



Shaping the Future of the West



Tucson's New Prosperity: *Capitalizing on the Sun Corridor*

***A Sun Corridor Legacy Program
Policy Technical Report
Prepared by the Sonoran Institute***



Sonoran Institute

Mission

The Sonoran Institute inspires and enables community decisions and public policies that respect the land and people of western North America.

Vision

The Sonoran Institute contributes to a vision of a West with:

- Healthy landscapes—including native plants and wildlife, diverse habitats, open spaces, clean air and water—from northern Mexico to western Canada.
- Vibrant communities where people embrace conservation to protect quality of life today and in the future.
- Resilient economies that support prosperous communities, diverse opportunities for residents, productive working landscapes, and stewardship of the natural world.

A Collaborative, Community-Based Approach

The nonprofit Sonoran Institute, founded in 1990, works across the rapidly changing West to conserve and restore natural and cultural assets and to promote better management of growth and change. The Institute's community-based approach emphasizes collaboration, civil dialogue, sound information, local knowledge, practical solutions and big-picture thinking.

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About the Sun Corridor Legacy Program

Over the next 20 years, Phoenix and Tucson – 100 miles apart – will grow together to become one of the country’s ten megaregions, home to more than ten million people. Called the “Sun Corridor,” this area’s future prosperity – and that of the state – will be determined by how well it competes for human and financial resources in a global economy. To maintain a competitive advantage, Arizona must protect and enhance its quality of life.

Good Decisions for Land and People

To meet the West’s challenges in the coming years, the Sonoran Institute is launching keystone initiatives in four specific landscapes to address growth and change and to serve as models for conservation, stewardship and sustainable development. One of the four is our Sun Corridor Legacy Program, which will cultivate collaborative approaches to better manage growth and development for rapidly urbanizing regions in the 21st century. The Sun Corridor Legacy Program is striving to achieve these five objectives:

- 1 *Promote a commuter rail system linking Phoenix and Tucson***
- 2 *Create a new model for a sustainable desert community***
- 3 *Advance a clean and secure energy future for the Sun Corridor***
- 4 *Conserve more than one million acres of the Sonoran Desert***
- 5 *Preserve three of the Sonoran Desert’s remaining free-flowing rivers—the San Pedro, Santa Cruz and Verde***



To find out more about the program’s work, visit www.sonoraninstitute.org.

Acknowledgements



Crisis or opportunity? A glass half-empty or half-full? What most see as a global economic meltdown, and a grinding halt to Arizona's growth machine, may be Tucson's ticket to a more economically prosperous and stable future. For metropolitan Tucson, the moment is serendipitous, a "bust" of the economic cycle when we can take full advantage of our Sun Corridor address – on our own terms. Make no mistake, Tucson has never wanted to be like Phoenix. But we need to harness our enviable position as a partner in the

West's largest economic powerhouse, the Sun Corridor, if we hope to maximize our strengths, protect what we value and secure our unique identity in the marketplace.

This Sonoran Institute report is second in a series of Sun Corridor concept papers. Focused on Tucson's economic future, it explores the metropolitan area's economically favorable position in the mammoth Sun Corridor region, encouraging Tucson to embrace Phoenix as an asset, not a competitor. In this context, the report recommends actions that can help Tucson achieve status and benefits as a Sun Corridor leader.

The report is a cooperative effort by many people. First, our lead researcher and author, Dan Hunting, did a superlative job, working with the Institute's esteemed board member and globally recognized economist Joe Kalt and myself. I also want to commend Sun Corridor Legacy Program Director Dave Richins for his insights in producing timely and relevant research, and Judy Crawford for her editing assistance.

Most importantly, this report is made possible by the generous support and leadership of the Thomas R. Brown Family Foundation. Its abiding interest in finding ways to sustain our Tucson quality of life is greatly appreciated.

A handwritten signature in black ink that reads "Luther Propst".

Luther Propst
Executive Director
Sonoran Institute
May 2010

About the Authors

Dan Hunting is an Economic and Policy Analyst for the Sonoran Institute. His research interests include sustainable economic development in light of the Sun Corridor megapolitan concept, state trust land reform, and the role of arts and culture in economic development. After a career as a photojournalist, he pursued his interest in public policy at Arizona State University, where he helped develop core concepts of the Sun Corridor geography at the Morrison Institute while working on his master's in Public Administration. Upon graduation, he took a job with the Arizona legislature, working as a fiscal analyst for the Joint Legislative Budget Committee. Duties included budget development and program analysis for nine state agencies, including the Arizona Department of Environmental Quality and Department of Administration. He has authored and contributed to works on domestic violence, sustainability, public art, and education.

Joseph (Joe) Kalt is the Ford Foundation Professor of International Political Economy at Harvard University's John F. Kennedy School of Government. He is a principal author of the Project's latest book, [The State of the Native Nations](#). Joe holds PhD and master's degrees in economics from UCLA, and a bachelor's degree in economics from Stanford University. He specializes in the economics of natural resources, economic development, antitrust, and regulation, and serves as senior economist with Lexecon, an FTI Consulting company. He serves on the boards of trustees/directors of Montana State University's Big Sky Institute, The Communications Institute, and the White Mountain Apache Tribe's Fort Apache Heritage Foundation.

Luther Propst founded and directs the Sonoran Institute. The Institute works to conserve our national parks, forests, wildlife refuges and other public lands, promote "smart growth;" better manage water and reform local and state energy and climate change policies – the core issues that define how the West is growing and changing. The Institute also is recognized as a leading practitioner in the North American West of community-based, collaborative and innovative efforts to advance and ground conservation in an understanding of economic values and implications.

Previously, Propst practiced law, where he represented landowners, local governments and organizations nationwide in land-use matters, and with World Wildlife Fund in Washington D.C. Propst received his law degree and master's in regional planning from the University of North Carolina at Chapel Hill.

Propst has co-authored three books, including *Balancing Nature and Commerce in Gateway Communities*, and frequently speaks and writes on western conservation, land use, economic development, and state trust lands. In addition, he serves on the boards of the National Conservation System Foundation, High Country News, Lincoln Center for Applied Ethics at Arizona State University, the Murie Center and the Rincon Institute.

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Executive Summary



Metropolitan Tucson is restarting its economy after the collapse of the state's growth industry and unprecedented upheaval in global financial markets. Now is the time for leaders throughout Pima County to look at the changed economic landscape and plan for a prosperous, stable and sustainable future.

Economic development plans for metro Tucson have traditionally not viewed the area in the context of a larger economic picture. In reality, Tucson is a key component of the Sun Corridor megapolitan, the huge integrated economy stretching from Nogales to Prescott. When viewed as part of the Sun Corridor, Tucson is not just another mid-sized Sun Belt city; it is a full partner in the largest and most dynamic economy in the West.

Tucson's position in the Sun Corridor provides unique competitive advantages. It can position itself as being fully integrated with the Phoenix market, but with a lifestyle far surpassing anything in Maricopa County. Metro Tucson will be attractive to businesses that need access to the Sun Corridor economy, yet want the unparalleled lifestyle of a livable city that is surrounded by preserved land. Tucson is ideally situated to attract highly educated, high-wage workers.

Now is the time for metropolitan Tucson to capitalize on the Sun Corridor concept by enhancing its unique natural setting and lifestyle, while reforming the governance structures and developing the regional links that will solidify its economic position.

