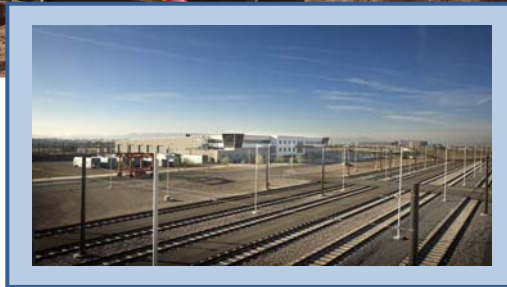
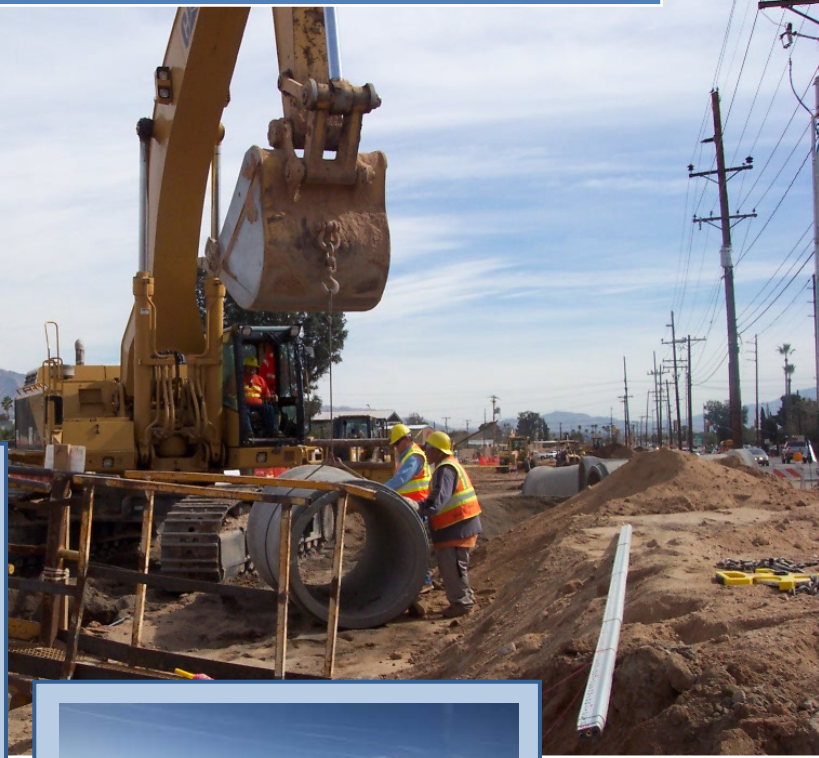




2011

# Recommendations for the Highway-Heavy and Industrial Construction Industry's Economic Recovery



The Associated General Contractors of America, Inc., Arizona Chapter

1/1/2011

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## Introduction

Arizona's construction industry has been hit extremely hard by the recent economic downturn. As a community we can work together to make Arizona's future brighter while creating a more robust economy for the state. This can be done by investing in Arizona's infrastructure, taking the lead in renewable energy, stopping the flow of infrastructure dollars for unintended uses and creating a conducive business and regulatory environment that will help diversify our struggling economy. This document is intended to guide civic, business and political leaders in making key decisions that will affect the outcome of Arizona's recovery.

## Mission

**The Arizona Chapter Associated General Contractors represents its members and serves the community by building and supporting a strong, sustainable, safe and responsible construction industry.**

# AZAGC Leadership

## Executive Committee

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Doug Duplisea, Second Vice Chairman  
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David Martin, President  
Amanda McGennis, Sr. Vice President  
Sarah Morgan, Vice President

# The Associated General Contractors of America, Inc. – Arizona Chapter

## The Oldest and Most Influential Construction Association



### AGC of America – A National Leader

The Associated General Contractors of America, Inc. (AGC) is the nation's oldest and largest trade association representing the construction industry. It was formed in 1918 following a request by President Woodrow Wilson. Wilson, after meeting individually with different builders, suggested that they form an association so they could speak with one voice on matters of concern to the growing industry. AGC of America is headquartered in Arlington, Virginia. There are 95 local AGC chapters across the country, and AGC student chapters on many college campuses.

*AGC was the 2008 recipient of the Honor Award by the National Building Museum. The award was in recognition of AGC's 90 year history of leading the industry. AGC is the only trade association to have ever received the award.*

### The Associated General Contractors of America, Inc. - Arizona Chapter is Born

On April 18, 1934 the Arizona Highway and Engineering Contractors met with the Builders, and a motion carried to join together and create one organization that represented all sectors of the construction industry in Arizona. On April 19, 1934, a similar meeting of the Building contractors was held, and a motion carried to join with the highway and engineering contractors. Both industry sectors agreed that it should be called the Associated General Contractors of America Inc., Arizona Chapter (AZAGC). Thus, the Arizona Chapter was born on June 8, 1934.

The chapter originally represented all sectors of the industry. Over the years board members included construction leaders such as Del E. Webb, John Sundt, R.C. Tanner, Halsey Royden, Jack Mason, William Pulice, Karl Ronstadt and Harold Ashton to name a few. Our members have built diverse projects such as highways, roads, light rail, fire stations, public schools, and state buildings such as the Governor's tower and additions to Wildcat Stadium in Tucson.

### Political Involvement

Like the national association the Arizona Chapter is the oldest construction association in Arizona, and has branded itself as a leader in the industry. Our focus remains on staying involved in the political process where the AZAGC can advocate for its members. Over the last decade, the



association lead a number of campaigns including Proposition 400 in Maricopa County, Proposition 400 in Pinal County and Question One and Two in Pima County.

These three successful elections alone increased Total Available Market (TAM) for our members an

additional \$18 Billion over 20 years. AGC's leadership in the T.I.M.E Coalition would have increased the market by an additional \$42 Billion.

While we are involved in issue campaigns, the association is also involved in helping candidates get elected to state, county and local offices. Our endorsements include a bi-partisan list of candidates. The AZAGC reviews voting records, interviews candidates and require they fill out the AGC public policy survey.

