



## COUNCIL MINUTES

April 25, 2013

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 25, 2013 at 7:33 a.m.

### COUNCIL PRESENT

Scott Smith  
Alex Finter  
Christopher Glover  
Dina Higgins  
Dennis Kavanaugh  
Dave Richins  
Scott Somers\*

### COUNCIL ABSENT

Alex Finter

### OFFICERS PRESENT

Christopher Brady  
Debbie Spinner  
Dee Ann Mickelsen

(Mayor Smith excused Vice Mayor Finter from the entire meeting. He excused Councilmember Somers from the beginning of the meeting; he arrived at 8:30 a.m.)

1. Presentation/Action Items.
2. Hear a presentation, discuss and provide direction on the following department budgets:
  1. Energy Resources
  2. Water Resources
  3. Transportation

### ENERGY RESOURCES

Energy Resources Director Frank McRae displayed a PowerPoint presentation (**See Attachment 1**) and provided brief background information regarding the City's utility services. (See Page 2) He said that the City of Mesa has been providing safe, reliable and efficient electric and gas services to its residents since 1917. He also noted that for the second consecutive year the City received the Power Association's First Place Safety Award.

Mr. McRae displayed a list of the Energy Resources Department's innovations for FY 2012/13 and noted that some of those innovations will be continuing into the next year. He said that the Light Rail Business Retention Program that was developed in partnership with the Neighborhood Economic Development Corporation (NEDCO) has been positively received by the businesses participating in the program.

Mr. McRae further remarked that the proposed Compressed Natural Gas (CNG) station, which is currently in the feasibility and planning phase, will be included in the Capital Improvement Program (CIP). He indicated that several outside businesses have expressed an interest in obtaining CNG services from the City. He added that staff is exploring various location options for a CNG station. (See Pages 4 and 5 of Attachment 1)

Responding to a question from Councilwoman Higgins, Mr. McRae explained that ideally the CNG station will have islands for City vehicles and public vehicles. He said that the City will need to consider the costs associated with providing CNG service to the public.

Mr. McRae reported that staff is working with a consultant to determine what the cost will be to convert the City's Solid Waste fleet over to CNG. He noted that infrastructure and facility upgrades will be required.

Mr. McRae also highlighted the Energy Resource Department's innovations for FY 2013/14. He reported that the Mesa Drive project provided staff with some real-time cost data for electric underground conversions. He stated that while it is expensive to install a new electric system it is even more expensive to convert an overhead system to an underground system. He added that the information obtained from the Mesa Drive project will allow the City to move forward with underground conversions without having to speculate on the costs. (See Page 6 of Attachment 1)

Mr. McRae reviewed the Department budget for FY 2013/14 and noted the minimal changes from last year's adopted budget. He also pointed out that labor/personal services are 2% under budget and commodities (gas and electric supply contracts) are 7% under budget. (See Page 7 of Attachment 1)

Mr. McRae advised that in 2010, the Energy Resources Department received an authorization of \$15.9 million for the conversion of 4kV circuits to 12kV circuits. He displayed a map that illustrates the portion of the City's electric utility that has been converted to 12kV and what portion of the system remains to be converted. He said that this project, which began approximately 20 years ago, is anticipated to be completed in 2014. Mr. McRae also referenced a graph that illustrates the cumulative service interruptions and noted that the conversion to 12kV lines has improved reliability. (See Page 9 and 10 of Attachment 1)

Mr. McRae discussed the conversion from electric overhead to underground service that was completed as part of the Mesa Drive project between Southern Avenue and 8<sup>th</sup> Street. He said that the conversion project included the following:

- Removal of overhead distribution equipment
- Installation of underground conduit and wire
- Six residents adjacent to Mesa Drive were converted to underground services
- Removal of poles and telecommunication wires

In response to a series of questions from Councilwoman Higgins, Mr. McRae explained that the cost to convert overhead electric service to underground service depends on the nature of the existing system. He said that installing a new underground system is generally six to ten times more expensive than an overhead system and converting from an overhead to an underground system is ten times more expensive. He added that depending on what other infrastructure is in the area, the minimum placement depth for underground electric lines is 24 inches. Mr. McRae indicated that he would research and determine what the average cost per foot would be to install underground service and provide that information to the Council.

Responding to a question from Mayor Smith, Mr. McRae explained that currently there are no priority requests for underground electric conversions and noted that in most instances the request for conversion is an aesthetics issue. He added that the underground conversion on Mesa Drive was a priority project that was completed at the direction of the Council.

City Manager Christopher Brady remarked that the underground conversion project on Mesa Drive, which was one of the largest sections in the City to be converted, was completed in conjunction with another project. He said that the City tries to schedule underground conversions to coincide with other projects.

Councilmember Richins commented on the benefits of having an upgraded system with brand new transformers, wires and infrastructure. He stated that these improvements harden the infrastructure against natural disasters and makes copper thefts more difficult.

Mr. McRae stated that some areas may be prioritized for an underground conversion if there are several residents in an area who have requested the conversion and are willing to participate in the funding of the project. He said that a determination would need to be made with regards to what portion of the service would be the City's financial responsibility and what portion would be the customer's.

Mayor Smith remarked that all new development within the City will have underground electric service.

Mr. McRae displayed a map that illustrates the location of the overhead and underground electric systems throughout the City. He pointed out that 60% of the City's electric system is underground. He explained that because of the costs, converting to an underground system is a long-term project that will take many years to complete. (See Page 12 of Attachment 1)

Discussion ensued regarding the large 69kV transmission lines that connect to the 12kv lines within neighborhoods.

Mr. McRae referred to a list of funded electric CIP projects and said that staff will continue to work towards completing the conversion to 12kV transmission lines. He stated that there has been a significant increase in requests for new and upgraded services from existing and new customers. He noted, however, that the Energy Resources Department does not have the funds to meet those requests, therefore, staff will be seeking an increase in the CIP budget. He added that it is anticipated that this trend will continue as the light rail brings new development into the City. (See Page 13 of Attachment 1).

Mr. McRae briefly reviewed the non-bond funded electric CIP projects and noted that underground electric will be installed in conjunction with the Main Street Light Rail construction project. (See Page 14 of Attachment 1)

Mr. McRae briefly outlined some of the planned CIP projects (electric) that will require new authorization as follows:

- New and upgraded services for both new and expanding customers
- Undergrounding of electrical lines on Mesa Drive from 8<sup>th</sup> Avenue to 6<sup>th</sup> Street
- Lifecycle replacements and enhancements to the 12kV substations

Mr. McRae provided an update on the CIP projects for gas services and said that in 2010 the City received voter approval for \$48.4 million in bond authorization. He stated that a majority of those funds have been used to complete joint projects with the Transportation Department, the Water Resources Department and the Electric Department. He also advised that 21,500 linear feet of intermediate and high-pressure mains were replaced as part of the Mesa Drive project. (See Page 18 of Attachment 1)

Mr. McRae reported that 9,200 feet of high-pressure steel mains were extended to Waste Management in order to meet their growing Compressed Natural Gas (CNG) needs. He stated that Waste Management has a public CNG station and said that it is anticipated that Waste Management will become the City's second largest CNG customer. Mr. McRae reported that a high-pressure main was also extended to the Banner Desert facility, which will allow the hospital to convert to a cogeneration system. He noted that this project will enhance the efficiency of the Heating, Ventilation and Air Conditioning (HVAC) system and water heating systems at the Banner Desert facility. (See Page 19 and 20 of Attachment 1)

Mr. McRae displayed a list of Energy Resources funded gas CIP projects and said that it is difficult to accurately forecast bond-funding requirements. He advised that there were 676 new residential customers in the first eight months of FY 2012/13. He reported that the remainder of the 2010 authorization will be spent on joint system rehabilitation projects and noted that it is anticipated that the \$48.4 million that was authorized in 2010 will be expended by the spring of 2015. (See Page 21 of Attachment 1)

Mr. McRae briefly reviewed a list of the planned gas CIP projects that will require new authorization. (See Page 23 of Attachment 1) He said that these projects include installing intermediate and high-pressure gas mains at various locations throughout the City, adding service to new/expanding customers and possibly adding an additional CNG station. (See Page 23 of Attachment 1)

Mr. McRae indicated that without the support of the City Council and the City Manager's office these projects would not have been completed. He also recognized and expressed his appreciation for the assistance provided by the Engineering Department, the Water Resources Department, Information and Technology Department, Communications Department, Economic Development, the City Attorney's Office, Business Services, Financial Services and the Fleet Department.

Mayor Smith thanked Mr. McRae for the presentation.

## WATER RESOURCES

Water Resources Department Director Kathryn Sorensen introduced Water Resources Assistant Director Susan Miller, Deputy Director of Water Distribution and Collection Jake West and Water Resources Deputy Director of Water Enterprise Services Alisha Solano, who were prepared to address the Council. Ms. Sorensen advised that Ms. Miller would be retiring soon and expressed her appreciation for her years of service.

Dr. Sorensen displayed a PowerPoint presentation (**See Attachment 2**) and said that the Water Resources Department treats and delivers high quality water to the homes and businesses in the community. She added that Water Resources is also responsible for the safe removal and reclamation of wastewater which protects the environment and bolsters future water supplies. (See Page 2 of Attachment 2)

Dr. Sorensen stated that while Water Resources is an “unseen” utility it does provide the foundation for public health, economic development and quality of life in our community. She displayed a list of the Department’s Effective Utility Management objectives and noted that the Water Resource Department’s annual Strategic Business Plan is available online. (See Page 4 of Attachment 2)

Dr. Sorensen referred to a series of graphs that illustrate the efficiency of the Water Resource Department compared to other communities in the area. (See Page 7, 8 and 9 of Attachment 2) She highlighted the Departments strategies for ensuring efficiency as follows:

- Optimize chemical use, water losses, miles driven and energy demands
- Insists on performance matrix and benchmarking
- Making the best use of employees and setting high standards for performance and accountability

Dr. Sorensen indicated that one of the Department’s goals is to use less energy. She noted, however, that regardless of the gains that have been made, energy costs continue to increase. She said that it is anticipated that this trend will continue and will put pressure on the budget. She also noted that chemical costs continue to rise and that more chemicals are being used in the wastewater collection system to control odor. (See Page 9 of Attachment 2)

Dr. Sorensen reported that the cost of Central Arizona Project (CAP) Water is increasing. She said that CAP water is expected to increase an additional \$500,000 in FY 2013/14 and \$1 million each year thereafter. (See Page 10 of Attachment 2)

In response to a question from Mayor Smith, Dr. Sorensen explained that the cost increase for CAP water is related to the Navajo Generating Station (NGS). She said that in the past CAP would pump water to Lake Pleasant during the winter months when energy rates are relatively low and sell the excess entitlement during the summer at an estimated \$25 million a year.

Dr. Sorensen stated that CAP has not been able to resell the energy due to the low cost of natural gas and, therefore, have lost revenues. She said that this is a pressure point that the Water Resources Department is currently experiencing. She also noted that additional environmental requirements are anticipated to bring more pressures.

Councilmember Richins suggested that the Water Resources Department “bottle their budget” dramatically since the costs associated with the NGS will be passed on to CAP water users.

Dr. Sorensen stated that the loss in revenue from the NGS will result in an expected \$500,000 increase this year and \$1 million thereafter. She said it is uncertain what the additional costs will be as new environmental requirements are imposed.

Discussion ensued regarding how the City will adjust to the increased costs and how the additional costs will be built into the annual water rate.

Dr. Sorensen continued with the presentation and advised that the Water Resources Department also maintains and replaces water and sewer lines. She said the pipes that are targeted for replacement are generally the worst pipes in the system.

Mr. West explained that older pipes and those with a history of breaks are typically targeted for replacement, such as those on Main Street and Country Club Drive. He described the process that is used to identify funds and cover the cost of projects related to breaks in the system.

In response to a question from Councilwoman Higgins, Mr. West explained that the Water Resources Department inspects and cleans out the sewer system regularly and noted that approximately 16 miles of pipe are cleaned out each month. He noted that areas near schools and hospitals, where the City can't afford to lose that portion of the system, are a priority.

Dr. Sorensen displayed a series of charts and reported that as a result of the replacement projects, the City's waterline breaks have decreased by 50%. She pointed out that the number of pipeline breaks in Mesa is nearly 90% lower than the national benchmarks. She added that sanitary sewer overflows are also below the national benchmark. (See Page 13 of Attachment 2)

Mayor Smith commented that the eastern and mid-western portion of the country have entire systems at risk. He said that Mesa has taken an aggressive approach to the renewal and revitalization of its water systems and he thanked staff for their efforts.

Dr. Sorensen indicated that some of the replacement projects will require additional authorization. She explained that part of providing reliable service is ensuring that the City has adequate water wells that can provide redundancy. She stated that the Water Resources Department has a program that addresses water well rehabilitation and development. (See Page 14 of Attachment 2)

Ms. Miller discussed the issues surrounding the naturally occurring arsenic in the City's water supply and reported that Well #26, which is an important well to the City, exceeded the allowable arsenic level. She described how staff was able to quickly address the elevated arsenic issue, saving the City \$1.8 million.

Dr. Sorensen reported that the City's largest transmission line in west Mesa will be replaced. She said that this will be a large project that will include the replacement of the transmission main from the Val Vista Water Treatment Plant to the City's three reservoirs. She stated that the first phase of this project has been included in the existing bond authorization. She noted, however, that future phases will require additional authorization. (See Page 15 of Attachment 2)

Dr. Sorensen discussed the importance of having a skilled workforce and noted that the Water Resources Department does have an aging workforce. She explained that there is a limited pool of skilled workers with specialized work experience in water treatment plants.

Councilwoman Higgins commented that parents may want to encourage their children to pursue a career path in this area where there will always be jobs available. She pointed out that Gateway Community College offers a Water Treatment Program and that discussions are underway regarding the possibility of adding a Wastewater/Water Treatment Operator Program at East Valley Institute of Technology (EVIT).

Dr. Sorensen remarked that the Water Resources Department is working with Gateway Community College and reported that an intern program has been developed to mentor students and help them obtain their certification.

Dr. Sorensen reported that installing new waterlines in southeast Mesa will improve pressures and reliability for existing customers and allow for expansion at Phoenix-Mesa Gateway Airport and Arizona State University (ASU) Polytechnic Campus. She stated that the new groundwater collection lines will provide new sources for drought redundancy. She added that many of these projects will require additional bond authorization. (See Page 18 of Attachment 2)

Dr. Sorensen discussed the Signal Butte Water Treatment Plant and reported that the basis of design has been completed. She said that construction of the \$90 million plant is necessary to the economic development in southeast Mesa. She added that the Plant will also provide source treatment redundancy for the entire eastern service area.

Responding to a question from Mayor Smith, Dr. Sorensen explained that the design phase of the Signal Butte Water Treatment Plant is planned for FY 2016/17 and 2017/18 and construction is planned for FY 2018/19 and 2019/20. She said that depending on the growth in the area the design portion of this project may appear in the next bond election.

City Manager Christopher Brady advised that the forecast for utilities will be brought back to the Council at a future date. He said that the anticipated new water accounts are driving the Water Treatment Plant project. He explained that staff will try to identify funding sources for large projects that are just outside of the forecast, such as the Signal Butte Water Treatment Plant.

Discussion ensued with regards to the timing and demand for the Water Treatment Plant, which will take several years to complete.

Mr. Brady reported that the City has control of the land where the Water Treatment Plant will be built and said that the design phase will be the next step in the process. He stated that it will take approximately two years to construct the Plant, which means that realistically the opening of this Plant is still eight years away. He added that if the development at Eastmark were to take off, construction of the Plant may need to be accelerated.

Dr. Sorensen discussed the expansion of the Greenfield Water Reclamation Plant and said that the Plant will enable economic growth in southeast Mesa. She explained that the Plant also provides additional Colorado River water through the exchange with the Gila River Indian Community which benefits the entire water service area. She stated that it will cost \$60 million to construct the Plant and noted that additional authorization will be required. She added that

the design phase is scheduled to take place in FY 2013/14 and FY 2014/15. (See Page 20 of Attachment 2)

Responding to a series of questions from Mayor Smith, Dr. Sorensen explained that Mesa owns 4 million gallons of water per day (mgd) at the Greenfield Plant, the Town of Queen Creek owns 4 mgd and the Town of Gilbert owns 8 mgd.

Dr. Sorensen remarked that at this time the City's timeline for expansion of the Greenfield Plant coincides with that of the Town of Gilbert. She stated that while Queen Creek may not have a need to participate at this time they have indicated that they would like to. She added that Mesa would have the ability to move forward with the expansion with the partnering communities.