Tucson as Part of the Sun Corridor

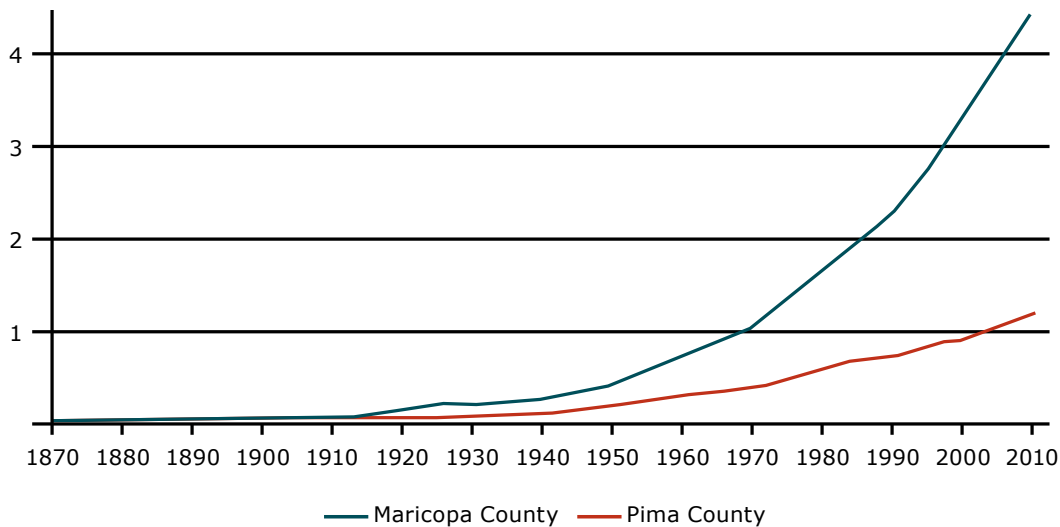


In 1864, Tucson was the most populous city in the newly established Arizona Territory, yet the capital was placed in the tiny frontier camp of Prescott. Tucsonans may have been enraged at the slight, but the Lincoln administration wasn't about to locate the new capital in the Confederate stronghold of Tucson, no matter how big it was. A few years later, Tucson was able to snatch away the capital, only to lose it to Prescott when the political winds shifted yet again. In 1889, Tucson was plotting to regain its rightful status when the upstart little farming town of Phoenix was suddenly named as the capital city.

Phoenix was an unlikely choice: It was located off the main rail line, had a shaky water supply, and was far removed from the copper and gold mines that powered Arizona's nascent economy. But somehow, its town fathers had pulled a fast one and snagged the Territorial capital. Phoenix never looked back. Over the next century, greater Tucson would grow from a dusty railroad town to a metropolis of over a million people. This growth would be the envy of almost any other city, but it was nothing compared to the growth of the state capital, which would come to dominate the West, with a metropolitan population of over 4 million.

Population since 1870 (millions) source: Census Bureau

1

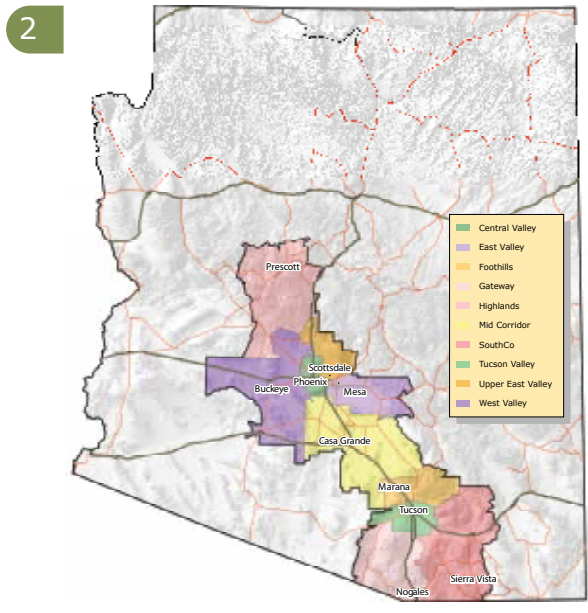


Phoenix is the nation's fifth largest city. Tucson comes in at a respectable, and livable, number 32 in terms of population.¹ The two cities have long had an uneasy relationship. Tucsonans mock the traffic and endless sprawl of Phoenix, and wonder why anyone would live in the soulless wasteland to the north. For their part, people in metro Phoenix barely acknowledge the existence of Tucson, treating the state's second largest city as if it's an isolated backwater, only slightly more noticeable than Ajo or Benson.

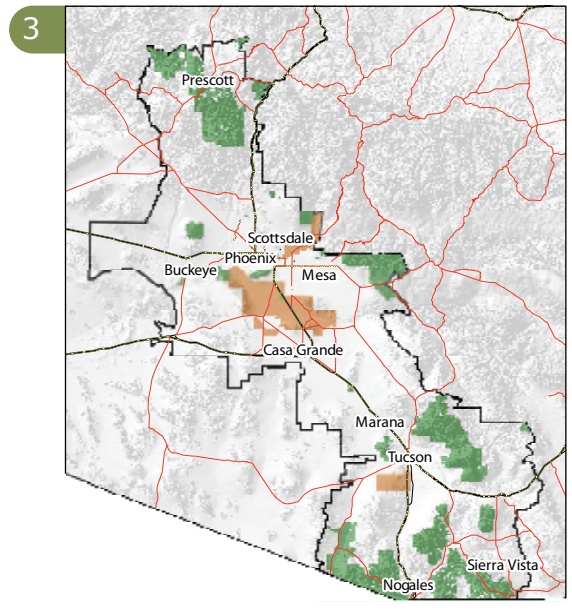
As metropolitan Tucson searches for the tools that will lead it out of the Great Recession, it must take careful and realistic stock of its economic surroundings. Meaningful progress will not happen by simply putting more resources into faulty

old policies. The policies of the past have not sufficiently acknowledged the realities of how Tucson and Pima County are integrated into the overall economy of western North America. Southern Arizona is inextricably tied to a much larger economic web. Economic development studies across the nation have long stressed the need to plug into a global economy, but before it tackles the world, Tucson needs to develop its links to metropolitan Phoenix. Tucson is part of the Sun Corridor megapolitan region. This region stretches from the Mexican Border up through Tucson and Phoenix to Prescott² (Figure 2). The Sun Corridor defines the economic heart of Arizona and, more importantly, it forms the largest concentration of economic power in the eight states of the Intermountain West.³

