

# Summary of Economic Strategies Workshop: APS Sun Valley to Morgan Transmission Line Project

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Prepared for:

Bureau of Land Management  
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Hassayampa Field Office  
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## **Introduction**

On June 8<sup>th</sup>, 2011 a three hour Economic Strategies Workshop was conducted to comply with BLM's Land Use Planning Handbook during the Hassayampa Field Office's Environmental Impact Statement (EIS) and Land Use Plan Amendment process. The purpose of the workshop was to identify BLM management opportunities that further the social and economic goals of area communities. This summary provides a framework for analysis of social and economic issues in the Draft Environmental Impact Statement.

## **Workshop Process**

The agenda for the workshop covered the following topics:

1. BLM Land Use Planning Process
2. Area social and economic conditions and trends
3. Public presentations on social and economic considerations

After welcoming participants, covering logistical details, and introducing presenters the workshop started with a discussion of the BLM planning process and the Hassayampa Field Office's (HFO) progress.

An overview of area social and economic trends and conditions were then presented in order to generate discussion of BLM influences in the area. The slides used during this discussion are included below in Appendix 1. The slides were generated using information from Headwater's Economic Profile System and are available to the public at the Headwater's website ([headwaterseconomics.org](http://headwaterseconomics.org)).

After the discussion of area trends participants were given four minutes to make a presentation on a social or economic issue of concern. An open dialogue between BLM, presenters, and other members of the public occurred following the presentations. The following broad topics were addressed by one or more presenters:

- Project overview
- Land use
- Recreation, open space, conservation, and wildlife
- Homeowner concerns
- Future development planning

Notes taken during this discussion are included below in Appendix 2.

## Summary of Social and Economic Values Identified

### 1. Economic (market) values

- a. *Property values*: both current homeowners and prospective developers expressed concerns that the transmission line will reduce property values, exacerbating the already weakened housing market. In contrast, APS contended that the transmission line will increase property values through enabling additional development. Existing literature on the property value implications of transmission lines in concert with housing price data can be used to estimate the economic consequences of the proposed project and alternatives.
- b. *Recreation expenditures*: the land north of SR-74 (which includes BLM-managed lands) is used by a number of recreational users, including OHV riders and hikers. Several presenters noted the economic impact of recreation on the Arizona economy and expressed concerns that the proposed transmission line route would close existing trails and access points. The economic impact of recreation expenditures can be estimated with input-output modeling (IMPLAN).
- c. *Employment and income*: economic impacts are generally measured through employment and income consequences. While employment and income considerations were addressed in many presentations, several explicitly emphasized concerns related to local jobs and income. Construction related to the transmission line and associated projects, such as solar facilities, argued several presenters, would expand local employment opportunities. The employment and income consequences of the proposed project and alternatives can be modeled with input-output software (IMPLAN).
- d. *Fiscal impacts*: a number of presenters identified potential channels for the transmission line project to affect tax revenue and state/local budgets. Any change in property values would affect property tax receipts. In addition, any change in property values on state lands would affect state funding for education. The project proponent suggested that the project would increase local tax revenue through enabling future development. The fiscal consequences of the proposed project and alternatives can be modeled with input-output software (IMPLAN).
- e. *Future projects accommodated with increased capacity*: participants expressed interest in portraying the effects of increased capacity on future projects including renewable energy. The interconnection queue could be used for data on any proposed project that would be directly affected by the transmission line.

### 2. Economic (non-market) values

- a. *Consumer surplus value of recreation*: in addition to the economic impact of recreation expenditures, several presenters discussed social and non-monetary values associated with recreation, such as community cohesion. Existing economics literature estimates the consumer surplus value (above and beyond

what is actually spent recreating) for various recreational activities across the U.S. This literature can be used to estimate the consumer surplus consequences of the proposed project and alternatives.

- b. *Ecosystem services*: ecosystem services are the goods and services provided by nature that bring value to human life, but generally lack market prices (e.g., wildlife habitat). In particular, a presenter identified the lands north of SR-74 as providing habitat for desert tortoise. Existing ecosystem services literature provides estimates of value of various types of services. When appropriate and reliable, such estimates may be used to calculate value. However, given the lack of site specific data, it may be more appropriate to discuss ecosystem service values in non-monetary and qualitative terms.