Market share is important to the association, however, it is equally important that AZGAC stay involved in social matters that increase risk to our industry. That is why the AZAGC, along with a number of other industry partners, fought and defeated Proposition 202, the Sierra Club's Initiative to stop growth. AZAGC also



participated in "No on 105". Passage of 105 would've made it impossible for Arizona voters to approve any additional investments in infrastructure.

The association also understands the importance of environmental stewardship. In 2009 we signed a partnering agreement with the Nature Conservancy. This partnership begins the process of opening dialogue with

reasonable members of the environmental community who know that balancing growth with an eye on preserving our future resources can be done civilly and respectfully. Both organizations understand it is important to preserve Arizona for future generations.

### Regulatory Advocacy

Along with government relations and political activity, AZAGC is aggressively involved in regulatory issues affecting contractors and our public and private clients every day. AZAGC continues to work hard on air quality, environmental, safety and health and labor issues at both the federal, state and local level. Recently, we worked on the facilitation of revisions to the asphalt and concrete sections of the Maricopa Association of Governments (MAG) uniform specifications.

We also participate in numerous specification revisions with ADOT including the most recent DBE Task Force.

Solar energy is an emerging market for contractors. Unions are abusing the Arizona Corporation Commission's environmental clearance process to force applicants to negotiate project labor agreements

(PLAs). AZAGC is fighting to ensure companies interested in investing in this new market do not meet the unreasonable demands of unions and their onerous PLAs.

It is our top priority to keep the membership and key decision-makers informed and involved in the parts of their daily business affected by regulatory agencies.

### Networking, Social and Philanthropy

Aside from political and regulatory involvement, AZAGC is also involved in numerous philanthropic and social events. Whether it's collecting – literally tons of - food for the homeless or building roads for Sunshine Acres Orphanage in Mesa, sponsoring university students at the Reno construction competition, or providing gifts to children during the holidays, AGC cares. Many of these are accomplished by raising money through our numerous social events such as golf tournaments, the annual clay shoot, formal dinner-dances or silent auctions to name a few.

**Background of Arizona's Construction Industry Employment and Contribution to the Budget and Economy**

Arizona's economy is in serious trouble as it continues into a recession that, most experts expect to be deeper and last longer than the economic difficulties that other states will experience. The housing market has plummeted, retail sales are weak and jobs continue to be lost. When there is a downturn in the residential or commercial markets, there is not sufficient strength in other parts of the economy to offset the decline and the entire state suffers longer and more severe recessions than the nation as a whole. That is why it's important that Arizona policymakers accept and understand that investing in infrastructure is beneficial to all of Arizona's economy.

In 2007, a total of 372,000 jobs were supported by the direct and indirect outlays associated with the state's nonresidential construction spending. The construction industry (residential plus nonresidential) employed 136,700 workers in August 2009, a decrease of 108,100 (44%) from June 2006 when construction employment in Arizona peaked.

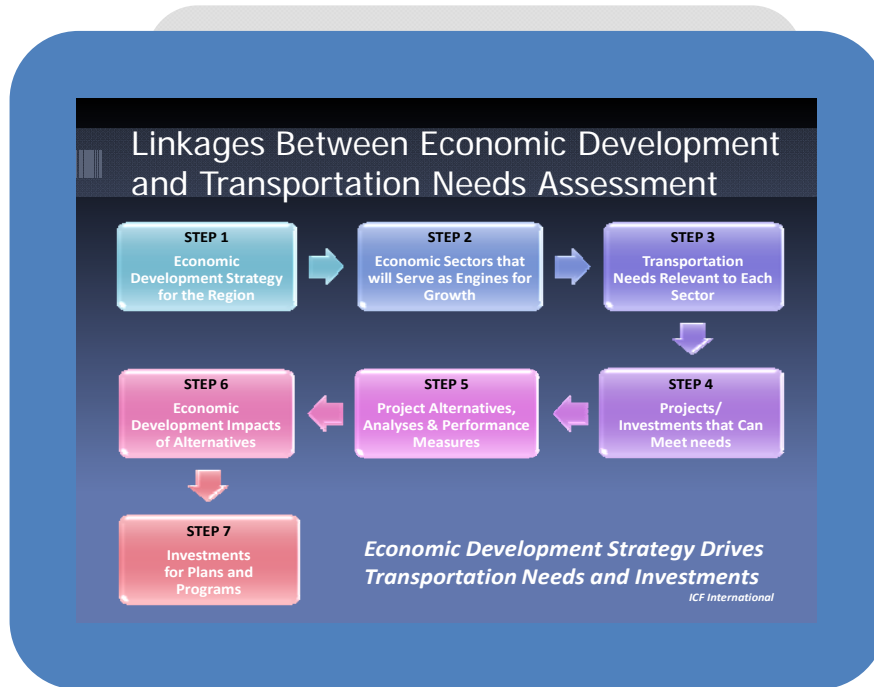
As of November 2010, the national construction unemployment rate is 18.8% - nearly twice the national overall rate. With the small employment number bounce from stimulus projects tapering off, construction employment remains very fragile in Arizona. Over the past two years, four of Arizona's metropolitan areas, Tucson, Phoenix, Prescott and Flagstaff have consistently ranked in the top fifth percentile of construction jobs lost out of 337 metropolitan areas across the United States. To compound this issue, a report released in May 2010 by the US Census Bureau, outlines that 2009 Arizona state tax receipts fell 17.9%. Arizona ranked second with the FY09 decrease of sales tax exceeded only by Alaska.

**Transportation's Influence on the Economy and the Multiplier Effect**

Numerous studies have been done that show the direct correlation between transportation investment and the overall

economy. Commercial development which sustains hospitals, businesses, schools and other vital services to the economy have long been supported by a good infrastructure system.

The ICF International diagram below illustrates this correlation.



The correlation between transportation/construction investment and the overall economy is clear. When workers in Arizona lose their jobs, whether they are construction laborers, retail workers or state employees, the negative consequences are multiplied. Unemployed and underemployed workers – and even workers who are simply concerned about a recession – spend less on consumer goods, delay replacing old cars and other durable goods, and abandon their plans of buying new homes. This sets off a chain reaction that negatively impacts retail stores, construction companies and construction material suppliers, car dealers, real estate developers and sales companies, and other industries whose owners and employees then also reduce their spending.