The Sun Corridor & its Realms



Protected & Tribal Lands in the Sun Corridor



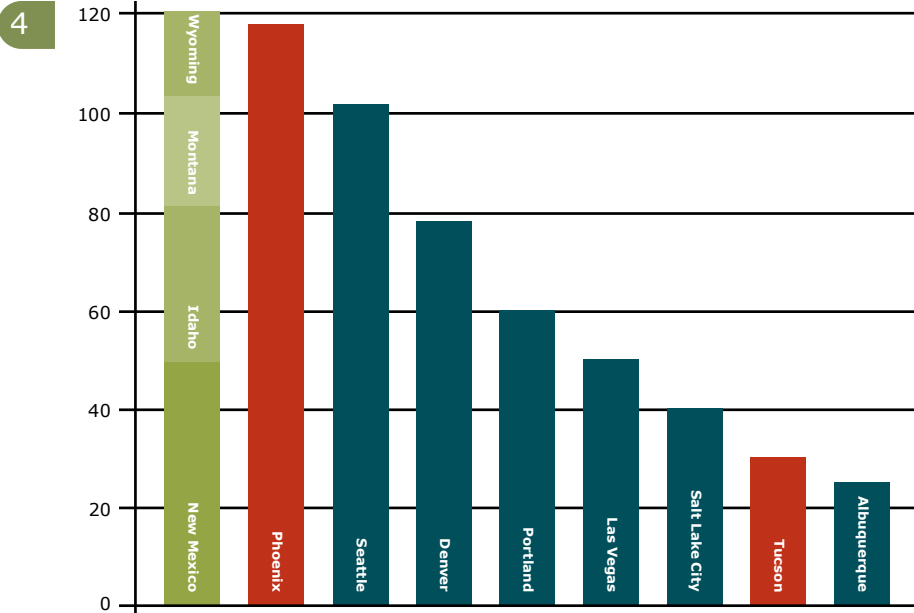
The Sun Corridor is not about simply paving everything between Phoenix and Tucson. A 2008 report from the Morrison Institute for Public Policy, *Megapolitan: Arizona's Sun Corridor*, sub-divided the Sun Corridor into ten "realms" that capture the distinct aspects of each area.⁴ Each of these realms retains its identity, even as it contributes to the whole economy of the region.

A unique characteristic of the Sun Corridor is the large amount of public land contained within the megapolitan region. With 3,000 square miles, or 17% of the Sun Corridor already set aside as national parks, forests, wildlife refuges, other public lands and tribal lands (Figure 3), the region will never be a solid, urbanized mass like Southern California or the Northeast United States. The Sun Corridor is about developing connections across the region for the benefit of everyone. The future of metropolitan Tucson depends upon discovering and exploiting these connections.

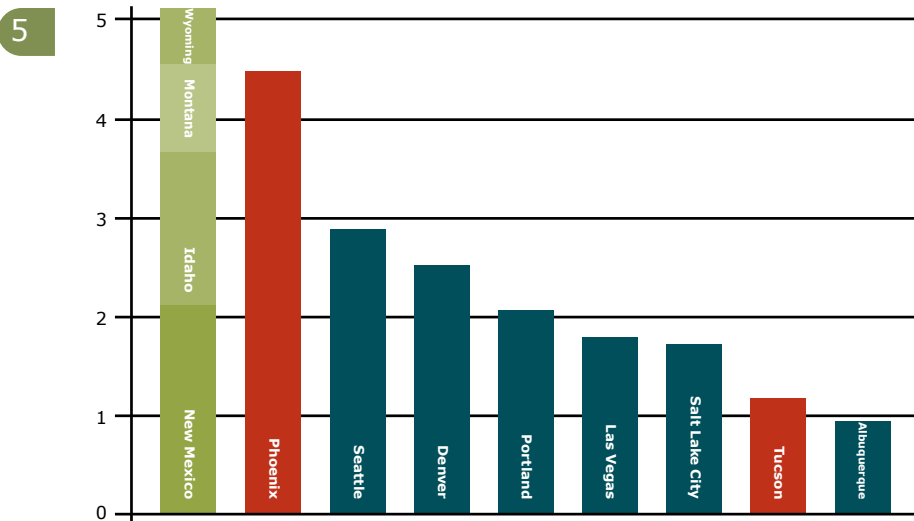
Putting Things in the Proper Scale

To understand Tucson's role in the Sun Corridor, the Tucson and Phoenix Metropolitan areas can be compared to other states and metropolitan areas in the West. Although these comparisons show figures for the Phoenix and Tucson Metros, a full accounting of the Sun Corridor would incorporate data from Prescott, Nogales and other areas of the mega-region.

2008 Total Personal Income (billions) *source: American Community Survey*



2008 Population (millions) *source: American Community Survey*



Metropolitan Tucson is one-quarter the size of Metro Phoenix, in both population and size of its economy (Figures 4 & 5). This isn't a reflection of how *small* Tucson is, but an example of the incredible size of Phoenix. Phoenix dominates the Intermountain West. Metropolitan Phoenix is economically larger than seven of eight states of the Intermountain West. The exception is the slightly larger economy of Colorado. The economy of metropolitan Phoenix *alone* is comparable to the combined economies of

Wyoming, Montana, Idaho, and New Mexico. Note that Tucson is still a considerable player in the West, being the fifth largest city in the Intermountain West, with a population surpassing Montana and Wyoming.

Phoenix is the epitome of extreme growth of an arid-land city. It has focused all of its resources on maintaining this growth model. The water and transportation infrastructure, zoning policies, and economic development plans of metropolitan Phoenix are all designed to support the industry of growth.

There was an unspoken game in the 20th century to see which western city could grow the biggest. That game is now over: Phoenix has 'won' the growth game, and won it decisively. Phoenix is not only the economic and population center of Arizona; it's also the dominant force in the Intermountain West. However, Phoenix is experiencing the downside of that victory. The pleasant environment that lured millions to the Valley of the Sun has now been largely paved over, making the area less attractive for economic opportunity. The most recent housing boom and bust cycle has saddled the area with infrastructure costs that will persist for decades. Phoenix won the growth game, which is a good thing for Tucson.

Metro Phoenix is not a Competitor, it's an Asset

Figures 4 and 5 show that the size of metro Phoenix puts it in a class by itself; larger in both population and economy than many states. Tucson cannot compete head-to-head with Phoenix, just as a 140 pound welterweight boxer cannot be expected to compete against a 200 pound heavyweight. This doesn't mean that welterweight Tucson is any less of a competitor than heavyweight Phoenix; they are simply in different classes. It should be noted that both ESPN and Muhammad Ali himself consider the welterweight Sugar Ray Robinson to be the greatest boxer of all time, despite the heavyweight Ali's moniker as 'The Greatest.'⁵ Tucson doesn't need to be a heavyweight, with all the burdens that come with competing in the heavyweight class. The last thing Tucson wants is to be a second-rate version of Phoenix. Tucson needs to be the best welterweight fighter that it can be.

Tucson and Pima County must learn to treat Phoenix and Maricopa County not as competitors, but as assets that can help promote prosperity in southern Arizona. This will require a fundamental change in the mindset of the business and policy communities, as well as environmental and neighborhood advocates in metropolitan Tucson. Rather than pursuing development plans that simply try to build a larger downtown nucleus or a transportation network to rival that of Phoenix, consideration needs to be given to how Tucson functions within the geography of the Sun Corridor. This doesn't mean that new skyscrapers or freeways are necessarily a bad idea, but it may not be a good strategy to pursue conventional downtown high-rise development in Tucson if the Phoenix market is already oversaturated with such buildings. There is little advantage to replicating an urban form that has been executed on a much larger scale a hundred miles to the north. Instead, development plans need to capitalize on metropolitan Tucson's strongest asset in relation to Phoenix: the incredible natural amenities of southern Arizona coupled with a lifestyle centered on enjoying that environment. Under this model, the old tension of economic development versus smart growth and the environment disappears. With the environment as Tucson's prime competitive advantage in the Sun Corridor, it becomes clear that conservation and smart growth policies will spur economic development, not impede it.

