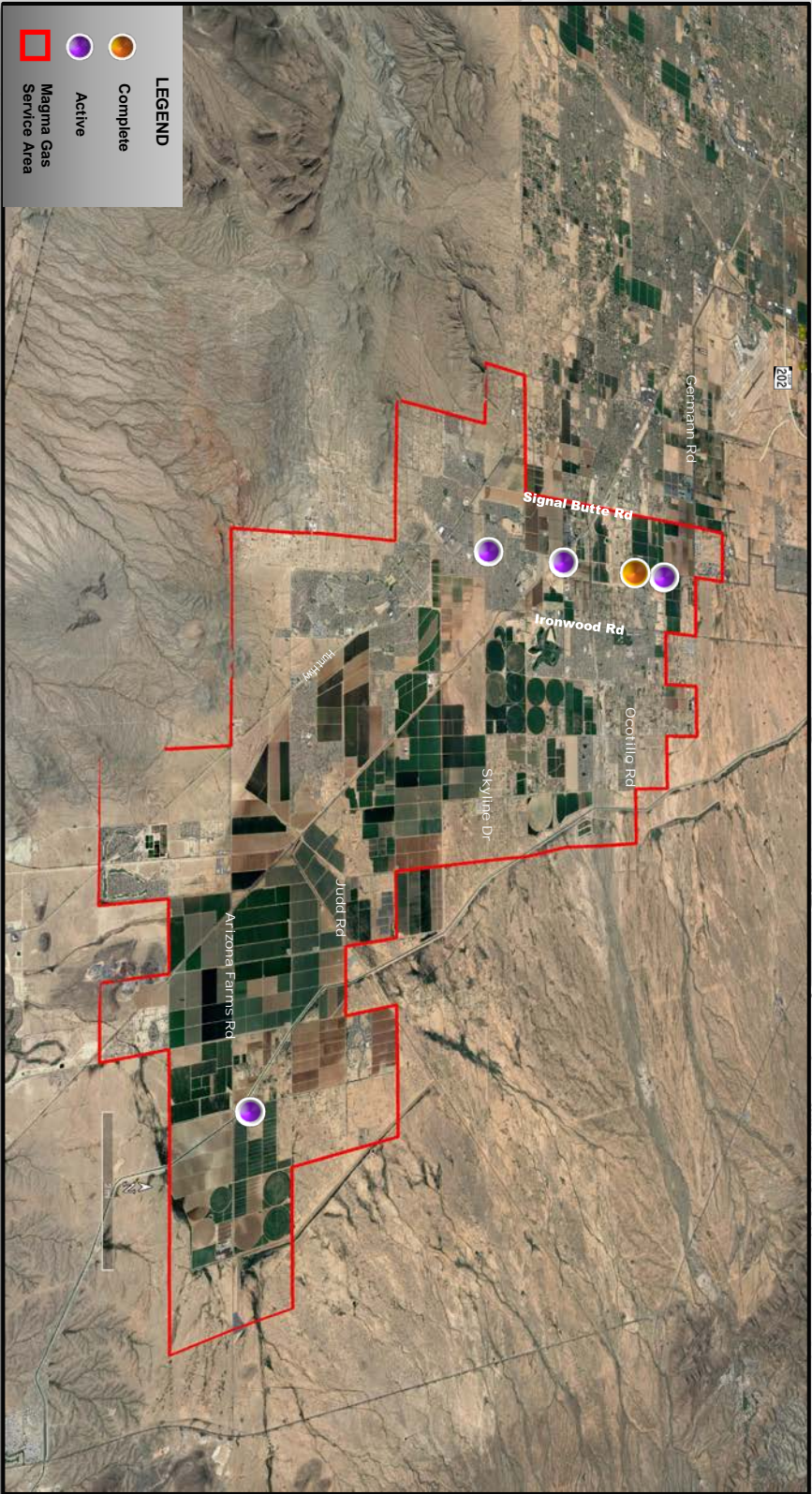


# Natural Gas Projects in Mesa Service Area





# Natural Gas Projects in Magma Service Area





# Nature of Electric and Natural Gas Projects

## PROJECT SCHEDULE DRIVERS:

- Many Natural Gas & Electric lines are under streets + Natural Gas joint-trenched with Water:

**\$20M or 23% of Program**

- Customer Demand + New Customers:

**\$30M or 35% of Program**



# Future CIP Bond Needs



**Lifecycle Replacement**



**Contractual Obligations**



**Customer Demand**



**System Reliability**

# Calendar

May	21	Council considers CIP adoption
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Questions?







# City of Mesa

FY 2018/19

## Utility Rate Recommendations and Enterprise Fund Summary

April 5, 2018

### **Presented by**

Candace Cannistraro – Management and Budget Director

Brian Ritschel – Deputy Management and Budget Director

Scott Bouchie – Environmental Management and Sustainability Director

Frank McRae – Energy Resources Director

Jake West– Water Resources Director

# Enterprise Operations

Each utility is operated as a separate business center

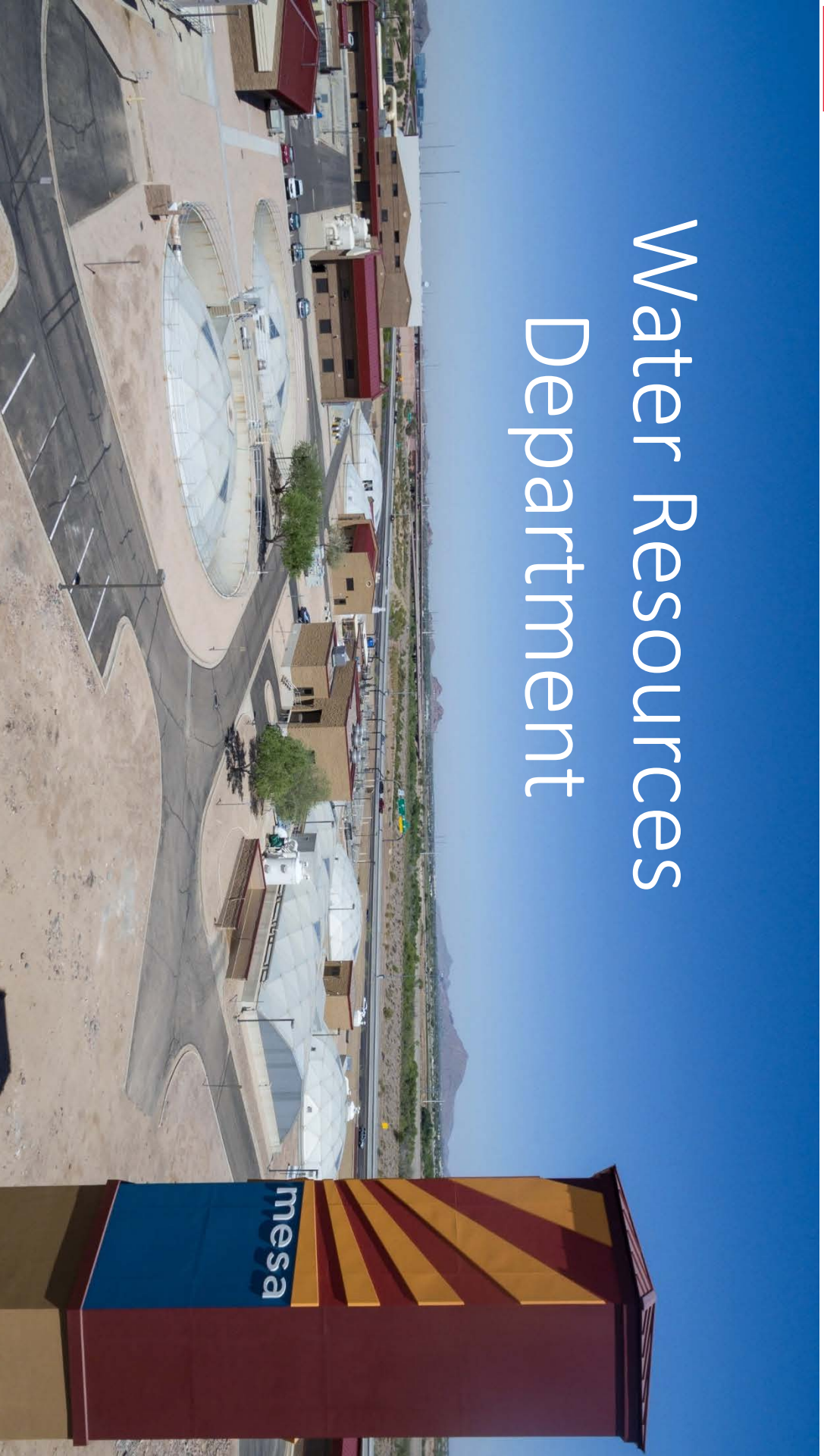
Combined Ending Reserve Balance adheres to the adopted financial policy of at least 8-10% over the forecast period

Reserve balance can be used to smooth rate adjustments year-to-year

Reserve balance can be used to phase in new programs or changes in operations



# Water Resources Department



# Water Resources

## Value

We provide these valuable services that protect public health and the environment, bolster the local economy, and are an integral part of the vibrant lifestyle enjoyed in Mesa.

## Service

Our service area consists of 170 square miles with a growing population of over 485,000 people.

## Connections

The water system provides service to approximately 149,000 residential and commercial connections.

The wastewater collection system provides service to approximately 125,000 residential and commercial connections.

# Accomplishments

- City of Mesa water continues to meet over 100 state and federal water quality standards
- Know Your H2O Water Bar
- PRSA Copper Anvil Award of Merit – Know Your H2O Water Bar
- PRSA Copper Anvil Award of Merit – Water Quality Consumer Confidence Report
- Matthew Rexing, Compliance Lab Supervisor, received the AWWA 2017 George Warren Fuller Award for distinguished service in the water supply field
- More than 350 water education student workbooks and accompanying teacher manuals distributed to schools for grades K-6





# Water Resources Top Challenges

## System Growth

- Recruiting and retaining highly qualified staff
- Succession Planning

## Water Commodity

- Water commodity costs increasing
- Possible future water shortage

## Maintenance of Aging Infrastructure

- Distribution and Collection System Maintenance
- Reliability



# Water Business Objective

## Mission

- Provide reliable, high quality water services at fair and reasonable rates for the people in our community.

## Desired Outcomes

- Mesa's water demands are met
- Mesa's water is safe and reliable
- Mesa's water quality meets Mesa's goals for taste, odor, and fluoride
- Water is provided in a cost-effective manner

# Measuring Success -Water

## Water Meter Read Error Rate

- Target - Meter readers are measured as a group will not exceed 4 errors per 10,000 reads per month.
- Average – 3.5 errors per 10,000 reads per month

## % of Groundwater Pumped

- Target – 10% - per month
- Average – 19.75% per month

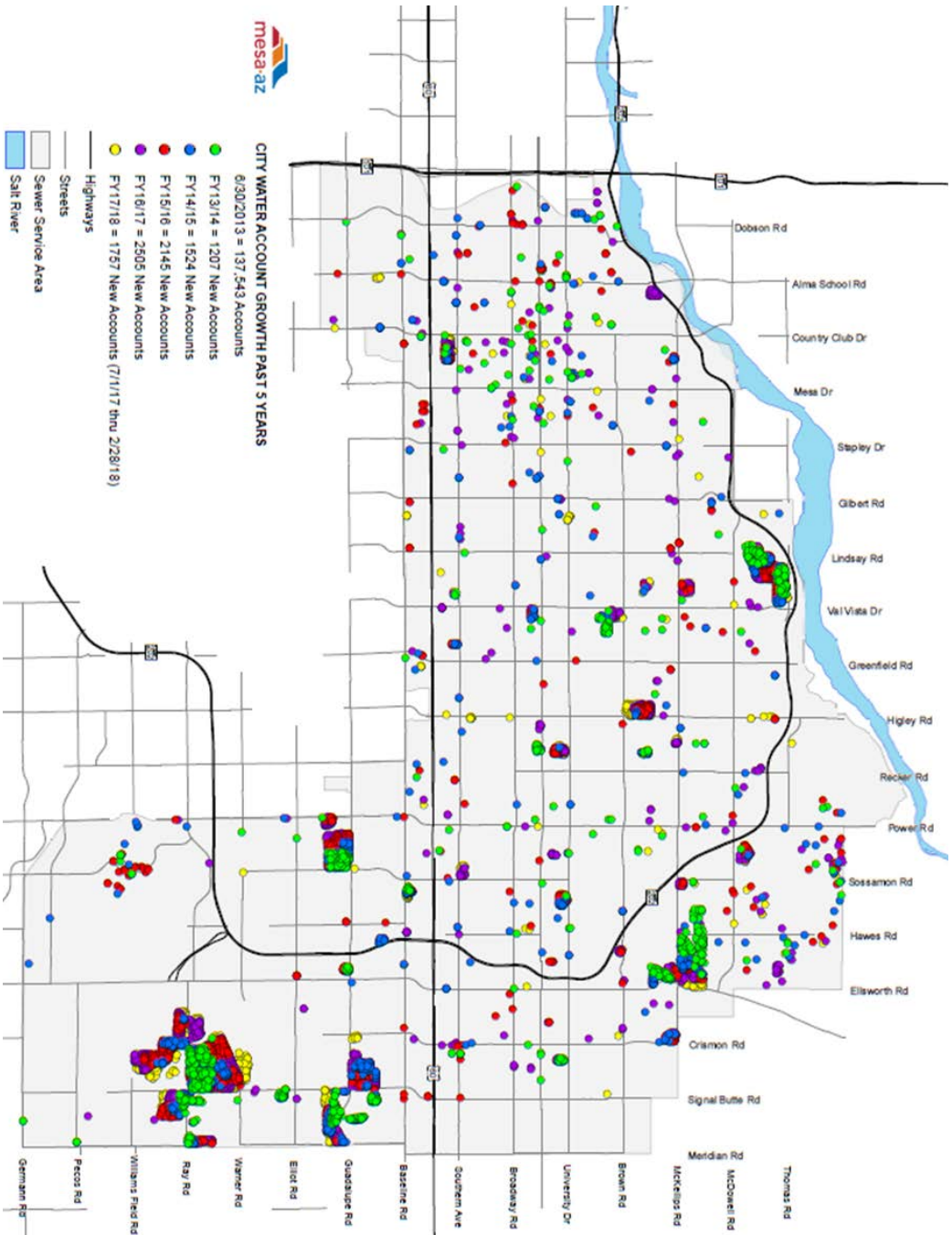
## # of Leaks and Breaks per 100 miles of Pipe