### 3. Social values

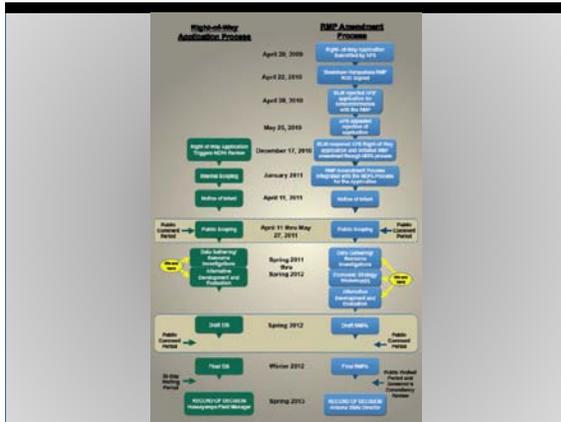
- a. *Quality of life*: quality of life encompasses a broad range of social considerations, including scenic views, recreation opportunities, and health. For both current homeowners and proponents of future development, the value of scenic views was emphasized. While there is an economic component to scenic views (expressed through property values), there is also a social element. The social element was addressed by individuals who expressed values related to driving on SR-74, for example the “rural scenic expectation” was noted as important to recreationists, commuters and area residents. Participants noted effects from transmission line development and future growth would exacerbate sprawl and thereby impact various aspects of quality of life. Infrastructure reliability was noted as important to quality of life, as it relates to expectations of electrical service reliability and health and safety during the hot summer months.
- b. *Health and safety*: several presenters expressed concerns related to the health and safety implications of transmission lines. A current homeowner was concerned that transmission lines emit radiation or electromagnetic rays that could be harmful to people and animals. In addition, an individual who lives near an airfield expressed concern that above-ground transmission lines would increase the risk of flying into and out of the development. The health and safety consequences of the proposed project and alternatives will be evaluated by the appropriate specialist (to be referenced in the social section).

# Appendix 1 – Area Social and Economic Conditions and Trends

## Economic Strategies Workshop: Maricopa County, Arizona

June 8, 2011  
BLM National Training Center  
Phoenix, AZ

Proposed Sun Valley to Morgan Transmission Line Project



### BLM Planning Considerations

- What trends have you observed?
- What questions, issues, or concerns do you have about the data presented?
- Describe the county's social and economic relationship to public lands.
- Proposals, initiatives, and trends that the audience foresees influencing BLM land uses and/or BLM land use decisions.

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### Meeting Purpose

- To promote understanding of how economic analysis fits into the BLM planning process and how public input will provide valuable information for NEPA analysis in the EIS.
- To provide a collaborative opportunity for the public, government entities, regional businesses, and community organizations to discuss local and regional activities, trends, and social and economic conditions related to the proposed Project.

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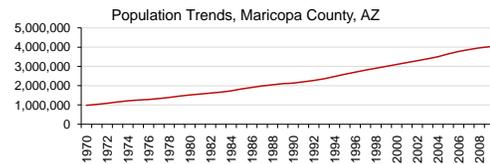
### What We Heard In Scoping About Socioeconomic Values

Issues/Concerns
Visual Aspects Adjacent to SR 74 - North and South
Visual Aspects - Nearby Dwellings and Recreational Users
Health and Safety – Homeowners, Aviation, Recreation, EMF
Property Values – Homeowners, Public Land, Private Land
Recreation – Open Space – Conservation – Wildlife
Public Land Access – Commercial and Private
Process and Need for Proposed Project

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### Demographic Conditions and Trends

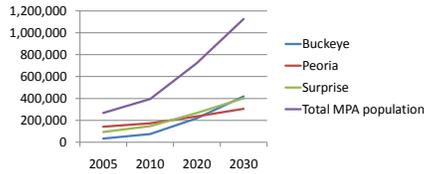


- Between 1970 and 2009, Maricopa County's population grew from 980,133 to 4,023,132 – an 310% increase.
- Data from the 2010 Census indicate County population decreased to 3,817,117 persons.
- The Arizona Department of Commerce predicts that Maricopa County's population will exceed 5 1/2 million by 2020 and 7 million by 2040.
- What factors do you think are driving the rapid population growth?