By considering Tucson as part of the larger Sun Corridor economic system, plans can be made that will enhance Tucson's competitive advantage in the market, while capitalizing on the tremendous scale of the Metro Phoenix economy. As a stand-alone metropolitan area, Tucson's peer cities are places like Fresno, CA and Tulsa, OK.⁶ When included as part of the Sun Corridor, however, Tucson can compete with Miami, Atlanta and Seattle. There are several advantages to competing at this larger scale, the first being notoriety. If national and global communities perceive the Sun Corridor as a region on par with Atlanta and Seattle, Arizona becomes an attractive location for advertising campaigns, product roll-outs, and any other situation that calls for a major population and economic base. The ability to attract major new industries and corporate headquarters is also enhanced by the Sun Corridor's position as a top-tier market. Rather than trying to attract a regional headquarters, cities throughout the Sun Corridor will be in a position to compete for national corporate headquarters.

2008 GDP Rankings *source: Bureau of Economic Analysis*

6

Metropolitan Area	2008 GDP (billions)	Rank
New York Northern New Jersey Long Island	1,265	1
Los Angeles Long Beach Santa Ana	718	2
Chicago Naperville Joliet	521	3
Houston Sugar Land Baytown	403	4
Washington Arlington Alexandria	396	5
Dallas Fort Worth Arlington	380	6
Philadelphia Camden Wilmington	332	7
San Francisco Oakland Fremont	311	8
Boston Cambridge Quincy	300	9
Atlanta Sandy Springs Marietta	270	10
Miami Fort Lauderdale Pompano Beach	261	11
Sun Corridor	224	12
Seattle Tacoma Bellevue	219	13
Detroit Warren Livonia	201	14
Minneapolis St. Paul Bloomington	194	15
Phoenix Mesa Scottsdale	187	16
San Diego Carlsbad San Marcos	169	17
Denver Aurora Broomfield	151	18
San Jose Sunnyvale Santa Clara	147	19
Baltimore Towson	133	20
Tucson	32	68
Prescott	5	285

Although capturing large new industries is certainly desirable, the reality is that there are precious few of these large employers to be had. A more realistic and ultimately more productive by-product of the Sun Corridor's status as a major market will be the attraction of a great many smaller employers. These small- and medium-sized enterprises will be much more likely to locate to a Sun Corridor Tucson that is integrated into a larger, connected economy that plays on a national scale than to a provincial Tucson that operates as a lone outpost. Small, high-wage enterprises such as consultants and technology specialists can live the Tucson lifestyle while taking advantage of the huge economic resources of the Sun Corridor. Notably, these smaller employers can be attracted at much lower cost, since they typically don't demand millions of dollars worth of incentives nor require the large infrastructure improvements of bigger employers. These mobile, 'creative class' workers can be attracted to an economically-connected Tucson that offers significant lifestyle improvements over Phoenix.

2008 Population Rankings *source: Bureau of Economic Analysis*

7	Metropolitan Area	2008 Population	Rank
	New York Newark Bridgeport, NY NJ CT PA	22,154,752	1
	Los Angeles Long Beach Riverside, CA	17,786,419	2
	Chicago Naperville Michigan City, IL IN WI	9,793,036	3
	Washington Baltimore Northern Virginia, DC MD VA WV	8,295,397	4
	Boston Worcester Manchester, MA RI NH	7,514,759	5
	San Jose San Francisco Oakland, CA	7,354,555	6
	Dallas Fort Worth, TX	6,655,261	7
	Philadelphia Camden Vineland, PA NJ DE MD	6,398,896	8
	Houston Baytown Huntsville, TX	5,829,620	9
	Atlanta Sandy Springs Gainesville, GA AL	5,729,304	10
	Sun Corridor	5,509,420	11
	Miami Fort Lauderdale Pompano Beach, FL	5,414,772	12
	Detroit Warren Flint, MI	5,354,225	13
	Phoenix Mesa Scottsdale, AZ	4,281,899	14
	Tucson, AZ	1,012,018	55
	Prescott, AZ	215,503	176

The concept of the Sun Corridor as an economic fact is gradually becoming more established in the business and political community of Arizona. As this idea spreads, national leaders will begin to realize that the Sun Corridor is a force to be reckoned with on a large scale. When the Phoenix economy is augmented by the substantial Tucson economy, the Sun Corridor becomes a player on the national stage. As figure 6 indicates, the addition of Tucson and Prescott's gross domestic product (GDP) to that of Phoenix catapults the region past Minneapolis, Detroit and Seattle to become the 12th largest metropolitan economy in the country. A similar jump takes place when metropolitan Phoenix, Tucson, and Prescott are summed to give the population of the Sun Corridor (Figure 7). When the populations of Tucson and Prescott are added to that of 14th ranked Phoenix, the Sun Corridor megapolitan becomes the 11th largest market in the nation.⁷

Tucson has Competitive Advantages in the Sun Corridor Scheme

An outsider looking at Tucson on its own, removed from the context of the Sun Corridor, would see a typical medium-sized city, with nothing too remarkable about it other than its unique natural setting. However, a more interesting picture emerges when Tucson is viewed as an integral part of the Sun Corridor. In this view, Tucson is not an isolated player, but rather a key part of the dominant economy of the Intermountain West of the United States, strategically positioned along major transportation corridors and providing critical access to the growing markets in Mexico. The Sun Corridor has developed a significant aerospace cluster, with major employers in Tucson, Phoenix, and Mesa. Tucson can also be a very inviting alternative for businesses that want to take advantage of all that metro Phoenix has to offer, but in a natural environment that is more pleasant than the Valley of the Sun. Tucson and Pima County are attractive to creative-class workers who appreciate the area's integration of Hispanic heritage into a modern, globally-connected economy. These valuable workers see a tolerant, multi-cultural city in close proximity to an international border as a location ripe with opportunity. Tucson needs to find ways to benefit from the incredible scale of Phoenix while preserving what is unique and desirable about Tucson.

- *Pleasant Natural Environment*
- *Tolerant Multi-Cultural City*
- *Strong Aerospace Cluster*
- *Competitive International Location*

Acknowledgement of the reality of the Sun Corridor will allow Tucson to pursue development patterns that were not apparent before. Under the previous paradigm, Tucson's unstated goal was to grow into something resembling Denver, Salt Lake City, or a scaled-down Phoenix. As part of a larger Sun Corridor region, Tucson is free to pursue different patterns of development thus creating a different niche or identity, taking what it needs from metro Phoenix, and capitalizing on its own strengths.



In early 2007, Tucson Regional Economic Opportunities Inc. (TREO) released *Securing Our Future Now: An Economic Blueprint for the Tucson Region*. The Blueprint, as it's known, combined quantitative analysis of metro Tucson with focus group conversations, interviews, and surveys. The report contained an analysis of the region's strengths and weaknesses and suggested concentrating on five areas to develop a more competitive economy:

TREO's "Power of Five"

- **High-Skilled/High-Wage Jobs**
- **Educational Excellence**
- **Urban Renaissance**
- **Livable Communities**
- **Collaborative Governance Stewardship⁸**

In addition to identifying these "Power of Five" areas of concentration, the report also described a series of indicators to measure progress toward these goals. TREO has committed to periodically publishing updated report cards on these indicators. Although the Blueprint was released at the peak of the real estate bubble and economic conditions have changed considerably since then, it remains a valuable tool for assessing future economic development plans in Tucson. If anything, economic difficulties have increased the need to focus development efforts on the five areas highlighted in the report. Furthermore, because the Blueprint is well known in the Tucson business and policy communities, it can serve as a useful starting point for further discussions about where the area is headed.

The first report card promised in the Blueprint was published in August 2008 and largely relied on data from 2007. The 2008 report card thus did not capture the effects of the recession on the Tucson economy. A new report card scheduled to be published in August of 2010 should provide a clearer picture of the effects of the recession on metro Tucson. In the meantime, data is available to give an idea of how Tucson is weathering the economic storm.