- Target – 1 per month
- Average – 1.6 per month





# Water Account Growth



# Water System Overview

- ▶ 1915 to 2000 - 1,655 miles of Water Main
- ▶ 2001 to 2005 - Added 343 miles
- ▶ 2006 to 2010 - Added 203 miles
- ▶ 2011 to 2015 - Added 162 miles
- ▶ 2016 to Current Added 31 miles -
  - ▶ **2,394 miles of Water Main**
- ▶ 2016 to Current 66 additional miles proposed
- ▶ 80 additional miles planned in Future Development
- ▶ 31 Wells - Additional planned
- ▶ 5 Transfer Stations
- ▶ 20 Pump Stations - Additional planned
- ▶ 16 Reservoirs
- ▶ 23 Pressure Reducing Valves
- ▶ 20,056 Fire Hydrants
- ▶ 62,156 Valves - includes system valves, control valves, and hydrant valves

# Water Significant Budget Changes FY18/19

- Water Commodity **+\$1.2M**  
(CAP/SRP)
- Electrical **+\$251k**
- Chemicals **+\$159k**
- Preventative Maintenance  
**+\$104k**
- Meter Reader Position **+\$114k\***
- Regulatory Compliance **+\$90k\*\***
- Customer Service Specialist  
**+\$68k**
- Signal Butte Water Treatment  
Plant

\* Figure includes both ongoing and one-time position costs  
\*\*Funding for one-time costs

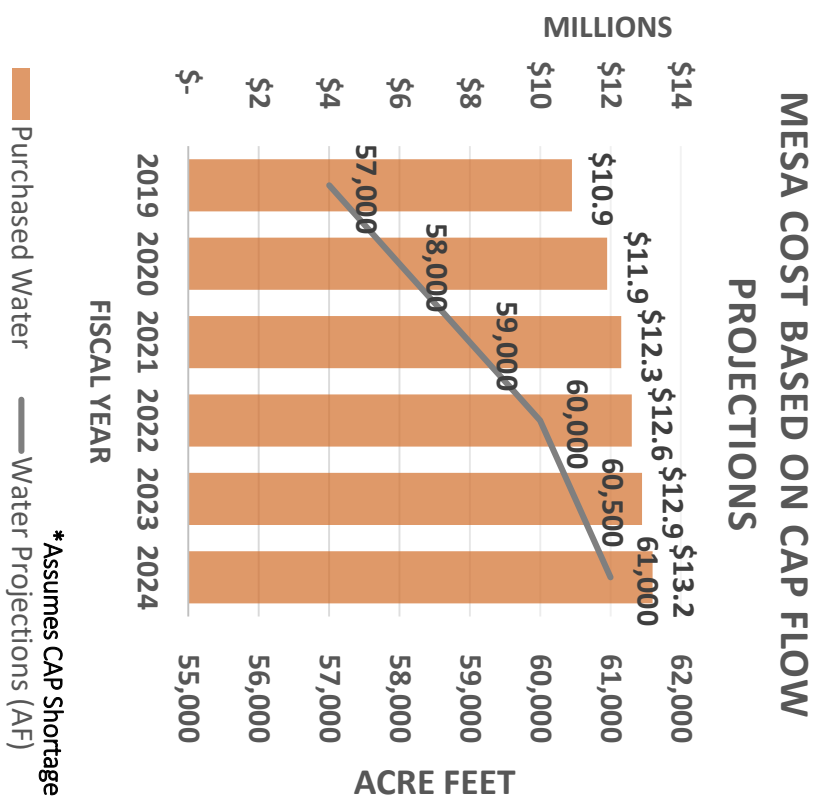
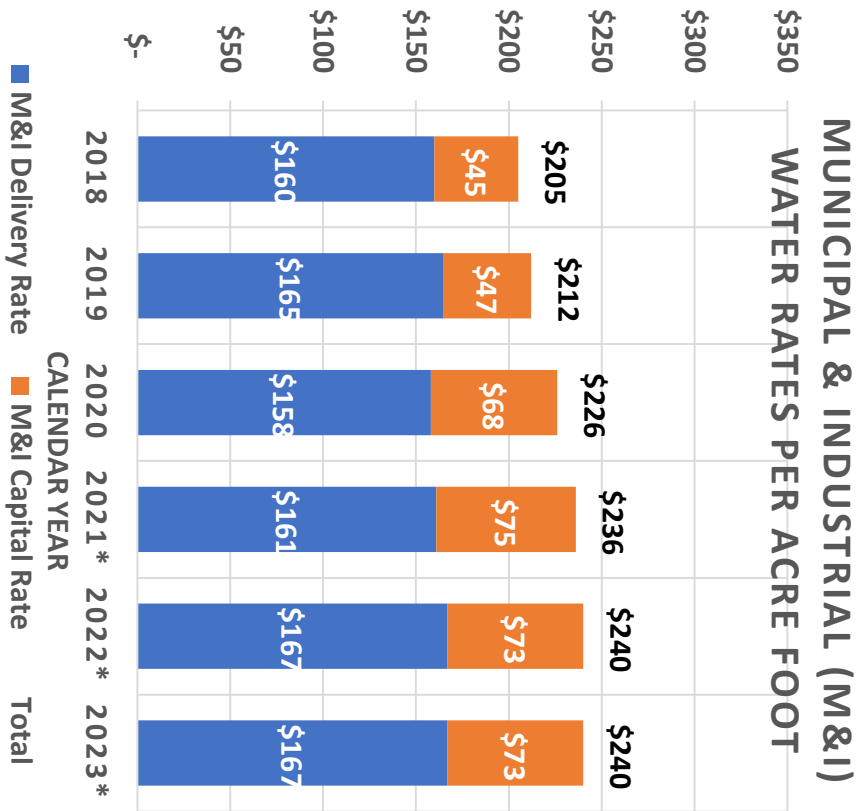


## nal Butte Water Treatment Plant

- FY18/19 will **be the first full fiscal year** of operations for the City's newest plant
- O&M Budget: **\$3.2 Million**
- Total Staff: **16 Authorized – 12 Filled - 4 Vacant**
- Water Production: **24 MGD**
- Water Delivery: **May 2018**

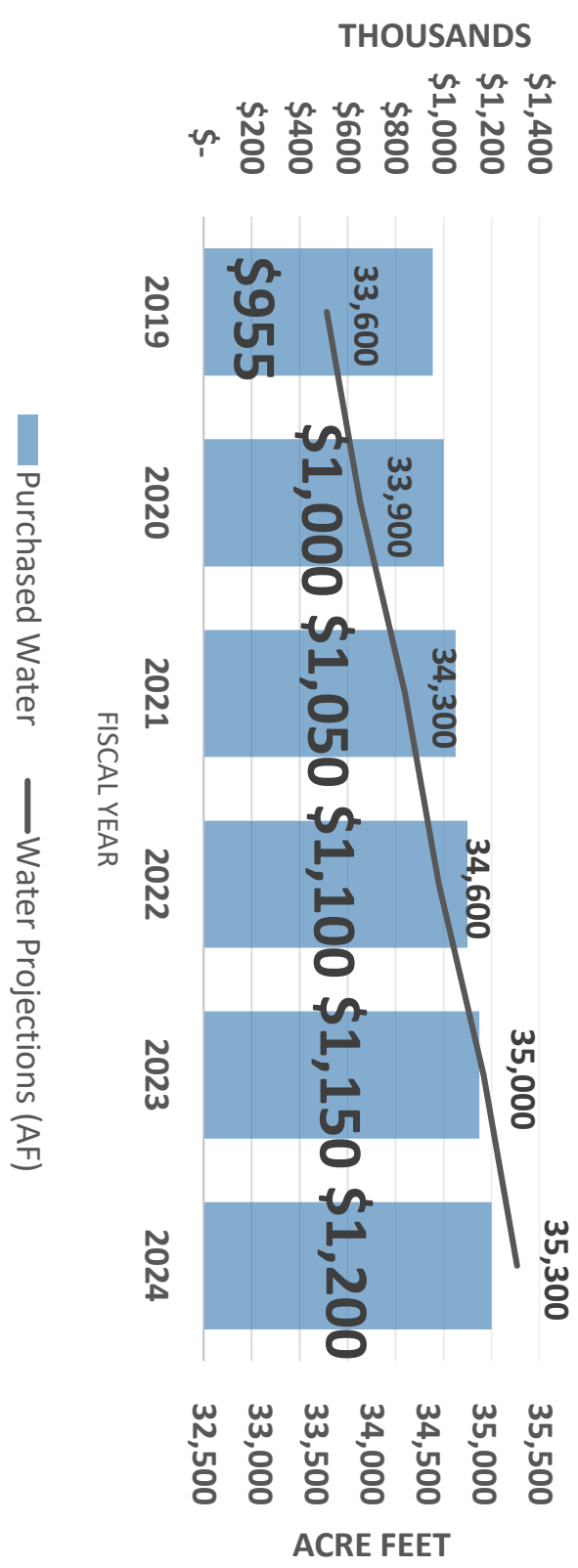


# Water Commodity Costs – Central Arizona Project



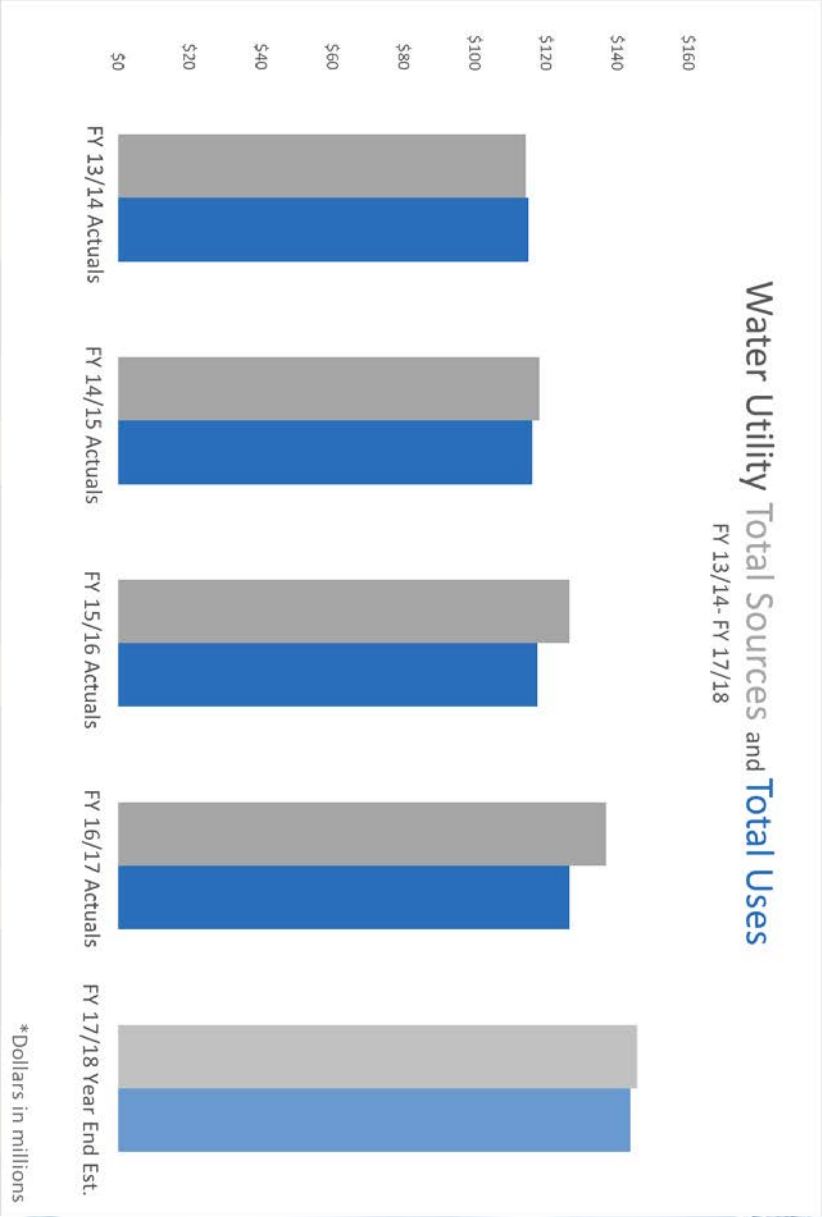
# Water Commodity Costs - SRP

MESA COST BASED ON SALT RIVER PROJECT (SRP)  
FLOW PROJECTIONS





# Water Utility 5-Year Trend



# Water Utility Financial Summary

<b>Sources of Funding</b>	FY 16/17	FY 17/18	FY 17/18	FY 18/19
	Actuals	Adopted Budget	Year End Estimate	Proposed Budget
Revenues	\$136.9	\$140.6	\$145.7	\$153.2
<b>Uses of Funding</b>				
Operating Expenditures	\$40.8	\$49.2	\$48.3	\$51.8
Project Costs	\$0.1	\$0.1	\$0.1	\$0.5
General Fund Transfer	\$53.6	\$55.0	\$55.0	\$56.0
Debt Service Transfer	\$23.8	\$31.9	\$32.2	\$36.4
Lifecycle/ Infrastructure Transfers	\$2.6	\$2.8	\$2.9	\$3.1
Capital Transfer	\$0.2	\$1.1	\$1.1	\$0.6
Economic Investment Fund Transfer	\$5.5	\$3.9	\$4.1	\$5.8
Total Uses	\$126.7	\$143.8	\$143.6	\$154.1
<b>Net Sources and Uses</b>	\$10.2	(\$3.2)	\$2.1	(\$0.9)

\*Dollars in millions



# Wastewater Business Objective

## Mission

- Provide reliable, high quality, and environmentally responsible wastewater services at fair and reasonable rates for the people in our community.