Dr. Sorensen reiterated that while the Water Resources Department does operate efficiently, costs are increasing and the City is going to need to spend some money to build and rehabilitate some major infrastructure.

Dr. Sorensen displayed the budget for the Water Resources Department and said that the reported increases have been included in the financial forecast. She said that staff is proposing an increase in the budget to cover the CAP commodity as well as the use of some of the "pay-as-you go" funds to cover some one-time repairs that will need to be completed over the course of the next year. (See Page 22 of Attachment 2)

Dr. Sorensen briefly reviewed the remaining authorization and potential 2014 authorization needs for Capital Improvement Plan (CIP) projects as follows:

Remaining Authorization (Funded Projects):

- Water – \$28.6 million
- Wastewater – \$49.9 million

Potential 2014 Authorization (Planned Needs):

- Water – \$132 million
- Wastewater – \$99 million

Responding to a question from Councilmember Richins, Dr. Sorensen explained that the authorization for planned needs varies over utilities. She said, however, that the authorization is usually spread out over a period of four years. She noted that sometimes the authorization can be spread out for a longer period of time.

Discussion ensued regarding the utility programs and CIP projects that have been built into the forecast.

Mayor Smith commented that the City authorizes bonds for two reasons: one is to replace existing equipment and the other is to expand. He stated that if all the City did was replace existing equipment the City's debt level would remain constant. He said that the Greenfield Plant and the Signal Butte project will not be replacing any existing systems, but would address capacity issues. He requested that as staff reviews the bonds, that the replacement projects and capacity projects be separated.

Dr. Sorensen stated that over the next four or five years it is anticipated that 60% of the water projects will be replacement projects and 40% will be related to expansion and growth. She said that with regards to wastewater, 70% of the projects will be related to expansion and growth and 30% will be for rehabilitation.

Mayor Smith remarked that the creation of new debt is always discussed, but there is never any celebration when the City is able to retire or pay off old debt. He stated that to some it may appear that we are always adding new debt, therefore, it would be helpful to have the percentage of bonds that are being used for replacement projects and the percentage that are being used for capacity projects identified.

Mayor Smith pointed out that bond elections were held in 2008, 2010, 2012, and noted that it is anticipated that there will be a bond election next year. He said that he would like the overall program to demonstrate that the City is paying off debt and replacing equipment.

Mayor Smith thanked staff for the presentation.

## **TRANSPORTATION**

Transportation Department Director Dan Cleavenger introduced Deputy Transportation Director-Traffic Engineer Alan Sanderson and Deputy Transportation Director-Field Operations Lenny Hulme, who were prepared to address the Council.

Mr. Cleavenger displayed a PowerPoint presentation (**See Attachment 3**) highlighting the Transportation Department's budget and innovations for the FY 2013/14 budget. He remarked that the Transportation Department currently has many projects underway.

Mr. Cleavenger reported that the MyMesa Smartphone App, which was originally implemented as a means for citizens to report graffiti, has been expanded to include the reporting of other issues, such as:

- Illegal dumping
- Sidewalk defects
- Signs – deteriorated or illegal
- Streetlight outages
- Solid Waste – non-serviced containers
- Code Compliance issues

Mr. Cleavenger displayed a graph that illustrates the number of MyMesa reports that the Transportation Department received in the last year and noted that 2,000 reports are received each month. He pointed out that many residents took advantage of the MyMesa app in October during "Make a Difference Day." (See Pages 3 and 4 of Attachment 3)

Responding to a question from Councilwoman Higgins, Mr. Cleavenger explained that reports received from the MyMesa app are forwarded to the department for which the issue relates. He said that the graph that has been displayed demonstrates the reports that were related to street issues only. He stated that reports regarding graffiti are forwarded to the contractor who will address the issue. He added that the MyMesa app has been a popular and helpful addition.

Mr. Cleavenger discussed the asphalt mix and geotechnical designs used by the Transportation Department. He said that more rubber is being used in the asphalt mix to provide a more durable pavement that will require less maintenance. He stated that last year alone the City was able to keep over 38,000 tires out of landfills and noted that next year it is anticipated that the City will use over 100,000 tires in its asphalt mix.

Mr. Cleavenger reported that the Transportation Department purchased a new software system called "Micropaver." He said that staff is currently working with the Information and Technology Department to load 27 years of data into the new system. He stated that this system will improve the Transportation Departments ability to forecast the lifecycle of the City's pavement.

Mr. Cleavenger discussed the Bike Share Program that is anticipated to be in operation by the end of 2013. He said that the program will provide "on demand" loaner bikes along the light rail corridor.

In response to a question from Councilmember Richins, Mr. Cleavenger explained that Phoenix has been working on a Bike Share program, but he is unaware of how the program was funded. He stated that Phoenix may move forward with a different method or model, which could be a challenge to the program. He said that the goal is to partner with Phoenix and have one seamless program.

Mr. Cleavenger stated that Phoenix has expressed an interest in a privately run Bike Share Program that would require very little City involvement. He noted, however, that the City of Mesa would prefer to partner with a vendor and be a little more "hands on."

City Manager Christopher Brady stated that it would make more sense to have a regional approach to the Bike Share Program, therefore, it is hoped that this issue can be resolved. He stated along with the light rail, it is anticipated that the Bike Share Program would also address the needs of many of the non-profits in the area, such as Save the Family or A New Leaf.

Mr. Brady explained that having access to the bikes could assist non-profit clients with transportation to work, healthcare, shopping and light rail. He indicated that the Bike Share Program would be the next portion of the transit system and will expand the influence of the light rail.

Mr. Brady advised that the vendors who attended the Great Arizona Bicycle Festival have expressed an interest in the program and noted that the costs for the program are not that significant. He said that discount passes could be provided to non-profit clients to help meet some of their transportation needs.

Mr. Cleavenger reported that a community survey was conducted in order to obtain feedback on the Bike Share Program. He briefly summarized the findings of the survey as follows:

- Individuals would use the bikes for casual rides or connecting to buses and light rail
- Individuals would be willing to pay for the bike service
- Individuals would be interested in paying for the service using a debit/credit card or transit pass
- Individuals believe it to be an important program

Mr. Cleavenger provided a brief update on the Lumen Management System (streetlight system) and discussed the systems capabilities as follows:

- Identify light malfunctions
- Alert staff when circuits are out (indicating copper wire theft)
- Dimming capabilities
- Energy savings

Mr. Cleavenger remarked that staff has been exploring energy-saving light management solutions. He noted, however, that the return on investment is not enough to move forward with such an option at this time.

In response to a question from Councilwoman Higgins, Mr. Hulme advised that the new Eastmark Development will have LED lights on all of its arterial and residential streets. He stated that while the City has not completely switched over to the use of LED lights, it is one of the tools available to developers. He added that the use of LED lights has moved beyond that of a pilot program and is now part of the City's streetlight system.

Councilwoman Higgins requested that the information regarding the City's use of LED lighting, including the planning, testing and pilot program that was used to develop an LED lighting system, be made available on the City's website.

Mr. Cleavenger displayed a graph illustrating the Transportation Department's forecasted revenues. He also reviewed the Department's FY 2012/13 year-end budget and proposed FY 2013/14 budget. He noted that the Department's operating expenditures have remained consistent. (See Pages 8 and 9 of Attachment 3)

Mr. Cleavenger reviewed the Departments operating expenditures and funding sources. He explained that General Fund dollars are used for projects such as parking lots and Enterprise Funds are used for utility patches. He added that the \$22.5 million that the City receives in Transportation Funds comes from sales tax and Highway User Revenue Funds (HURF).

Mr. Cleavenger advised that the Transportation Department's Capital Improvement Program provides for the replacement of the City's aging infrastructure and the construction of new facilities. He stated that most of the Transportation Department's Capital funds are spent on the City's street network. He noted that the lifecycle of the City's arterial streets, even with proper maintenance, is typically 20 to 25 years.

Mr. Cleavenger discussed the Transportation Department's operational and maintenance needs that are funded by local sales tax and HURF funds. He explained that the Transportation Department's capital construction projects have been underfunded. He stated that prior to 2008, the Transportation Department used HURF bonds to fund projects and said that the City is still paying on that debt. Mr. Cleavenger added that in 2008 the City used General Obligation (GO) Bonds backed by a secondary property tax.

Mr. Brady clarified that in the past HURF bonds were used every four years (1996, 2000 and 2004) to fund projects.

Mayor Smith remarked that it has been nine years since the City utilized HURF bonds.

In response to a question from Mayor Smith, Assistant to the City Manager Scott Butler explained that the HURF transfers have decreased. He stated that the decreases appear to be stabilized under the Governor's budget proposal for this year.

Mayor Smith commented that HURF funds are acquired through gas taxes and vehicle registrations.

Responding to a question from Councilwoman Higgins, Mr. Butler indicated that staff will research and determine if Compressed Natural Gas (CNG) will have a tax assessment that will be contributed to the HURF.

Mr. McRae remarked that he did not believe that there were any assessments from the sale of CNG attached to HURF.

Mr. Cleavenger stated that in 2008 the City's match for the Proposition 400 Regional Transportation Plan projects came from GO bonds. He added that the bonds also provided the Transportation Department with the leverage needed to seek additional federal funds and, as a result, millions of dollars have been received for street projects, Intelligent Transportation Systems (ITS) and the Bike and Pedestrian system.

Mr. Cleavenger displayed a series of photographs and provided a brief overview of the projects that were completed utilizing the 2008 bond authorization (\$110.9 million). He advised that some Non-Regional Transportation projects (RTP) also utilized bond funding. (See Pages 13 through 21 see Attachment 3)

Mr. Cleavenger discussed the ongoing Rusted Streetlight program and reported that currently the City has approximately 6,500 streetlight poles that are susceptible to rusting. He added that the City replaces approximately 120 streetlight poles each year.

Councilmember Richins commented that the City is currently in the process of replacing streetlights. He noted, however, that there are many areas of the City that are lacking streetlights altogether.

Discussion ensued regarding specific areas of the City where residents have requested streetlights be removed and other areas that are lacking a sufficient number of streetlights.

Responding to a question from Councilmember Richins, Mr. Hulme explained that in 2008 staff researched the issues surrounding the lack of streetlights in certain areas as well as the cost to install more streetlights. He indicated that the information that was gathered would be provided to the Council.

Mr. Cleavenger discussed the City Share Program that allows for the costs of Capital improvement activities to be shared with developers in order to finish streets. He advised that the developer is responsible for 24 feet of asphalt, curbs, gutters, sidewalk and a portion of the streetlights. He explained that City Share funding is used to finish the portion of the street project that is beyond what is required by the developer.

Mr. Cleavenger reported that the City obtained full federal funding for the Dobson Road (Broadway Road to Main Street) Shared Use Path project. He stated that staff is currently in the process of obtaining easements and right-of-ways and noted that construction will begin this summer. He added that this project is anticipated to be completed by February of next year.

Councilmember Richins commented on the unique Vietnamese businesses along Dobson Road. He suggested that staff conduct some community outreach and explore the possibility of creating a theme or street design that celebrates the Asian community.

Mr. Cleavenger explained that the Porter Park Pathway will be a shared use path that will run northeast from Mesa Drive and 8<sup>th</sup> Street. He stated that the City has obtained \$300,000 to complete the design of this project. He noted, however, that staff was recently notified that an additional \$1.4 million in Maricopa Association of Governments (MAG) close-out money will be available. He added that the City's local match for the project will be less than \$100,000.

Mr. Cleavenger briefly highlighted the 2012 Parks Bonds Shared Use Paths that will be completed as follows:

- Riverview/Rio Salado
- West Mesa Connector
- Southeast Mesa Project

Mr. Cleavenger discussed some of the Transportation Department's planned projects that will require additional bond authorization. He noted that these projects include Regional Transportation Plan (RTP) projects and arterial reconstructions. He stated that arterial reconstructions are one of the City's largest needs and in the past have been under-funded. He reported that the last time the City received a significant amount of funds for projects was in 2010 when \$10.7 million was received from the American Recovery and Reinvestment Act (ARRA).

Mr. Cleavenger described the difference between pavement overlays and pavement reconstructions. He said that a reconstruction is necessary when a roadway has reached the end of its lifecycle and the existing pavement is removed and replaced with a new asphalt surface. He noted that a reconstruction project cost three times more than an overlay project.

Mayor Smith remarked that the City was able to complete a number of reconstruction projects utilizing the stimulus funds that were received.

In response to a question from Mayor Smith, Mr. Cleavenger explained that the project that is currently underway at University Drive and Dobson Road was originally a Proposition 400 project. He said that this reconstruction project was coordinated with the utility work that also needed to be completed in that area.

Mr. Hulme commented that not only did the road need to be redesigned at University Drive and Dobson Road, but the infrastructure was also aging and needed to be replaced.

Mr. Cleavenger displayed a series of maps illustrating the City's current pavement conditions. He said that the City is currently spending \$4 to \$5 million a year on overlays. He indicated that over the next five years the City could increase its funding to \$9 million a year for overlays and \$8 million a year for the reconstruction of arterial streets. (See Pages 27, 28 and 29 of Attachment 3)

Discussion ensued regarding the possibility of a future bond election to complete the projects that are not covered by Proposition 400 funds.

Councilmember Somers requested that an accounting of the pavement conditions of all of the public streets within the Mesa Planning Area be conducted. He stated that information regarding the pavement conditions and the costs to bring the infrastructure up to a minimum standard will be beneficial when annexations are discussed. He added that this information will also be beneficial to the Fire Department in the event City services are extended to those areas. He noted that some of the County roads will not support fire apparatus.

Mayor Smith remarked that the condition of the pavement has not been a major point of consideration when individual annexation cases are reviewed. He stated that if large portions of the County islands were to be annexed, the City could be taking on a huge obligation with regards to street maintenance. He noted that there would not be any corresponding revenue received from these annexed residents since they are already shopping in the City's commercial areas.

Responding to a question from Mayor Smith, Mr. Hulme advised that the County's Street Maintenance Program is different from the City's. He explained that staff reviews the annexation requests to determine what the costs will be to bring the County's streets up to the City's standards. He added that the City does share street maintenance information with the County.

Mr. Cleavenger suggested that that County be required to bring the streets up to a minimal standard before the City will agree to an annexation.

Mayor Smith remarked that infrastructure standards will be a continuing issue and stated that the County would not be in agreement with bringing the streets up to the City's standards. He noted that if the County had the budget to take care of the streets they would have already done so. Mayor Smith said that these issues will need to be discussed with the County as the City receives more requests for annexations.

Mr. Sanderson stated that many of the homes that were built in the northeastern portion of the City were built before the County established the standards it has today. He reported that in many cases there are no paved roads or right-of-ways and some residents must travel across the private property of their neighbors in order to access their property.

Mayor Smith commented that in Arizona, counties are not expected to provide municipal services and said that it would be naive to expect the County to provide the City's level of service.

Mr. Cleavenger briefly summarized the ongoing 2008 bond authorization projects that would require additional authorizations to complete as follows:

- Fiesta District Improvements (west City limits including Dobson Road)
- MAG Intelligence Transportation Systems (ITS) Projects
- Rusted streetlight poles
- City Share

Mr. Cleavenger also provided a brief overview of the upcoming projects that will require additional authorization as follows:

- Phoenix-Mesa Gateway roadway and traffic improvements (east side terminal)
- Landscape/Streetscape enhancements on arterial streets (First Avenue from Macdonald to Lesueur Roads)
- Bus pullouts and shelters
- Storm drain pumps
- Internally illuminated street name signs (Power and Knowledge Corridor, Fiesta District, Downtown)
- Light rail pedestrian improvements west of Dobson Road

Mr. Cleavenger also referenced a list of some of the Transportation Department's future projects. (See Page 32 of Attachment 3)

Councilmember Richins commented that the City needs to collaborate with Mesa Public Schools and explore some "safe-route to school" concepts. He suggested that the Transportation Department explore different pathways or conduct a study to identify ways in which the flow of traffic around the schools in the community can be improved.

Councilmember Somers requested that if a study is conducted that it also include charter and private schools since many of them are located along arterial streets.

Mayor Smith thanked staff for their efforts.

