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**PENCIL READY PROJECTS**A White Paper from the Nevada Chapter of the American Institute of Architects  
And the AIA Nevada Design Coalition

The Nevada economy is in trouble. In Las Vegas alone, unemployment in **the design and construction industry** has reached 67% and is continuing to rise. In Reno the rate is over 50% and rising. Many architecture firms have closed or downsized significantly due to the fact that there are no jobs currently being planned or designed. And, when planning and design stops.....all work in the design and construction industry stops. And, the economy of our state suffers.

Design and construction is the state's second largest industry and we are currently seeing unprecedented reductions in available work. This is leading to staggering levels of unemployment and under-employment. The stimulus package funding that was allocated for "shovel ready" projects does nothing to encourage long term jobs for the industry. "Shovel ready" is once and done. It only employs the smallest percentage of the industry for the shortest time. In order to stimulate the state's economy and create jobs, **we must start with the pencil**, and design projects that will expand into the future and generate jobs for architects, contractors, engineers, consultants, interior designers, landscape architects and others, who can then hire the construction workers, the sub-contractors, suppliers and manufacturers...and so on. For every \$100M of capital funds invested in our states building infrastructure, we create jobs for 6,000 Nevadans. It begins with the pencil (in the design and planning) phase of projects and ends with a healthy economy. **When architects work....the whole design and construction industry works.**

**Architects are showing a 67% decline in employment since 2008.****Engineers are showing a 57% decline and Contractors are showing a 78% decline.**

As of December 2009, architecture firms have no more than a 3-6 month backlog of work for existing staff, and Engineers have no more than 3 months work. Now that the City Center project is completed, the construction industry is at a standstill, and will remain idle until design projects are completed by architects. Since there are no projects currently being planned or designed, it is expected that the decline in unemployment will continue with architects reaching 67% by the end of 2009. Engineers will reach 57% and Contractors will reach a staggering 78% unemployment by the end of 2009. This is disaster for our economy.

Shovel ready projects provide no work for the design industry and only supply short-term work for the construction trades. By overlooking the lack of work available to architects, the construction unemployment numbers will be exacerbated by a lack of "constructable" projects to fill the future void. "Pencil Ready" projects put architects and engineers to work now, and ensure work for the construction trades continues.

Due to current economic conditions the private commercial market has become saturated with office and retail space; thereby nearly eliminating the need for commercial and retail design and construction. The State of Nevada Capital Improvement Program (CIP) was reduced during the legislative session from over \$600 million to under \$200 million. The 2010 state budget indicates a CIP program of only \$9 million, and this barely covers maintenance on existing structures.

To balance the state's budget, funds were taken from cities, and counties around the state through hold-backs in the ad-valorem tax. This has severely limited the local availability of work. Projects and programs that are funded through proceeds arising from funds garnered through the gas tax have been

cut due to reduced consumption by a struggling public. The gas tax needs an overhaul to meet new reduced consumption and higher efficiency standards to ensure these projects and programs survive.

Due to reduced purchase of BLM property, the availability of SNPLMA funds has been reduced or eliminated. This has eliminated the opportunity to design and construct much needed family recreation areas statewide.

A survey of architectural firms statewide has shown multiple projects were put on hold during various stages of design due to economic shortfalls. These projects were publicly funded and needed to supply basic social services to Nevadans. These projects affected higher education, rural healthcare and multiple public safety projects. Each of these areas needs specific attention to bring Nevada up to national standards.

Some of these projects include a training academy for the Nevada Highway Patrol in North Las Vegas, multiple rural adult mental health facilities, additions to Clark County Fire Stations #80 and #81 and the UNR Civil Engineering lab expansion.

The Highway Patrol facility would allow the Nevada Highway patrol to augment its ability to train new officers and achieve a better public presence. The facility would also serve as a sub-station for the Highway Patrol. This additional location in North Las Vegas would reduce service times for the Highway Patrol in this area of the Las Vegas valley. The rural Fire Station additions are critical for services to Mt. Charleston and Cold Creek communities. Without the needed additions, these Fire Stations are unable to provide the full services that are the standard of Clark County Fire Department. Finally, the rural Adult Medical Health Facilities provide services to Nevada's outlying communities that would otherwise be unavailable to these residents.