**The Economics of Construction Investment**

Nonresidential construction spending in Arizona totaled an estimated \$18 billion in 2007. This direct construction spending in the state contributed a total of \$40 billion (16%) to state GDP of \$247 billion.

Direct construction spending in the state added \$13 billion in additional personal earnings to the benefit of Arizona residents working in the state.

**Construction Industry Pay**

In 2008 annual pay of all construction workers in Arizona averaged \$44,400, 6.0% more than the average for all private sector employees.

**Small Business**

Arizona had 16,800 construction firms in 2007, of which 85% were small businesses employing fewer than 20 workers.

**Investing in Infrastructure**

Every \$1 billion in nonresidential construction spending would add about \$2.3 billion to the state's Gross Domestic Product (GDP), about \$740 million to personal earnings and create or sustain 21,000 jobs.

7,100 jobs would be direct construction jobs located in the state.

3,400 jobs would be indirect jobs from supplying construction materials and services. The majority of these jobs would be located within the state of investment but there would be some out of state jobs supported.

10,500 jobs would be induced when workers and owners in construction and supplier businesses spend their incomes locally and nationwide.

**“For every \$1 Billion invested in non-residential construction 21,000 direct and indirect jobs are created in Arizona”**

*Ken Simonson, Chief Economist  
AGC of America*



**Arizona’s Current Transportation Needs**

Recently, the Arizona Department of Transportation along with the state’s Metropolitan Planning Organizations (MPOs), Council of Governments (COGs) and business leaders completed its work on a project called Building a Quality Arizona (BQAZ) which comprehensively lays out Arizona’s long term transportation needs. ADOT’s *Preliminary Definition of Critical Needs* concluded that from now until 2030 there is \$162.3 billion of unmet need.

Arizona will continue to grow possibly doubling its population by 2050 and there are inadequate funds to meet these challenges.

BQAZ acknowledges that Arizona must further diversify its transportation modes (multi-modal) to plan for continued growth statewide especially in the Sun Corridor Megapolitan Region.

**Air Quality**

According to the Environmental Protection Agency (EPA), Maricopa and Pinal County struggle to meet attainment. If Maricopa County fails to

**MAG Projects Cut**

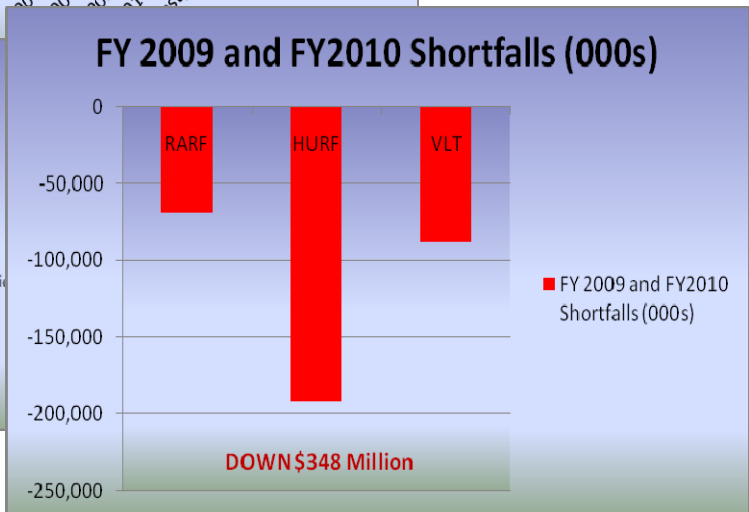
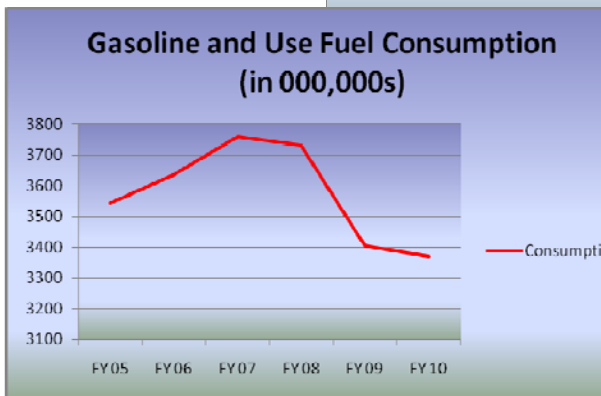
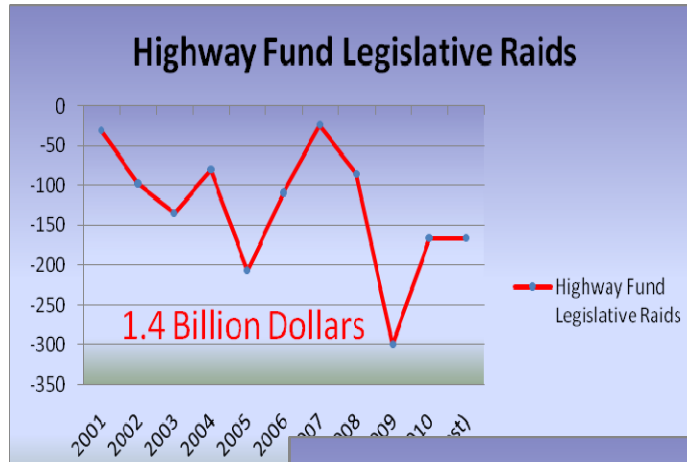
Due to the lack of revenue being generated from the regional area road fund now known as Maricopa County Excise tax, in 2009, the Maricopa Association of Governments (MAG, the Valley’s Metropolitan Planning Organization) revised their twenty-year plan by reducing the expected projects by \$6.6 billion.

**State Highway Funds are Being Raided**

From 2001 to 2011, over \$1.4 billion has been taken from transportation coffers. This equates to approximately 40,000 jobs over the last 10 years.

**The Feds have failed to extend the highway bill**

SAFETEA-LU stands for Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users. It was enacted in August 2005 and authorizes all federal surface transportation programs. It allows all of these programs to exist. The bill originally expired on Sept. 30, 2009. It has been extended through a series of continuing



overcome EPA’s decision to reject the 5% plan, then the area could lose an additional \$1.8 billion in federal transportation funding jeopardizing the region’s entire Transportation Improvement Plan (TIP) of \$7.2 billion.