## Desired Outcomes

- Wastewater treatment is cost effective
- The system reliably collects and treats wastewater and delivers reclaimed water
- Treated wastewater meets all regulations for beneficial reuse
- The environment is protected from wastewater contamination





# Measuring Success - Wastewater

## # of miles of sewer lines cleaned

- Target – 26 per month
- Average – 19 per month

## # of miles sewer lines inspected

- Target – 20 per quarter
- Average – 15 per quarter

## # of Sanitary Sewer Overflows (SSO's)

- Target – 0 per quarter
- Average – 1.25 per quarter

# Wastewater System Overview

- ▶ 1915 to 2000 - 1,230 miles of Sewer Main
- ▶ 2001 to 2005 - Added 258 miles
- ▶ 2006 to 2010 - Added 115 miles
- ▶ 2011 to 2015 - Added 84 miles
- ▶ 2016 to Current Added 63 miles
  - ▶ **1,750 miles of Sewer Mains**
- ▶ 75 additional miles planned in Future Development
- ▶ 8 Lift Stations - 4 additional planned
- ▶ 7 Lift/Odor Control Stations
- ▶ 6 Odor Control Stations
- ▶ 35 miles of reclaimed water lines



# Wastewater Significant Budget Changes FY18/19

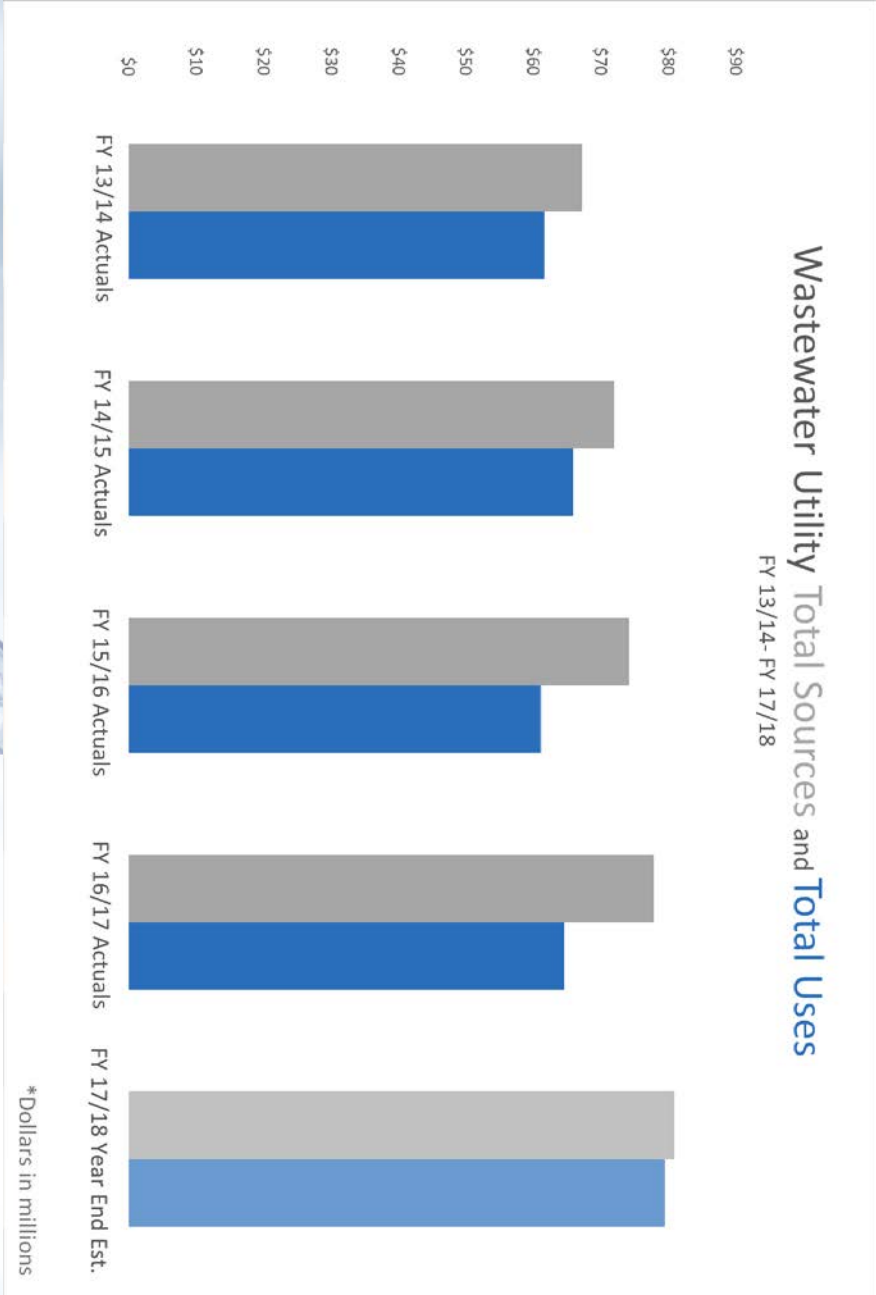
- 91st Avenue WRP +\$250k
- Greenfield WRP Joint Venture Obligations +\$127k (Mesa share) \*
- Chemicals +\$297k
- Preventative Maintenance +\$75k
- 3 Wastewater Collections Positions – System Maintenance +\$372k \*

\* Figure includes both ongoing and one-time costs





# Wastewater Utility 5-Year Trend



# Wastewater Utility Financial Summary

Sources of Funding	FY 16/17	FY 17/18	FY 17/18	FY 18/19
	Actuals	Adopted Budget	Year End Estimate	Proposed Budget
Revenues	\$77.9	\$81.6	\$81.0	\$86.1
<b>Uses of Funding</b>				
Operating Expenditures	\$23.1	\$26.3	\$24.0	\$26.3
Project Costs	\$0.1	\$0.1	\$0.2	\$0.3
	\$0.0	\$0.0	\$0.0	\$0.0
General Fund Transfer	\$14.6	\$15.5	\$15.5	\$15.7
Debt Service Transfer	\$25.3	\$37.5	\$37.6	\$40.0
Lifecycle/ Infrastructure Transfers	\$1.6	\$1.6	\$1.6	\$1.7
Capital Transfer	\$0.0	\$0.1	\$0.1	\$0.3
Economic Investment Fund Transfer	\$0.0	\$0.4	\$0.6	\$1.1
Total Uses	\$64.6	\$81.5	\$79.5	\$85.5
<b>Net Sources and Uses</b>	<b>\$13.3</b>	<b>\$0.1</b>	<b>\$1.5</b>	<b>\$0.6</b>

\*Dollars in millions

# Average Residential Water and Wastewater Annual Cost Comparisons – FY 2017/18 Rates

Water



Wastewater





# Water Resources Department Questions?

# Environmental Management & Sustainability Department

*Encourage efficient use of natural resources, protect the community from environmental hazards, and ensure excellence in the delivery of solid waste services through waste reduction, reuse, recycling, innovative technology, and education.*



# Household Hazardous Material

## From Events to Permanent Facility

- 25,000 vehicles served in the last 5 years
- 314,000 gallons of hazardous material collected in the last 5 years
- Permanent Facility opens Fall 2018



Rendering of Facility





# Energy Efficiency

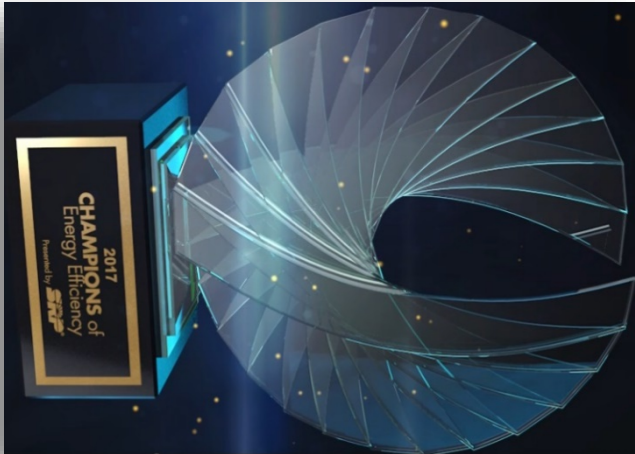
## Top 3 2017 Energy Efficiency projects

Project Details	Estimated Annual kWh saved/ \$ saved
Northwest Water Reclamation Plant LED Lighting Retrofit	550,600 kWh/\$44,050
East Mesa Service Center HVAC & Energy Management System	557,560 kWh / \$58,000
Convention Center HVAC Upgrades	200,000 kWh / \$10,000

**Performance measure:**

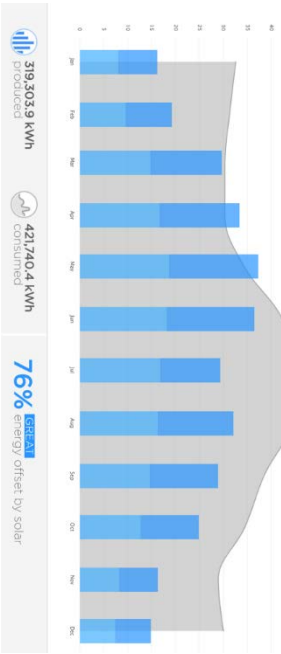
**kWh saved through energy conservation (All Energy Efficiency Projects)**

- \$457,000 savings in 2017 (5,700,000 kWh)
- Equivalent to removing 908 vehicles driven 1 year

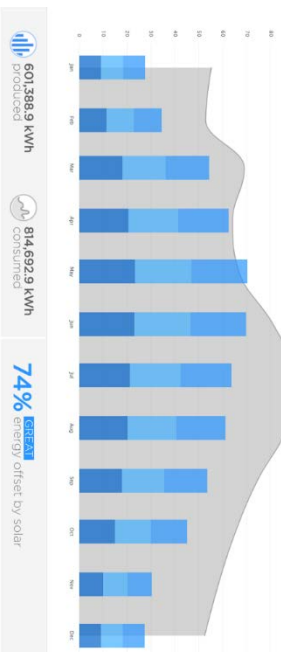


# Renewable Energy

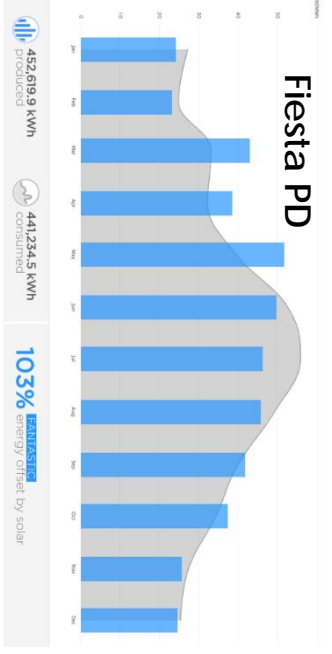
Superstition PD/Fire Station 212



Red Mountain Library



Fiesta PD



Multi-Gen

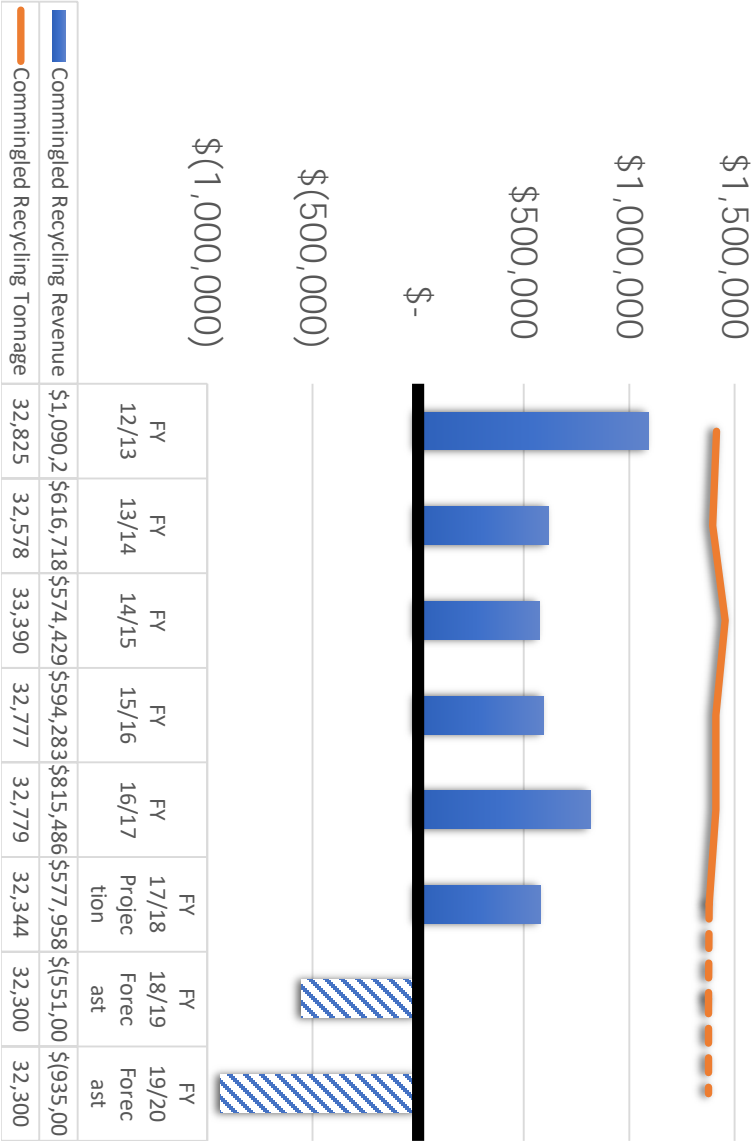


## Performance Measure:

kWh generated from renewable energy sources (All 8 Solar Projects)

- \$53,000 savings in 2017 (2,200,000 kWh)
- Equivalent to removing 351 vehicles driven 1 year

# Recycling Revenue vs Tonnage





# Investment In the Future



## Food To Energy



- Collection
  - Feedstock supply, collection method (trucks and containers) and rates
- Treatment
  - Bench Scale Testing and preprocessing (Center St.)
  - Anaerobic Digestion-Renewable Natural Gas
- Final Use
  - Co-generation on-site or pipeline quality
  - Treatment for both

# Investment In the Future



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## Bulk Item Collection

- Increase to 4 day a week collection
- Temporary Employee

## Introducing “Neighborhood Clean-Up”

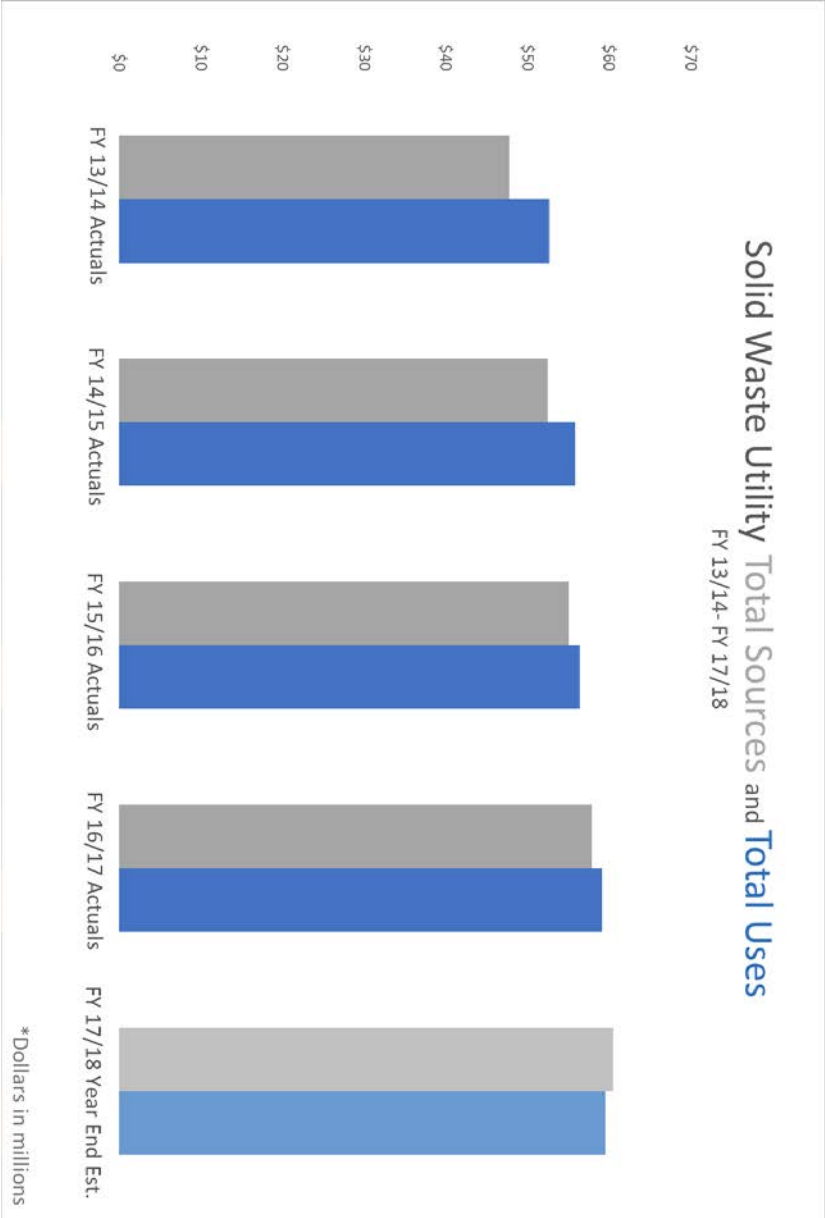
- Re-branding
- Educate public and promote