Not only were these projects an important part of improving the quality of life for many Nevadans through enhanced social services; but, these projects would have served to employ thousands of Nevadans in the Design and Construction industry. These are not projects that are without proven need, these are thoroughly analyzed and planned projects that serve the direct needs of Nevadans.

#### OPPORTUNITIES TO CREATE JOBS

An independent study of the Waxman-Markey Bill (HR 2454) by the American Institute of Architects indicates that the bill would create 270,000 jobs (nationwide) in the design and construction industry annually.

- Nevada is poised to lead the nation in renewable and energy efficient technologies. Both new energy efficient facilities as well as existing facility upgrades are needed within Nevada.
- Nevada will also need new laboratory and manufacturing facilities to meet the global demand for renewable technologies that will be generated in our state.
  - Manufacturing Plants
  - Warehouse Facilities
  - Research Facilities
  - Educational Facilities for Renewable Technologies in K-12 Education and Higher Education

- An aging population of “Baby Boomers” will be in need of government and social services in the next 10 to 30 years. Nevada does not currently have the infrastructure to serve this need:
  - Adult Day Care
  - Senior Centers
  - Outpatient Medical Facilities/Medical Office Buildings
  - Senior Housing
  
- The current recession has displaced many families in southern Nevada and has taken its toll on social programs. Assistance for this problem can be found in the built-environment:
  - Family Shelters
  - Battered Women and Family Centers that Allow Families to Stay Together
  - Homeless Education and Training Centers
  - Neighborhood Services Program

## ARRA RETROFIT ISSUES

The ARRA set aside billions of dollars in funding for energy efficient retrofits and new projects. In spite of the available funding, most of these monies will be spent on residential projects and will only support a small portion of the industry. Every dollar spent in commercial and institutional energy retrofits employs nearly three times as many people as residential projects. Currently, incentives do not exist to retrofit the majority of Nevada’s commercial and institutional buildings.

## SOLUTIONS TO THE PROBLEM

AIA Nevada and the Design Coalition are calling for a Renewable Energy Baseline. Within the next 10 years, all existing building stock should perform to the following standards:

### Commercial and Institutional

- Energy consumption 25% less than ASHRAE 90.1 – 2004
- Water consumption 44% less than EPA 1992 Standards

### Residential

- Create incentives to have 60% of all existing homes to generate a minimum of 3kW of green power
- Create standards for all new homes to generate a minimum of 3kW of green power
- Introduce and implement required gray water reuse for residential landscape

## RECOMMENDATIONS & SOLUTIONS

AIA Nevada and the Design Coalition is asking that the Federal government review feasibility of a stimulus package **aimed at specific needed projects** rather than generating funding and then finding projects. The Federal government should focus on methods to de-couple utility company profit from energy consumption to allow incentives for efficiency. The Federal government should utilize block grants to get “Pencil Ready” projects funded. Nevada’s federal representatives should focus on broadening the base of funding towards renewable energy in Nevada. And, they should explore methods to assist home owners to fund efficient upgrades to their existing homes by financing the cost over time.



& The AIA Nevada Design Coalition

Our State government should implement codes to require all homes to produce renewable energy, and should set goals and standards to have over 50% of Nevada's energy from renewable sources by 2020. Local governments should establish performance goals for new construction within their jurisdictions that focus on smarter design.

AIA Nevada and the Design Coalition also propose the formation of regional project clearinghouse committees. These groups could serve to review proposed projects on a regional level and recommend those projects that have the greatest need and/or could employ the greatest number of Nevadans. These committees could also serve to research and facilitate grants and funds that are available for public projects. Another service of these committees could be to attract public/private partnerships that could help fund public projects through private avenues. Through these relationships joining private development with public needs we can help shape a better Nevada.

*The Nevada Chapter of the American Institute of Architects is the statewide professional association for architects and related design and construction professionals.*

*The AIA Nevada Design Coalition consists of affiliated professional representatives from the American Consulting Engineers Council; Associated General Contractors; American Society of Interior Designers; American Society of Landscape Architects, AFL-CIO Nevada, Southern Nevada Homebuilders Association.*