Data Sources: U.S. Department of Commerce and Arizona Department of Commerce

## Demographic Conditions and Trends

Municipal Planning Area Population Projections

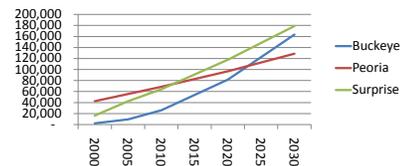


- Between 2005 and 2030 the Maricopa Association of Governments predicts that population in Buckeye, Peoria and Surprise will increase by 1180%, 116% and 330%, respectively.
- What factors do you think are driving the rapid population growth?
- Are these projections accurate in your opinion?

Data Sources: Maricopa Association of Governments

## Demographic Conditions and Trends

Housing Units in Buckeye, Peoria and Surprise Municipal Planning Areas

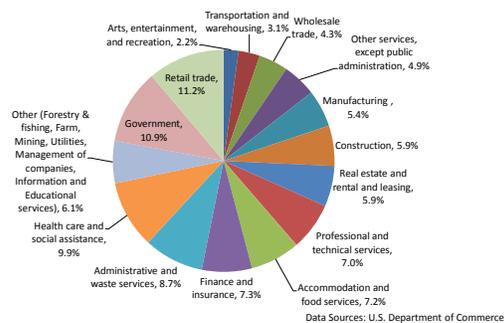


- Between 2000 and 2030 the Maricopa Association of Governments predicts that households in Buckeye, Peoria and Surprise will increase by 6876%, 202% and 1001%, respectively.
- Are these projections accurate in your opinion?

Data Sources: Maricopa Association of Governments

## Economic Conditions and Trends

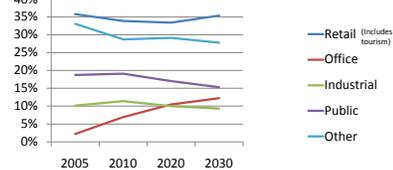
Maricopa County Employment by Industry, 2009



Data Sources: U.S. Department of Commerce

## Economic Conditions and Trends

Components of Employment, Buckeye, Surprise and Peoria Municipal Planning Areas

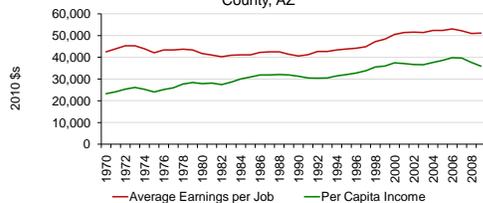


- The Maricopa Association of Governments predicts that total employment will increase in all communities however, Industrial, Public and Other employment (includes construction) will decrease as a share of total employment.
- Are these projections accurate in your opinion?

Data Sources: Maricopa Association of Governments

## Economic Conditions and Trends

Average Earnings per Job & Per Capita Income, Maricopa County, AZ

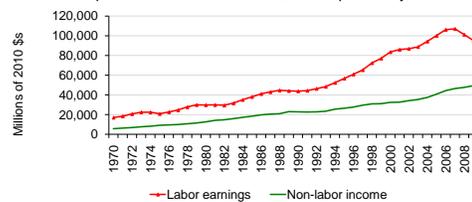


- Since 1970, earnings per job in Maricopa County has increased from \$42,529 to \$51,113, by 20% (inflation-adjusted). Over the same period, per capita income increased from \$23,291 to \$35,898, by 54% (inflation-adjusted).
- This difference may be explained by growth in non-labor income.

Data Sources: U.S. Department of Commerce

## Economic Conditions and Trends

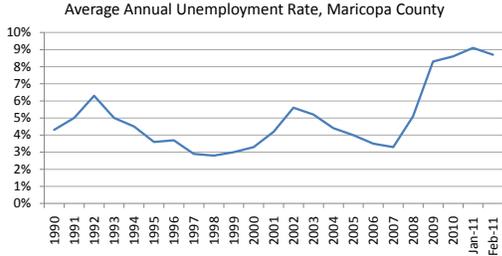
Components of Personal Income, Maricopa County, AZ



- From 1970 to 2009, non-labor income grew from \$5,763 million to \$49,279 million (inflation-adjusted), a 755% increase. While labor income grew from \$17,065.3 million to \$95,142.5 million, a 458% increase.
- In 1970, non-labor income represented 25% of total personal income. By 2009 non-labor income represented 34% of total personal income.

Data Sources: U.S. Department of Commerce

## Economic Conditions and Trends



- Like much of the US, the unemployment rate in Maricopa County has spiked since 2008.
- Since 1990, the annual unemployment rate ranged from a low of 2.8% in 1998 to a high of 9.1% in January of 2011.