# Challenges

- *Recycling Market Risk Increases*
- *Barrel Replacement Program*
- *Keeping Up With Growth*
- *Tipping Fee Increases*
- *Call-Out Pay Policy Change*
- *CNG Station Annual Maintenance*



# Solid Waste Utility 5-Year Trend



# Solid Waste Utility Financial Summary

Sources of Funding	FY 16/17	FY 17/18	FY 17/18	FY 18/19
	Actuals	Adopted Budget	Year End Estimate	Proposed Budget
Revenues	\$57.8	\$59.8	\$60.4	\$62.5
<b>Uses of Funding</b>				
Operating Expenditures	\$33.0	\$34.9	\$34.4	\$35.8
Project Costs	\$0.1	\$0.0	\$0.0	\$0.5
General Fund Transfer	\$21.4	\$21.4	\$21.4	\$21.8
Debt Service Transfer	\$0.3	\$0.3	\$0.3	\$0.4
Lifecycle/ Infrastructure Transfers	\$1.2	\$1.2	\$1.2	\$1.2
Capital Transfer	\$3.2	\$2.1	\$2.1	\$2.5
Total Uses	\$59.1	\$60.0	\$59.5	\$62.2
Net Sources and Uses	(\$1.3)	(\$0.3)	\$0.9	\$0.2

\*Dollars in millions

# Environmental Management & Sustainability Department

## Questions?







# ENERGY RESOURCES DEPARTMENT

Our purpose is to safely, reliably and economically provide electric and natural gas utility services to our customers.

	COMMUNITY SAFETY	SKILLED & TALENTED WORKFORCE	SUSTAINABLE ECONOMY	TRANSFORM NEIGHBORHOODS	PLACEMAKING
SAFETY	X	X	X	X	
RELIABILITY	X	X	X	X	X
ECONOMICS		X	X	X	X



- Celebrated 100 years of serving our customers
- American Public Gas Association - System Operational Achievement Recognition (SOAR) - Silver 2017-2020
- American Public Power Association (APPA) Reliable Public Power Provider (RP3) - Platinum 2017 -2020

## Accomplishments

FY 17/18



# KEY PERFORMANCE MEASURES – Electric

## SAFETY

1,500+ days without an Employee Lost Time Accident

## RELIABILITY

Outage Duration – Measured in minutes of interruptions per customer

	17/18	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Cum.
Actual	.486	.108	.66	0	.209	.011	.191	1.638	3.303	
Target	2.834	1.001	1.097	.947	3.055	.44	.185	.197	15.756	

# of Outages	17/18	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Cum.
Actual	7	2	5	0	1	1	2	2	19	
Target	8	8	4	3	2	1	1	1	28	

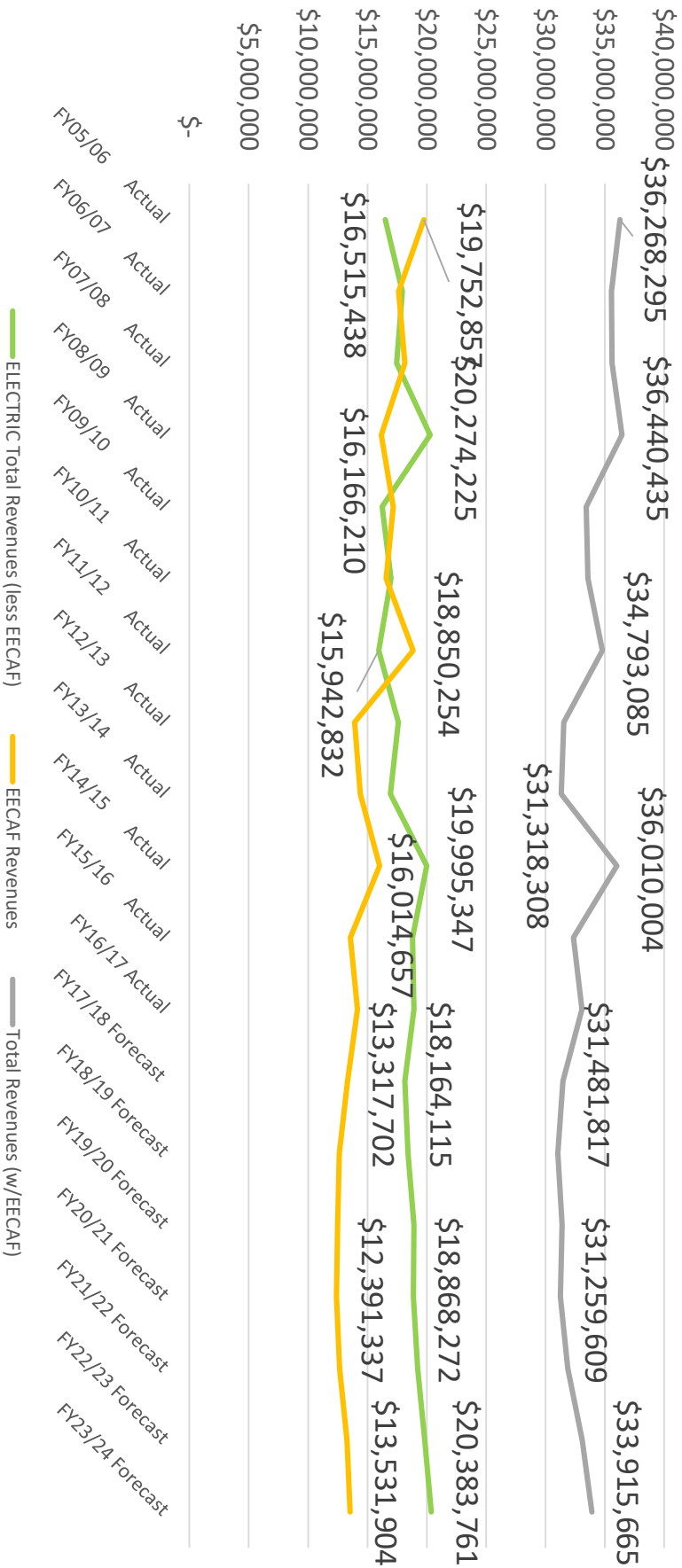
<u>ECONOMICS (Affordab</u>	17/18	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Avg.
Actual	\$8.79	\$10.31	\$10.55	\$13.85	\$18.21	\$12.28	\$15.84	\$13.59	\$12.93	

O&M Costs / Customer	Target	\$16.49	\$16.49	\$16.49	\$16.49	\$16.49	\$16.49	\$16.49	\$16.49	\$16.49
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Favorable residential bill comparisons with SRP (with proposed rate increase)

- More than 21% less than SRP for low consumption level customer
- More than 13% less than SRP for average customer

# Electric Revenue History and Forecast



# KEY PERFORMANCE MEASURES – Gas

## SAFETY

900+ days without an Employee Lost Time Accident

Emergency Response Time - % exceeding 30 mins

17/18	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Avg.
Actual	0.0%	3.7%	0.0%	0.0%	0.67%	0.0%	1.14%	0.0%	0.69%
Target	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%

Blue Stake - Damages per 1,000 locates

17/18 July Aug Sept Oct Nov Dec Jan Avg.

Actual 0.52 0.47 0.22 0.05 0.0 0.79 0.0 0.29

Target 2 2 2 2 2 2 2 2

## RELIABILITY

Outage Frequency - Measured by Interruptions per customer

17/18 July Aug Sept Oct Nov Dec Jan Feb Cum.

Actual 0.0002 0.0013 0.0 0.0001 0.0 0.0 0.0003 0.0 0.0019

Target 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0002 0.0016

## ECONOMICS (Affordability)

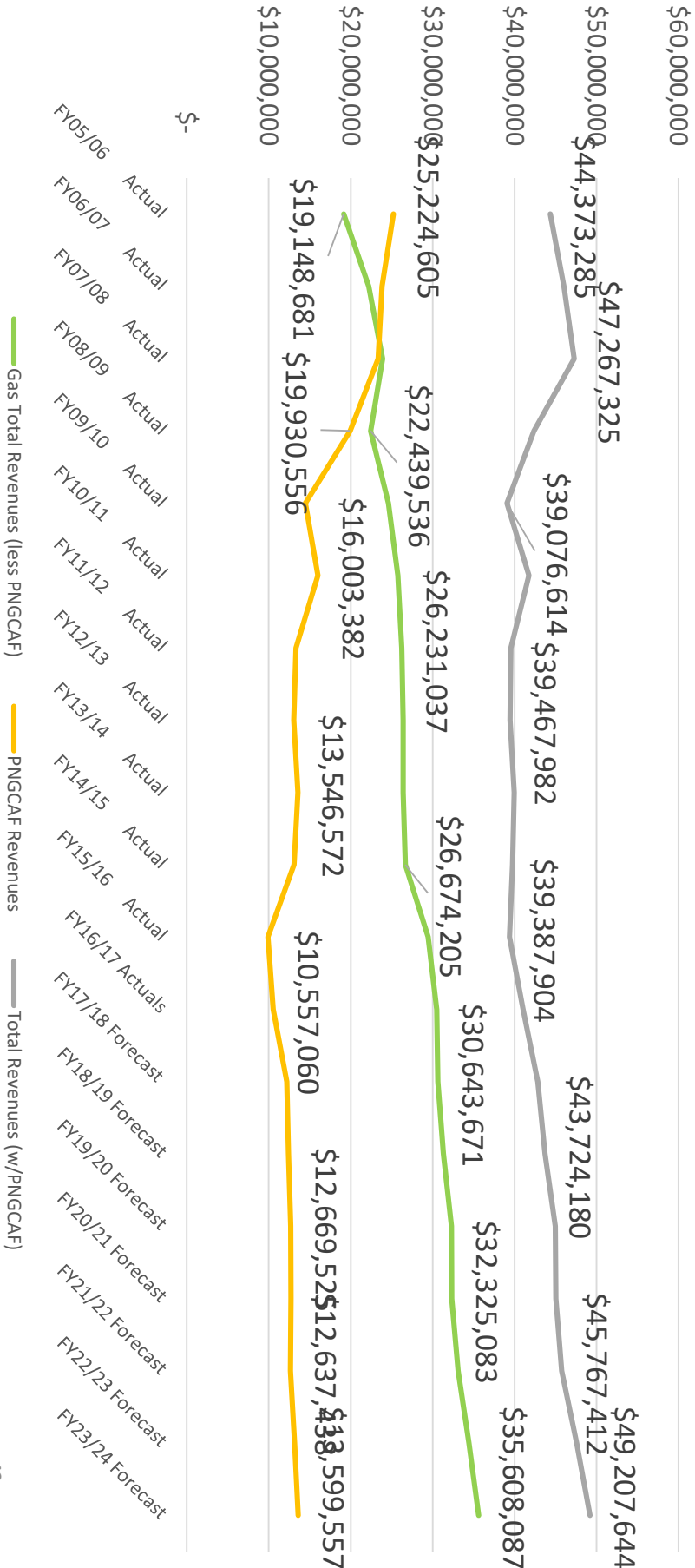
O&M Costs / Customer

17/18	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Avg.
Actual	\$6.80	\$8.20	\$8.42	\$8.12	\$11.17	\$7.61	\$7.64	\$7.61	\$8.20
Target	\$8.59	\$8.59	\$8.59	\$8.59	\$8.59	\$8.59	\$8.59	\$8.59	\$8.59

Residential bills are competitive and comparable with SWG



# Gas Revenue History and Forecast



# FY 18/19 Challenges & Opportunities

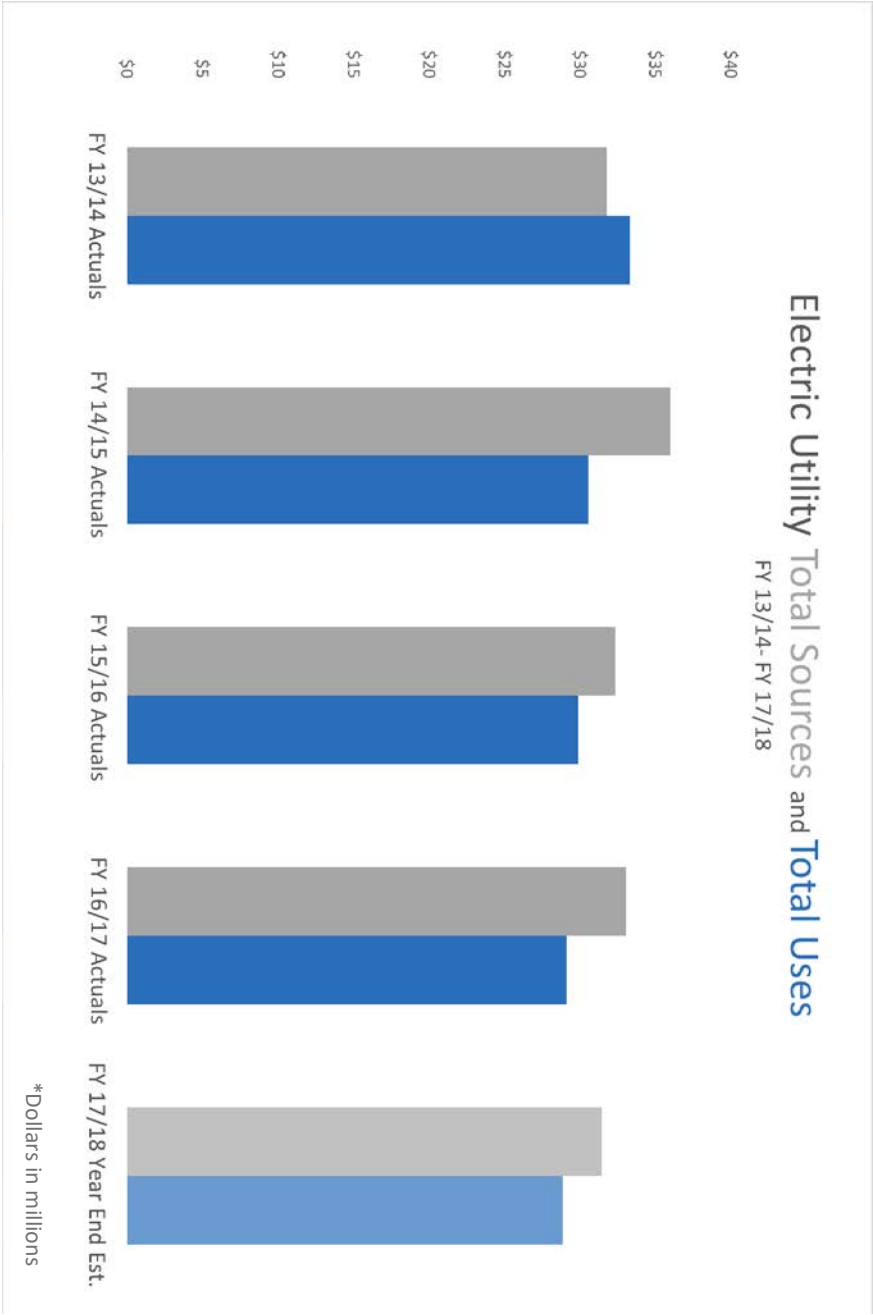
- Continue shifting recovery of fixed costs to fixed/flat rate components
- Advanced Meter Technology/Infrastructure (AMI)
  - Awaiting Consultant Recommendations
  - Integration with existing systems such as CIS
  - Funding
- Cyber Security
- Plan for more clean energy resources
  - Integrated Resource Plan
  - Joint projects with Environmental Management & Sustainability and Water Resources
  - Electric & CNG Vehicles
- Stretching remaining 2014 Bond Authorization
- Hyper Competitive Labor Market