Imagine Greater Tucson

Developing a shared vision and strategy for the Tucson region is the goal of Imagine Greater Tucson (IGT). IGT will engage a wide range of interests in this process including business leaders, non-profit, government, education, health care, neighborhood and conservation organizations. By incorporating input from such a wide range of stakeholders and building on past efforts such as the TREO Blueprint, IGT hopes to develop a vision with broad support from all sectors of the community. IGT is currently in its early stages; the group will be gathering input through a series of workshops that will ultimately lead to the development of a preferred scenario for the future of metro Tucson, and a description of an implementation plan to achieve that vision.

www.imaginegreatertucson.org

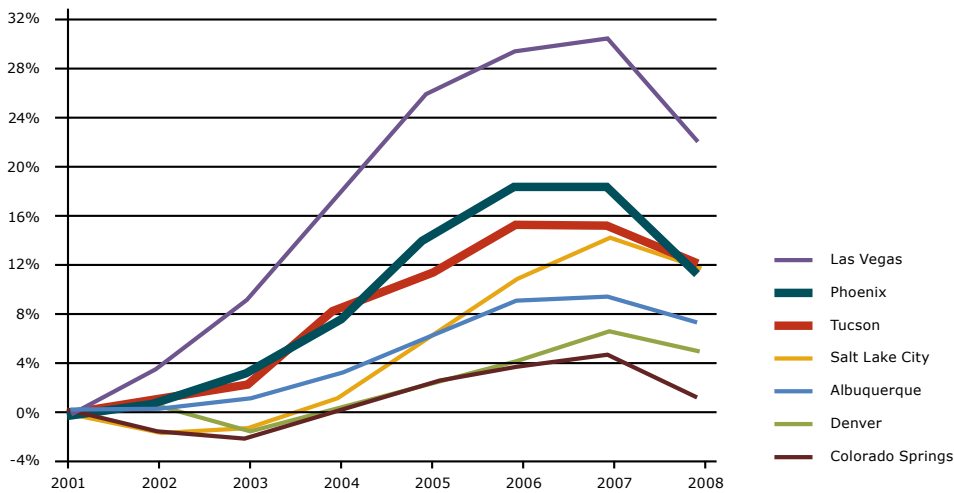
Job Losses

The TREO report cited robust job growth of 21% between 1997 and 2006, with an annual growth rate of 2.4%. Between December 2006 and December 2008, total employment in Pima County declined by 2.8%, compared to the nationwide loss of 1.5% over the same period (Figure 8). Severe job losses in construction, business administration, and entertainment sectors were somewhat offset by gains in the health care and social service sectors.⁹ However gloomy these figures may be, the picture is somewhat brighter than in metro Phoenix, where job losses over the same period totaled 5.6%.

Percentage Change in Total Employment Since 2001 (Dec-Dec Figures)

source: Bureau of Labor Statistics

8



The Arizona We Want

The Center for the Future of Arizona (CFA) is leading a long-term project to define a vision of statewide goals and the strategies needed to achieve those goals. An extensive telephone poll of Arizona residents was conducted to gauge attitudes and concerns about the state. The survey showed that Arizonans are highly attached to their community. The Arizona We Want report notes that GDP growth is correlated with high levels of citizen attachment to community. The poll also shows that Arizonans rate their communities' natural environment highly, but are pessimistic about the availability of job opportunities.

CFA distilled the results of the poll down to eight broad goals for the state, centered on care of the economy, people and the environment. CFA is now developing plans for implementation of these goals, and creating indicators that will measure progress toward their achievement.

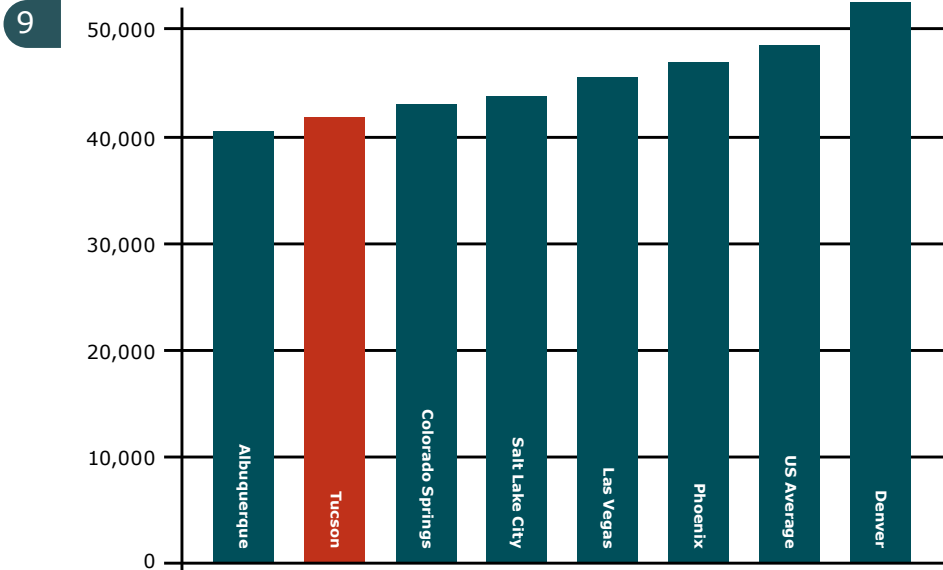
As a statewide effort, the Arizona We Want project may be useful for defining a vision that can unify communities throughout the Sun Corridor. Presumably, the large dataset generated by their polling effort can be broken down to show commonalities among the Sun Corridor cities. Used in combination with the results of Imagine Greater Tucson, this may provide a useful vision for the megapolitan region.

www.thearizonawewant.org

Low-Wage Economy

Per capita personal income in Arizona dropped by 4.1% statewide in 2009, to \$32,935.¹⁰ Nationally, there was a 2.6% drop in per capita personal income, to \$39,138. Tucson remains a low-wage metropolitan area, with average annual pay lagging behind the national average and other cities in the West (Figure 9).

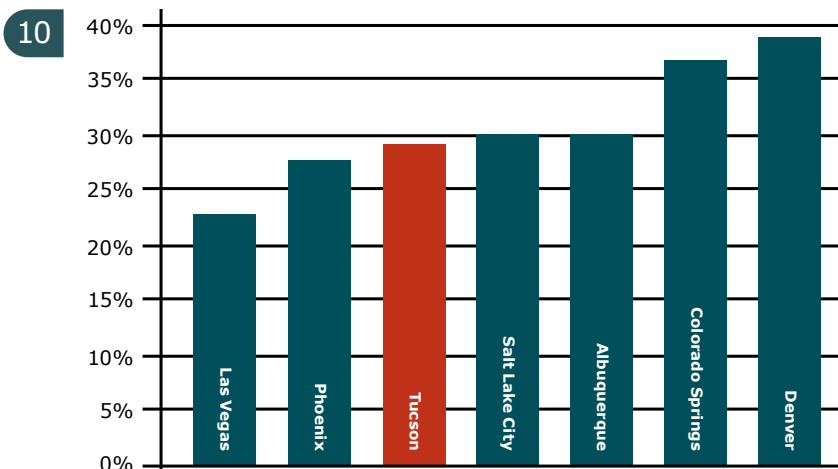
2008 Average Annual Personal Income source: Bureau of Labor Statistics



Low Educational Attainment

The percentage of Tucson workers with a college degree continues to be low by comparison to other western cities (Figure 10). The recent Brookings Institution Mountain Monitor report on economic conditions in the West notes that economic recovery is closely associated with the educational attainment of the workforce.¹¹ Cities such as Denver and Colorado Springs are recovering at a much faster pace than Las Vegas and Phoenix.

