THE ROAD TO RECOVERY
LESSONS FROM ARIZONA’S FIRST ECONOMY

The Great Depression Hit Arizona Hard

• Copper mining declines 90%.
• Farm production falls by 66%.
• Livestock count drops nearly in half.
• Arizona loses 13% of its residents in three years.

The Great Depression took its toll on Arizona as the state’s first real economy, based on cotton, cattle, copper, citrus, and climate – affectionately known as the 5Cs – collapsed.

But Arizona rebounded, building a new economy and becoming one of the most dynamic and fastest-growing states in the nation.

Fast Forward to 2009

• 46% decline in the number of housing units authorized from 2007 to 2008.
• 21% decline in construction employment forecast from 2008 to 2009.
• 29% increase in those receiving food stamps from April 2008 to April 2009.
• 62% increase in home foreclosures from January 2008 to 2009.
• 88% increase in bankruptcies between June 2008 and June 2009.

The economic underpinnings in Arizona of housing, employment, and financial services have collapsed, as they have almost everywhere else around the nation, albeit deeper here than in most other states.

Arizona again must have the wisdom and willpower to rebound. But it will take more than a bold vision, although one is needed. It will take follow-through and collaboration – neither of which have been Arizona’s strong suit in recent years – as well as informed public policy based on what we’ve learned from the past, melded with what we already know about the future.

In short, Arizona must prepare itself for the next economy.

Dear Colleague,
The Road to Recovery is the first in a series of briefing papers Morrison Institute will present as part of a year-long special project: The State of Our State. This is a pivotal time in Arizona’s history. The deepest recession since the Great Depression has heightened awareness and discussion of basic policy issues, including key factors that drive Arizona’s economy and determine our quality of life. As the new executive director of Morrison Institute, I invite you to join us in examining these important issues to chart a course for the future.

You can do so by attending our October 9th State of Our State conference, visiting our Web site, MorrisonInstitute.asu.edu, and by contributing to the ongoing conversation. If change is warranted, it requires informed and collective efforts of engaged groups and individuals like you. We look forward to your participation.

Sue Clark-Johnson
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THE 5Cs MEANT MILLIONS TO ARIZONA’S 450,000 RESIDENTS

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Value 1938</th>
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<tbody>
<tr>
<td>Cotton</td>
<td>$11,000,000</td>
</tr>
<tr>
<td>Cattle</td>
<td>$13,600,000</td>
</tr>
<tr>
<td>Copper</td>
<td>$70,000,000</td>
</tr>
<tr>
<td>Citrus</td>
<td>$700,000</td>
</tr>
<tr>
<td>Climate</td>
<td>$80,000,000</td>
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</table>

Source: *The WPA Guide to 1930s Arizona.*

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**The 5Cs: Certainty About What We Did and Who We Were**

Insights into the future can come in part from a look at the past. Repetition, sufficient reality, and a smart turn of phrase had made the 5Cs a cliché by the Great Depression. The *WPA Guide to 1930s Arizona* noted: “The people of Arizona rattle off a number of words beginning with ‘C’ to summarize their economic life – cotton, cattle, copper, citrus, and climate” – thus indicating their state’s wealth is based on agriculture, mining, and the tourist trade.”

These sectors comprised Arizona’s version of the Old West natural resource economy that was then dominant throughout the Western states. It was rooted in the land and nurtured by corporate interests, out-of-state investments, and close ties between business and government. It depended on the federal government’s decisions just as much as it did on individuals’ entrepreneurial spirit.

The 5Cs were clear, specific, reflective, and evocative. The phrase described how Arizona prospered and by extension who Arizonans were as workers, although not everyone worked in those industries. The term embodied the state’s economy and identity. Whether viewed now as pleasantly nostalgic or dismissed as hopelessly old-fashioned and meaningless, a major legacy of the 5Cs is Arizona’s still evident pro-growth, pro-business culture in which land is first to be used and then protected. From the perspective of 2009 for good and ill, the 5Cs:

- Highlighted how Arizona’s natural resources became economic assets.
- Fed the propensity for marketing and boosterism that was evident in Arizona from the mid-19th century forward.
- Pointed to industries for which Arizona was justifiably well known.
- Supplied an economic identity understood well beyond the state.
- Provided clarity about what public policy should protect and invest in.
- Shaped public policies on water, natural resource management, educational systems, community development, social services, and other issues as well as political culture and the business climate.
- Linked past and present through romance and reality.
• Tied the state to national and global markets and to cycle after cycle of boom and bust.
• Planted seeds that are still bearing fruit in today’s knowledge-based economy.