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

Councilmember Richins: Arizona League of Conservation Voter's Earth Night

Mayor Smith: Greater Phoenix Economic Council meeting

4. Scheduling of meetings and general information.

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

Saturday, April 27, 2013, 9:00 a.m. – Pancakes and Surfing with Councilmember Kavanaugh

Thursday, May 2, 2013, 7:30 a.m. – Study Session

Mr. Brady advised that compared to surrounding communities the compensation for the City's Magistrate Judges has fallen behind. He requested that this issue be referred to the Judicial Advisory Board for a compensation review and said that a report will be brought back to the Council.

Mayor Smith stated that it was the consensus of the Council that the Judicial Advisory Board review the compensation of the City Magistrate Judges.

5. Items from citizens present.

There were no items from citizens present.

6. Adjournment.

Without objection, the Study Session adjourned at 9:16 a.m.

---

SCOTT SMITH, 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 25<sup>th</sup> day of April, 2013. I further certify that the meeting was duly called and held and that a quorum was present.

---

DEE ANN MICKELSEN, CITY CLERK

bdw  
(attachments – 3)

# **CITY OF MESA, ARIZONA**

## **ENERGY RESOURCES DEPARTMENT**

### **FISCAL YEAR 13/14 BUDGET & CAPITAL IMPROVEMENT PROGRAM 4.25.13**



# SINCE 1917 ...

Mesa's electric and gas utilities have been providing Safe, Reliable, and Efficient energy utility services

## Electric Utility

- 16,041 residential and commercial customers
- 5.5 sq. mi. centered around downtown Mesa

## Gas Utility

- 57,641 residential and commercial customers
- 90 sq. mi. in Mesa & 236 sq. mi. in Pinal County



# FY 12/13 INNOVATIONS

- Light Rail Business Retention Program with Neighborhood Economic Development Corporation (NEDCO)
- High Speed Switches
- Mobile Generators
- Electric Vehicles Charging Station Pilot
- Pilot Solar Incentive program
- Hoover
- 2012 Presidential Debate
- Marketing Compressed Natural Gas (CNG) Vehicles to Commercial Fleets
- Succession Planning

# FY 13/14 BUDGET



# FY 13/14 INNOVATIONS

## FY 13/14 INNOVATIONS (BEGUN IN FY 12/13)

- Continue Light Rail Business Retention Program
- High Speed Electric Switches
- Modify Pilot Solar Incentive program
- Continue pursuit of Hoover electric energy supply
- Proposed CNG Station (CIP Funded)
  - Feasibility & Planning Phase
  - Solid Waste Assessment-Council Presentation In May
- Implement & Continue to Enhance Succession Plan



## **FY 13/14 INNOVATIONS**

- Electric Undergrounding(CIP Funded)
- Electric Smart Grid(CIP Funded)
- Advanced Metering Technology Pilot In MAGMA (CIP Funded)
- Gas Cogeneration in Mesa Schools
- Veteran Recruiting & Training



# FY 12/13 & 13/14 DEPARTMENT BUDGETS

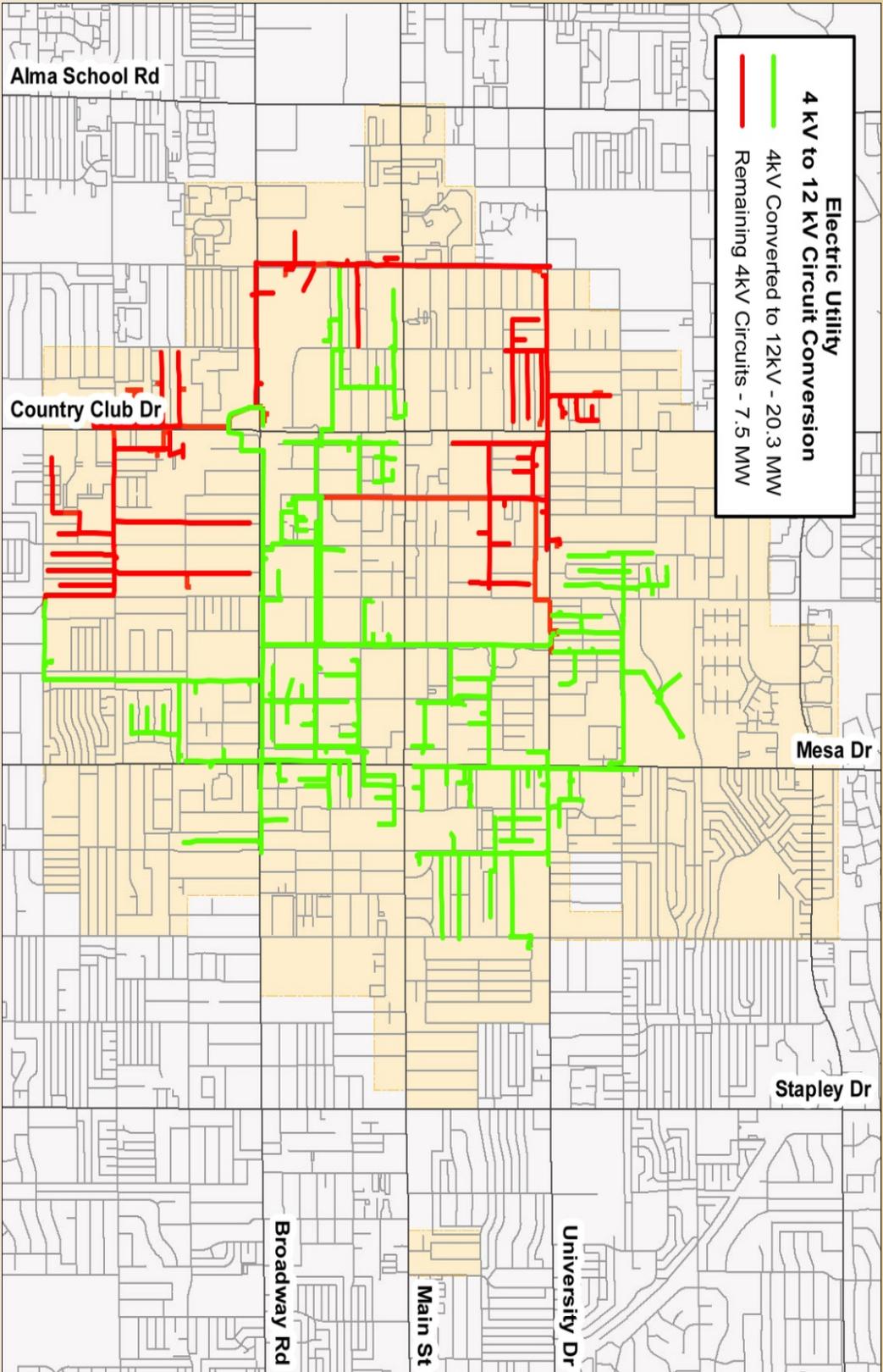
EXPENDITURES	2012-13 ADOPTED		2012-13		2013-14 PROPOSED	
	BUDGET	YEAR-END ESTIMATE	BUDGET	YEAR-END ESTIMATE	BUDGET	YEAR-END ESTIMATE
PERSONAL SERVICES	\$9,120,379	\$8,936,708			\$9,391,411	
OTHER SERVICES	\$2,409,735	\$2,112,186			\$2,313,952	
COMMODITIES	\$32,198,886	\$29,850,956			\$31,630,292	
PURCHASED CAPITAL	\$295,000	\$382,000			\$460	
<b>TOTAL</b>	<b>\$44,024,000</b>	<b>\$41,281,850</b>			<b>\$43,336,115</b>	
<b>FUNDING SOURCES</b>						
	<b>2012-13 ADOPTED</b>	<b>2012-13</b>	<b>2013-14 PROPOSED</b>			
	<b>BUDGET</b>	<b>YEAR-END ESTIMATE</b>	<b>BUDGET</b>			
GENERAL FUND	\$86,850	\$58,850	\$76,971			
TRANSPORTATION RESTRICTED	\$250,447	\$201,669	\$294,674			
ENTERPRISE	\$43,686,703	\$41,021,331	\$42,786,776			
OTHER	\$0	\$0	\$177,694			
<b>TOTAL</b>	<b>\$44,024,000</b>	<b>\$41,281,850</b>	<b>\$43,336,115</b>			



# FUNDED ELECTRIC CIP PROJECTS

## 2010 AUTHORIZATION

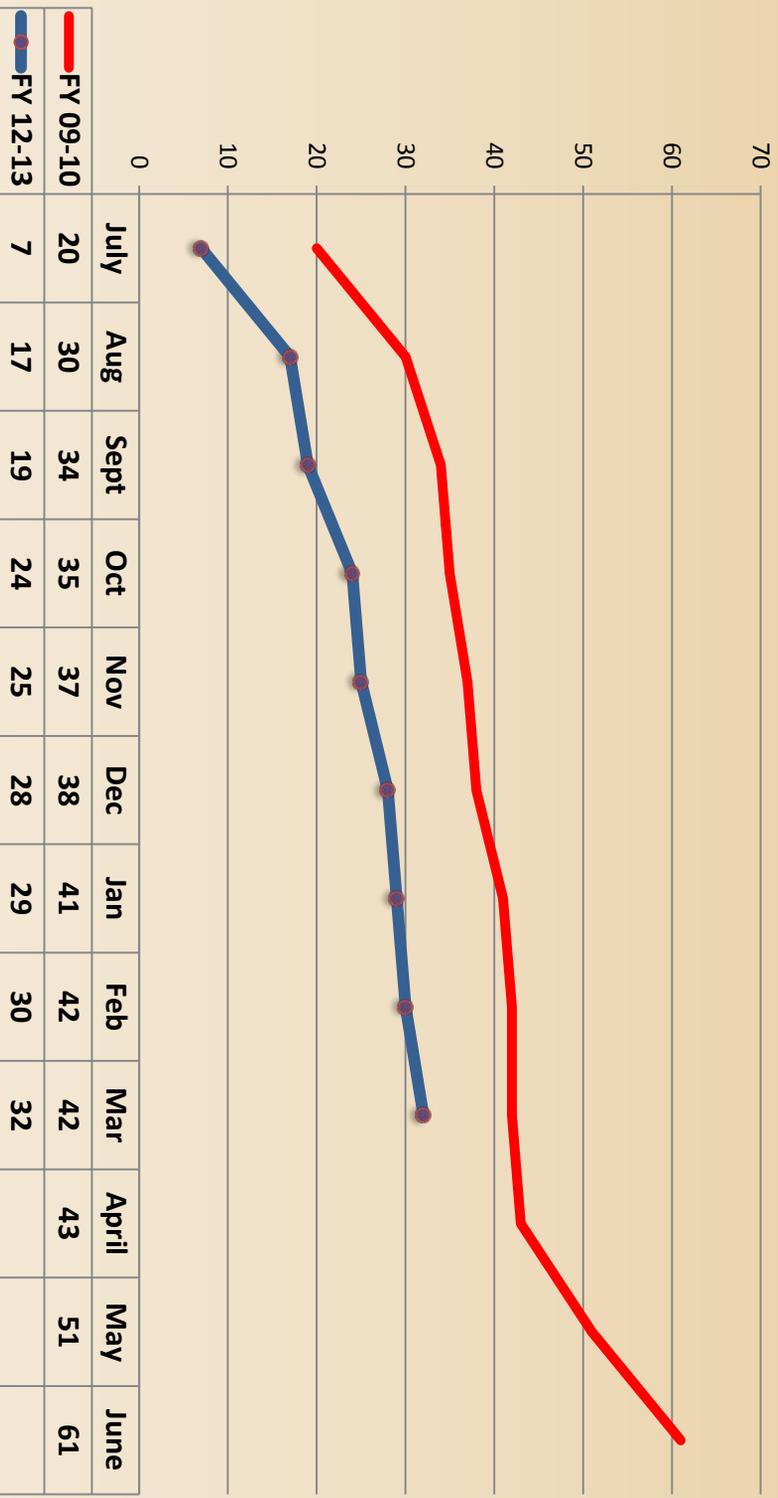
Electric \$ 15.9 million





# 4 kv TO 12 kv CONVERSION RELIABILITY IMPROVEMENTS

CUMULATIVE SERVICE INTERRUPTIONS FY 09/10 VS 12/13



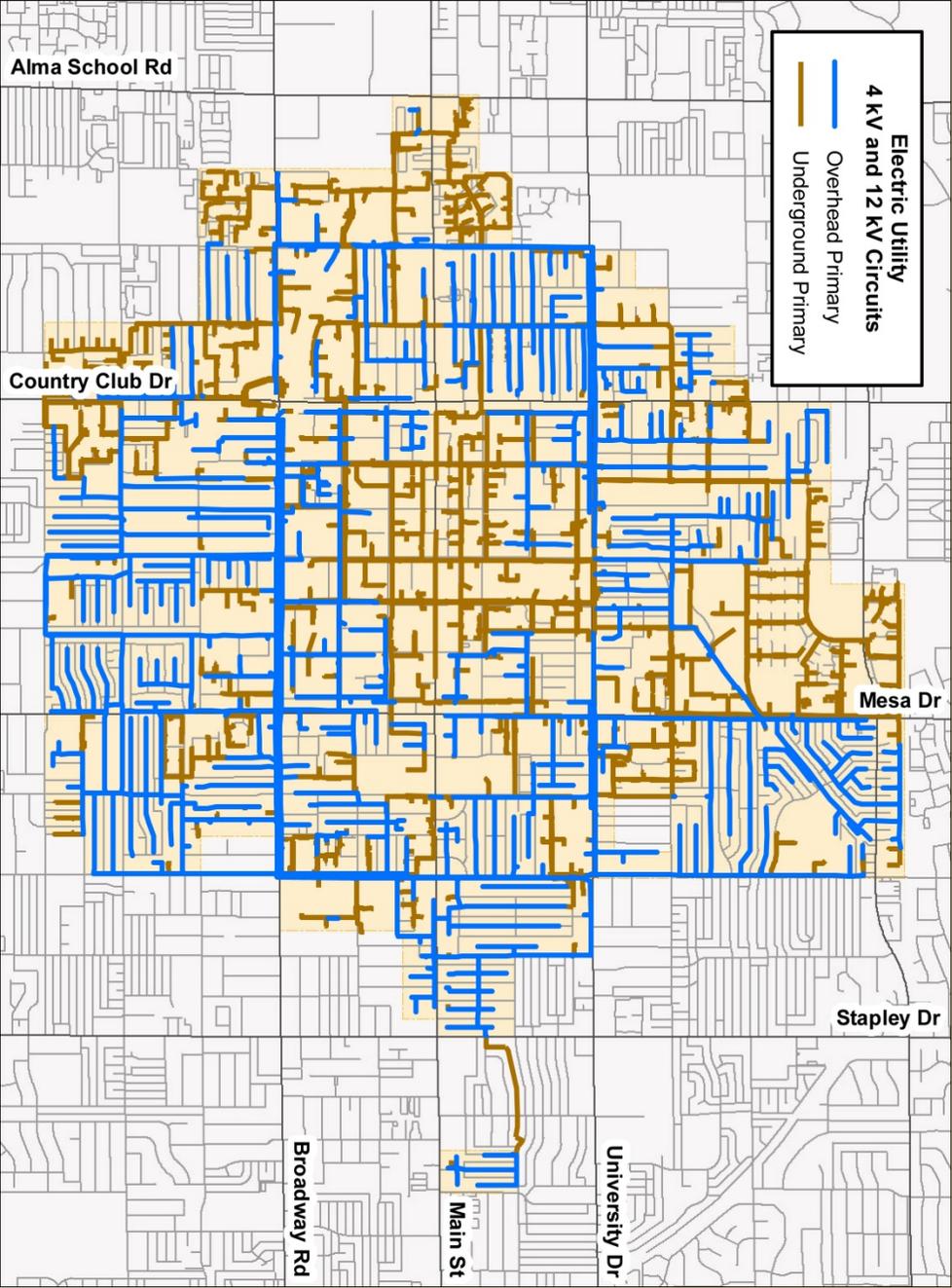


# ELECTRIC OVERHEAD TO UNDERGROUND CONVERSIONS

- Underground electric distributions systems can be more safe & reliable than comparable overhead systems
- Mesa Dr. project provided unique opportunity
  - Southern to 8<sup>th</sup> Avenue
  - Removal of Overhead Distribution Equipment
  - Installation of Underground Conduit & Wire
  - Six residents adjacent to Mesa Dr. converted to Underground
- Telecom & Pole removal - April 2013



# OVERHEAD & UNDERGROUND





# FUNDED ELECTRIC CIP

- Complete the 4 kV to 12 kV conversion
- Kellwood Substation
  - Complete 69kV/12kV Transformer
  - Complete Connections to 12kV Underground Network
- New & Upgraded Services to New & Expanding Customers
- Underground conversions
- Lifecycle, Repair & Replacements
- \$ 15.9 million authorized in 2010 will be **100%** issued & spent by Spring 2014