**Fuel Consumption is Decreasing**

According to the latest numbers provided by the Arizona Department of Transportation, gasoline and use fuel consumption is down to 2002/03 levels.

**State Transportation Funding is Decreasing**

Over the last two years (FY’09 and FY ’10) 11.2%, 7.0% and 9.3% has been lost from the VLT, HURF and RARF respectively. Aggregate revenue from these sources is approximately \$348,000,000.

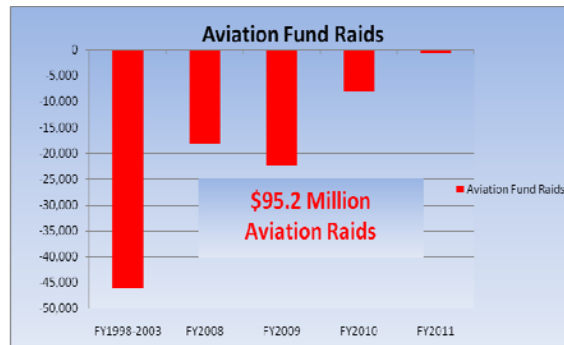
resolutions through Congress. The latest resolution expires at 11:59 p.m. on March 4, 2011.

**Federal Transportation Funding is Dwindling**

This year P.L. 111-226 was passed which required states to revert \$2.2 billion in unobligated apportionment (a.k.a. the rescission) back to the federal government. Arizona’s portion was \$45.1 million. Since May, 2009 ADOT returned over \$280 million while congress only restored \$170 million. These fluctuations wreak havoc and instability on state transportation planning.

### Arizona's Airports

The transfer of over \$96 million dollars out of the State Aviation Fund and into the State General Fund forced ADOT Aeronautics in fiscal year 2009 to terminate \$5.3 million in existing grants and placed \$19 million of existing grants on a deferred reimbursement schedule of up to 18 months. It also postponed the State/Local grant program, the Airport Pavement Management System (APMS) program and the loan program for the last two years.



the money managed by ADOT is sent into the state's economy and to its private-sector. Thus, as one of the only departments that creates private-sector jobs, it is imperative that there is stability, especially at the upper-management levels. ADOT loses many employees to local agencies where pay can be as much as 50% higher than what is offered at the department. Also, the department's workforce is aging and becoming retirement-ready, leaving an already depleted department in line to have another wave of departures. It must be understood that the Arizona Department of

Transportation plays a vital role in moving our economy forward. Therefore investments, with accountability must be made to preserve, hire and promote qualified professionals at the department.

### Transit Revenue is Being Lost

In FY 2009, Arizona taxpayers generated \$484,440,000 in federal gas tax revenue from their consumption of over 2.66 billion gallons of gasoline. 80% of this nearly \$484M or \$387M is deposited in the Federal Highway Trust Fund and the remaining 20% or \$97M is deposited in the Federal Transit Fund. Without a reliable source of state rail/transit match funding, Arizona is missing out on accessing these funds. Therefore, this funding generated in Arizona is being distributed to other states.

### Our Arizona Department of Transportation

Over the last few decades, the average tenure of the state engineer is sixteen months. The Director's tenure is similar. Eighty percent of

### Infrastructure is Important to the Overall Economy

AZAGC acknowledges Arizona needs a more diversified and innovation-based economy, but it could take a decade or more to accomplish this assuming there is broad-based and coordinated effort aimed at that goal. Economic diversification is not the only solution to our current dire economic problems. Investing in infrastructure will create jobs and give future generations an asset that improves their quality of life. The quickest way to get Arizona's economy moving forward again is to reverse the sharp decline in the construction industry.

## AZAGC Message:

- **NO MORE HURF or AVIATION FUND RAIDS - Use VLT/Highway revenue and Aviation Fund for their intended purpose.**
- **Reimburse the \$1.4 Billion stolen from the HURF.**
- **Support and pass a new federal highway bill before March 4, 2011.**
- **Increase the Gas Tax or Implement a Statewide Sales Tax to Pay for Needed Infrastructure.**
- **Eliminate the Gas Tax with a Revenue Generating VMT Tax that truly funds Arizona's multi-modal transportation needs.**
- **Encourage Congress to Change U.S. Code 23 Section 111 to privatize and commercialize rest stops.**
- **Institute a 5 Year Contract for the ADOT Director.**
- **With accountability measures, increase pay for ADOT's upper management and create a career track to allow professionals to advance within the department.**
- **Oppose onerous EPA regulations that limit the use of transportation funds.**

According to the U.S. EPA, the United States has an investment gap estimated at \$450 to \$600 billion over the next 20 years for safe drinking water and wastewater treatment infrastructure including conveyance systems made of aging pipes, sanitary sewers and stormwater systems.

Several private and public studies conducted over the past several years estimate that 20,000 – 60,000 jobs are created for every \$1 billion in federal investment in wastewater infrastructure.



Currently, most water projects are funded through loan programs with the Clean Water State Revolving Fund (CWSRF) and the Drinking Water State Revolving Fund (DWSRF) and are administered through the Arizona Water Infrastructure Finance Authority (WIFA) and local entities.

### Qualifying projects intended for CWSRF funds:

- Water efficiency, energy efficiency, green infrastructure or other environmentally innovative activities;
- Construction of wastewater treatment plants including planning and design;
- Construction of improvements and upgrades to wastewater treatment plants including planning and design;
- Design of a sewer collection system;
- Construction of a sewer collection system;
- Water reclamation and reuse facility expansion;
- Non-point source projects.



### Types of projects that can be intended for DWSRF funds:

- The construction/upgrading of water treatment facilities;
- Water efficiency, energy efficiency, green infrastructure or other environmentally innovative activities;
- Supplemental water source interconnect;
- Arsenic treatment to meet public health standards and to protect public health;
- Consolidation and interconnection of public water systems;
- Planning and engineering associated with eligible projects;
- Replacement/rehabilitation of transmission lines and storage facilities;

- New water wells;
- Water system expansion;
- Other projects necessary to address compliance/enforcement or security issues.

Additional water projects are funded and administered through the U.S. Army Corp of Engineers and the U.S. Department of Agriculture for rural projects in outlying counties in Arizona.