Data Sources: U.S. Department of Labor

## Socioeconomic Data

- All of the data used in this presentation are available from public sources
- The Economic Profile System-Human Dimensions Toolkit (EPS-HDT) is a joint project of Headwaters Economics, the Bureau of Land Management, and the US Forest Service
- EPS-HDT allows users to produce free, detailed socioeconomic profiles at a variety of geographic scales
- To learn more, or to download the toolkit, visit: <http://headwaterseconomics.org/tools/eps-hdt>



Proposed Sun Valley to Morgan Transmission Line Project

## CLOSING & NEXT STEPS

- Preparation of scoping report – July 2011
- Ongoing data gathering and resource investigation
- Ongoing alternative development and evaluation
- Publish Draft EIS and possible RMPA – Spring 2012
- Public Meetings on Draft EIS – Spring 2012
- Publish Final EIS and possible RMPA – Winter 2012
- Publish Record of Decision – Spring 2013

Proposed Sun Valley to Morgan Transmission Line Project



## Project Contact

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## Appendix 2 – Notes of workshop discussion

### Economic Strategies Workshop – What BLM Heard

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APS Sun Valley to Morgan Transmission Project

**Date:** June 8, 2011 5:00pm - 9:00pm (GMT-Arizona)

**Location:** BLM National Training Center  
9828 North 31st Avenue  
Phoenix, AZ 85051

List of presenters from agencies, organizations and the general public:

TOPIC	ORGANIZATION – AFFILIATION	PRESENTER
Project Information	Arizona Public Service	Richard Stuhan, GISP
Land Use	AZ Department of Transportation Arizona State Land Department Bureau of Reclamation	Paul O’Brien Ed Dietrich Peter Castaneda
Recreation, Open Space, Conservation, Wildlife	Sierra Club Off Highway Vehicle Coalition Maricopa County Parks – Lake Pleasant Sun City Hikers Citizen	Don Steuter Jeff Gursh Don Harris Ray Prendergast Donald Begalke
Homeowner Concerns	Thunder Ridge Vistancia	Dwight Wiser Lynda Reithman Walter Zahlman
Future Development and Planning	City of Peoria Saddleback Heights Southern AZ Home Builders ORANGE SOLON Corp.	Steve Burg Wendell Pickett Charlie Bowles Chuck Gray Robert Wanless

Please note: ~The opinions expressed below were made by the presenters at the workshop and are not necessarily the opinions of the BLM~

- The Sun Valley to Morgan project will provide extra capacity for renewable projects especially solar. APS explained that the completing of this segment of the 500kV circuit for the Phoenix Metropolitan Area will add an additional 600 MW capacity to the entire 500kV loop and would allow for a total of 1200 MW.

- The project is important for the creation of construction and operation jobs for solar projects and the largest current issue for solar companies building in Arizona is transmission capabilities. Solar companies prefer to use underutilized lands for their projects, but are unable to connect to the grid.
- The cost of undergrounding transmission lines especially 500kV would be between 10-50 times more and is an unrealistic option/alternative due to cost.
- It was stated that the original preferred route during the ACC process would have cost \$10 million more and would have only been a mile or two shorter than the currently proposed route.
- In 2004 Maricopa Association of Governments (MAG) adopted a regional transportation plan via the Prop 400 tax plan that included improvements over a 20 year period. This plan identified SR74 as a highway corridor and earmarked funding for right-of-way (ROW) preservation efforts. The study for this area included existing portions of SR74 through BLM lands and identified 200 feet of ROW north of SR74. At some future point when funding has been identified, a full design concept study will be undertaken. At that time, an application would be made to BLM for additional ROW easement. The estimated timeframe for this action is beyond 2026. There is a MAG plan in development for projects that could not be funded or fully funded at the time Prop 400 was passed. There was no funding for the SR 74 project identified at that time – only funding for the ROW preservation.
- The federal government created the state trust lands for several beneficiaries most of whom are school children. The State Land Department's job is to manage this acreage for its beneficiaries. State trust lands are a special form of private lands, not public lands. The impact of a 500kV line on trust lands in terms of access, viewshed, development opportunities, and future value is monumental.
- The original study area for this project included a large area, which was minimized by the addition of the 230kV line. At the time this was proposed, the 230kV was expected to be needed in the next 7-10 years, but that has now been extended out to 20-25 years. Further study of the separation of the 230kV and 500kV lines should be conducted.
- Placement of the 500kV line in the West Wing corridor should be studied along with the splitting of the two lines.
- No study on the effect of transmission lines on state trust lands has been conducted, but based on other private landowner assertions during the ACC process, such impact could certainly be negative.
- The ultimate fate of BLM lands to the north of SR 74 was discussed. It was presented that once an area has been disturbed, the managing agency loses interest and is more likely to dispose of the land. The designation of resource conservation area for the BLM land north of

SR 74 was lost under the new resource management plan (RMP). Long-term concerns for resource protection of the land north of SR 74 were expressed.