The 5Cs’ histories highlight differences and similarities with today’s economy. A major difference is that the Cs required fewer skills among workers. A similarity between then and now is how Arizona is affected by and contributes to worldwide trade, but more as a follower than a leader. Preserving land and the environment has clearly gained ground compared to the past, as has ensuring quality of life for Arizonans and protecting those who are most vulnerable. Sustaining Arizona is emerging as a top priority and an economic strength. Clearly, networks and synergy between industries, universities and businesses, and the public and private sectors are not new. Even as other industries overshadowed them and they faded in the public mind, portions of the 5Cs remained viable by evolving and adopting new technologies. In fact, among these resource-based industries and the states that depended on them and similar ones, the capacity to make smooth transitions from old to new – not just once but repeatedly – stands out as separating today’s economic leaders from the followers.

In 1984, Representative Morris K. Udall wrote: “The five Cs have been the driving force behind Arizona’s economy. The five Cs gave economic security to past generations and

EMPLOYMENT TODAY IS HEAVY ON SERVICES, NOT ON MINING

Arizona Employment by Sector, 2008 Q3 Employment Wages

<table>
<thead>
<tr>
<th>Industry</th>
<th>Employment</th>
<th>Average Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining</td>
<td>14,109</td>
<td>$64,624</td>
</tr>
<tr>
<td>Agriculture &amp; Forestry</td>
<td>17,648</td>
<td>$27,249</td>
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<tr>
<td>Utilities</td>
<td>23,812</td>
<td>$76,503</td>
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<tr>
<td>Management of Companies</td>
<td>27,582</td>
<td>$68,925</td>
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<td>Information</td>
<td>43,295</td>
<td>$53,717</td>
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<tr>
<td>Real Estate, Rental &amp; Leasing</td>
<td>51,288</td>
<td>$40,743</td>
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<tr>
<td>Arts, Entertainment &amp; Recreation</td>
<td>53,968</td>
<td>$32,708</td>
</tr>
<tr>
<td>Other</td>
<td>76,263</td>
<td>$71,617</td>
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<tr>
<td>Transportation &amp; Warehousing</td>
<td>84,400</td>
<td>$43,837</td>
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<td>Wholesale Trade</td>
<td>106,562</td>
<td>$59,362</td>
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<tr>
<td>Finance &amp; Insurance</td>
<td>124,343</td>
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<td>Professional, Scientific &amp; Technical</td>
<td>131,035</td>
<td>$61,352</td>
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<td>Public Administration</td>
<td>161,778</td>
<td>$51,725</td>
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<tr>
<td>Manufacturing</td>
<td>172,845</td>
<td>$58,630</td>
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<tr>
<td>Construction</td>
<td>188,396</td>
<td>$43,722</td>
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<tr>
<td>Educational Services</td>
<td>190,245</td>
<td>$36,874</td>
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<tr>
<td>Administrative &amp; Support</td>
<td>226,699</td>
<td>$30,504</td>
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<tr>
<td>Accommodation &amp; Food Services</td>
<td>230,214</td>
<td>$16,985</td>
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<tr>
<td>Health Care &amp; Social Assistance</td>
<td>291,359</td>
<td>$46,419</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>317,880</td>
<td>$27,509</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,535,243</strong></td>
<td><strong>$41,511</strong></td>
</tr>
</tbody>
</table>

Source: Arizona Department of Commerce, Research Administration, in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics.
real hope to future generations. All that, however, is changing. Arizona, like the rest of
the country, is undergoing an economic transformation. Whole new industries are being
created, while others die or struggle to survive. Business as usual is changing. Arizona is
moving from a mining and agriculturally oriented economy, to a high technology and service
based economy. This is changing the patterns of where Arizonans live and work. 33

When Udall sent those comments to his constituents, Arizona’s economy had been
remade around aerospace and other tech, housing, and the services needed for a growing
population. Tourism remained a force, and mining and agriculture continued to
contribute to, but by no means headline, the economy. In other parts of the country,
Silicon Valley, Route 128, and the Research Triangle began to blossom. As they
have developed into economic powerhouses, Arizonans have looked at their
achievements with longing, despite the state’s own tech-based fame and assets.