### Challenges

The current funding formula of the CWSRF was initiated by Congress in 1987, and no longer accurately reflects Arizona's water infrastructure needs. In fact, according to the Congressional Research Service, Arizona ranks 50<sup>th</sup> among states in terms of percentage of documented needs met.

With federal oversight, funding clean water projects through the CWSRF gives states a lead role in structuring and managing their programs. States have the flexibility to structure priority setting criteria so they can address state-specific water quality goals. If the funding formula is appropriately updated to reflect growth, Arizona would receive an increase of over \$16.5 million dollars a year.

In addition to funding sources for upgrading degrading water infrastructure, the construction of additional infrastructure is also important to Arizona. For example, the Big Chino Ranch (BCR) project in the Prescott Active Management Area has been moving forward but recently had to slow down due to the economy. In December 2004, the City of Prescott and Prescott Valley

entered in to an intergovernmental agreement and purchased lands north of the Prescott Active Management Area in the Big Chino Sub basin of the Verde River Groundwater Basin referred to as the BCR with the intention of building a 30-mile pipeline to import water into the area. The construction of the project and transmission lines to move the water to pump stations could result in significant jobs and help to ensure sustainability to the area with a safe and secured water source.

Last regular legislative session, Senate Bill 1445, was passed and signed by Governor Brewer. This gave Prescott the right to pump as much as 8,068 acre-feet of water per year, and clarifies that any municipality in the Prescott Active Management Area can use the Big Chino groundwater.

While AGC continues to advocate for moving forward with construction of the Big Chino Water Ranch pipeline, we

understand a delicate balance must be struck between construction and being good stewards to the environment.

## AZAGC Message:

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- **Update Arizona's share of Clean Water State Revolving Fund.**
- **Create Water Infrastructure Funding Bank.** Creation of a Water Infrastructure Bank would alleviate any future funding issues related to delayed or deferred appropriations from Congress.
- **Streamline needless environmental permits and regulations by preserving state and local authority over water projects.**
- **Fund the Big Chino Water Ranch project.** Currently, the project has been scaled back. It is not included in the City of Prescott's current capital improvement plan which runs until fiscal year 2016.
- **Do not include Buy American Provisions in reauthorization of the Clean or Drinking Water SRF.** Buy America Provisions for SRF projects were included in the ARRA funded projects. This well-meaning provision has never been applied to construction projects administered at the state level and creates additional administrative to the agency and the contractor.
- **Encourage Public Private Partnerships.** During these economic times, it is important to allow and encourage additional funding options.



The construction of utility scale generation plants has multi-fold economic impact to the state: direct construction numbers, manufacturing facilities and employment, once constructed full-time employment, infrastructure upgrades, and creation of renewable energy source for sale.

*“Leadership is key in renewable energy as we look to creating jobs that are at the core of our economic recovery.”*

Governor Jan Brewer  
Arizona

With 360 days of sunshine a year and a multitude of wide open space available, Arizona is looked at as the obvious leader in renewable energy technologies. In the past 15 years, Arizona has worked hard to make this a reality.

The Arizona Department of Commerce, Office of Innovation & Technology has said Arizona has one of

the nation’s leading capacities to generate solar power, “A 2005 study by the National Renewable Energy Lab of the U.S. Department of Energy estimates that Arizona has the capacity to generate approximately 2.5 gigawatt of solar power. To put this into perspective, the electric generating capacity of the entire U.S. is approximately 1,000 gigawatt.”

The first solar power plant in Arizona was opened in 1997 and is a 95 kilowatt photovoltaic plant in Flagstaff, it is operated by Arizona Public Service. Most recently, in July 2010, President Obama announced a \$1.45 billion loan guarantee to Abengoa Solar, Inc. for the construction of the Solana Generation Plant in Gila Bend. The project is scheduled to begin operation in 2013 and create 1,600-1,700 new construction jobs, and operation of the plant will add another 85 permanent jobs. These construction and operating jobs will create a few thousand additional indirect jobs.

In 2009, the Dry Lake Wind Power Project, located in Navajo County, Arizona, was the state’s first commercial-scale wind farm. The 30 turbines at this wind power project generate 63 megawatts (MW) energy. At maximum levels, it will generate power for more than 15,000 average homes, according to the American Wind Energy Association’s calculation. (SITE)



### Renewable Energy Standard

Arizona Corporation Commission established the Renewable Energy Standard (RES) in 2006, requires regulated utilities to derive 15% of their electricity from renewable resources by

2025, with 30% of that to be obtained from distributed energy technologies. Unlike some states, Arizona does not have solar specific requirements in the RES; it can be met by solar and other renewable sources: wind, water, geothermal and biomass.

According to the Arizona Commerce Authority and the Greater Phoenix Economic Council, the RES:

- ✓ Is the single-most important policy driving local market demand for solar panels and utility-scale generation projects;
- ✓ Has helped to attract manufacturers to supply the market, installers to service the market and generation project for utility-scale generation plants; and,
- ✓ The distributed generation requirement is met largely by rooftop solar panel installations.

To further push renewable energy focused businesses to Arizona, Governor Brewer signed the Renewable Energy Tax Incentive Program in 2009. This program provides tax incentives to companies in the solar, wind, geothermal and other renewable energy industries who are expanding or locating in Arizona by offering two benefits: a refundable income tax credit and real and personal property tax reduction. Alone, this program has drawn eight companies, 1,350 jobs, and \$153.2 million in capital investment since January 2010.

### Challenges

While Arizona is in the road to moving to renewable energy sources as reliable form of energy, still many challenges lie ahead. Utility scale generation plants for renewable energy sources like solar and wind are still very expensive to build and produce energy. Developing additional aggressive incentives for businesses to invest in the large utility scale projects will bring more business and manufacturing interesting in investing in renewable energy to Arizona.

The U.S. Department of Energy says, “Without dramatic improvements and upgrades over the next decade our nation’s transmission system will fall short of the reliability standards our economy requires, and will result in higher electricity costs to consumers.” Today’s transmission lines are becoming overburden by the growing population. Bringing RES into the mix creates an additional concern the demand on transmission lines. Transmission lines and further development of the smart grid will enable a mix use of generation technologies available to the consumer in a reliable and affordable form.