## **FUNDED ELECTRIC CIP (NON-BOND)**

- Mobile/Emergency Electric Generators w/ Fire Dept.
- Automatic Transfer Switches(2)
- Install underground Electric with Main Street Light Rail Construction
  - Service to Transit Oriented Development
  - Avoid traffic disruptions later on Main Street
  - Minimize costs to extend service to new/expanding customers
  - Expand availability of power connections available for special events & avoid need for mobile generators



# PLANNED ELECTRIC CIP PROJECTS

# NEW AUTHORIZATION NEEDED



## PLANNED ELECTRIC CIP

- New & Upgraded Services/New & Expanding Customers
- Undergrounding
  - Mesa Drive: 8<sup>th</sup> Ave to 6<sup>th</sup> St
  - Expansion of Underground Distribution System & Overhead Conversions
- Lifecycle Replacement and Enhancements to 12 kV Substations (Transformers, switchgear)



# FUNDED GAS CIP PROJECTS

## 2010 AUTHORIZATION

Gas \$ 48.4 million



# MESA DR. AND SOUTHERN

- Joint Transportation, Water, Wastewater, and Electric project
- Safety & Reliability
- Lifecycle & Rehabilitation
- 21,500 linear feet of intermediate pressure and high pressure main replaced
- Started March 2012





# HIGH PRESSURE MAIN EXT. TO WASTE MANAGEMENT/ CNG

- 9,200 feet of High Pressure Steel Main & Regulator Station
- Additional pipeline capacity to serve economic development projects
- Revenues: \$321k upfront and \$335k over the next five years
- Time (or Slow Fill) & Fast Fill for WM's Solid Waste vehicles & Fast Fill available to the Public





## HIGH PRESSURE MAIN EXT. TO BANNER DESERT

- Banner Desert Cogeneration
- 940 feet of High Pressure Steel Main
- Total cost of \$279K;  
Revenues: \$242K upfront and \$32K /year



Cogeneration is the simultaneous production of thermal (heat) and electric energy. Large engines generate electricity and the exhaust is used for water & space heating at the hospital campus



# FUNDED GAS CIP

- High And Intermediate Pressure Gas Mains
- Advanced Metering Technology Pilot In  
MAGMA
- Service for Expanding & New Customers
  - Difficult To Accurately Forecast Bond  
Funding Requirements
  - 676 new residential in 1st 8 months of 12/13  
& 635 new residential in 11/12 (12 months)
- Joint System Rehabilitation Projects
- \$ 48.4 million authorized in 2010 will be 100%  
issued & spent by Spring 2015



# **PLANNED GAS CIP NEW AUTHORIZATION NEEDED**



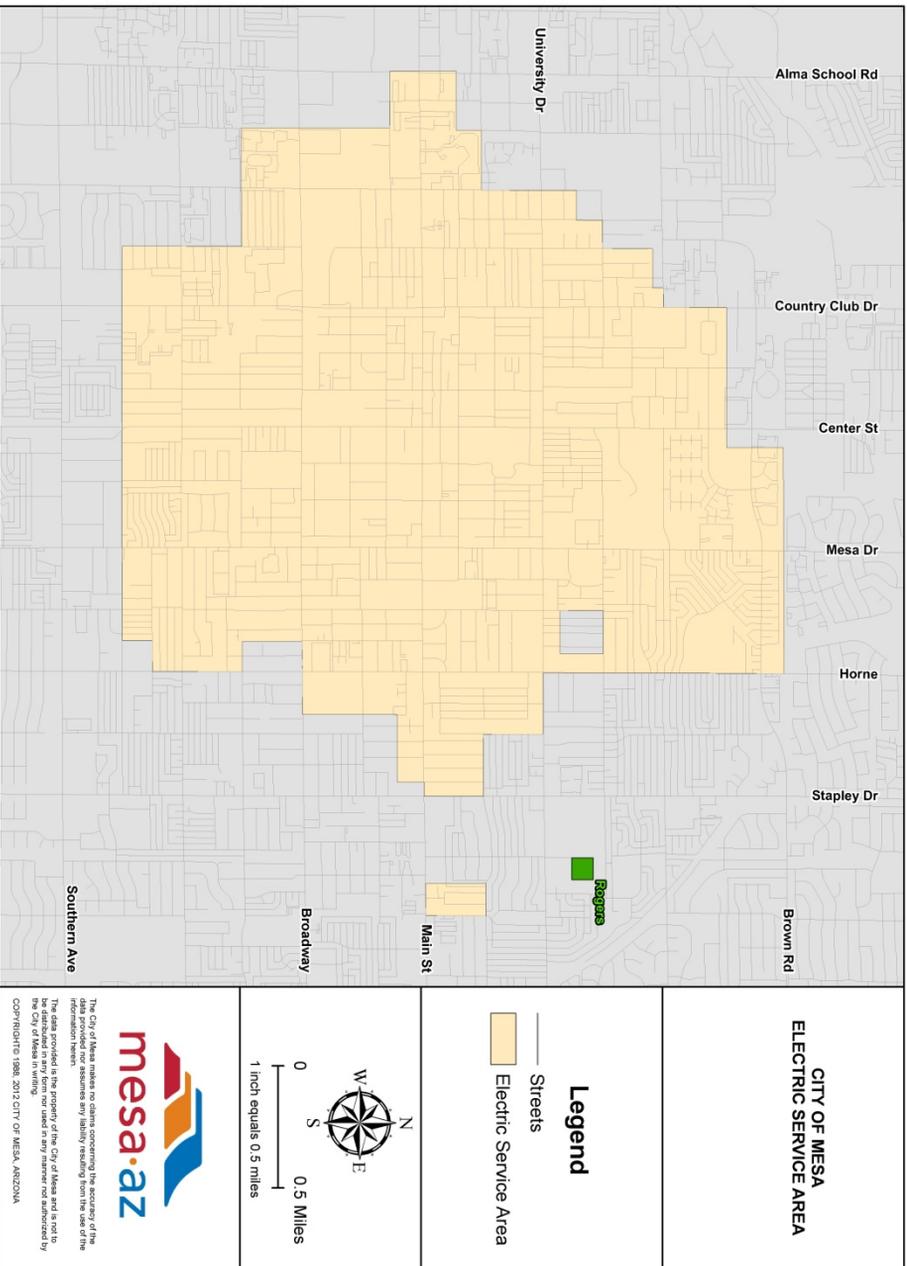
# PLANNED GAS CIP

- High Pressure & Intermediate Pressure Gas Mains
  - Most are Joint System Rehabilitation Projects
  - Broadway - Country Club to Gilbert
  - Stapley - University to McKellips
  - Higley - McDowell to Thomas
  - Stapley and University
  - McKellips - Val Vista to Greenfield
- Service to New/Expanding Customers & Meters
- Another CNG station(s)



# QUESTIONS?

# Service Area - Electric



<p><b>CITY OF MESA</b>  <b>ELECTRIC SERVICE AREA</b></p>
<p><b>Legend</b></p> <ul style="list-style-type: none"> <li>— Streets</li> <li>■ Electric Service Area</li> </ul>
<p style="text-align: center;">               0 0.5 Miles              1 inch equals 0.5 miles         </p>
<p style="text-align: center;">   <b>mesa.az</b> </p> <p><small>The City of Mesa makes no claims concerning the accuracy of the data provided nor assumes any liability resulting from the use of the information herein.              The data provided is the property of the City of Mesa and is not to be used for any other purpose without the express written consent of the City of Mesa in writing.              COPYRIGHT © 1988, 2012 CITY OF MESA, ARIZONA</small></p>



## ***FY 13/14 INNOVATION***

### **Electric Smart Grid**

- Strategic implementation for Smart Grid technology, metering infrastructure and emergency management solutions for the City of Mesa Electric customers
- Improve operational efficiencies, and improve customer service by allowing customers to manage energy consumption
- Better prepare for disasters and emergency management

# Electric Vehicle Charging Sites



MAIN

Center

Mesa Dr

MAC, 3  
Chargers

Pepper Pl  
Lot, 3  
Chargers

Mesa Conv,  
2 Chargers

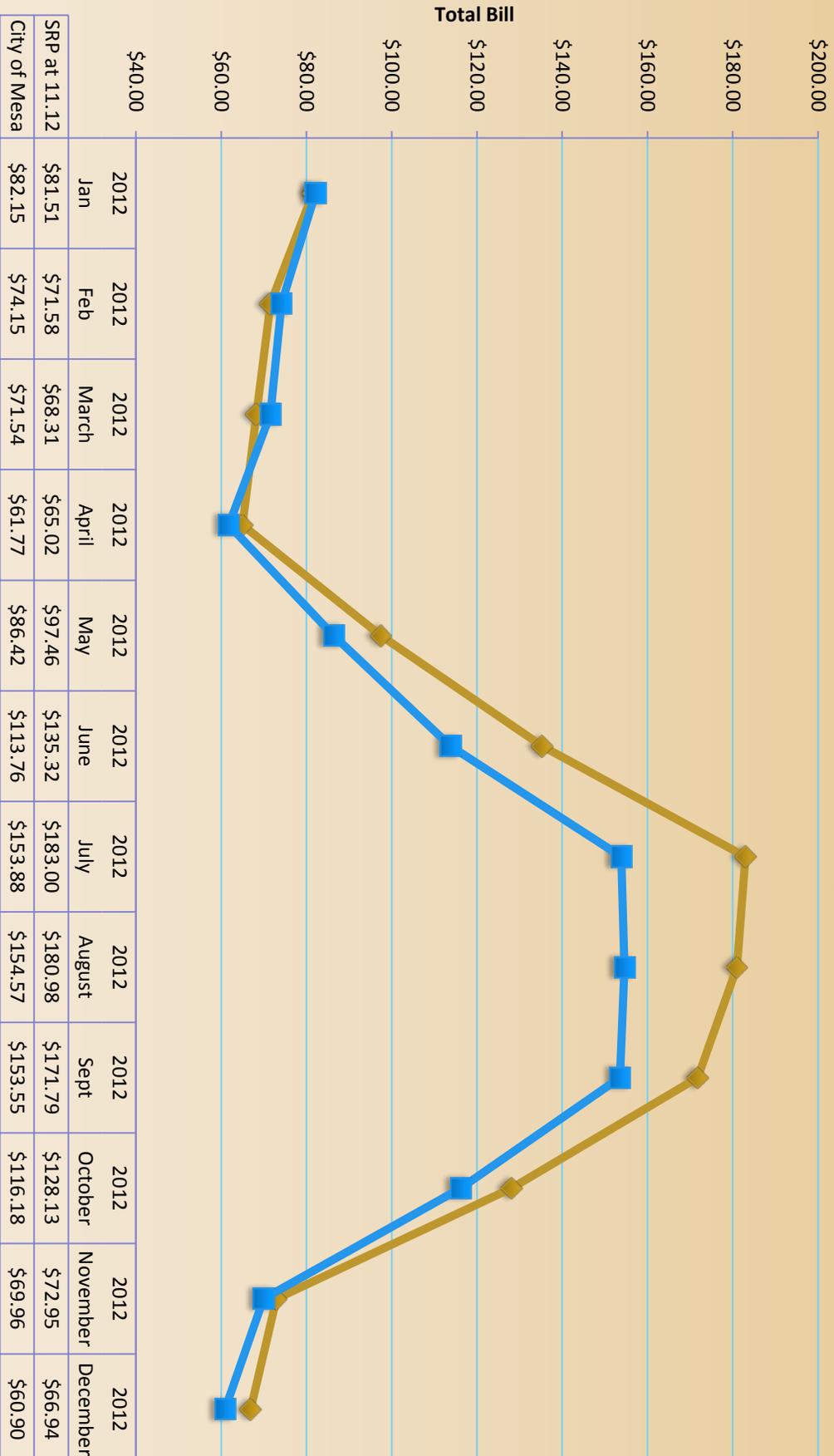
Library, 3  
Chargers



## **PERFORMANCE MEASUREMENTS**

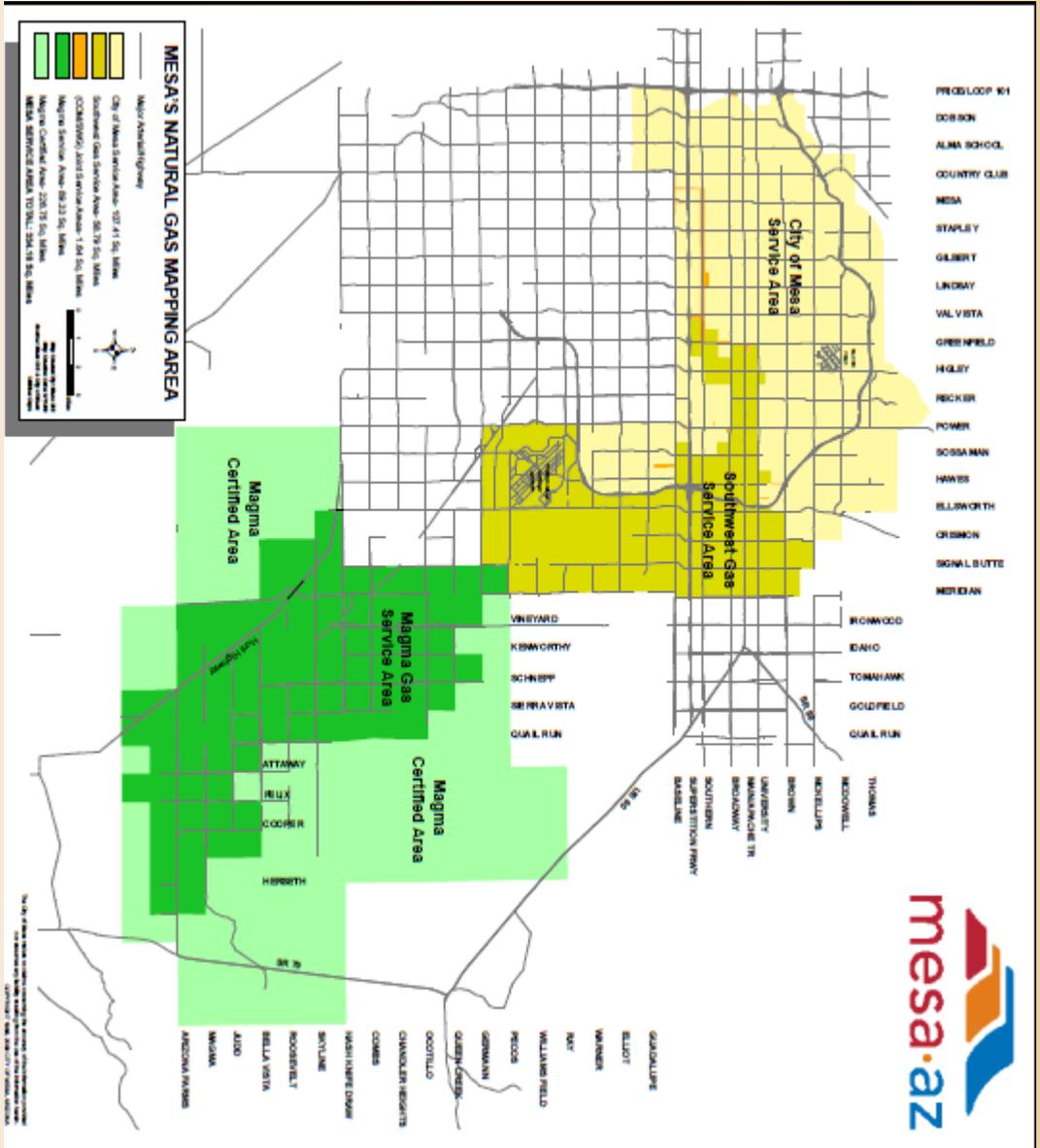
- Electric Reliability - Cumulative Frequency & Duration of outages below targets (benchmark is 25% lower than regional comparison)
- Annual, Average Residential Electric Gas Bill is \$124.16 less than SRP
- Electric has worked 1,774 days with no lost time accidents
- Electric Energy Supply Costs are 9% below budget