# PROPOSED FY 18/19 Budget

- No material changes unique to the Energy Resources Department.
- Funding system expansions to meet customer growth with a combination of contributions from customers and bonds.
- Potential complications of downtown revitalization could be costly and exceed available bond authorizations.
- Supplementing our crews with contractors and temporary employees where effective.
- Compensation – recruiting and retention of qualified employees is critical to meeting the challenges and capitalizing on the opportunities for innovation and technology.

# Electric Utility 5-Year Trend



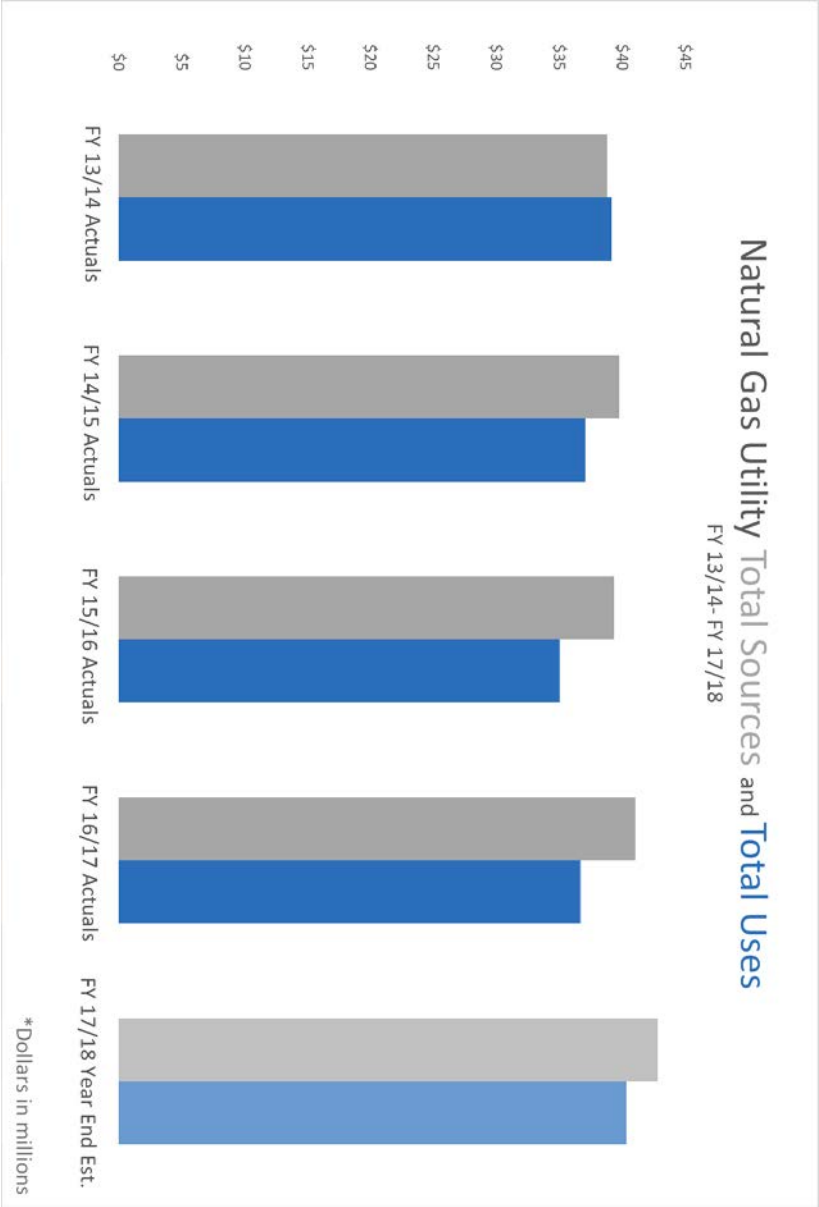


# Electric Utility Financial Summary

Sources of Funding	FY 16/17	FY 17/18	FY 17/18	FY 18/19
	Actuals	Adopted Budget	Year End Estimate	Proposed Budget
Revenues	\$18.9	\$18.2	\$18.2	\$18.4
EECAF Revenues	\$14.2	\$13.6	\$13.3	\$12.6
Total Sources	\$33.1	\$31.9	\$31.5	\$31.0
Uses of Funding				
Operating Expenditures	\$6.7	\$7.7	\$6.7	\$7.6
EECAF Expenditures	\$13.7	\$13.6	\$13.3	\$12.6
Expenditure Subtotal	\$20.4	\$21.3	\$19.9	\$20.3
Project Costs	\$0.2	\$0.0	\$0.0	\$0.2
General Fund Transfer	\$6.5	\$6.7	\$6.7	\$6.8
Debt Service Transfer	\$1.2	\$1.3	\$1.3	\$1.5
Lifecycle/ Infrastructure Transfers	\$0.7	\$0.6	\$0.6	\$0.6
Capital Transfer	\$0.2	\$0.1	\$0.1	\$0.3
Economic Investment Fund Transfer	\$0.0	\$0.2	\$0.2	\$0.5
Total Uses	\$29.1	\$30.2	\$28.9	\$30.1
Net Sources and Uses	\$3.9	\$1.7	\$2.6	\$1.0

\*Dollars in millions

# Natural Gas Utility 5-Year Trend



# Natural Gas Utility Financial Summary

Sources of Funding	FY 16/17	FY 17/18	FY 17/18	FY 18/19
	Actuals	Adopted Budget	Year End Estimate	Proposed Budget
Revenues	\$30.5	\$31.1	\$30.6	\$31.3
PNGCAF Revenues	\$10.6	\$13.1	\$12.2	\$12.4
Total Sources	\$41.0	\$44.1	\$42.8	\$43.7
Uses of Funding				
Operating Expenditures	\$13.0	\$13.8	\$13.1	\$14.0
PNGCAF Expenditures	\$11.1	\$13.0	\$12.5	\$12.4
Expenditure Subtotal	\$24.1	\$26.7	\$25.6	\$26.4
Project Costs	\$0.1	\$0.0	\$0.1	\$0.2
General Fund Transfer	\$7.8	\$8.0	\$8.0	\$8.1
Debt Service Transfer	\$3.7	\$5.5	\$5.5	\$5.7
Lifecycle/ Infrastructure Transfers	\$0.8	\$0.9	\$0.9	\$0.9
Capital Transfer	\$0.1	\$0.1	\$0.1	\$0.0
Economic Investment Fund Transfer	\$0.0	\$0.2	\$0.3	\$0.6
Total Uses	\$36.7	\$41.3	\$40.3	\$41.8
Net Sources and Uses	\$4.4	\$2.8	\$2.5	\$1.9

\*Dollars in millions

# ENERGY RESOURCES DEPARTMENT Questions?







# Rate Adjustment Implementation

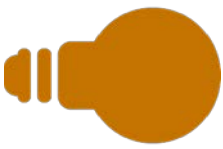
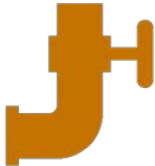
- Methods of implementation of rate adjustments can vary from year to year based on needs and goals of the individual utilities
- Impact on individual customers can vary based on the method of implementation and the customer consumption of services

# Revenue Impact

Forecasted expenses are compared with forecasted revenues based on current rates and projected customer growth

In FY 2018/19, the following increase in revenues is needed to accommodate the estimated costs

Utility	Revenue
Electric	\$252,000
Natural Gas	\$474,000
Solid Waste	\$1,555,000
Wastewater	\$2,680,000
Water	\$3,965,000





# Average Residential Customer Impact

Utility	Annual	Monthly	
Electric	\$1.25	\$15.00	
Natural Gas	\$0.75	\$9.00	
Solid Waste	\$1.01	\$12.12	
Wastewater	\$1.15	\$13.80	
Water	\$1.62		
	\$19.44		

# City of Mesa FY1819 Utility Rate Adjustment Scenarios

SCENARIO A: Smooth rate adjustments throughout the forecast period with a minimum 10% reserve balance

TOTAL ENTERPRISE FUND	FY 17/18	FY 18/19	FY 19/20	FY 20/21*	FY 21/22	FY 22/23	FY 23/24
	Year End Est.	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
Total Sources	\$368,434,516	\$383,388,041	\$398,960,176	\$405,397,585	\$417,352,847	\$436,241,880	\$453,773,450
Total Uses	\$363,664,604	\$387,021,463	\$399,994,122	\$416,292,479	\$432,850,411	\$447,966,402	\$459,050,481
Net Sources and Uses	\$4,769,912	(\$3,633,423)	(\$1,033,946)	(\$10,894,894)	(\$15,497,565)	(\$11,724,522)	(\$5,277,031)
Ending Reserve Balance	\$97,497,738	\$93,864,315	\$92,830,369	\$81,935,475	\$66,437,910	\$54,713,388	\$49,436,357
Ending Reserve Balance Percent**	25.2%	23.5%	22.3%	18.9%	14.8%	11.9%	10.4%
WTR All Rate Revenue	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
WW All Rate Revenue	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
SW Residential	3.50%	3.50%	3.50%	3.50%	3.00%	3.00%	3.00%
SW Commercial	2.50%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
SW Rolloff	0.00%	0.00%	2.00%	2.00%	2.00%	2.00%	2.00%
ELC Residential -svc charge only	\$1.25	\$1.75	\$2.25	\$2.50	\$2.50	\$2.50	\$2.50
ELC Non-Residential	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GAS Residential - svc charge only	\$0.75	\$0.75	\$0.75	\$0.75	\$1.00	\$1.00	\$1.00
GAS Non-Residential - svc charge only	\$0.75	\$0.75	\$0.75	\$0.75	\$1.00	\$1.00	\$1.00
*WITH ECONOMIC CORRECTION STARTING IN FY20/21							



# City of Mesa FY1819 Utility Rate Adjustment Scenarios

**SCENARIO B:** A 1% reduction of current rates in FY18/19 with smooth rate adjustments FY19/20-FY23/24 that preserves a minimum 8% reserve balance or higher over the forecast period

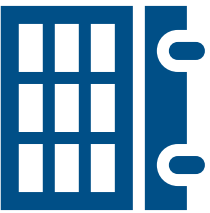
<b>TOTAL ENTERPRISE FUND</b>		FY 17/18 Year End Est.	FY 18/19 Forecast	FY 19/20 Forecast	FY 20/21* Forecast	FY 21/22 Forecast	FY 22/23 Forecast	FY 23/24 Forecast
Total Sources		\$368,434,516	\$371,944,523	\$388,945,645	\$400,477,323	\$418,269,327	\$443,612,668	\$460,350,820
Total Uses		\$363,664,604	\$386,801,903	\$399,803,142	\$416,203,384	\$432,878,051	\$448,123,129	\$459,191,339
<b>Net Sources and Uses</b>		\$4,769,912	(\$14,857,380)	(\$10,857,497)	(\$15,726,061)	(\$14,608,725)	(\$4,510,461)	\$1,159,481
<b>Ending Reserve Balance</b>		<b>\$97,497,737</b>	<b>\$82,640,357</b>	<b>\$71,782,860</b>	<b>\$56,056,799</b>	<b>\$41,448,075</b>	<b>\$36,937,614</b>	<b>\$38,097,095</b>
Ending Reserve Balance Percent*		<b>25.2%</b>	<b>20.7%</b>	<b>17.2%</b>	<b>12.9%</b>	<b>9.2%</b>	<b>8.0%</b>	<b>8.0%</b>
WTR All Rate Revenue	3.50%	-1.00%	5.25%	5.25%	5.25%	5.25%	5.25%	2.67%
WW All Rate Revenue	4.00%	-1.00%	5.75%	5.75%	5.75%	5.75%	5.75%	3.17%
SW Residential	3.50%	-1.00%	5.25%	5.25%	5.25%	5.25%	5.25%	2.67%
SW Commercial	2.50%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
SW Rolloff	0.00%	0.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
ELC Residential	\$1.25	-1.00%	\$3.38	\$3.75	\$3.75	\$3.75	\$3.75	\$1.91
ELC Non-Residential	\$0.00	-1.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GAS Residential	\$0.75	-1.00%	\$1.13	\$1.13	\$1.13	\$1.50	\$1.50	\$0.76
GAS Non-Residential	\$0.75	-1.00%	\$1.13	\$1.13	\$1.13	\$1.50	\$1.50	\$0.76
<b>*WITH ECONOMIC CORRECTION STARTING IN FY20/21</b>								

# City of Mesa FY1819 Utility Rate Adjustment Scenarios

**SCENARIO C:** A reduced rate adjustment in FY18/19 with smoothed rate adjustments FY19/20-FY23/24 that preserves a minimum 8% reserve balance or higher over the forecast period