## AZAGC Message:

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- **Create a long-term statewide renewable resource plan.** As technology advances, a mix of generation technologies will allow for renewable energy to become more reliable and affordable for the customer.
- **Encourage Renewable Energy Standards.** RES allow for the development and growth of emerging technologies, research and development for renewable energy. Without RES, there is no incentive to move away from traditional energy sources.
- **Invest in upgrading transmission lines.** Invest in the infrastructure needed distribute energy in a reliable and efficient manner.
- **Balance environmental regulations with economic benefits to the region, state and municipalities.** In order to utility scale generation plants to move forward with construction, local elected officials and industry stakeholders must work together to agree on sustainable options to issues dealing with the environment.
- **Need stability in incentives to create a healthy and growing demand for renewable energy.** Incentives should include long-term use for the consumer.
  - Example: Feed-In Tariff programs (FIT), California uses a FIT program and allows consumers to enter into a 10-, 15- or 20-year contracts. FIT typically include three key provisions:
    - Guaranteed grid access;
    - Long-term contracts for the electricity produced; and,
    - Purchase prices that are based on the cost of renewable energy generation and tend towards grid parity.
- **Develop state and local grant programs which encourage renewable energy systems.** In other solar competitive states, localities offer grants to offset the cost of the renewable energy projects. At this point Arizona does not offer any of these programs.
- **Continue to invest in Science Foundation Arizona (SfAZ).** The Arizona legislature appropriates \$10 million in funds to SfAZ per year. It is imperative to continue this, even during difficult economic times for research and development. For every dollar the state appropriates in funds, SfAZ leverages \$3 in private funds. This is a long term investment into technology, research and economic development in renewable energy for Arizona.



In order for Arizona to remain competitive, the business community must focus on investing in the future of the workforce.

According to the November 30, 2010 report by the Arizona Commerce Authority:

*“When it comes to job creation, projections show Arizona will experience imbalanced job growth through 2018 with only 11,000 new manufacturing jobs, and an inordinately high number of low paying jobs requiring only minimal education - positions most susceptible to economic downturns”*

Two keys to promoting education is developing an educated and sustainable workforce for Arizona to build a stronger business climate, as well as building and maintaining world-class facilities for those students to learn and live in.

According to the ACT College Readiness report, 78 percent of high school graduates did not meet the readiness benchmark levels for one or more entry-level college courses in mathematics, science, reading and English.

### Investing in workforce development

AGC has and will continue to work with elected officials, agency representatives, other business leaders and the community to promote training and development of Arizona’s future workforce.

The universities and the Arizona Board of Regents continue to work with the business community and AGC members to build world-class facilities and recruit educators for math and science for research and development--critical to continue much needed research and development to strengthen Arizona’s economy.

During a recent period during which two high-rise buildings were constructed in Los Angeles, over 5,000 were built in Shanghai

Knowing that not all students are college-bound, it is critical to prepare these students for long-term careers. The legislature determines how much of the career and technical education programs are funded in Arizona. AGC urges the legislature to continue funding these critical programs to ensure a diverse workforce is trained and maintained to promote Arizona’s economy.

### Del E. Web School of Construction

AGC has an active role in investing in the future of the construction workforce in Arizona. AGC has been in partnership with Arizona State University officials to build a facility to house the ASU Del E. Web School of Construction (DEWSC) for several years. The construction industry has raised over \$19 million in funds from AGC members and industry partners. AGC members are so dedicated to giving back, they teach courses at DEWSC.

### Capital Improvements

In the 2009 budget, \$1 billion in bonds, backed by the state lottery, helped to finance the building and deferred maintenance of capital construction projects for higher education in Arizona known as the SPEED package (Stimulus Plan for Economic and Educational Development). This proposal included lifting the advertising cap for the Arizona Lottery to help finance 30 years of bonds authorized by the State Board of Regents, helping to pay for universities to construct and maintain buildings. The fiscal impact of the Phoenix Biomedical Campus was estimated between \$1.1 billion and \$2.1 billion alone.

Due to budget concerns the SPEED package was put on hold once the Phoenix Biomedical Campus project was approved by the Joint Committee on Capital Review. The Arizona Board of Regents (ABOR) and universities continues to address and promote deferred maintenance projects as well as new construction projects.

Many deferred maintenance projects address public safety concerns: updating outdated facilities, including dormitories and learning building on the University of Arizona, Arizona State University, Northern Arizona

University and community college campuses across the state. Many of which have not been updated since the Arizona Legislature put a hold on capital projects funds.

Some believe that investing in capital projects was not the authority of the Arizona legislation. AGC believes funding new construction and much needed deferred

maintenance projects is outlined in the constitution of the state of Arizona. Specifically citing Section 10:

*Section 10. The revenue for the maintenance of the respective state educational institutions shall be derived from the investment of the proceeds of the sale, and from the rental of such lands as have been set aside by the enabling act approved June 20, 1910,*

*or other legislative enactment of the United States, for the use and benefit of the respective state educational institutions. In addition to such income the legislature shall make such appropriations, to be met by taxation, as shall insure the proper maintenance of all state educational institutions, and shall make such special appropriations as shall provide for their development and improvement.*

## AZAGC Message:

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- Fund and allow use of outside funding sources for university capitol projects – including new construction and deferred maintenance projects;
- Support math, science and technology research education programs to move Arizona forward;
- Promote career and technical education opportunities for all Arizonans;
- Work with local school board to address public safety issues which can be addressed updating facilities;
- Fund the Del E. Web School of Construction building on the Arizona State University campus.

### Next Generation Transportation

Sustainability is a far-reaching topic within the construction industry covering the use of natural resources, the environmental impact of our construction sites and improvements to the built environment as well as quality of life for the occupants.

As contractors we play a significant role in reducing the environmental impact of a facility through the review of designs, proposed specific

“This thing is beyond pavement, we have to do whatever it takes to integrate the road into the context of the area and tread lightly on the land.”

*Melinda Peters  
Maryland State Highway  
Administration*

materials and equipment, staging and phasing during the planning of a project. During construction, contractors are responsible for the storm water run-off, land disturbance, recycling, air quality programs and more.

As a steward of our environment, AGC supports initiatives that will enhance our quality of life for generations to come without burdening them with unusable or overly cumbersome regulations that will increase the cost of construction to the point where improvements to our environment are too costly to make.