# Residential Monthly Electric Bill



◆ SRP at 11.12    
 ■ City of Mesa

# Service Areas - Gas

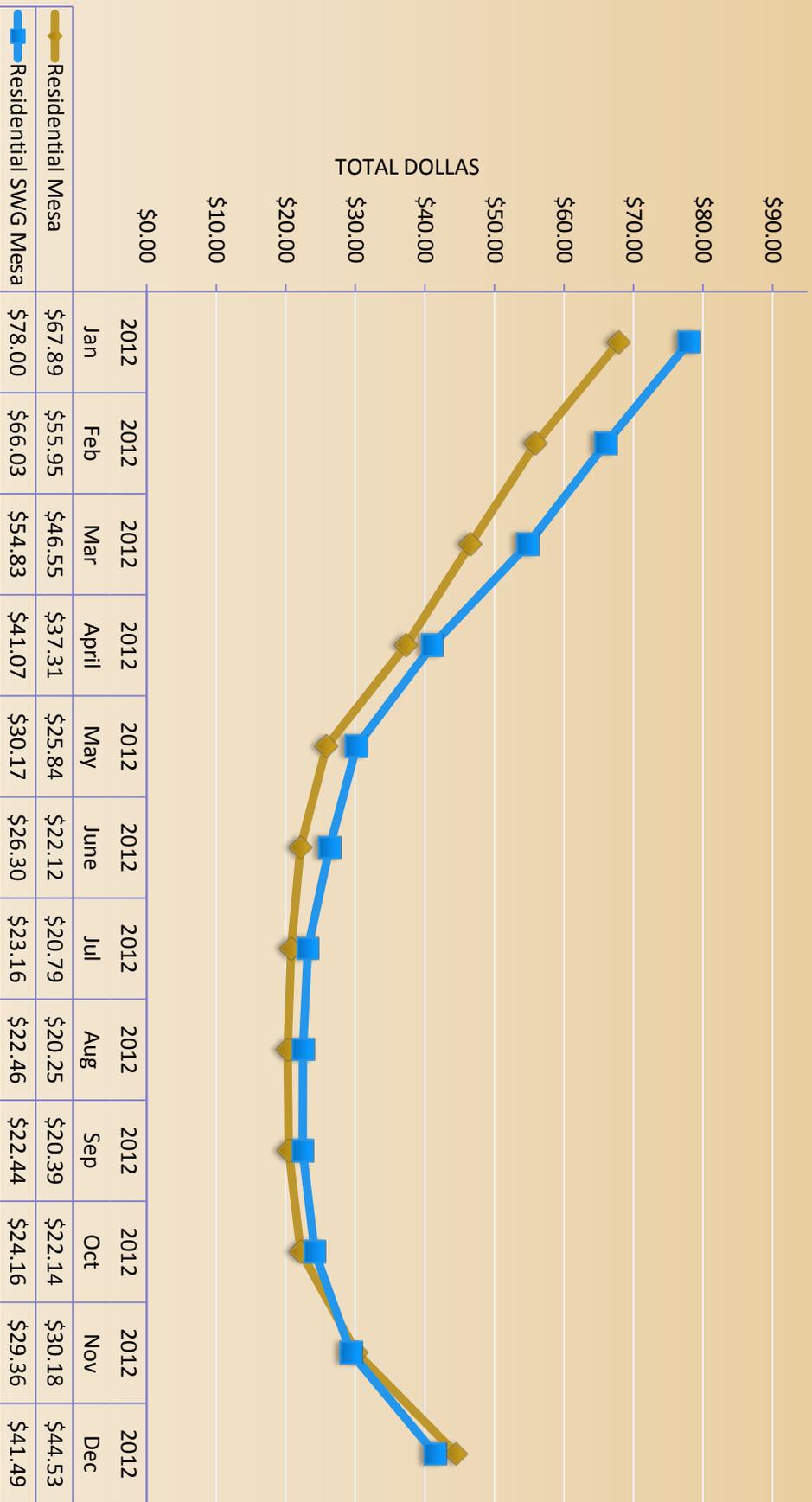




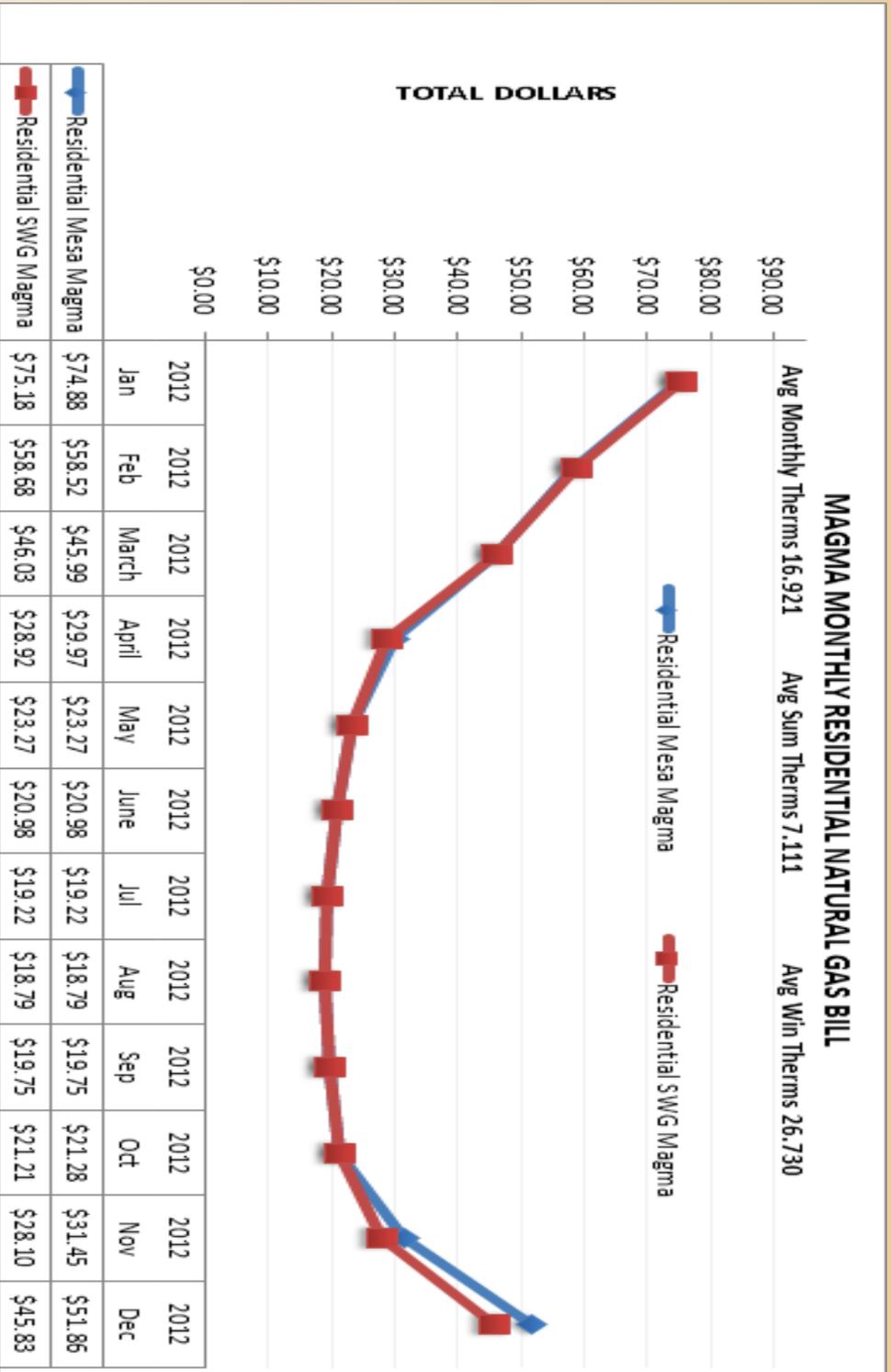
## **PERFORMANCE MEASUREMENTS**

- Natural Gas Supply Costs are 11% below budget
- Annual, Average Residential Gas Bill is \$45.53 less than Southwest Gas
- Gas Emergency Response Times
  - Average response time (Target: 30 minutes)
    - Mesa: 19.7 minutes
    - Magma: 26.9 minutes
  - Percent of calls that exceed 30 minutes
    - Mesa: 2.1%
    - Magma: 21.8%
- 365 Days without a Lost Time Accident

# MESA RESIDENTIAL NATURAL GAS BILL



◆ Residential Mesa    
 ■ Residential SWG Mesa

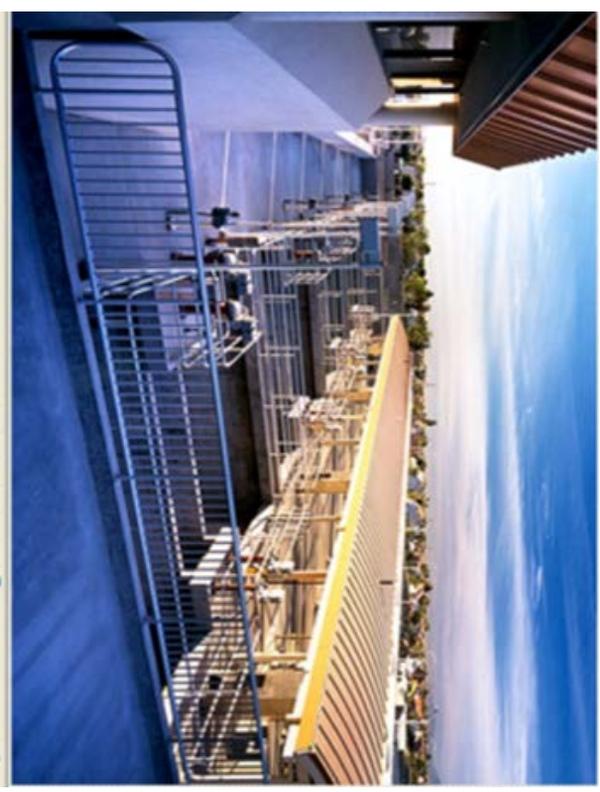




**We treat and reliably deliver  
high quality water to homes  
and businesses in our  
community**

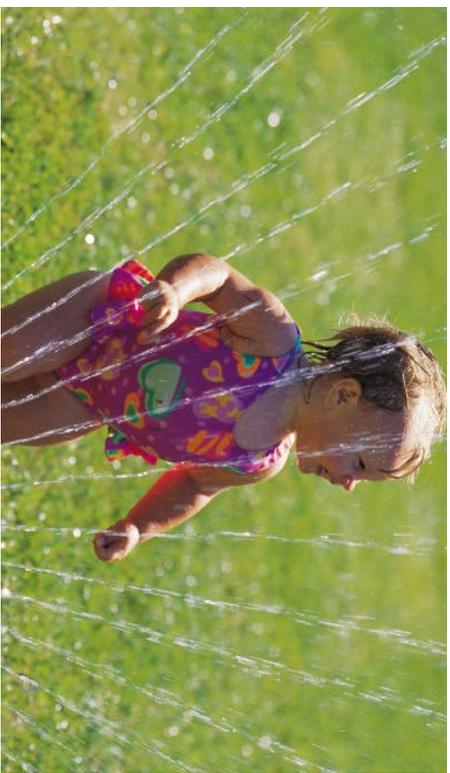


**We safely remove wastewater from  
our homes and businesses and  
reclaim it to protect the  
environment and to bolster our  
future water supplies**





We provide the foundation for public health,  
economic opportunity, and a sustainable  
quality of life in our community



# Effective Utility Management

- Supply high quality water
- Deliver outstanding customer service
- Ensure ample talent to safely do our work today and tomorrow
- Operate at the highest levels of efficiency and cost-effectiveness
- Maintain financial stability
- Optimize infrastructure performance
- Ensure operational resiliency
- Ensure water resource sustainability

*Check out our annual strategic business plan at*

<http://www.mesaaz.gov/water/>

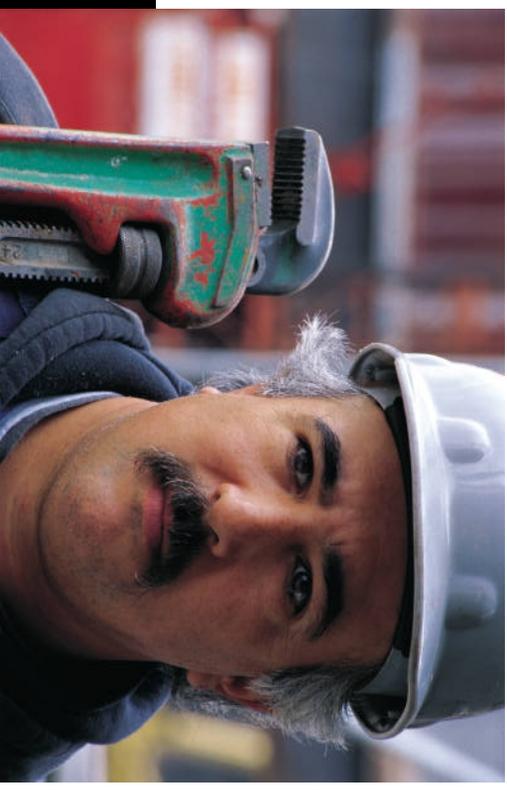
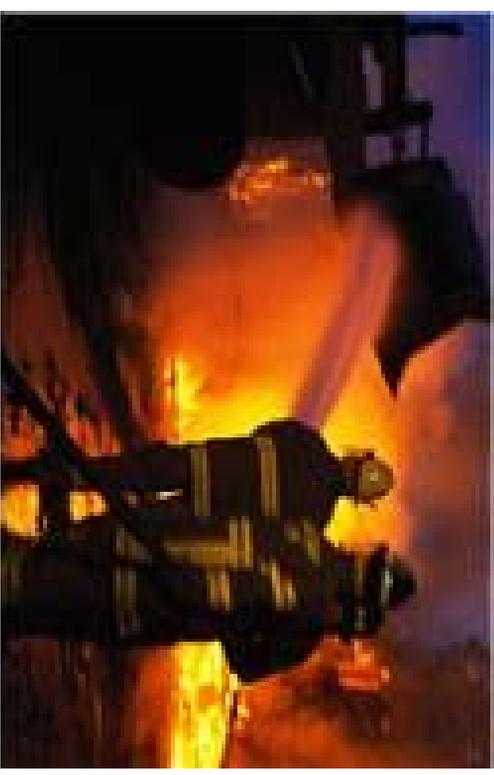


# Ensuring Reliable Service

## Enabling Economic Opportunity

## Operating Efficiently

*Effective utility management is supported by a sound capital improvement program and a reasonable budget*