- Recreation in Maricopa County accounts for \$78 million in sales tax and 13,000 jobs. It is important to maintain this area for recreation because where there are no trails, there are no sales.
- It was said that the BLM rules state that for every one mile of jeep road opened, 3 miles must be closed. The cost of replacing lost jeep trails due to this project will require finding a replacement area, additional NEPA and cost of building new trails. This cost could be as high as or higher, than the cost to homeowners if the line is placed elsewhere.
- Clear cutting the ground of vegetation is a problem for PM10 dust emissions, the loss of desert tortoise habitat, and trail riders who use vegetation as markers.
- The proposed transmission line would affect the viewshed from the Lake Pleasant visitor's center and several camp sites.
- The SR74 Scenic Corridor designation was created in the 1990s by the Maricopa County SR 74 Scenic Corridor Committee. The Committee attempted to involve all concerned stakeholders in their findings regarding the protection of the beauty of SR 74. The study committee looked at all of the issues involved with the preservation of SR 74 – height, setbacks, color, land preservation, and values. Consequently, it would be terrible for the project to spoil this beautiful corridor.
- There was expressed disappointed with the ACC decision and the potential effects on SR 74 and BLM lands due to all the outdoor and recreational activities in the Lake Pleasant area. The area north of SR 74 is more rural and visited by metropolitan dwellers and should be preserved without transmission lines.
- The SR 74 corridor has been designated as a freeway corridor by ADOT and should be available for co-location. Change will happen regardless of this transmission line project.
- The APS corridor would be approximately 8 miles of ROW at 200 feet wide or approximately 200 acres of disturbance. Concerns were expressed that historically once a corridor is designated for transmission any number of other transmission lines are allowed to pass through as well.
- There are four miles of hiking trails at Lake Pleasant in the park and several unofficial trails that lead into BLM lands in the area. SR 74 is in and out of the trail viewshed for most of the trails.
- Concern was expressed about the effect of transmission lines as currently proposed on the private Thunder Ridge Airpark along the proposed route. The Airpark coordinated with

Luke AFB and fly below 500 feet. The transmission line at 200 feet would be a detriment to that flight pattern. The concern is for safety of the pilots and passengers.

- Vistancia, Trilogy and Blackstone communities will have a combined final build out of 42,000 people. It was reported that transmission lines have been associated with health issues, lower property values and tax revenues.
- Vistancia is 8 miles south of the SR 74 corridor with two mountain ranges in between and the closest point of the proposed transmission line to the west is 14 miles from Vistancia. BLM should consider the south side of SR 74.
- The ACC chose the current corridor and APS noted that transmission lines do not emit radiation but rather electric- magnetic fields (EMFs).
- BLM should give consideration to future private developments in the immediate area of the transmission line. Information on the effects to property values was requested. APS stated that the further the property is from a transmission line, the less the effect.
- Statements were made that SR 74 is already a transportation corridor and the land will be disturbed whether or not this project is approved.
- The most recent City of Peoria general plan was adopted last year. Planned residential developments require the City's approval. The area along SR 74 has become a buffer between development and recreational space. Future housing plans have to be taken into consideration. SR 74 is going to become the boundary of growth. This transportation corridor would be a good place for the transmission line whether it is on the north or south side of the road.
- The three primary studies regarding the effects of the transmission line on property in the Saddleback development area were identified:
  1. Open specific alignments on the north side of SR74 – this alignment will only influence around 800 acres of land. There would, however, be major impacts to a proposed resort site.
  2. The second study shows the line on the north side of SR74 in between 150-200 feet with poles tucked into the hillside. This would result in 1,300 acres of affected land.
  3. The third study is for the south side of SR74 and shows the line at 300 feet, highly silhouetted. This would result in 1,500 acres of affected land.
- It was reported that studies have shown the positive impacts of new housing construction on communities. The normal annual range of new homes is 900,000 to 1 million. The time period in which there were 3-5 million houses per year oversaturated the housing market. Once the average is back to normal, other economic factors come back into play. There are a variety of financial impacts to consider. In a community such as Peoria, if there are 100 homes built there is a financial and job impact of \$7 million on local income basis,