Population under 25 years old with College Degrees source: Bureau of Labor Statistics



Vision for the Future: Capitalize on the Sun Corridor



Tucson's future will, like it or not, be greatly influenced by the gigantic economy of Phoenix. This is the essence of the Sun Corridor megapolitan concept. Rather than staging a futile attempt to compete economically against Maricopa County, or plan as if Phoenix was not there, southern Arizona can embrace the reality of regional thinking and work towards a future where Pima County can take full advantage of the huge economic scale of the Sun Corridor while preserving that which makes Tucson and Pima County so special. The change to a regional mindset needs to occur at two levels. First, leaders must recognize the reality that Tucson and Phoenix form a single economic region, and promote this concept within the Sun Corridor itself. This will involve describing the megapolitan geography and assuring everyone that the Sun Corridor is about connections, not uniformity, and that it is an existing economic reality, not a plan for the future created by the government or the business community.

The Sun Corridor doesn't need to be invented because it already exists. The question is how to use this reality as an engine for both prosperity and conservation.

For many, their initial vision of the Sun Corridor is a sea of red-tile roofs consuming the state. The Sun Corridor needs to be framed to emphasize that everyone, Phoenix, Tucson, and all the smaller connected communities, can take advantage of the scale of the region while retaining their individual identities. This is especially critical in Tucson, whose major economic asset is its distinctiveness and natural setting.

Next, the Sun Corridor concept must be widely disseminated to the rest of the world. This process has already begun with the publication of reports by the Morrison Institute for Public Policy and the Brookings Institution, but the concept needs to move out of academia and into the wider world where business and policy decisions are made.^{12,13} Wider acceptance of the Sun Corridor concept, both internally and externally, is essentially a marketing task. The first steps in this acceptance are simple and inexpensive. If TREO and its Maricopa County counterpart, Greater Phoenix Economic Council (GPEC), linked to each other's business-attraction websites, it would be a tremendous acknowledgement of the linkages between the two areas. There has already been some progress toward regional thinking. In December 2009, the Pima Association of Governments (PAG), Maricopa Association of Governments (MAG) and Central Arizona Council of Governments (CAAG) signed a resolution calling for a joint planning council to identify common goals and interests for the Sun Corridor. This underscores the important point that the Sun Corridor is already an operating reality.

Specific Recommendations for Action



The specific recommendations that follow from this analysis of Tucson's current position fall into four broad categories:

- 1 *Become a "Top Feeder"*
- 2 *Play to Our Competitive Advantages*
- 3 *Run the City and County Well*
- 4 *Work with the Other Sun Corridor Players*

Become a "Top Feeder"

The Tucson metro area is strategically positioned in the Sun Corridor. The Sun Corridor attracts huge amounts of money, people, and jobs. Tucson has the opportunity to be a "top feeder" in this flow of economic activity and attract clean, high-paying employers. These employers can use Phoenix as a hub and build nationally and globally connected businesses from a well-run, well-resourced Tucson-Pima County base.

To become a "top feeder", the Tucson metro area must capitalize on its competitive advantages. It must strategically employ its environment, its scenic attractions, its less dense and smaller footprint, and its ineffable lifestyle and culture to position itself as the place that makes those to the north say, "Yeah, but I'd rather live in Tucson." At that point, the cleaner, knowledge-based, global-playing employers who are drawn to a less hassled and more attractive urban enclave will, indeed, make the "live in Tucson" idea a reality. This will not be easy. It will require resources and cooperation between traditionally fractious elements, and a significant change in mindset by business and political leadership. The easier alternative is to retain the status quo and become a bottom-feeder in the Sun Corridor, relying on the economic crumbs that fall off the table up in Maricopa County.

All recommendations to advance Tucson should consider how those plans mesh with the reality and vision of the Sun Corridor and advance the top-feeder strategy. Future economic development plans for southern Arizona must explicitly consider the connections between the metro Phoenix and metro Tucson economies. Previous strategies for economic development, smart growth, and conservation need not be abandoned; their conclusions are still largely valid within the Sun Corridor geography, but they should be reexamined to ensure that they are capturing the full benefit of operating within a larger regional scale.

Play to Our Competitive Advantages

In a competitive world, where virtually every nation, province, state, county and city is out trolling for the best employers, the smartest people, and the most capable managers and workers, Tucson and Pima County need to follow the first rule of the management gurus: *Do what you are good at*. This means protect and enhance the assets that make Tucson what it is.

Protect Aspects of the Tucson Lifestyle that Differentiate it from Phoenix

The greatest competitive advantage that Tucson has over metropolitan Phoenix is its spectacular natural setting with abundant opportunities for outdoor recreation. The extremely large size of the Valley of the Sun makes accessing trails for hiking and mountain biking difficult for many in Maricopa County, but these amenities are much closer at hand in Tucson. The natural beauty and environment of Tucson is already in place and remarkably intact. Nature's bequest of mountains and the desert has been augmented by land use protections that make access easy and affordable. Pima County's strategy of acquisition with access is in place and successful. In short, the big picture is a good one. Now, the task of policy is to get the specifics right: Keep the parks and trailheads open and safe. Control the invasion of buffelgrass so the Sonoran Desert is not reduced to a flammable grassland, void of its emblematic saguaros and the diverse plant and animal life so appreciated by generations of Tucsonans. Channel and manage traffic efficiently and provide robust transportation options in ways that preserve and connect neighborhoods, industrial areas, and commercial centers that real people actually want.

The Tucson basin is nearly surrounded by protected public lands or state trust lands some of which warrant additional protection. It is easy to envision relatively modest expansions to this system of public lands that would make Tucson the first major city in the country to be nearly surrounded by national parks and other protected public lands providing conservation values and available for public outdoor recreation. Pima County, the municipalities of Tucson, Marana, Oro Valley, and Sahuarita, Arizona State Land Department and State Parks Department, the National Park Service, Forest Service, Bureau of Land Management, and Fish and Wildlife Service should develop a plan to consolidate and better coordinate management of the protected public lands that surround the Tucson metro area. State trust land reform will be especially important to Tucson, both in setting aside land for preservation and also in defining which trust lands will be developed. Changes to the antiquated state trust land system have great potential to influence the urban form of Tucson.

Build, Maintain, and Manage Municipal and Outdoor Infrastructure

Tucson and Pima County will not be the attractive, vibrant, place-to-be "top feeder" of the Sun Corridor if the roads are crumbling, the schools and local parks are decaying, the power distribution system is an eyesore, healthcare delivery is substandard, and police and fire protection are not world class. The common sense principles of "Livable Communities" provide efficient, minimally-politicized strategies for positively affecting how people feel about their day-to-day lives. They look to their municipal and state governments, and also to the private and public sector, to provide the basic physical and operational infrastructure that makes their community the place they want to be.

Better management of public lands should be combined with continued development of bicycle lanes along roads, washes, and other corridors, to create a robust, safe, and integrated network of paths that make bicycle commuting a serious possibility, and development of additional trailheads for hiking, mountain biking and horseback riding. Tucson has environmental amenities that can't be beat. Protecting that environment is no longer only about saving endangered species; it's also about maximizing economic prosperity. Tucson has a tremendous advantage that it needs to capitalize on: access to one of largest economies in the nation while still retaining an incredible environment with convenient access to outdoor recreation.