TOTAL ENTERPRISE FUND		FY 17/18 Year End Est.	FY 18/19 Forecast	FY 19/20 Forecast	FY 20/21* Forecast	FY 21/22 Forecast	FY 22/23 Forecast	FY 23/24 Forecast
Total Sources		\$368,434,516	\$379,784,762	\$395,195,104	\$402,512,049	\$415,642,809	\$435,861,340	\$454,835,874
Total Uses		\$363,664,604	\$386,949,398	\$399,918,820	\$416,234,768	\$432,816,211	\$447,958,792	\$459,071,729
Net Sources and Uses		\$4,769,912	(\$7,164,636)	(\$4,723,716)	(\$13,722,719)	(\$17,173,401)	(\$12,097,451)	(\$4,235,856)
Ending Reserve Balance		\$97,497,737	\$90,333,101	\$85,609,385	\$71,886,666	\$54,713,265	\$42,615,814	\$38,379,958
Ending Reserve Balance Percent*		25.2%	22.6%	20.6%	16.6%	12.2%	9.3%	8.1%
WTR All Rate Revenue	3.50%	2.00%	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%
WW All Rate Revenue	4.00%	2.50%	4.35%	4.35%	4.35%	4.35%	4.35%	4.35%
SW Residential	3.50%	2.00%	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%
SW Commercial	2.50%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
SW Rolloff	0.00%	0.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
ELC Residential -svc charge only	\$1.25	\$1.00	\$2.25	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50
ELC Non-Residential	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GAS Residential - svc charge only	\$0.75	\$0.45	\$0.75	\$0.75	\$0.75	\$1.00	\$1.00	\$1.00
GAS Non-Residential - svc charge only	\$0.75	\$0.45	\$0.75	\$0.75	\$0.75	\$1.00	\$1.00	\$1.00

\*WITH ECONOMIC CORRECTION STARTING IN FY20/21



# Schedule for FY 2018/19 Utility Rate Consideration

- Apr 5** – City Council Discussion of Utility Rates
- May 7** – Introduce Utility Rate Ordinances
- May 21** – City Council Action on Utility Rates
- July 1** – Effective date for Utility Rate changes





# City of Mesa FY1819 Utility Rate Adjustment Scenarios

**SCENARIO B2:** A 2% reduction of current rates in FY18/19 with smooth rate adjustments FY19/20-FY23/24 that preserves a minimum 8% reserve balance or higher over the forecast period

TOTAL ENTERPRISE FUND									
	FY 17/18 Year End Est.	FY 18/19 Forecast	FY 19/20 Forecast	FY 20/21* Forecast	FY 21/22 Forecast	FY 22/23 Forecast	FY 23/24 Forecast		
Total Sources	\$368,434,516	\$369,275,212	\$387,021,044	\$400,164,030	\$419,763,736	\$447,127,707	\$460,314,590		
Total Uses	\$363,664,604	\$386,757,828	\$399,773,960	\$416,206,429	\$432,917,250	\$448,202,740	\$459,199,925		
Net Sources and Uses	\$4,769,912	(\$17,482,616)	(\$12,752,916)	(\$16,042,399)	(\$13,153,514)	(\$1,075,033)	\$1,114,665		
Ending Reserve Balance	\$97,497,737	\$80,015,121	\$67,262,205	\$51,219,806	\$38,066,293	\$36,991,260	\$38,105,925		
Ending Reserve Balance Percent*	25.2%	20.0%	16.2%	11.8%	8.5%	8.06%	8.0%		
WTR All Rate Revenue	3.50%	-2.00%	5.80%	5.80%	5.80%	5.80%	5.80%	1.35%	
WW All Rate Revenue	4.00%	-2.00%	6.30%	6.30%	6.30%	6.30%	6.30%	1.85%	
SW Residential	3.50%	-2.00%	5.80%	5.80%	5.80%	5.80%	5.80%	1.35%	
SW Commercial	2.50%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	
SW Rolloff	0.00%	0.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	
ELC Residential - svc charge only	\$1.25	-2.00%	\$3.73	\$4.14	\$4.14	\$4.14	\$4.14	\$0.96	
ELC Non-Residential	\$0.00	-2.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
GAS Residential - svc charge only	\$0.75	-2.00%	\$1.24	\$1.24	\$1.66	\$1.66	\$1.66	\$0.39	
GAS Non-Residential - svc charge only	\$0.75	-2.00%	\$1.24	\$1.24	\$1.66	\$1.66	\$1.66	\$0.39	
*WITH ECONOMIC CORRECTION STARTING IN FY20/21									

# City of Mesa FY1819 Utility Rate Adjustment Scenarios

## SCENARIO B3:

A 3% reduction of current rates in FY18/19 with smooth rate adjustments FY19/20-FY23/24 that preserves a minimum 8% reserve balance or higher over the forecast period

TOTAL ENTERPRISE FUND	FY 17/18	FY 18/19	FY 19/20	FY 20/21*	FY 21/22	FY 22/23	FY 23/24
	Year End Est.	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
Total Sources	\$368,434,516	\$366,605,900	\$385,278,516	\$400,271,681	\$421,966,452	\$449,019,709	\$460,760,619
Total Uses	\$363,664,604	\$386,713,752	\$399,748,420	\$416,217,892	\$432,970,615	\$448,249,890	\$459,218,156
Net Sources and Uses	\$4,769,912	(\$20,107,851)	(\$14,469,903)	(\$15,946,211)	(\$11,004,163)	\$769,819	\$1,542,463
Ending Reserve Balance	\$97,497,737	\$77,389,886	\$62,919,982	\$46,973,771	\$35,969,608	\$36,739,427	\$38,281,890
Ending Reserve Balance Percent*	25.2%	19.4%	15.1%	10.8%	8.0%	8.0%	8.0%
WTR All Rate Revenue	3.50%	-3.00%	6.43%	6.43%	6.43%	5.51%	0.93%
WW All Rate Revenue	4.00%	-3.00%	6.93%	6.93%	6.93%	6.01%	1.43%
SW Residential	3.50%	-3.00%	6.43%	6.43%	6.43%	5.51%	0.93%
SW Commercial	2.50%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
SW Rolloff	0.00%	0.00%	2.00%	2.00%	2.00%	2.00%	2.00%
ELC Residential - svc charge only	\$1.25	-3.00%	\$4.13	\$4.59	\$4.59	\$3.93	\$0.67
ELC Non-Residential	\$0.00	-3.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GAS Residential - svc charge only	\$0.75	-3.00%	\$1.38	\$1.38	\$1.84	\$1.57	\$0.27
GAS Non-Residential - svc charge only	\$0.75	-3.00%	\$1.38	\$1.38	\$1.84	\$1.57	\$0.27

\*WITH ECONOMIC CORRECTION STARTING IN FY20/21

# City of Mesa FY1819 Utility Rate Adjustment Scenarios

**SCENARIO D:** A reduced rate adjustment in FY18/19 with smoothed rate adjustments FY19/20-FY23/24 that preserves a minimum 8% reserve balance or higher over the forecast period

TOTAL ENTERPRISE FUND	FY 17/18	FY 18/19	FY 19/20	FY 20/21*	FY 21/22	FY 22/23	FY 23/24
	Year End Est.	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
Total Sources	\$368,434,516	\$381,093,424	\$396,272,091	\$402,956,705	\$415,404,697	\$434,876,846	\$453,040,145
Total Uses	\$363,664,604	\$386,975,571	\$399,940,360	\$416,243,661	\$432,811,448	\$447,939,102	\$459,035,815
Net Sources and Uses	\$4,769,912	(\$5,882,147)	(\$3,668,269)	(\$13,286,957)	(\$17,406,751)	(\$13,062,256)	(\$5,995,670)
Ending Reserve Balance	\$97,497,737	\$91,615,590	\$87,947,321	\$74,660,364	\$57,253,613	\$44,191,357	\$38,195,687
Ending Reserve Balance Percent*	25.2%	22.9%	21.1%	17.3%	12.8%	9.6%	8.0%
WTR All Rate Revenue	3.50%	2.00%	3.72%	3.72%	3.72%	3.72%	3.72%
WW All Rate Revenue	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
SW Residential	3.50%	2.50%	3.50%	3.50%	3.50%	3.50%	3.50%
SW Commercial	2.50%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
SW Rolloff	0.00%	0.00%	2.00%	2.00%	2.00%	2.00%	2.00%
ELC Residential -svc charge only	\$1.25	\$1.25	\$2.25	\$2.50	\$2.50	\$2.50	\$2.50
ELC Non-Residential	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GAS Residential - svc charge only	\$0.75	\$0.55	\$0.75	\$0.75	\$1.00	\$1.00	\$1.00
GAS Non-Residential - svc charge only	\$0.75	\$0.55	\$0.75	\$0.75	\$1.00	\$1.00	\$1.00

\*WITH ECONOMIC CORRECTION STARTING IN FY20/21

# Solid Waste Services

Residential Services			Commercial Services		
	Number of Customers	Rate		Number of Customers	Rate
Black (trash) barrel	135,183	\$28.76/ month for 90 gal 1xwk	Front Load bin service	2,406	Varies with size & quantity of bin and frequency of service
		\$25.68/ month for 60 gal 1xwk			
Blue (recycle) barrel	131,650	Included with trash service	Rolloff boxes	1,450	Varies with size of rolloff box
Green (yard waste) barrel	41,316	\$6.79/ month for 90 gal 1xwk			





# Utility Operating Expenditures

	FY14/15	FY15/16	FY16/17	FY17/18	FY18/19		FY14/15 to FY15/16	FY15/16 to FY16/17	FY16/17 to FY17/18	FY17/18 to FY18/19
	Actuals	Actuals	Actuals	Projected	Forecasted					
<b>Electric</b>	\$ 6.7	\$ 6.8	\$ 6.7	\$ 6.7	\$ 7.6	<b>Per Cent Change</b>				
<b>Gas</b>	12.1	11.9	13.0	13.1		<b>1.5%</b>	<b>-1.5%</b>	<b>0.0%</b>	<b>13.4%</b>	
<b>Water</b>	38.0	37.9	40.8	48.3		<b>-1.7%</b>	<b>9.2%</b>	<b>0.8%</b>	<b>7.6%</b>	
<b>Wastewater</b>	21.0	21.3	23.1	24.0	25.8	<b>-0.3%</b>	<b>7.7%</b>	<b>18.4%</b>	<b>3.5%</b>	
<b>Solid Waste</b>	32.0	32.5	33.0	34.4	35.0	<b>1.4%</b>	<b>8.5%</b>	<b>3.9%</b>	<b>7.5%</b>	
<b>Total</b>	\$ 109.8	\$ 110.4	\$ 116.6	\$ 126.5	\$ 132.5	<b>1.6%</b>	<b>1.5%</b>	<b>4.2%</b>	<b>1.7%</b>	
						<b>0.5%</b>	<b>5.6%</b>	<b>8.5%</b>	<b>4.7%</b>	

Dollars in millions

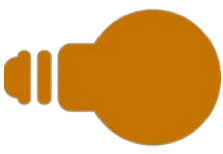
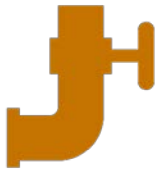
Study Session  
April 5, 2018  
Attachment 2  
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# Proposed Rate Adjustments

	Prior Year		
	FY 2017/18	FY 2018/19	FY 2018/19
	<u>Adopted</u>	<u>Projection</u>	<u>Proposal</u>
Electric	\$ 1.25	\$ 1.75	\$ 1.75
Gas	\$ 0.75	\$ 0.75	\$ 0.75
Water	3.5%	3.5%	3.5%
Wastewater	4.0%	4.0%	4.0%
Solid Waste *	3.5%	3.5%	3.5%

\* Residential



# Water Utility Rate Structure

## Current Residential Tier Structure for FY 17/18

First 3,000 gallons included in service charge

Tier	Gallons
Tier 1	4,000-10,000
Tier 2	Next 10,000 gallons
Tier 3	Next 4,000 gallons
Tier 4	All additional 1,000 gallons

## Proposed Residential Tier Structure for FY 18/19

First 3,000 gallons included in service charge

Tier	Gallons
Tier 1	4,000-9,000
Tier 2	Next 9,000 gallons
Tier 3	Next 6,000 gallons
Tier 4	All additional 1,000 gallons



# FY 18/19 Proposed Budget

City of Mesa  
Enterprise Funds  
(updated 04/02/2018)

2018/19 Proposed Budget	Actual FY 16/17	Budget FY 17/18	Projected FY 17/18	Forecast FY 18/19	Forecast FY 19/20	Forecast FY 20/21	Forecast FY 21/22	Forecast FY 22/23	Forecast FY 23/24
Beginning Reserve Balance	\$66.2	\$87.3	\$92.7	\$97.4	\$93.7	\$92.7	\$81.8	\$66.3	\$54.6
<b>Sources</b>									
Revenues	\$329.8	\$337.6	\$342.9	\$358.3	\$373.8	\$380.3	\$392.1	\$409.9	\$426.7
EECAF/PNGCAF Pass-through	\$24.7	\$26.7	\$25.5	\$25.0	\$25.2	\$25.1	\$25.3	\$26.4	\$27.1
<b>Uses</b>									
Operating/Transfer	\$303.2	\$341.9	\$338.0	\$362.0	\$374.8	\$391.2	\$407.6	\$421.6	\$432.0
EECAF/PNGCAF Pass-through	\$24.8	\$26.6	\$25.7	\$25.0	\$25.2	\$25.1	\$25.3	\$26.4	\$27.1
Net Sources and Uses	\$26.5	(\$4.2)	\$4.7	(\$3.7)	(\$1.0)	(\$10.9)	(\$15.5)	(\$11.7)	(\$5.3)
Ending Reserve Balance	\$92.7	\$83.1	\$97.4	\$93.7	\$92.7	\$81.8	\$66.3	\$54.6	\$49.3
Ending Reserve Balance Percent *	25.2%	21.5%	25.2%	23.4%	22.3%	18.9%	14.4%	11.9%	10.4%

Dollars in Millions

Note: Includes an economic correction beginning FY 20/21

\*As a % of uses of funding of the following year



# Economic Investment Fund Overview

April 5, 2018

Presented by:

Candace Cannistraro, Management and Budget Director

# Spring Training

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- Council request for opportunities to fund spring training
- Sale of Pinal County land identified as funding source
- Economic Investment Fund was set up to cover the cashflow of the debt service of the excise tax bonds until the land sales took place

# H.E.A.T. Initiative

---

- Economic Development initiative for investment activities/projects
  - Health, Education, Aerospace, Technology/Tourism
- Economic Investment Fund utilized to leverage debt service savings in Enterprise Fund due to refinancing of existing debt



# Investment Projects

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- Healthcare study
- Mesa Center for Higher Education
- Benedictine University
- Spring Training Multi-use Fields
- Able Engineering
- AZ Labs
- Accelerator
- Purchase of Mervyn's building
- Redevelopment zones



## Facility Lease Revenue

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- Operating expenses are off-set with revenues from tenants of the facility
- One-time lease opportunities are allocated to investment projects
  - Ex: Zayo lease
- Net expenses are covered by the Enterprise Fund