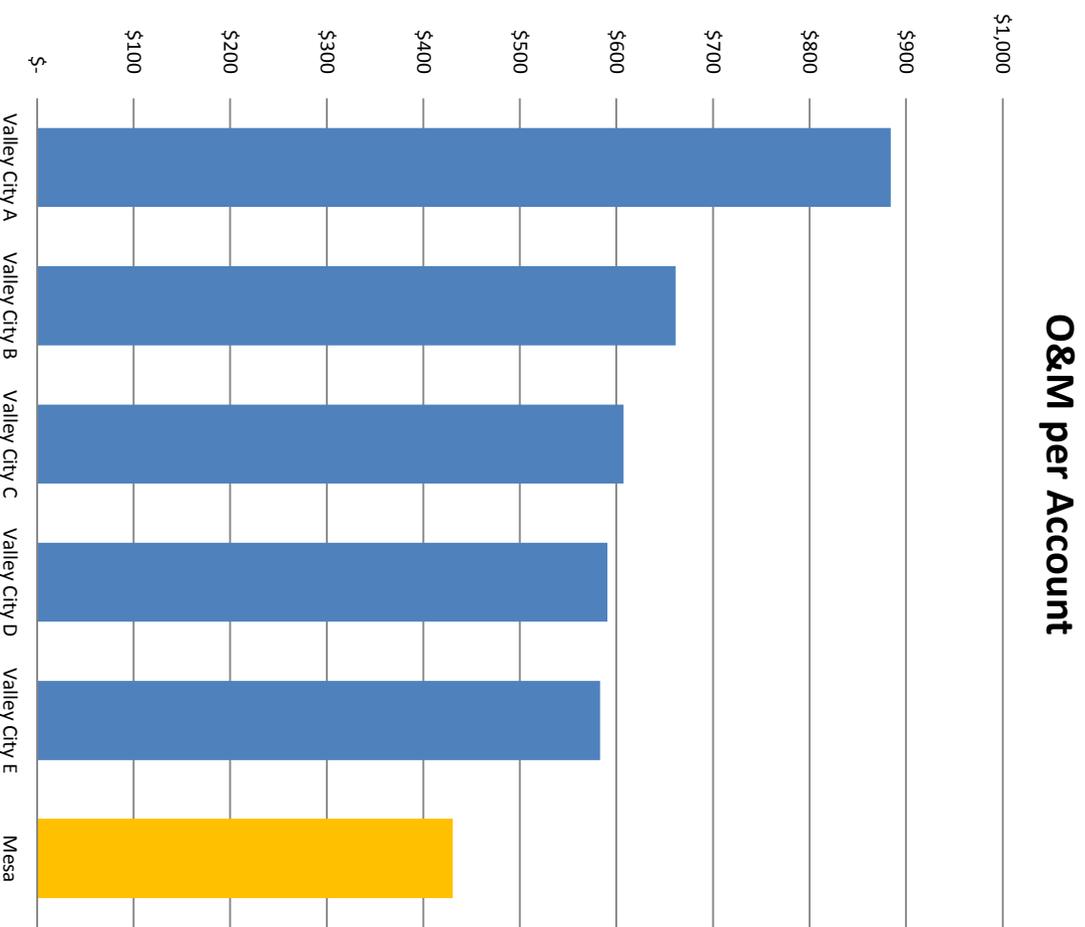
# Operating Efficiently



# Operating Efficiently

*Optimize chemical use, water losses, miles driven, and energy demands.*

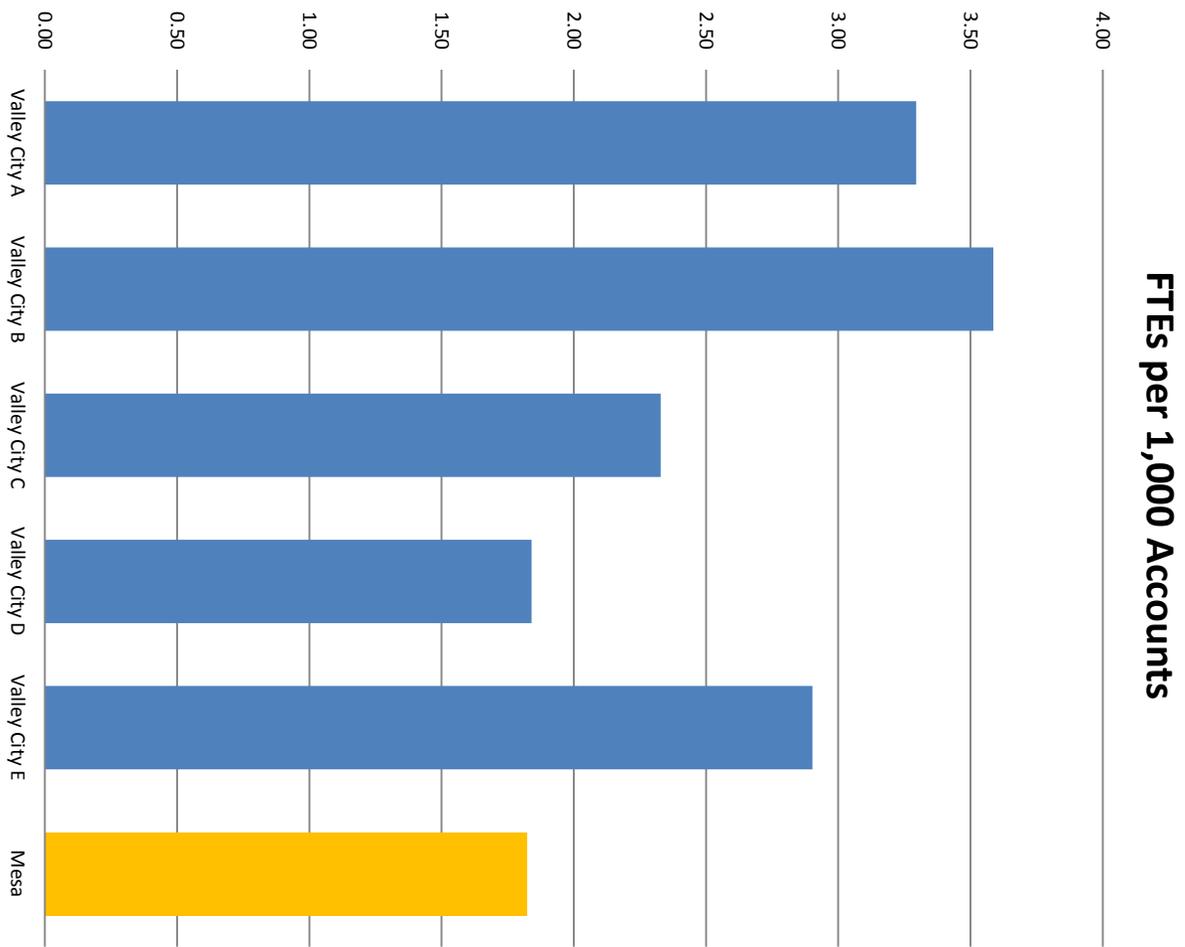
*Insist on performance metrics and benchmarking*



# Operating Efficiently

*Make the best use of employee experience, education, and technical expertise.*

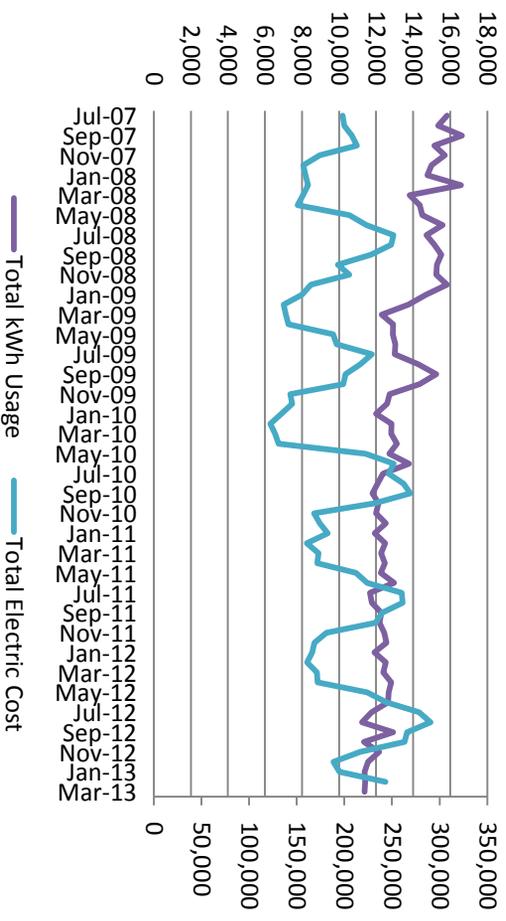
*Set high standards for performance and accountability*



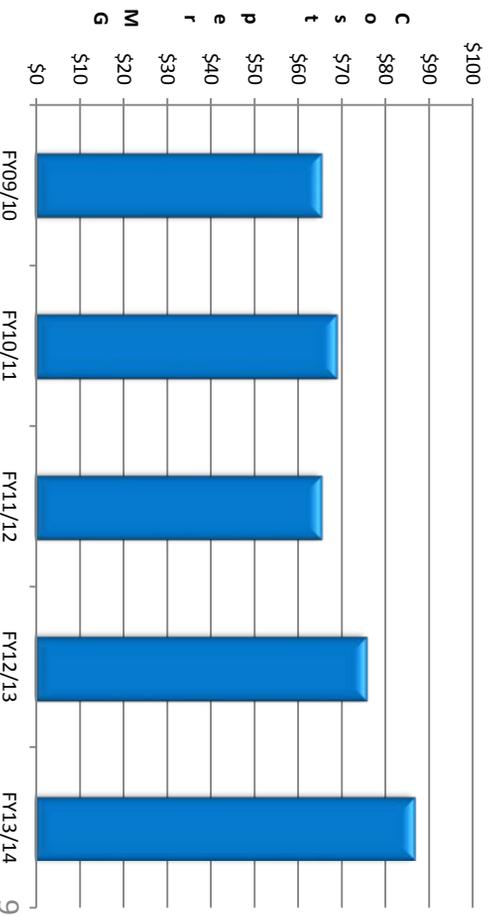
# Operating Efficiently

- Pressure points
- Energy Costs
- Chemical costs
- Water commodity costs

kWh usage per Million Gallons at Mesa Water Reclamation Plants



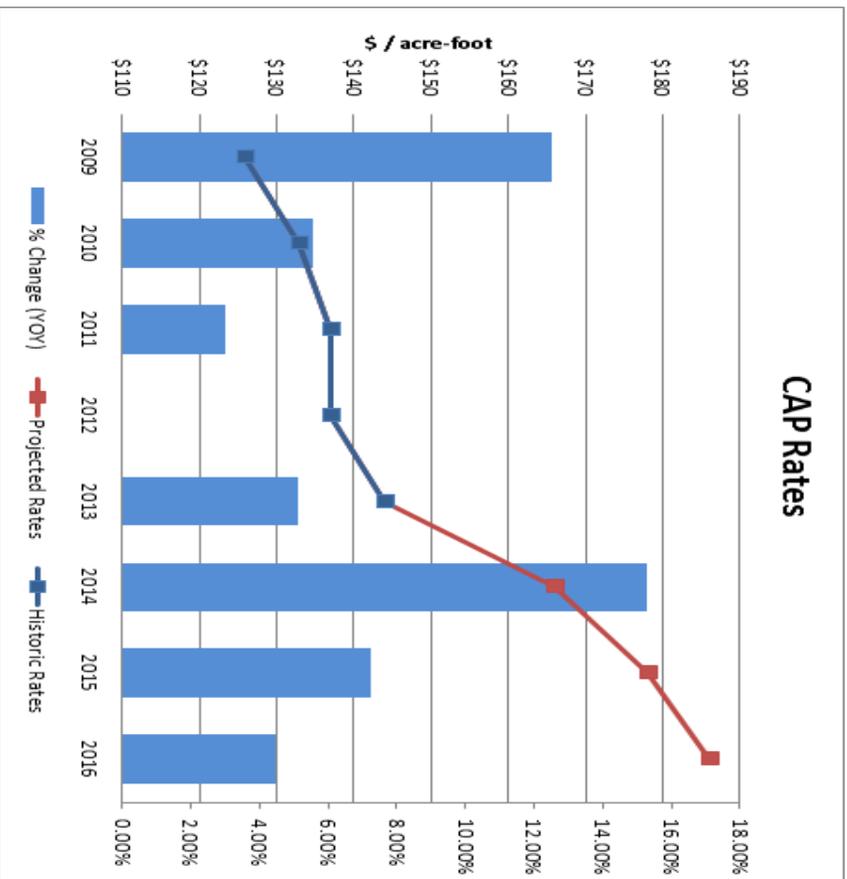
Chemical Cost per Million Gallons



*Forecast includes \$600,000 for increased electric costs and \$530,000 for increased chemical costs*

# Operating Efficiently

*Central Arizona Project Water Rates  
 Expected to increase at least \$1M per year*



**CAP**  
 CENTRAL ARIZONA PROJECT



*Forecast adjustment of \$500,000 for FY 13/14, \$1 M thereafter*

# Ensuring Reliable Service



# Ensuring

## Reliable Service

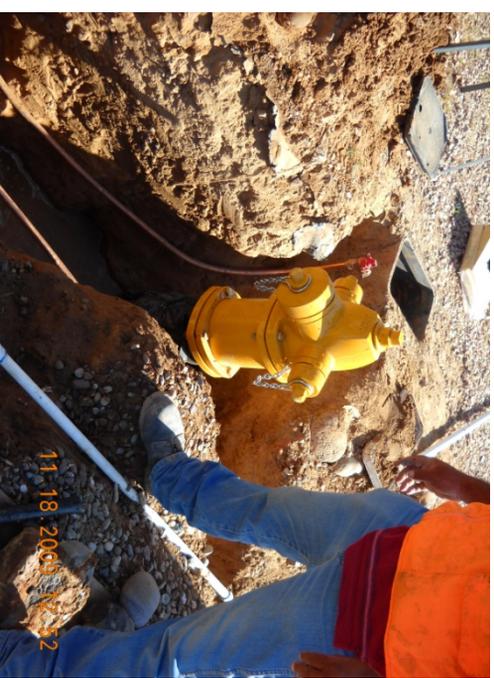
*Water and sewer line  
maintenance and  
replacement*

*Target pipes with the most  
break history, oldest pipes,  
undersized pipes, areas with  
no fire hydrants*

*Valve and hydrant  
maintenance*

*Sewer inspection and  
cleaning*

***Some projects included in  
existing bond authorization,  
others require additional  
authorization***



# Ensuring

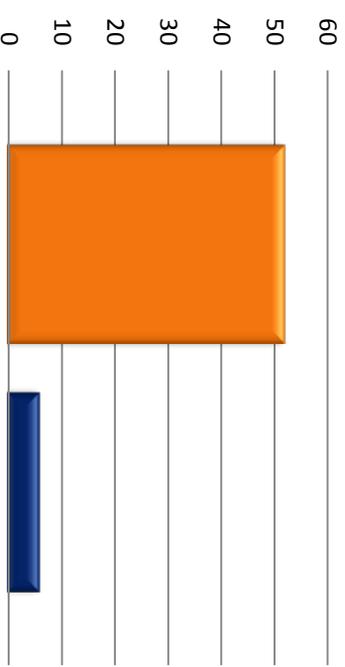
# Reliable Service

*Water line breaks have fallen by around 50% due to replacement projects*

*Pipeline breaks are nearly 90% lower than national benchmarks*

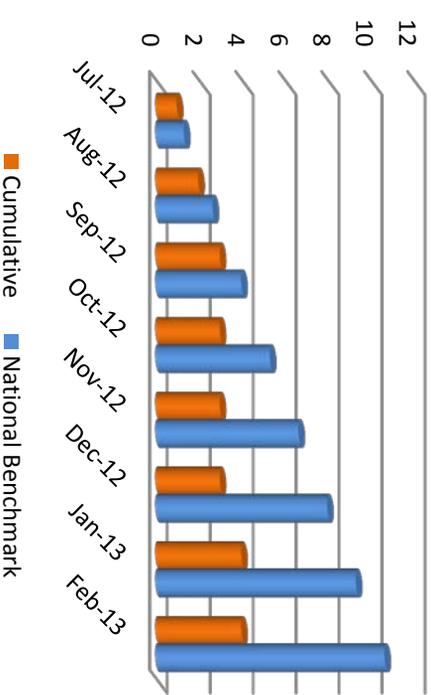
*Sanitary sewer overflows remain 60% below national benchmarks*

Pipeline Leaks and Breaks per 100 Miles of Pipe



■ National Median ■ City of Mesa  
 Source: American Water Works Association,

Sanitary Sewer Overflows



# Ensuring

## Reliable Service

*Well adequacy provides redundancy for drought and canal outages*

*Well rehabilitation*

*Improvements include aesthetic improvements, enhanced security*

*New well development*

*Optimal number and location*

*Maintenance of existing wells*

*Protection from contamination*

***Some projects included in existing bond authorization, others require additional authorization***



Before rehabilitation

***Innovation!***  
***bright employees averted \$1.8M in costs in treating City Well #26 for naturally-occurring arsenic***



After rehabilitation

# Ensuring

## Reliable Service

*Val Vista Water Treatment  
Plant transmission main to  
Lindsay, Pasadena, and  
Brooks reservoirs*

*Replacement of 1970's era  
pipeline*

*Largest transmission line  
in West Mesa*

***First phase included in existing  
bond authorization, future  
phases require additional  
authorization***



# Ensuring Reliable Service

*Ensure ample talent to safely do our work today and tomorrow.*

*Aging workforce*

*Limited pool of skilled workers*

*Specialized experience needed to run our plants*

*24/7 staffing*

***Innovation! Developed intern program for water and wastewater plants.***



# Enabling Opportunity



# Enabling

## Opportunity

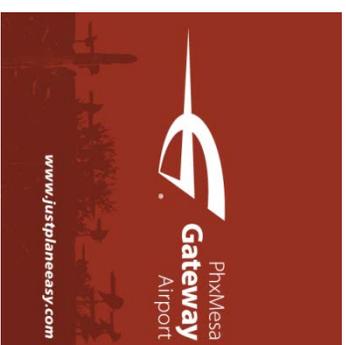
*New water lines in Southeast  
Mesa*

*Improve pressures and reliability  
for existing customers*

*Enable expansion at Gateway  
Airport*

*New groundwater collection lines  
provide new source and drought  
protection*

***Projects require additional bond  
authorization***



# Enabling

## Opportunity

*Signal Butte Water Treatment Plant*

*Basis of design completed, design and construction still ahead*

*Designed for 24 mil. Gal/day*

*Provides for economic development in Southeast Mesa, source treatment redundancy for entire service area*