\$710,000 in taxes and other revenues, and approximately 133 jobs created. On a macro basis, the Phoenix metro would generate \$16 million in local income, \$1.8 million in taxes, and 284 jobs. In this stagnant economy, it is critical to generate this type of growth. Mr. Bowles explained that numerous organizations have documented the impacts of transmission lines on property values. The National Homebuilders Association has been doing studies for over 30 years with the same general result – property owners do not want transmission lines close by. Home and land values do not increase when lines are in the view corridor or backyard. New housing creates jobs and monies for communities, so the location of these transmission lines becomes a critical issue.

- It was reported that only 13% of Arizona is private land, making it virtually impossible for this transmission line to not cross public lands. To take a portion of that 13% of private land unnecessarily is not using the land properly. There is a limited amount of land; the economy needs this land to be developed. If Arizona wants tourism it needs second homes, resorts, family homes, etc. The government should not infringe on private property owners unnecessarily.
- The importance of the relocation of several solar companies that have come to Arizona with the premonition that this is the state for solar development was noted. A predicted 100,000 jobs and 80% of solar power will be deployed from New Mexico westward. Solar generation is the future of the power system. The U.S. and most states have renewable targets. In order to meet these targets, there must be transmission.

## Appendix 3 – Public Outreach Activity Summary

### Public Outreach Activity Summary

The matrix that follows summarizes the public outreach activities that preceded the Economic Strategies Workshop for the Proposed APS Sun Valley to Morgan 230/500kV Transmission Line Project. The purpose of the outreach was to ensure that a cross section of individuals with specific expertise and/or special interests, elected officials, and agency staff were aware of the upcoming workshop. Galileo Project staff conducted outreach to various individuals through community visits, telephone calls, and follow up emails to encourage attendance at the workshop.

Activity	Recipient Description	Details
Dear Interested Party Invitations	Special interest groups, ACC commenters, mining claimant, and other interested parties.	Letter sent to mailing list on May 20, 2011. 509 invitation letters.
Elected official, agency, and tribal Invitations	Elected officials, government agencies, and tribal leaders.	Letter sent to mailing list on May 20, 2011. 246 invitation letters.
Neighborhood Outreach and Flyer Distribution	General public	Distributed throughout potentially affected communities. 300 flyers printed and distributed.
Telephone Outreach	General public, HOAs, Special interest groups, Agencies	Called representatives of general public, home owners associations, special interest groups, and agencies to determine interest in giving a presentation at the workshop.
Project information hotline	General public	5/19/11: Message recorded to inform the public about the workshop. 5/31/11: Message recorded with updated workshop time and location. 6/20/11: Message recorded with brief summary of workshop.

Activity	Recipient Description	Details
Constant Contact E-mail Notifications	E-mail lists prepared by Galileo Project: -Sent 5/31/2011- To: APS Email List, Subject: You Are Invited to Participate! June 8 <sup>th</sup> , 2011 in an Economic Strategies Workshop - Sent 6/7/2011- To: APS Email List, Subject: Reminder! Economic Strategies Workshop	Total Recipients: 532- 5/31/2011 Email 544- 6/7/2011 Email
Newspaper Advertisements	½ page Newspaper display advertisements for the Economic Strategies Workshop were placed in The Arizona Republic, Surprise Today, and the West Valley View.	<p><b>The Arizona Republic</b> <i>NW Valley Zones 1 &amp; 20, Peoria Zone 2, North Phoenix Zone 21</i></p> <ul style="list-style-type: none"> <li>• June 1, 2011</li> <li>• June 3, 2011</li> </ul> <p><b>Surprise Today</b></p> <ul style="list-style-type: none"> <li>• June 1, 2011</li> </ul> <p><b>West Valley View</b></p> <ul style="list-style-type: none"> <li>• June 3, 2011</li> <li>• June 7, 2011</li> </ul>
Press Release	General Public	6/2/11: News release to public regarding workshop date and location.
Meeting Handout	Meeting attendees	Handout distributed at workshop with general project description, the online location of workshop data, project timeline, etc.