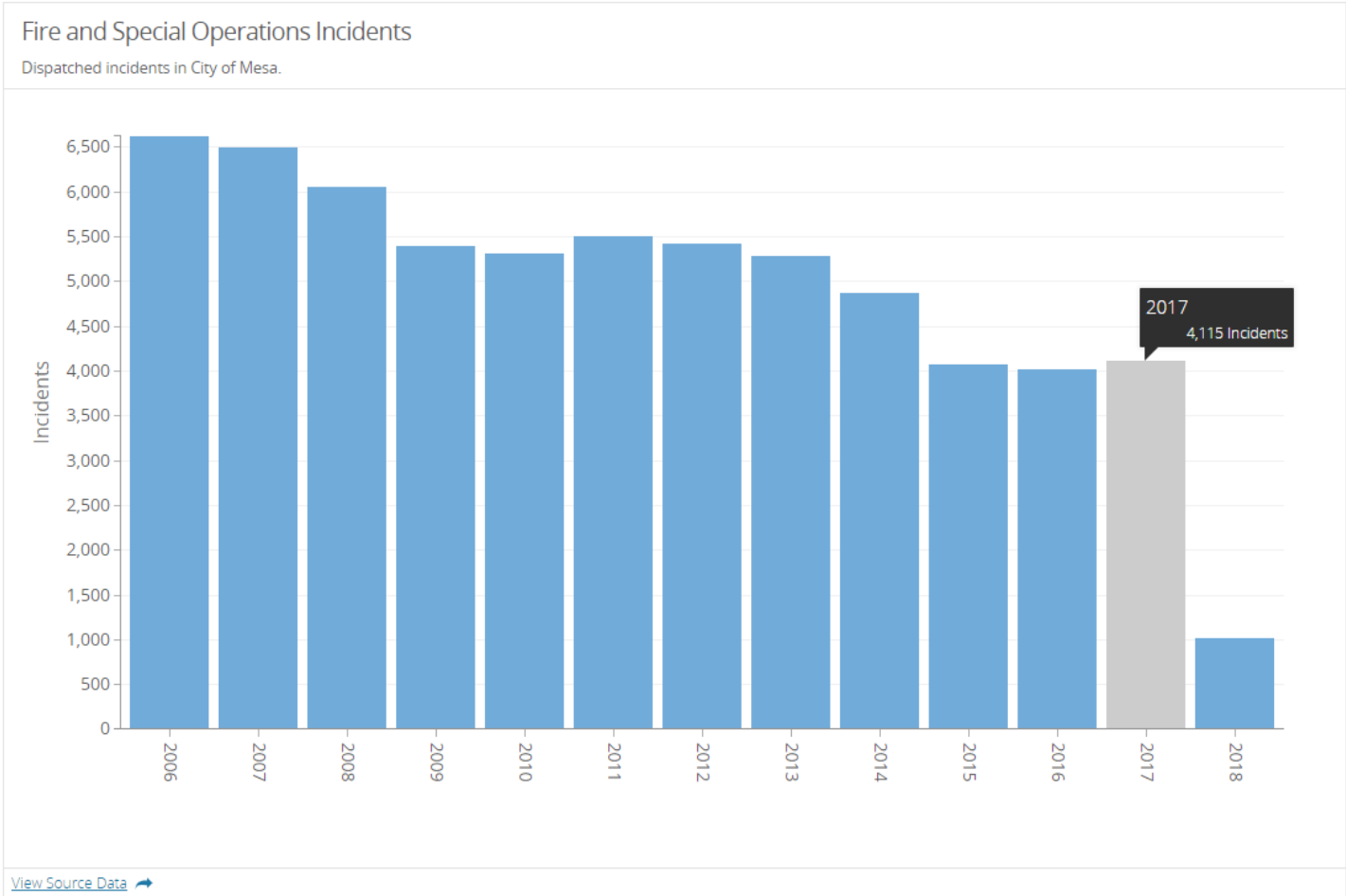
## Economic Investment Fund

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- Serves as a financial tool for investment in growth and expansion of industries in Mesa
- Allows for leveraging development opportunities as they arise
- Proposed budget includes placeholder for new investment in downtown (potential ASU development)



# Fire and Special Operations Incidents

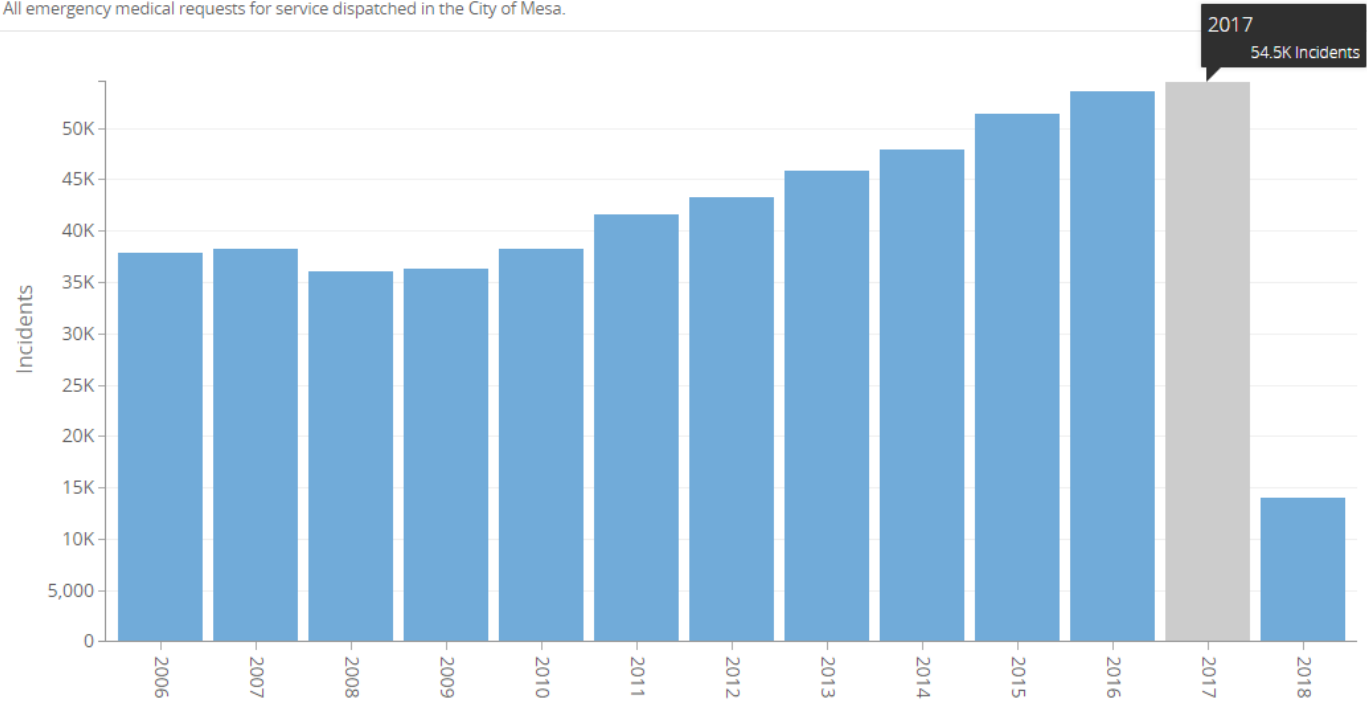




# Medical Incidents

## Medical Incidents

All emergency medical requests for service dispatched in the City of Mesa.

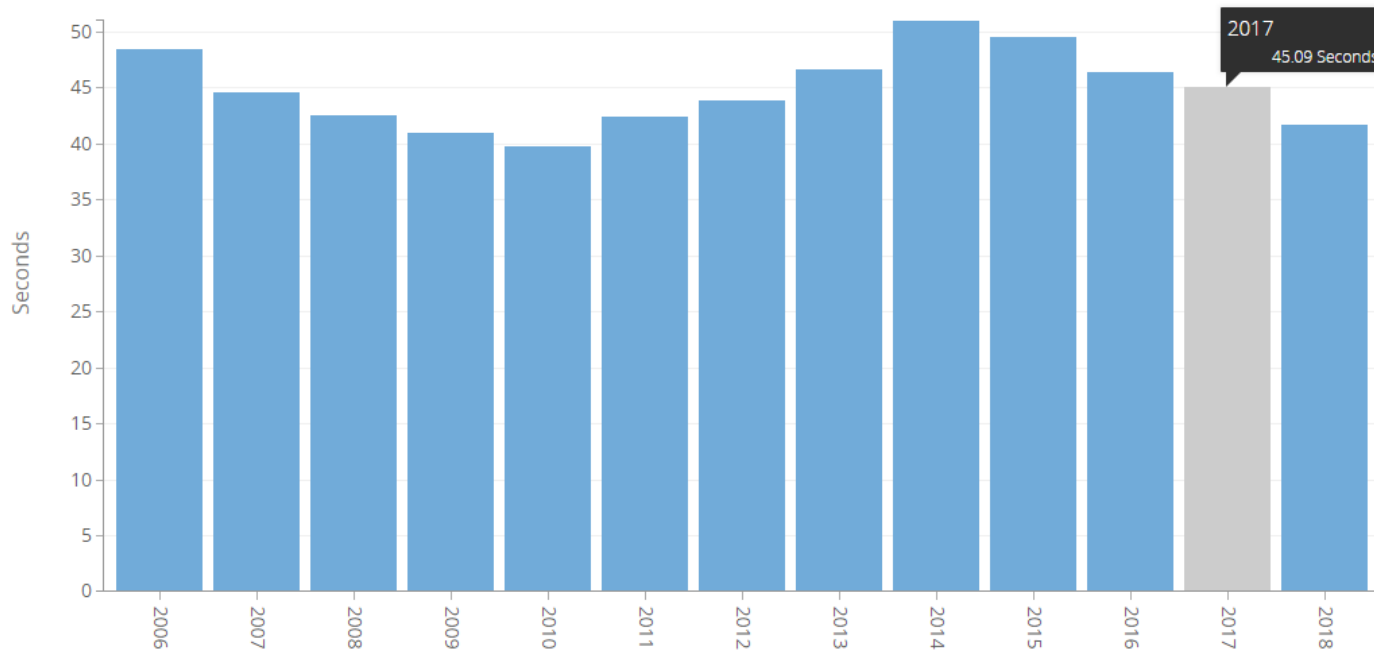


[View Source Data](#) ➔

## Dispatch Call Handling Average Response Time by Year

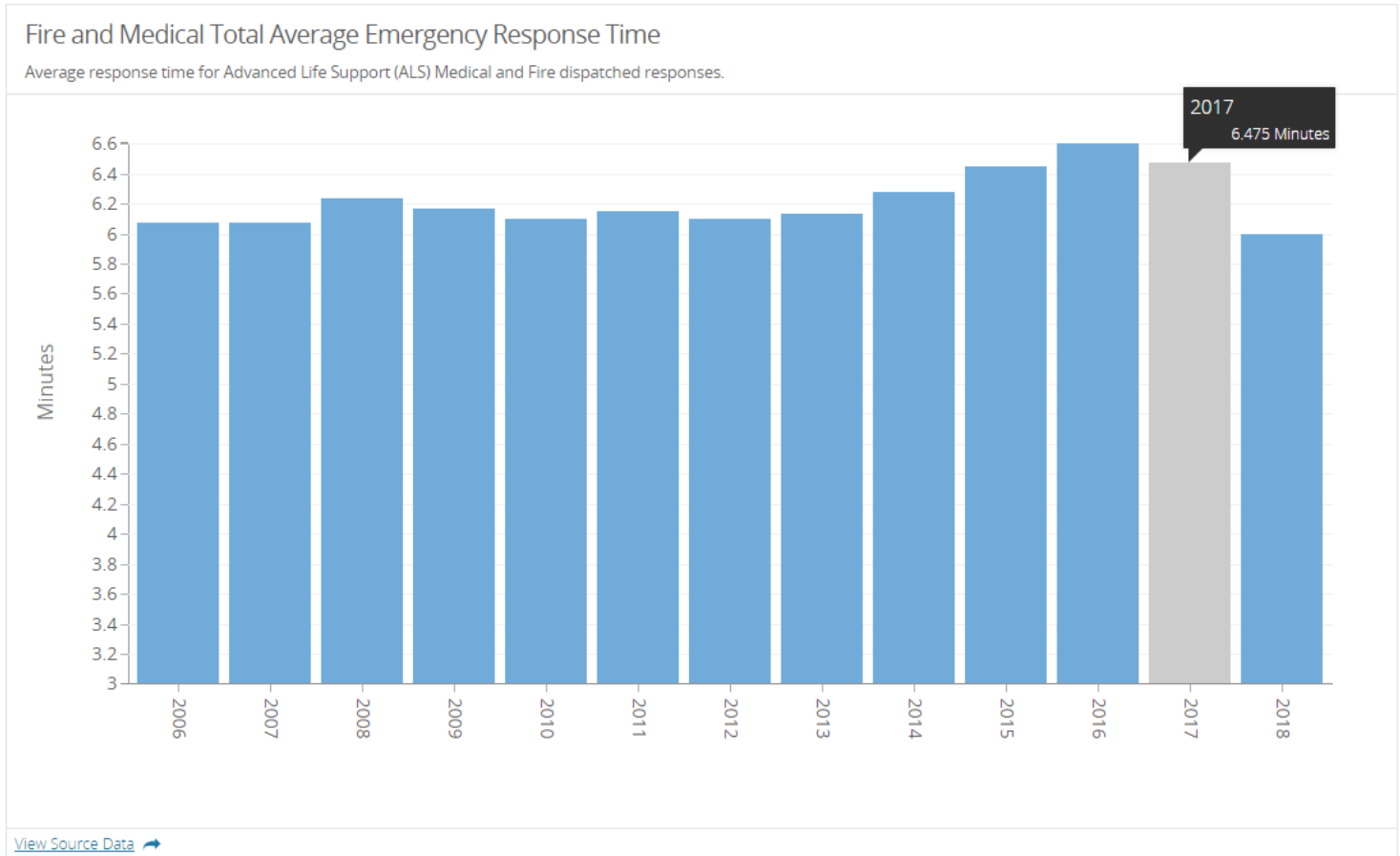
### Call Handling Average Response Time

Average time between receipt of fire and medical emergency call to unit dispatch.