Education, Education, Education

We live at a time in history when there has never been a higher payoff to education for both individuals and communities. This isn't surprising. Globalization and technological change now reward "brains" much more than "brawn." State funding cuts have placed the University of Arizona under siege, but the university continues to be ranked among the top universities in the world. Only the University of Colorado outranks it in the Intermountain West. The University contributes to the image of Tucson as an attractive, vibrant "place to be" perhaps as much as the region's physical setting. Employers throughout Pima County are bolstered directly by its production of an educated workforce, and everyone benefits from its many cultural contributions. The political, civic, and business leadership of the city and county must be focused on maintenance and promotion of the University as a critical asset.

Of the 4,056 incoming freshmen from Arizona at the University of Arizona in 2008, 1,849 came from Maricopa County (46%), while 1,670 came from Pima County. However, 90% of ASU students are originally from Maricopa County. Tucson effectively imports college students from metropolitan Phoenix.

Develop an Industry Based on Climate-Optimized Architecture

The Tucson homebuilding industry should be encouraged to build homes that are more appropriate for the Sonoran desert – focused on both creating a distinctive design and appearance and promoting energy efficiency. Tucson already supports a small industry based on green building and renewable energy. Local architects are designing homes that are optimized for the Sonoran desert which "requires a different way of thinking and a real understanding of place."¹⁴ Rather than trying to lure another industry to town, Tucson can focus on exporting the materials and techniques of climate optimized architecture. Phoenix remains committed to a policy of rapid growth, despite the current downturn in homebuilding, and Tucson can capitalize on this policy by designing homes for a desert market. Tucson would provide the designs, construction techniques, and building supplies needed for the next generation of growth in metro Phoenix and in arid regions worldwide. Tucson can also ensure that the next wave of growth leaves higher quality homes in its wake.

Promote Economic Links to Mexico

Although the southern border of the Sun Corridor is defined as the Mexican border, the economic reach of the megapolitan extends beyond political boundaries. Tucson benefits from its ties to Sonora and the interior of Mexico just as it benefits from its ties to Phoenix. Cross-border commerce has been an important part of the economies of both Arizona and Sonora for generations, with retail, industrial, and tourist trade aiding both sides of the border. Tucson is a key transportation center for parts and raw materials being shipped to Mexican manufacturing plants, and generations of Mexican families head north to shop in Tucson.

Run the City and the County Well

A common complaint about Tucson and Pima County – and an unfortunate, not-altogether fair image among “outsiders” – is that greater Tucson is not well run, and gets bogged down in internecine political fights. That leaders can’t get their act together to make smart decisions about attracting or growing the kinds of employers that everyone seems to want, or about the schools, or about what kind of downtown best fits their residents.

Revise Governance Structures

Pima County residents do not get their fair share of state shared revenue. Shared revenue is tax dollars that are paid to the state, which the state then gives to cities and counties. This revenue is divided via a complex formula. Pima County and its municipalities received a total of \$139 million from the state in fiscal year 2009, or \$137 per capita.¹⁵ Maricopa County and its municipalities received \$676 million during the same period, or \$168 per capita. This discrepancy in per capita funding appears to stem from the great number of Pima County residents (36%) who live in unincorporated areas of the county and not within any city. In Maricopa County, only 6% of residents live in unincorporated areas, so even small municipalities such as Cave Creek, Carefree and Guadalupe are able to capture a portion of state shared revenue. The 366,000 Pima County residents living in unincorporated areas only count toward the county portion of state shared revenue. If some of these unincorporated areas were annexed into a city, more shared revenue would come from the capital. Metro Tucson needs to address the loss of millions of dollars in state shared revenue due to its current governance structure. If Pima County collected state shared revenue as efficiently as Maricopa County, it would reap over \$31 million annually, allowing for more rational fiscal, infrastructure, and conservation planning.

Smart Structures for Smart Growth

The keys to a better run greater Tucson are not found in hoping for better leaders. Perhaps it’s natural for human beings to look for “messiahs” to solve their problems. But Tucson has a good stock of leaders who are committed and hard working. In fact, with its innumerable civic organizations, non-profits, neighborhood associations, and leadership clubs, Tucson is known – even studied – nationally for a remarkable level of citizen engagement. Leaders play to the incentives and systems that are available. Citizens get the decisions and outcomes that their systems and structures reward.

Separate Management from Politics

All over the world, there has been a strong trend toward “devolution” of governmental functions from the federal to the state and municipal level. Cities and counties, in particular, have critical dual roles to play. They not only need to make laws and regulations that allow economies and communities to function, but they also have to build, manage, and deliver basic infrastructure and services that undergird modern life. The Tucson City Council has often found itself enmeshed in day-to-day management decisions. The city needs to develop a system that allows city managers to do this administration, leaving the council to focus on big-picture strategic issues. Such a system would allow both elected officials and managers to do what they are best at, letting council members focus on governing the city, rather than administering programs and departments. Not all will agree on what’s good

for the people, or what the right direction is. However, there will be a better chance of creating a well-functioning City and County if elected officials are empowered to do what they're best at, and if the city's professional managers can do what they're best at. The Southern Arizona Leadership Council has recently published a report that details possible reforms that address many of the current deficiencies in Tucson's governance system.¹⁶

Work with the Other Sun Corridor Players

Like it or not, everybody in the Sun Corridor is going to need to learn to work better together. Their fates are intertwined. If Tucson wants to be the attractive, vibrant, place-to-be "top feeder" of the Sun Corridor, the Sun Corridor should strive equally to be a "top feeder" in the national and global economy.

One million times each year, passengers from Tucson drive to Phoenix to fly out of Sky Harbor Airport. It's estimated that 25% or more of Tucson air travelers use the Phoenix airport.

Post a Link to GPEC on the TREO Website

TREO and its metropolitan Phoenix counterpart, GPEC, strive to attract business to their respective regions. Each maintains an extensive website filled with economic and demographic information, reports, and other resources designed to lure new businesses. However, GPEC's site makes no mention of the opportunities available in Tucson, and TREO's site makes no mention of how the enormous Phoenix economy benefits Tucson. Although the two organizations have cooperated with Flagstaff and Yuma to put up a simple website designed to attract California businesses to Arizona, there is no connection to this site from either the TREO or GPEC sites.¹⁷ Furthermore, a search for the word "Phoenix" on the TREO website returns just a handful of hits, and searching for the word "Tucson" on the GPEC site returns just three passing references to the state's second largest city.¹⁸

A simple, inexpensive, and symbolically important first step in advancing the Sun Corridor would be for these two organizations to post links to each other on their websites. This would be an acknowledgement that the linked economies of Phoenix and Tucson provide a synergy that makes each city more attractive to business. If GPEC is initially unwilling to link to TREO, TREO should take the first step. This action would immediately position TREO and metro Tucson as the leader in regional thinking and break with the old provincial view that Phoenix and Tucson economic development is a zero-sum game. In the Sun Corridor, a gain for Phoenix does not mean a loss for Tucson. Suggested text for the TREO link to GPEC:

"Tucson anchors the southern portion of the Sun Corridor megapolitan region. The Sun Corridor is a rapidly growing market of over 5,500,000 people with an annual GDP of \$224 billion. Economic development in the northern part of the Sun Corridor is handled by the Greater Phoenix Economic Council."