***Design and construction require additional authorization***





# Bottom Line

*We operate very efficiently,  
but costs are increasing*

*We need to rehabilitate  
major infrastructure to  
ensure reliable service*

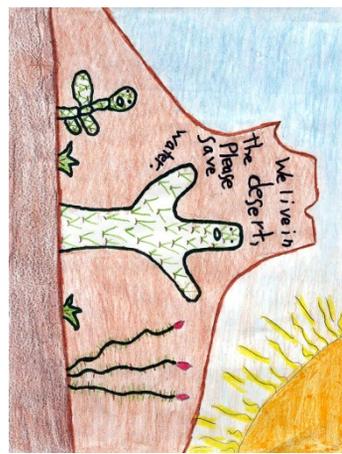
*We need to build major  
infrastructure to enable  
economic opportunity*



# Water Resources Department Budget

EXPENDITURES	2012-13 ADOPTED	2012-13	2013-14 PROPOSED
	BUDGET	YEAR-END ESTIMATE	BUDGET
PERSONAL SERVICES	\$18,467,236	\$17,400,000	\$18,506,847
OTHER SERVICES	\$24,270,860	\$24,471,536	\$26,537,809
COMMODITIES	\$13,425,773	\$13,200,000	\$14,125,350
PURCHASED CAPITAL	\$0	\$197,907	\$226,941
<b>TOTAL</b>	<b>\$56,163,869</b>	<b>\$55,269,443</b>	<b>\$59,396,947</b>
<b>FUNDING SOURCES</b>	<b>2012-13 ADOPTED</b>	<b>2012-13</b>	<b>2013-14 PROPOSED</b>
	<b>BUDGET</b>	<b>YEAR-END ESTIMATE</b>	<b>BUDGET</b>
GENERAL FUND	\$78,951	\$25,000	\$48,171
ENTERPRISE	\$56,084,918	\$55,244,443	\$58,069,859
OTHER & RESERVE EXTENSION REPLACEMENT	\$0	\$0	\$1,278,917
<b>TOTAL</b>	<b>\$56,163,869</b>	<b>\$55,269,443</b>	<b>\$59,396,947</b>

# Capital Improvement Plan

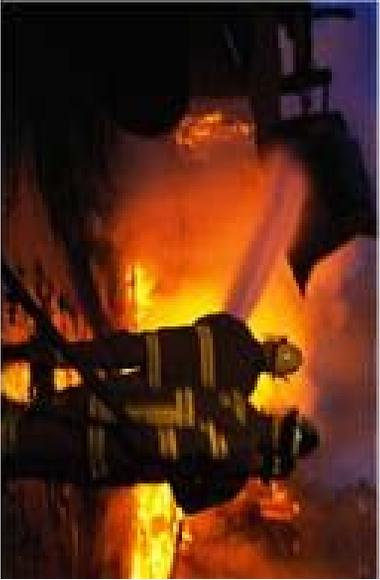


Remaining Authorization (Funded Projects)	Potential 2014 Authorization (Planned Needs)
-------------------------------------------------	----------------------------------------------------

Water	\$28.6 M	\$132 M
-------	----------	---------

Wastewater	\$49.9 M	\$99 M
------------	----------	--------

# Discussion



# Capital Improvement Plan



	Val Vista Transmission Line	Signal Butte Water Treatment Plant	Wells	Waterlines	Water Treatment Plants	On-going Projects	Total
Funded	\$14.6 M	\$0	\$1.2 M	\$2.8 M	\$3.1 M	\$6.9 M	\$28.6 M
Planned Need	\$24.5 M	\$7.5 M	\$11.7 M	\$42.3 M	\$21.1 M	\$25 M	\$132.1 M
Total	\$39.1 M	\$7.5 M	\$12.9 M	\$45.1 M	\$24.2 M	\$31.9 M	

**Water**  
 184 identified capital improvement projects

# Capital Improvement Plan



	GWRRP Plant Expansion	Wastewater Treatment Plants	Sewer line Projects	On-going Projects	Total
Funded	\$4.8 M	\$21.2 M	\$8.9 M	\$15 M	\$49.9 M
Planned					
Need	\$61.5 M	\$17.3 M	\$16.3 M	\$4 M	\$99.1 M
Total	\$66.3 M	\$38.5 M	\$25.2 M	\$19 M	

**Wastewater**  
**92 identified capital improvement projects**

# Transportation Department: FY 13-14 Budget April 25, 2013





# Innovations





# Innovations

## MyMesa Smartphone App

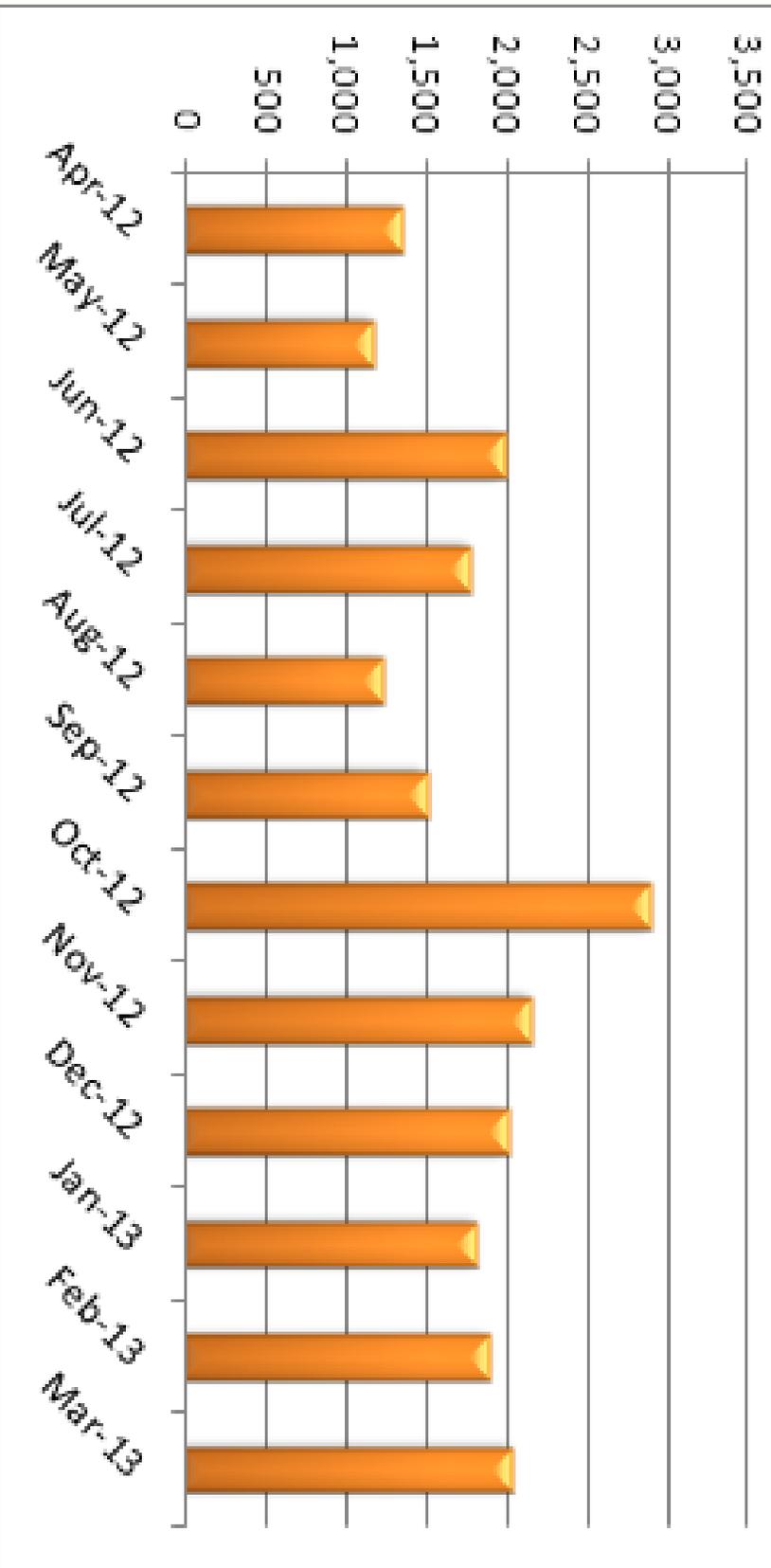
- Started in September 2010
- 23,000 reports over last 12 months
- Increased usage





# Innovations

## Number of MyMesa Reports





# Innovations

## Asphalt Mix Designs & Geotechnical Design

- Independent laboratory material testing
- Change in specifications
- Less preventative maintenance

## Pavement Management System

- Data migration
- Functional January 2014
- Automated survey
- Lifecycle analysis



# Innovations

## Bike Share Program

- On demand loaner bikes
- 5 stations/50 bikes
- RFP for private operator
- Operating by end of 2013



## Lumen Management System

- Pilots, testing, and research
- Return on investment



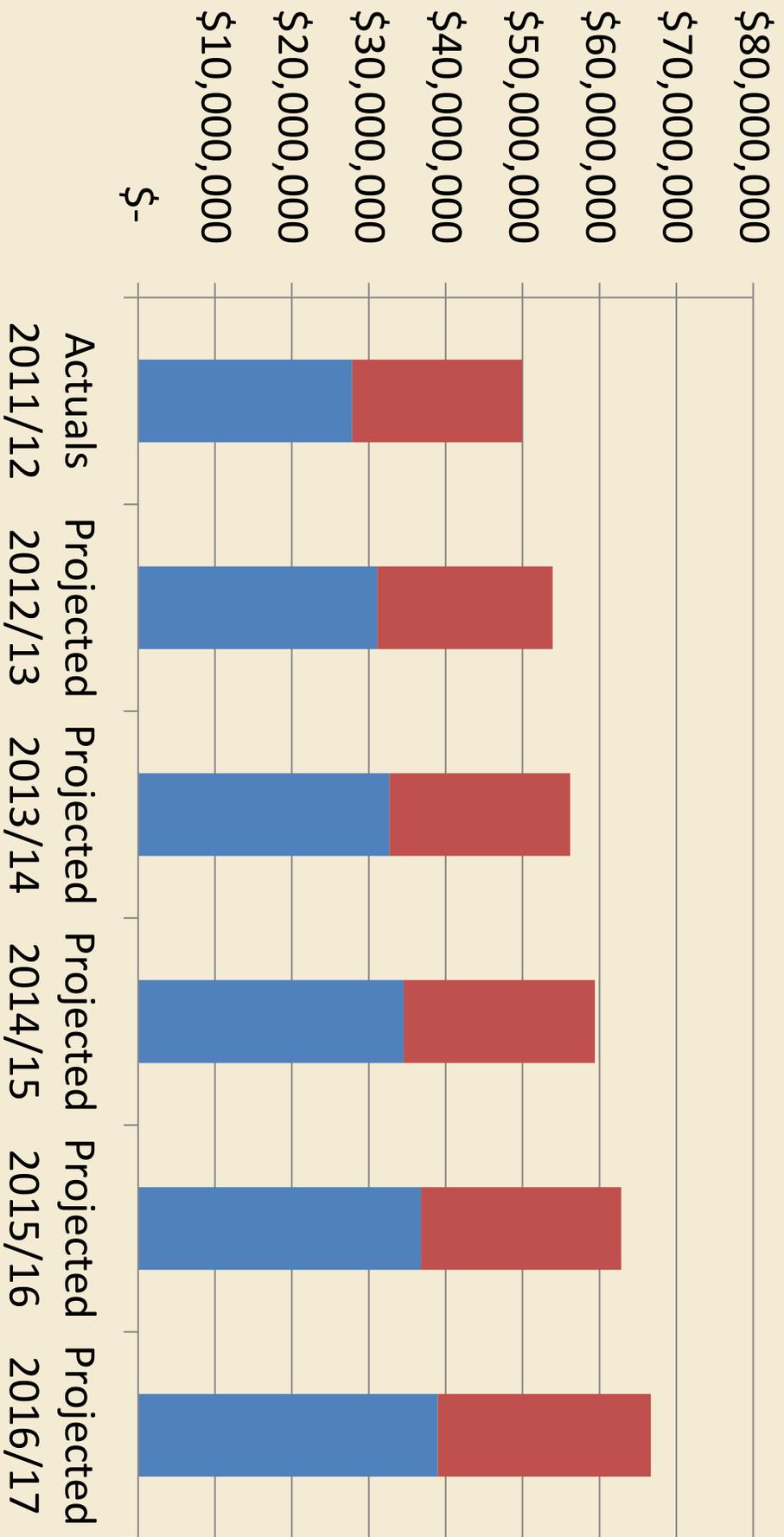
# Operational Budget





# Forecasted Revenues

■ Total HURF Revenues ■ Total LSST Revenues



**OPERATING EXPENDITURES BY CATEGORY**

	<b>12-13 ADOPTED BUDGET</b>	<b>12-13 ACTUAL YEAR-END EST</b>	<b>13-14 BUDGET</b>
<b>PERSONAL SERVICES</b>	\$12,807,934	\$12,300,000	\$12,658,760
<b>OTHER SERVICES</b>	\$27,262,826	\$27,200,000	\$23,367,182
<b>COMMODITIES</b>	\$9,926,740	\$9,900,000	\$7,825,070
<b>PURCHASED</b>	\$152,500	\$136,000	\$50,000
<b>TOTAL</b>	\$50,150,000	\$49,536,000	\$43,901,012

**OPERATING EXPENDITURES BY FUNDING SOURCE**

	<b>12-13 ADOPTED BUDGET</b>	<b>12-13 ACTUAL YEAR-END EST</b>	<b>13-14 BUDGET</b>
<b>GENERAL FUND</b>	\$754,744	\$750,000	\$581,765
<b>TRANSP.</b>	\$44,999,024	\$44,300,000	\$38,459,868
<b>ENTERPRISE</b>	\$971,074	\$986,000	\$903,205
<b>ENVIRONMENTAL</b>	\$3,425,158	\$3,500,000	\$3,956,174
<b>TOTAL</b>	\$50,150,000	\$49,536,000	\$43,901,012



# Capital Improvement Program



## Capital Improvement Program

The Transportation Department's Capital Improvement Program provides for the replacement of aging infrastructure and the construction of new facilities.



# 2008 Bond Authorization (\$110.9M)



# Gilbert Rd. and University Dr. Intersection

- 3 through lanes with dual left turns
- New pavement, curb, gutter & sidewalk
- Raised landscaped median on Gilbert
- New traffic signals, streetlights & landscaping
- Relocated SRP overhead electric and underground irrigation facilities



# Ray Road Improvements

(Sossaman to Ellsworth)

- 1 travel lane each direction
- Raised median
- Bike lanes
- PHX-Mesa Gateway Airport Access
- Connects Power & Ellsworth with access at Sossaman
- Aids future development



# Hawes Road Improvements

(Santan Freeway to Ray Rd.)