In today’s world, the conventional road building approach is insufficient for some high profile environmentally sensitive projects. Contractors will need to think beyond pavement and develop elements that will integrate the road into the context of the area.

One such approach gaining popularity is the Greenroads. Greenroads is a sustainability rating system for roadways. The program was developed by the University of Washington along with CH2M Hill. The rating system is designed to quantify sustainable practices associated with the design and construction of roads. It is applicable to all types of roadways (urban highways, arterials, rural roads and residential streets). The system awards credits for approvable sustainable choices and practices and can be used to

certify projects based on a total point value and can be implemented in a number of ways ranging from voluntary use by agencies and private enterprise to mandated goals and specifications.

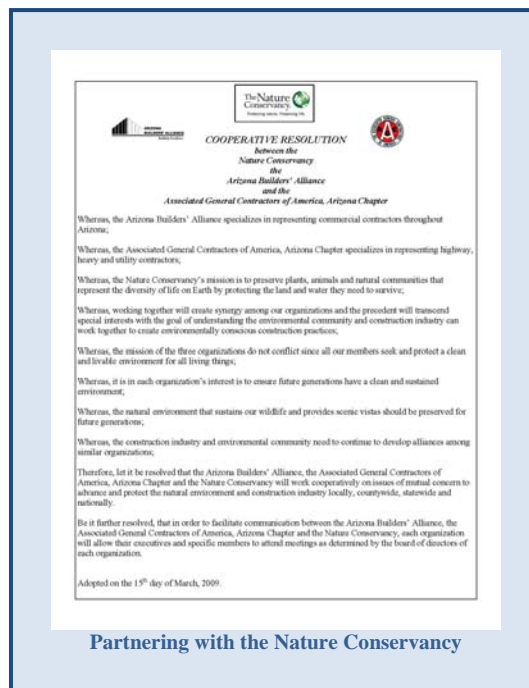
The ultimate benefit of Greenroads is more sustainable roadways. This means less impact on the environment, lower life-cycle costs, and more positive societal outcomes. Owners want to be viewed as eco-friendly. In the last two years owners around Arizona are beginning to incorporate programs like Greenroads into their transportation planning.

Recently the City of Peoria consulted with AZAGC on the use of a sustainable rating system for an upcoming project they are designing. The City is creating a template for what an environmentally and socially responsible construction project should look like. The chapter welcomes the opportunity to work on these efforts. The Federal Highway Administration (FHWA) has invested in the Greenroads program believing this is a new era for highway building.

Transportation and its infrastructure have huge economic, social and environmental impacts. By

designing and constructing more sustainable roads, the industry can better meet the needs of future generations, while protecting the natural systems of the planet. Ratings systems such as Greenroads provide a holistic way of considering roadway sustainability, a defined and quantitative means to assess roadway sustainability and a tool for decision makers, agencies,

consultants and contractors to make informed decisions on sustainable design and construction.



Partnering with the Nature Conservancy



The Clean Air Act (CAA) requires the U.S. Environmental Protection Agency (EPA) to identify and revise national ambient air quality standards (NAAQS) for air pollutants that may reasonably be anticipated to endanger public health. To date, EPA has set NAAQS for six “criteria” air pollutants: ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, particulate matter (PM<sub>10</sub>), and lead. EPA and the State of Arizona share responsibility for ensuring all areas attain federal NAAQS by deadlines specified in the CAA.

Since 2005 construction has lowered its emissions by 65% and now has over an 89% compliance record.

Arizona is required to monitor each of these pollutants and submit data used to determine whether geographic areas are in “attainment” for each. A geographic area that does not meet EPA air quality standards is classified as a nonattainment area.

Designation as a nonattainment area triggers a series of steps that must be taken to bring the area into compliance. Such as:

- ✓ State is responsible for preparing and executing state implementation plan (SIP) to achieve and maintain NAAQS within their borders.
- ✓ Plans are divided into air quality regions
- ✓ Regions establish enforceable requirements for controlling air pollution from stationary, and mobile sources. (Construction is considered an off road mobile source)
- ✓ Motor vehicle emissions budget (MVEB) is developed that determines the amount of emissions an area can produce and still maintain air quality standards.
- ✓ Once a MVEB is established local planning organizations must develop a transportation improvement program (TIP) that conforms to the SIP.
- ✓ Conformity is an attempt to coordinate transportation planning in an area so activities do not cause new air

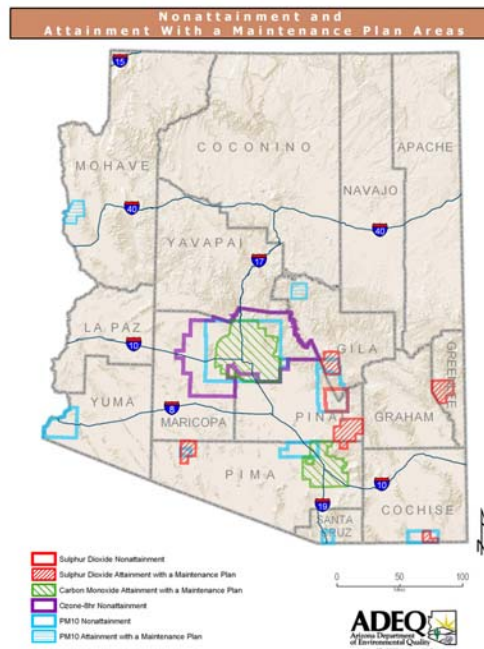
quality violations, worsen existing violations, or delay attainment of air quality standards.

- ✓ Transportation conformity applies to all nonattainment and maintenance areas that fail to meet air quality standards
- ✓ Conformity determinations are required for the approval, funding or implementation of highway and transit projects. Funding and implementation of federal highway/transit projects are suspended when a region is determined out of conformance. No new projects may advance until a new conformity determination is made.