This simple step shows that Tucson is not just another mid-sized Sun Belt city, but rather a full partner in the largest and most dynamic economy in the Intermountain West.

Research and Quantify the Links of the Sun Corridor

Although many economic, environmental, and transportation connections in the Sun Corridor are known, many more are not. If Tucson is to maximize the benefits of the Sun Corridor geography, a better understanding of these links is essential. Work should begin on collecting data at the megapolitan scale, to develop a more complete profile of the Sun Corridor. A large repository of data is being developed by the Arizona Indicators project, but it has been developed with little input from Tucson.¹⁹ A Tucson-based organization should collaborate with Arizona Indicators to ensure that this information is gathered at a scale that is appropriate for the Sun Corridor and will benefit the Tucson region.

Connect Tucson and Phoenix by Inter-City Rail

The three major councils of government in the Sun Corridor – the Pima Association of Governments, Maricopa Association of Governments, and the Central Arizona Association of Governments – have begun to cooperate on many issues, including transportation planning. As the Sun Corridor develops, the need for an inter-city rail line linking Tucson and Phoenix will become more pronounced. The Sonoran Institute’s recently released *Riding the Rails to Sustainability* report explores some of the benefits and challenges to developing a passenger rail system in the Sun Corridor. The development of meaningful passenger rail service between Tucson and Phoenix will require unprecedented levels of regional cooperation between dozens of organizations. Now is the time to begin strengthening the relationships that will be critical to the success of this project.

The Port of Tucson capitalizes on Tucson’s rail infrastructure to speed deliveries to Phoenix businesses. Traditional rail deliveries to Phoenix from Chicago take an average of six days, but with the multi-modal transportation offered through the Port of Tucson, delivery times are reduced to three days.

Conclusion



Over the years, there have been many plans, such as the TREO Blueprint, for economic development of southern Arizona. The recommendations from these documents are still largely valid. Tucson and Pima County must continue to pursue high-skill, high-wage jobs, demand K-12 educational excellence, and strengthen the University of Arizona as keys to future prosperity. These ideas remain critical, but must be revisited in light of the new awareness of how connected Tucson is to the regional economy of the Sun Corridor. Standing alone, Tucson is a pleasant, but unremarkable city in the eyes of the world. However, when viewed as part of the Sun Corridor, Tucson has unique advantages as part of the largest economy of the Intermountain West. Southern Arizona can position itself as fully integrated with the Phoenix market, but with a lifestyle far surpassing anything in Maricopa County. This makes metro Tucson attractive to businesses that need access to the Sun Corridor economy, and want the unparalleled lifestyle of a livable city that is surrounded by preserved land. In this context, preservation of Tucson's surroundings can be seen as an economic necessity, not just an environmental nicety.

The Sun Corridor is an idea that has existed in academic circles for several years, and is just now beginning to gain acceptance in Arizona's business and political communities. Tucson and Pima County have an opportunity to be leaders in the push for regional thinking. As early adopters of the Sun Corridor concept, Southern Arizona would be in a position to significantly define exactly what the Sun Corridor is and how it operates. However, if there is a delay in taking up the Sun Corridor banner, Maricopa County will eventually get into the game and use its enormous economic and political clout to set the rules so that metro Phoenix gains the most from the new regionalism. The recommendations outlined in this report are designed to be clear, concrete and achievable so that Tucson and Pima County can quickly establish leadership in the Sun Corridor and take full advantage of the benefits of regional economics.



- ¹ U.S. Census Bureau, Population Estimates, <http://www.census.gov/popest/datasets.html>. Although the incorporated cities of Phoenix and Tucson are ranked 5th and 32nd in terms of population, the metropolitan areas, including surrounding suburbs and county areas rank 14th and 55th. <http://www.census.gov/popest/datasets.html>.
- ² As an integrated economic unit, the Sun Corridor probably extends into Mexico, but this international relationship is beyond the scope of this paper.
- ³ The Intermountain West is comprised of Arizona, New Mexico, Nevada, Utah, Colorado, Idaho, Wyoming and Montana.
- ⁴ Morrison Institute for Public Policy, *Megapolitan: Arizona's Sun Corridor*, http://morrisoninstitute.asu.edu/publications-reports/Mega_AzSunCorr/view.
- ⁵ ESPN, Boxing, *Sugar Ray Robinson wins split decision from Ali*, <http://web.archive.org/web/20080107172258/http://espn.go.com/boxing/fnf/981202topten.html>.
- ⁶ U.S. Census Bureau, Population Estimates, <http://www.census.gov/popest/datasets.html>. Tucson's population of 1,012,018 falls between Fresno (1,057,486) and Tulsa (966,531). <http://www.census.gov/popest/datasets.html>.
- ⁷ U.S. Census Bureau, Population Estimates, <http://www.census.gov/popest/datasets.html>. Phoenix is the 12th ranked Metropolitan Statistical Area (MSA) with an estimated population of 4,281,899 as of July 1, 2009. The addition of Tucson and Prescott MSAs brings the Sun Corridor total up to 5,509,420, which would make the region the 7th largest MSA. However, the Sun Corridor is equivalent to a Combined Statistical Area (CSA). The CSA geography aggregates MSAs into larger units, recognizing that San Francisco, Oakland, and San Jose, for example, are closely connected. The Sun Corridor would rank as the 11th largest CSA.
- ⁸ Tucson Regional Economic Opportunities, Inc, *Tucson Economic Blueprint: Strategic Analysis Report*, <http://www.treoaz.org/About-TREO-Economic-Blueprint.aspx>.
- ⁹ Bureau of Labor Statistics, Quarterly Census of Employment and Wages, <http://www.bls.gov/cew/>.
- ¹⁰ Bureau of Economic Analysis, Regional Economic Accounts, http://www.bea.gov/newsreleases/regional/spi/sqpi_newsrelease.htm.
- ¹¹ Mark Muro, Jonathan Rothwell, *Mountain Monitor: Tracking Economic Recession and Recovery in the Intermountain West's Metropolitan Areas* (Washington DC:Brookings Institution, 2010). http://www.brookings.edu/reports/2009/1215_mountain_monitor.aspx.
- ¹² Morrison Institute for Public Policy, *Megapolitan: Arizona's Sun Corridor*, Updated July 2009 by Grady Gammage, Jr., <http://morrisoninstitute.asu.edu/morrison-update/megapolitan-arizonas-sun-corridor>.
- ¹³ Brookings Institution, *Mountain Megs: America's Newest Metropolitan Places and a Federal Partnership to Help Them Prosper*, http://www.brookings.edu/events/2008/1121_mountain_mega.aspx.
- ¹⁴ http://www.azstarnet.com/business/local/article_2d07f926-c516-5d5c-9d92-91d19c99b4ec.html
- ¹⁵ Arizona Department of Revenue, *2009 Annual Report*, (Phoenix, AZ: 2009). http://www.azdor.gov/Portals/0/AnnualReports/FY09%20Annual%20Report_web.pdf.
- ¹⁶ <http://www.salc.org/pdf/TC3-Overview-Feb11-2010.pdf>
- ¹⁷ Locate In Arizona, Arizona's Sun Corridor: Open for Business, <http://www.locateinaz.com>.
- ¹⁸ Greater Phoenix Economic Council, Site Search, <http://www.gpec.org/search.aspx?task=view&option=search&SearchText=search+site>.
- ¹⁹ Arizona Indicators, <http://www.arizonaindicators.org>.



Photo on right courtesy of Brian Anderson.



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