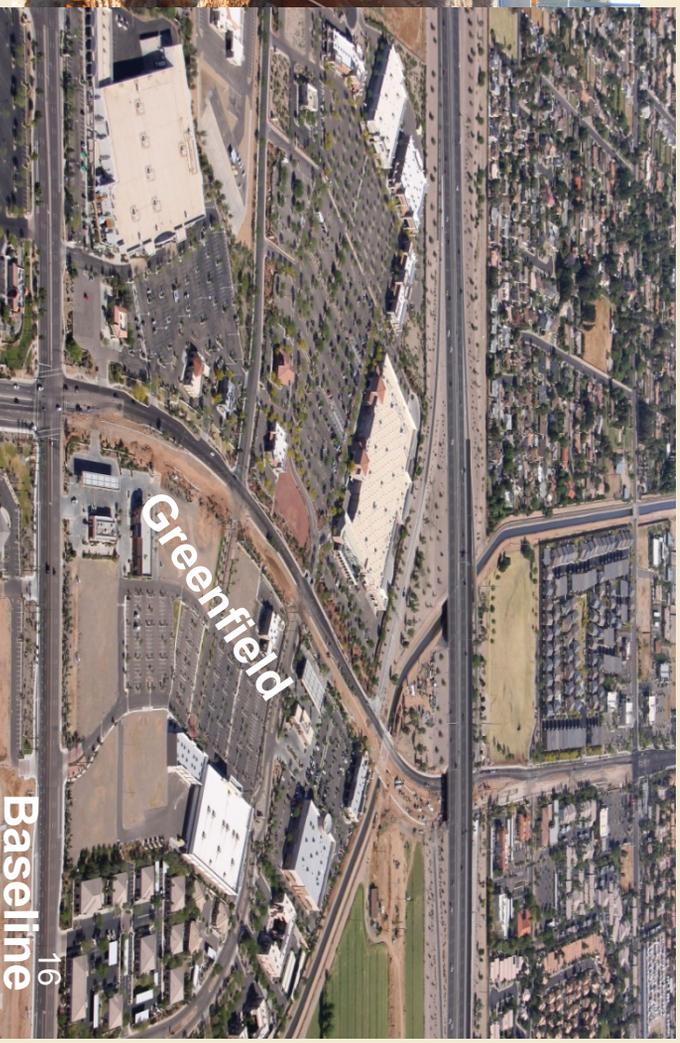
- 1 travel lane in each direction
- Connects Loop 202 to Ray Road
- Raised median
- Bike lanes
- Design and right of way dedications allow for ultimate widening to 6-lane arterial street
- Aids future development



# Greenfield Road Improvements

(Baseline to Southern)

- Provides 3 through lanes in each direction with dual left turns at major intersections
- New pavement, curb, gutter & sidewalk
- Raised landscaped median on Greenfield Road
- New traffic signals, streetlighting & landscaping
- Widened bridge over SRP's Eastern Canal to accommodate additional traffic lanes



# Signal Butte Road Improvements

(Near Elliot Road)

- 3 northbound lanes and one new southbound lane
- Drainage improvements:
  - ✓ New retention basins
  - ✓ Box culverts
  - ✓ Raised elevation of roadway in dip locations
- Water lines extended from City-owned reservoir at Signal Butte & Elliot
- Fiber-optics connecting 3 fire stations to City's network and traffic signals to ITS network



# ASU Ring Road/Innovation Loop

- 2-lane road around ASU Polytechnic Campus
- Water & sewer mains
- Storms drains & retention basins
- Repaved existing roundabout & main entrance off Williams Field Road



# roadway Road Improvements

(Sossaman to Hawes)

- Drainage improvements:
  - ✓ Install storm drain
  - ✓ Remove inverted crown
- 2 through lanes in each direction
- Bike lanes with striped median
- Added traffic capacity at Sossaman & Broadway intersection



# 2008 Bond Authorization (\$110.9M)

## Additional Completed Projects:

- Dobson Road & Guadalupe Road – RTP
- Intelligent Transportation Systems (ITS)

## Current Projects:

- Mesa Drive & Southern Avenue – RTP
- Power Road (Santan Freeway to Pecos Road) – RTP
- Dobson Road & University Drive
- Southern Avenue & Country Club Drive Intersection – RTP
  - ✓ Design & ROW Only
- Southern Avenue & Stapley Drive Intersection – RTP
  - ✓ Design & ROW Only



# Other Bond Funded Projects

## Street Construction Projects (Non-RTP)

- Fiesta District Improvements
- Riverview Street Improvements
- Rusted Streetlight Poles
- City Share

## Intelligent Transportation Systems (ITS)

- Incident Detection/Bluetooth Sensor
- West Side Real Time Adaptive



# Shared Use Path Projects

## Dobson Road (Broadway to Main)





# Shared Use Path Projects

## Porter Park Pathway





# 2012 Parks Bond Projects

## Funded Shared Use Paths

- Riverview/Rio Salado
- West Mesa Connector
- Southeast Mesa Project



# Planned Projects (Additional Authorization Needed)



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# Planned Projects (Additional Authorization Needed)

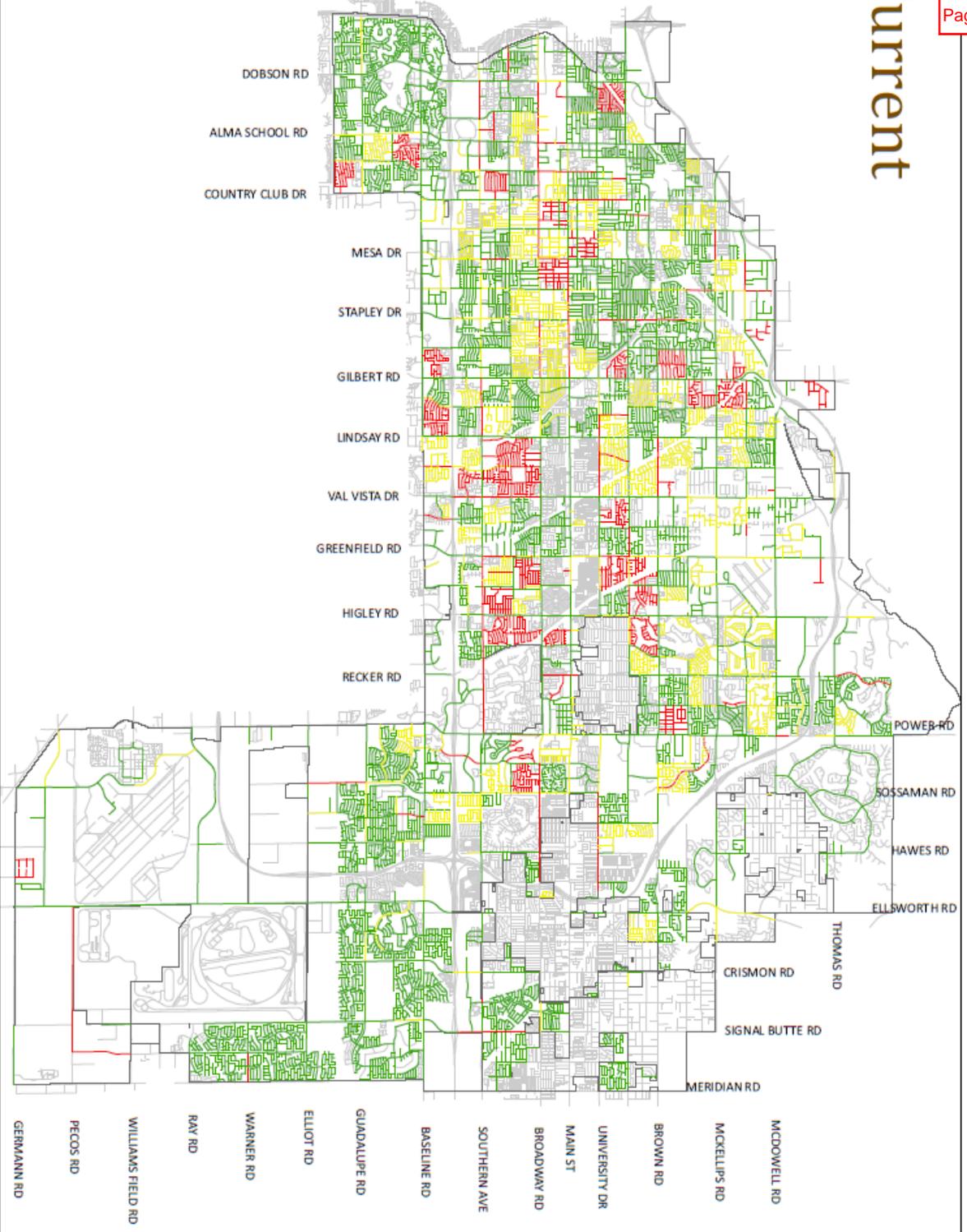
## Regional Transportation Plan (RTP)

- Southern Avenue & Stapley Drive
  - ✓ Construction Only
- Southern Avenue & Country Club Drive
  - ✓ Construction Only

## Arterial Reconstructs



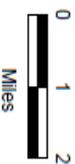
# Current



## Pavement Condition

### Legend

- Poor
- Fair
- Good

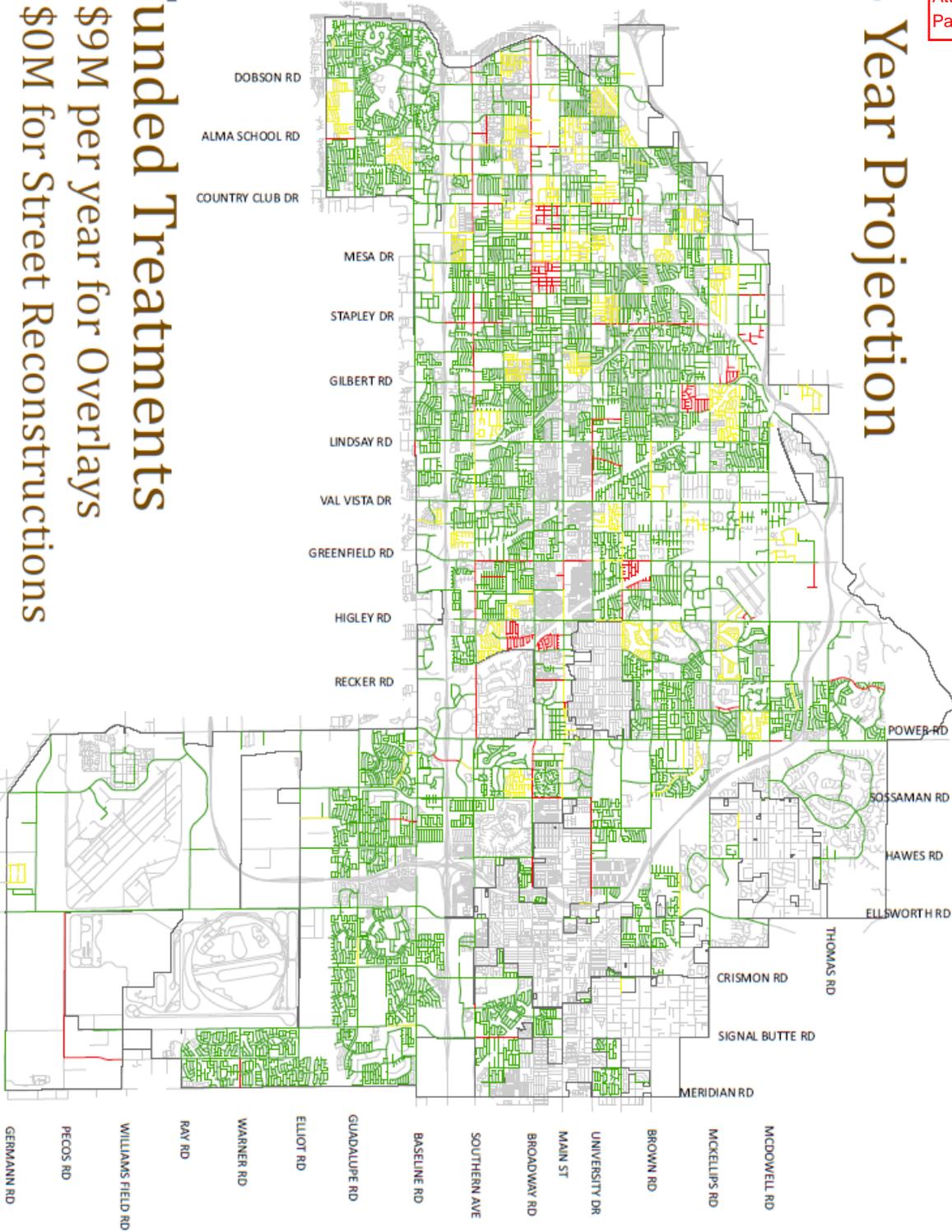


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# 5 Year Projection

- \$9M per year for Overlays
- \$0M for Street Reconstructions



Pavement  
 Condition

### Legend

- Red line: Poor
- Yellow line: Fair
- Green line: Good



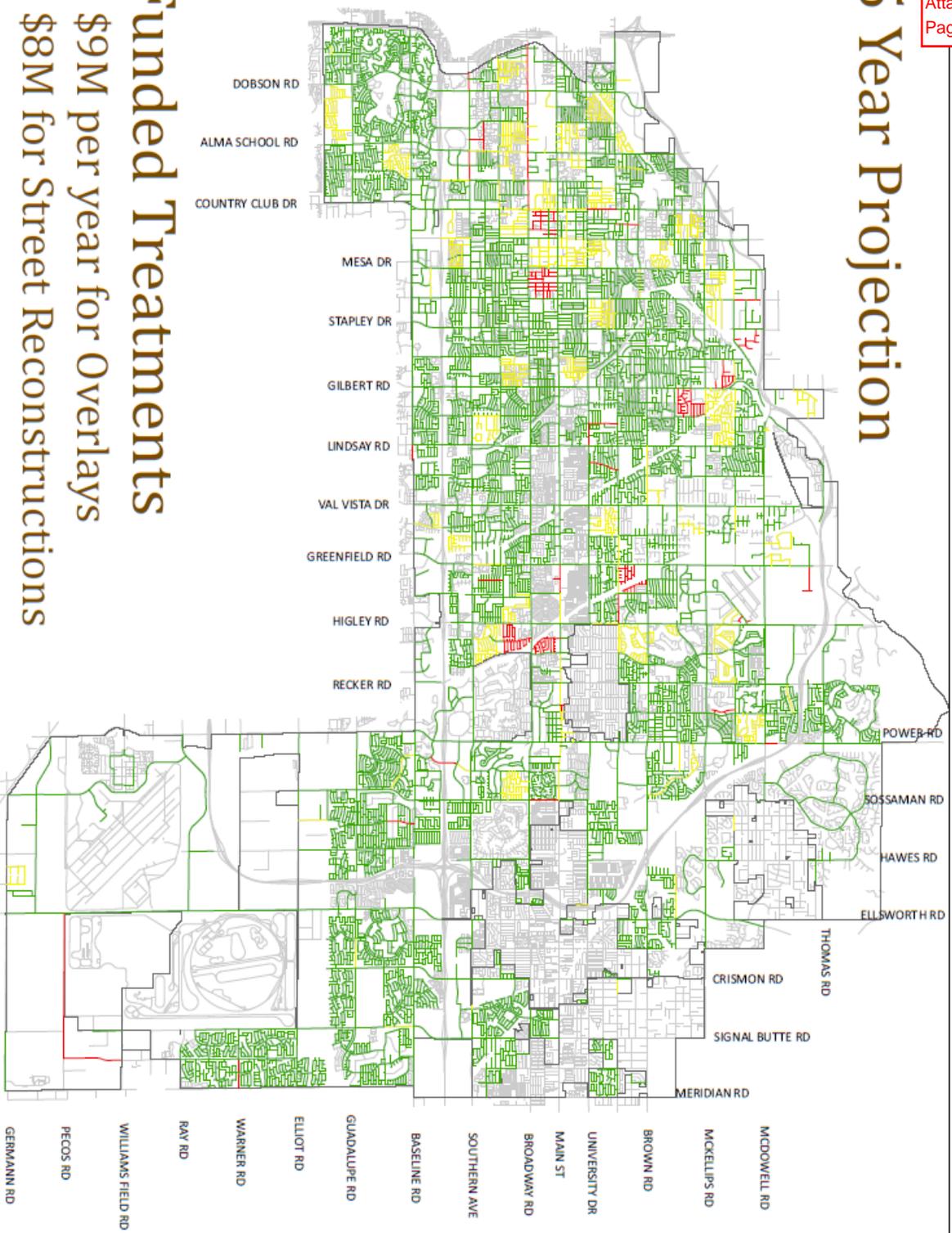
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# 5 Year Projection

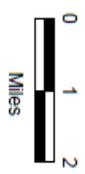
**Funded Treatments**

- \$9M per year for Overlays
- \$8M for Street Reconstructions



**Pavement  
 Condition**

- Legend**
- Poor
  - Fair
  - Good



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# Planned Projects (Additional Authorization Needed)

## Examples of Continuing Projects

- Fiesta District Improvements (West)
- MAG ITS Projects
- Rusted Streetlight Poles
- City Share



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# Planned Projects (Additional Authorization Needed)

## New Projects

- PHX-Mesa Gateway Roadway & Traffic Improvements
  - ✓ East Side Terminal
- Landscape/Streetscape Enhancements
  - ✓ First Avenue (Macdonald to Lesueur)
- Bus Pullouts and Shelters
- Storm Drain Pumps
- Internally Illuminated Street Name Signs
- Light Rail Ped Improvements W/O Dobson



# Future Projects

- Arterial Reconstructs
- Additional PHX-Mesa Gateway street network needs
- RTP Safety & Intersection Capacity Improvements
- Additional Fiesta District Phases (Central & East)
- Mesa Drive: 1<sup>st</sup> Ave to University
- Landscape/Streetscape Improvements
- Consolidated Canal Shared-Use Path Lighting
- Streetlight Management System



# Questions?