Their monikers reflect economies that grew out of sustained vision, commit-
ment, and investment. Everyone understands what these phrases now mean in terms
of jobs. They illustrate what Arizona has been trying to master since the dominance of
the 5Cs and what many observers say is still missing today.

**Planning Without Following Through**

As population growth and early technology initiatives picked up momentum after World
War II, Arizona’s economy shifted in response to tech developments and breakneck growth.
Housing and services accommodated as many as 2 million newcomers between 1960 and the mid-1980s alone. Another set of Cs, computers, construction, and call centers, made headlines. But real estate collapsed in the late 1980s due to Arizona’s own go-go outlook on growth and federal policies that helped put commercial development into overdrive. The period of the national savings and loan crisis, the downturn generated intense concern not just for the recovery of Arizona’s economy but for its mismatch with global economic trends and the performance of other states. Many private and public voices said it was time to change and plan. Arizona embarked on its first statewide economic development planning effort as a result. Economic development had been a prime activity for many entities since the earliest booster days, but the state had never had a real plan for the future that acknowledged the roles and contributions of the public and private sectors.

Private sector leaders drove Arizona’s effort. With a strong sense of urgency, hundreds of business people, educators, elected officials, and economic developers participated in an elaborate process that applied new research to familiar questions: What is Arizona good at now? What is emerging? How can Arizona be an economic leader? Creating a 21st Century Economy: Arizona’s Strategic Plan for Economic Development (ASPED) was based on the concept of economic clusters and supportive foundations. ASPED was the blueprint, and from it Governor Fife Symington in 1992 created the Governor’s Strategic Partnership for Economic Development (GSPED) to guide its implementation.

Opinions on the success and legacy of ASPED vary. While most acknowledge its farsightedness and significant public participation, the lengthy effort produced “process fatigue” and suffered from too little support for follow through and meager resources. Aspects of the effort though took hold in lasting ways – including the emphasis on particular clusters – but “ASPED was not allowed sufficient time to gain traction and fully transform the economic underpinnings of Arizona’s economy.” As administrations changed, commitment waned and attention shifted to new initiatives. Many observers say that with more leadership commitment, legislative support, and communication with Arizonans, these efforts could have put Arizona in a different place today. Other statewide plans and initiatives have followed.

Perhaps the most well-known and closely related successor to ASPED has been the public-private effort to grow a bioscience sector. Flinn Foundation led the way through the initiation of the Bioscience Roadmap and other public and private entities signed on for implementation over more than a decade. Landing the Translational Genomics Research Institute (TGen) in Arizona was an early win that helped to set off a series of coordinated plans and significant actions that today have put Arizona on the national and international stage. Biosciences were present in ASPED and are now part of the economic development portfolio.

Arizona bioscience jobs continued to grow at a significantly faster rate than the nation. Bioscience employment grew 23.3% during 2002-07, adding nearly 16,000 jobs for a total of 84,235. While the state’s fast-growing hospital subsector dominates its bioscience employment, non-hospital bioscience firms are actually growing more rapidly (24.3% during 2002-07).

Little will happen if a broad cross-section of Arizonans don’t understand and care about the efforts to build a 21st century economy with an Arizona brand on it – human capital, research and development, business climate, venture capital, global leadership, sustainability, and all.

of Science Foundation Arizona (SFAz), which was created in 2006 with state and private funds to invest in Arizona’s knowledge economy. Its strategic industries include information and communication technology and sustainable systems as well as biomedical research.

Governor Janet Napolitano continued the effort to create an overarching economic strategy and established the Arizona Economic Resource Organization (AERO) in late 2007. The nonprofit partnership is intended to lead a coordinated effort to enhance Arizona’s global presence. Its public and private partners provide economic policy input to participating entities such as the Commerce and Economic Development Commission, Arizona Department of Commerce, and SFAz.

Solar industry development has been an early focus, which SFAz and other partners have moved forward including getting an incentive package passed in 2009. AERO also administers the Arizona Fund of Funds, which raises money and reinvests it in professional venture funds. In the recession’s wake, however, there are doubts about various organizations’ staying power – including SFAz. A pending court challenge to the legislature’s actions may well make the difference, although leaders say work is progressing through private support.