### Arizona

Currently Arizona has 13 areas statewide designated as nonattainment areas or attainment areas with maintenance plans. Particulate Matter (PM<sub>10</sub>) is the predominant pollutant in most of these thirteen areas however sulfur dioxide, carbon monoxide and one hour and eight hour ozone standards are also regulated. Maricopa and Pinal County are currently awaiting action determinations from U.S. EPA, Region IX for PM. Statewide plans are found on ADEQ’s website

<http://www.azdeq.gov/environ/air/plan/notmeet.html>



Three Arizona counties have their own air pollution control programs and operate pursuant to agreements with ADEQ. In addition to ADEQ, two metropolitan planning organizations in Arizona share in the responsibility of completing state implementation plan requirements for ozone, carbon monoxide, and particulate pollution.

### Maricopa County PM<sub>10</sub>

Since 1999 Maricopa County has struggled to attain air quality standards. In 1999 over 77 measures were proposed and implemented in the serious area plan to reduce dust. Failing to attain, the region was required to prepare a five percent plan which means emissions must be reduced 5% annually until attainment is reached. On December 31, 2006 the region submitted its plan with an additional 53 aggressive measures to reduce

emissions, thereby designating the area as having the most stringent measures (MSM) in the nation for controlling dust.

Recently EPA notified officials of their intent to propose partial approval and partial disapproval of the regions five percent plan primarily for failure to demonstrate attainment

due to the exceedances categorized in the plan as “exceptional events”. Exceptional events are emission activities, such as extraordinary high winds, outside the control of mankind. Without these 2008/2009 exceptions the region will no longer be classified as having three years of clean data. Should EPA formally reject the plan in January 2011 a sanctions clock will begin thereby triggering a conformance freeze on highway construction projects planned after 2014 until a new conformance determination is made. This could put \$1.7 billion of highway funds and thousands jobs at risk. MAG would be forced to terminate many projects in the \$7.5 billion transportation improvement plan.

#### Pinal County

In 2009 after reviewing data indicating numerous violations of at the monitors in Pinal County, EPA requested the state submit recommendations for designating areas of Pinal County as either in attainment, nonattainment or unclassifiable for PM 10 and PM 2.5. The state submitted their recommendations for attainment boundary

designations; recently EPA revised these recommendations to include a portion of Pinal County as “nonattainment” for PM 10. This will require the County to prepare a SIP. The county will be required to develop a plan with more stringent enforceable actions, including additional control measures on contributing sources. Recommended Boundary area <http://www.azdeq.gov/enviro/air/plan/download/032910b.jpg>

#### Future Air Quality Issues facing Arizona

- ✓ *Revisions to the Ozone Standard – **this could impact thirteen of Arizona’s fifteen counties***
- ✓ *DOT/EPA proposed national emissions and fuel efficiency standards for heavy duty trucks (including pickup trucks)*
- ✓ *EPA Regulation of Greenhouse Gas Emissions in the Clean Air Act*
- ✓ *Regional Haze SIP within 5 years*
- ✓ *General Permits for Mobile Asphalt Plants & Crushing and Screening Operations*

## AZAGC Message:

- **Encourage the EPA to address and revise their Exceptional Events Rule for determining exceptional events.**
- **Oppose additional measures and fees to construction. Since 2005 construction has lowered its emissions by 65% and now has over an 89% compliance record.**
- **ADEQ should withdraw and revise the MAG 5% plan submitted in 2006. This will allow the MAG region time to amend the TIP to include additional projects should the region lapse into a “conformity freeze”.**
- **Support and Encourage Use of Inspections by allowing “Right to Cure” for minor violations**
- **Ensure Air Quality Controls Do Not Impede Infrastructure Construction.**
- **Oppose the Development of More Stringent NAAQS that Exclude Cost Considerations.**
- **Work with Pinal County to develop plans that achieve compliance in the region.**
- **Oppose Green House Gas Emissions in the Clean Air Act.**
- **Encourage the use of CMAQ funds in Arizona for retrofit of non-road diesel equipment used to construct projects funded by the highway bill.**
- **Work with the environmental officials and industry stakeholders to establish state-wide programs that encourage and financially assist voluntary diesel-engine retrofits and member initiated diesel emission reduction projects.**

The Clean Water Act (CWA) was enacted in 1948 and establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The Clean Water Act (CWA) authorizes EPA and states, which are delegated the authority, to regulate point and non-point sources that discharge pollutants into waters of the United States through the National Pollutant Discharge Elimination System (NPDES) permit program. So-called "point sources and non-point sources" are generated from a variety of municipal and industrial operations, including construction activities. The NPDES program is structured to provide permit coverage to point sources through either an individual or general permit. Construction activities generally fall into the category of "general" permit. A component of the NPDES is the Construction General Permit (CGP) most states amend them every five years.

### ADEQ has Authority

Arizona was given authority to implement and administer the NPDES/AZPDES Storm water Permit Program through the Arizona Department of Environmental Quality (ADEQ) in 2002. The state's authority for administering AZPDES and the Aquifer Protection Permit (APP) was in jeopardy for the

first time in 2010 due to state budget constraints. AGC, ADEQ and other industry stakeholders developed a revised fee structure to keep the programs funded and retain authority in Arizona.

To date the Arizona CGP has been revised twice. In 2008 major revisions were made to the permit effecting contractor compliance. The 2008 CGP added new provisions for obtaining a permit, final stabilization measures and reporting requirements. These pale in comparison to the changes proposed for Arizona's permit in 2013. In 2009 U.S. EPA revised its requirements for storm water runoff on construction sites. These requirements are significantly more stringent and will require Arizona to mandate discharge limits, add additional monitoring requirements as well as specific prescriptive control measures. Future Construction Storm water and Water Quality issues facing Arizona



### New permit revisions for Arizona's Aquifer Protection Permit and Multi-Sector General Permits.

Although these generally do not impact contractors draft language may conflict with requirements of the CGP. Revisions to Arizona's Construction General Permit in 2013 - National mandates for discharge limits, monitoring requirements and specific prescriptive controls.

## AZAGC Message:

- Encourage EPA to address post construction controls for the Construction and Development Effluent Limitations Guidelines in the current rulemaking versus initiating a separate rulemaking.
- Oppose the Development of more stringent Best Management Practices (BMP's) that exclude cost considerations.
- Ensure Stormwater discharge programs do not impede infrastructure construction.
- Organize a stakeholder working group along with ADEQ to develop monitoring protocols and training in order to comply with proposed ELG standards.
- Preserve current funding levels for both the AZPDES and APP programs.
- Support current proposed fee structure.