[View Source Data](#) ➔

## Fire and Medical Average Response Times

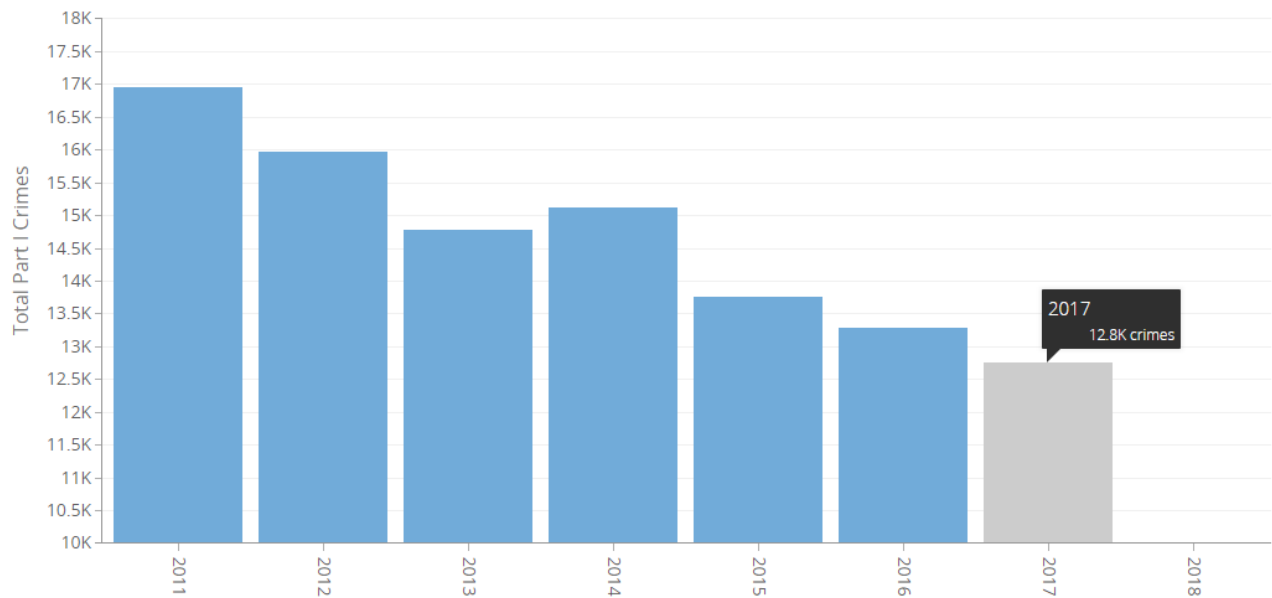


## Total Part I Crimes

The Uniform Crime Reporting (UCR) Program collects statistics on the number of offenses known to City of Mesa Police Department. In Part I, the UCR indexes reported incidents of crimes that are broken into two categories: **violent** and **property** crimes. Aggravated assault, forcible rape, murder, and robbery are classified as violent, while arson, burglary, larceny-theft, and motor vehicle theft are classified as property crimes.

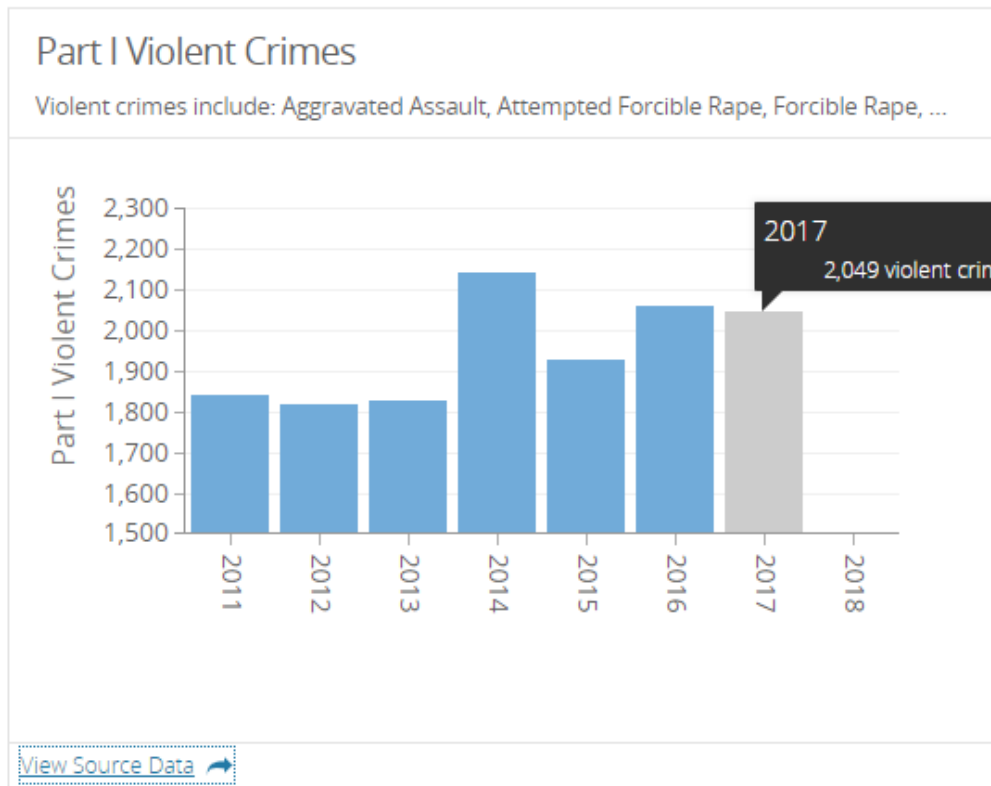
### Part I Crimes

All crimes include: Criminal homicide, Forcible Rape, Robbery, Aggravated Assault, Burglary, Larceny-theft, Motor vehicle theft and Arson.

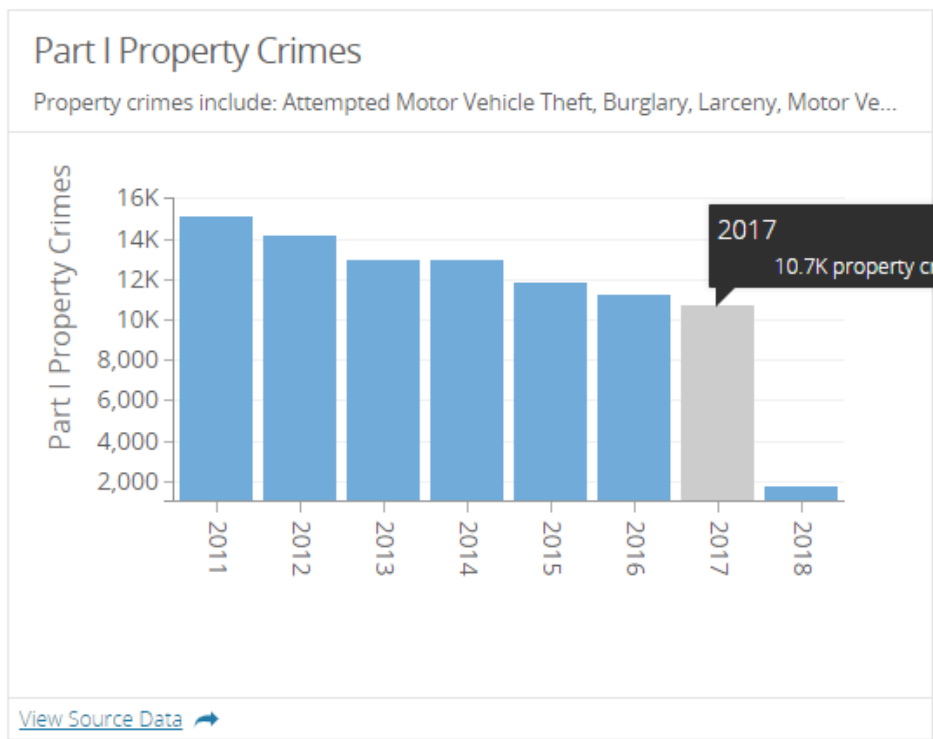




## Part I Violent Crimes

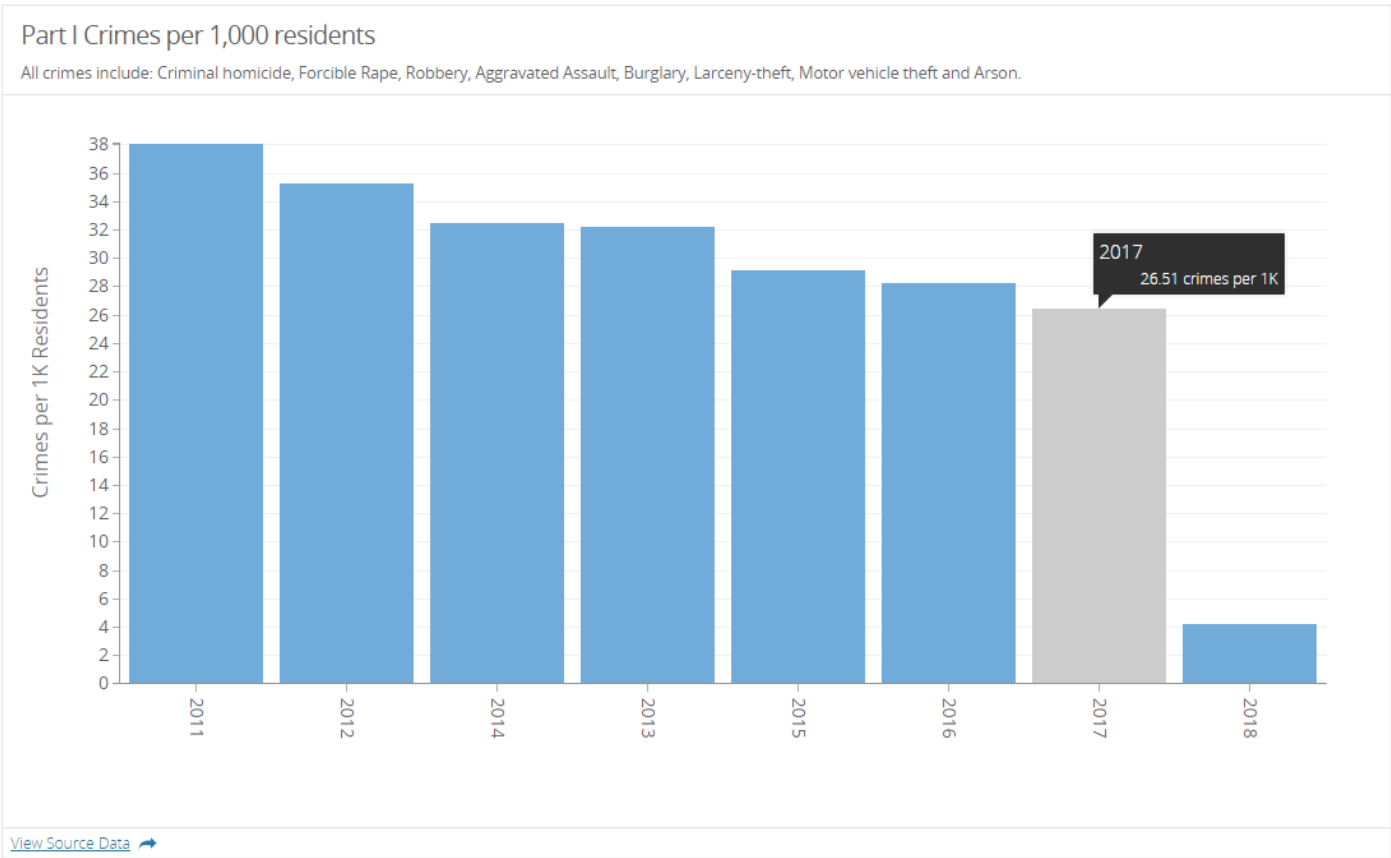


## Part I Property Crimes



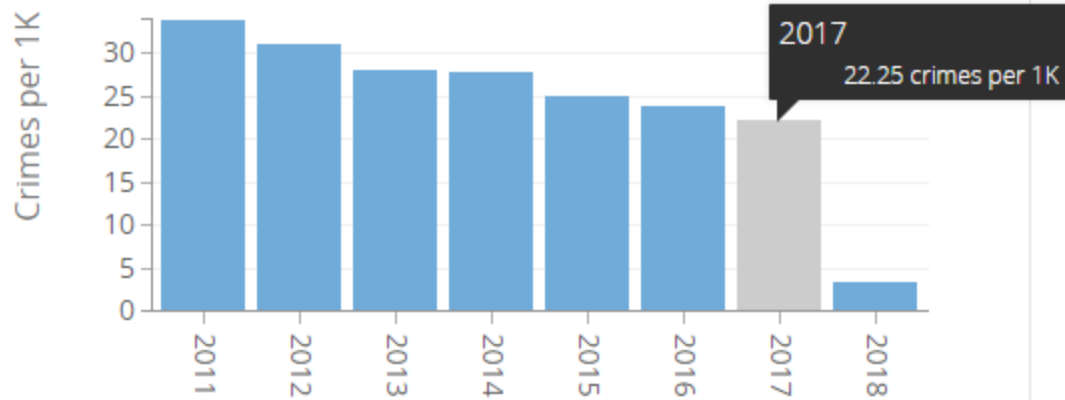
# Part I Crimes per 1,000 Residents

City of Mesa population 2011-2016 based on U.S. Census estimates; 2017-2025 based on Maricopa County Association of Governments (MAG) estimates.



## Part I Property Crimes per 1,000 Residents

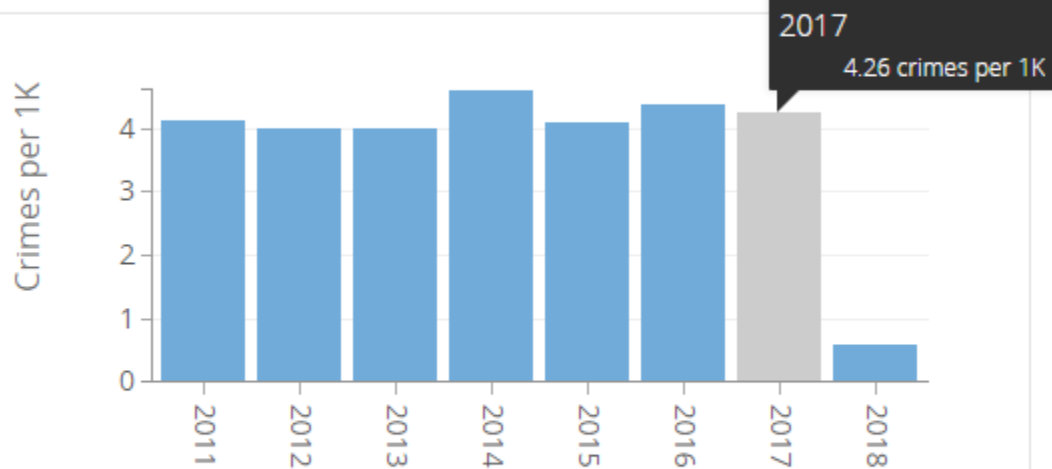
Property crimes include: Attempted Motor Vehicle Theft, Burglary, Larceny, Motor Ve...



[View Source Data](#) ➔

## Part I Violent Crimes per 1,000 Residents

Violent crimes include: Aggravated Assault, Attempted Forcible Rape, Forcible Rape, ...



[View Source Data](#) ➔