Considering the changes in recent years, Arizona is at a different starting point now than for other recoveries. These and complementary efforts have not been just best guesses about Arizona’s economy. They have been a continuation of aspects of Arizona’s past visions and accomplishments.

Will we describe Arizona in the next few years by citing solar or Biozona? Time will tell. The ups and downs of efforts in the past 20 years have shown that vision and day-to-day attention and resources must go hand in hand. Also, little will happen if a broad cross-section of Arizonans don’t understand and care about the efforts to build a 21st century economy with an Arizona brand on it – human capital, research and development, business climate, venture capital, global leadership, sustainability, and all.

In 1998, Morrison Institute polled the public about the value of the ASPED model. Only 14% of Arizonans had heard of ASPED or clusters. But once the idea was explained, support strongly outweighed opposition. Today, residents and leaders consistently cite the need for quality jobs and a high skill workforce in Arizona, but the sustained investments needed to create, attract, and retain quality jobs have not been discussed as much.

The concept of the 5Cs still resonates in part because they were tangible elements of Arizona’s everyday economy. Arizona’s economic engines – bio, solar, information technology, and other technologies from water conservation to
algae fuels – could play a similar role because they too play up Arizona’s strengths. And as Arizonans debate about the state’s economic identity and brand, researchers and entrepreneurs are making sure that Arizona has something amazing to offer.

**Arizona’s “Man on the Moon”**

The current recession brought on by recent collapses in housing, employment, finance, expenditures, and revenues has hit Arizona particularly hard, even when compared to the cycles in the mid 1970s and late 1980s. As ASU’s housing expert Jay Butler commented in *The Arizona Republic*, “Back then the economy slowed, but it didn’t slam into the wall like it seems to be doing now.” In terms of non-farm jobs, “we are roughly back to where we were in early 2004, before the latest boom and bust period.” While some experts are beginning to talk about a housing rebound, the importance in Arizona of the three industries that pulled the country down – construction, housing, and financial services – will make the comeback slow and fitful. The residential housing bust in comparison to the last commercial crisis has touched many more people in ways that ripple further and deeper through the private and public sectors. Public sector budget deficits are bigger than ever before as one result.

Another consequence is a hard-edged debate about how to fix the deficit with as little damage to the economy as possible. The current standoff is a familiar one, pitting the “more revenue” camp against the “less spending” loyalists. Many observers are saying that the resolution in Arizona will have to combine the two outlooks – in other words find the classic Arizona solution that draws on the sense of urgency, public and private resources, and is customized, realistic, and effective.

Observers have said that Arizona needs its own “man on the moon” initiative to get residents and policy makers involved in creating economic leadership. This deep recession looks like it is that challenge – and more importantly – that opportunity. This look back suggests that Arizona should:

- Support and communicate what is now basic to this state with room to embrace new ideas from entrepreneurs. Match these visions with the resources and sticktoitiveness they require.

- Agree to “joint custody” of the economy so that an Arizona solution for strategy and investment is possible. It is not just old or new or housing or science but a balance that will move Arizona towards the type of economy that has been envisioned for decades. Smart transitions are the key.

- Make the connection between emotion and economy. Find the inspiration and excitement – along with the resources – needed to connect Arizonans to what is happening and could happen to produce quality jobs. Attract and retain the best and brightest and grow and groom Arizonans for the jobs everyone talks about wanting.

- Recognize Arizona’s economy is in large part about sustaining its people and places.

We have matured as a state in economic terms and dynamics, and now is the time to put that maturity and knowledge to work.
The 5Cs led when Arizona was the Old West and have evolved and been overshadowed as part of the New West. The transition to the Sustainable West in which a deeper understanding of what a leading economy is and how it relates to the environment and communities is in process. Nostalgia aside, we cannot return to our former identity any more than we magically can be 30 years younger. We have matured as a state in economic terms and dynamics, and now is the time to put that maturity and knowledge to work. Out of these and other actions, the shorthand that will describe Arizona’s economy and identity for the 21st century will certainly emerge. Acknowledging the legacy of the 5Cs does not mean that all was or is well in Arizona’s economy. It simply means that Arizona has a history of knowing who it is and what it does – and could have that again.