Economic Development Planning, Summary 17

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Summary: The Sun Corridor, a region that stretches from Prescott south through Phoenix and Tucson to the Mexican border at Nogales, is at a crossroads. The region's population is expected to double by 2050, meaning that more than half of the Sun Corridor that will exist then has yet to be built. The plans and policies that communities adopt now will have a disproportionate impact on what the Sun Corridor will look like and how its economy will perform in 2050. Unlike slower growing regions, the Sun Corridor will have options to choose from. Key stakeholders will have to make critical decisions and strategic investments in the next five-plus years to lay the foundation for a sustainable Sun Corridor with a diversified and dynamic economy. The region's economic future is closely tied with
neighboring Mexico as well as California, and the wider Latin American continent. An inland port would enable the Sun Corridor to take advantage of its location and position it as a major economic hub. Promising economic sectors include transportation logistics, renewable energy, biomedical and pharmaceuticals, and such existing economic engines as microelectronics, air transportation, aerospace and defense, tourism and regional service centers.

**Sectors:** Economic development, infrastructure, microelectronics, aerospace, defense, renewable energy, transportation logistics, biomedical, tourism, agriculture, and logistics.

**Geographical impact:** Mexico, southern California and Arizona, notably the Sun Corridor stretching from Prescott south through Phoenix and Tucson to the Mexican border at Nogales.

**Key actors:** Federal, state, county, municipal and tribal governments, Legislature, governor, business community, Maricopa Association of Governments, Central Arizona Association of Governments, Pima Association of Governments, Arizona Department of Commerce, utility companies, state agencies (including State Land Department and Department of Transportation), public and private schools and universities, and private landowners.

**Challenges:** The Sun Corridor is competing with other mega regions, including the Front Range (stretching from Cheyenne, Wyo., through the Colorado cities of Fort Collins, Denver and Colorado Springs), for skilled workers and industries that pay high wages. Education is a concern. Some 27 percent of Sun Corridor residents have a bachelor’s degree, compared to 37 percent in the Front Range, which also pays a greater percentage of salaries above $100,000. Furthermore, the Sun Corridor’s immigrant workforce lacks specific skills. The relatively low levels of education among the rapidly growing immigrant population is likely to be a drag on the Sun Corridor economy, if not addressed. The Sun Corridor’s burgeoning population also could degrade the environment, a major reason for many who live and move to the region, as well as lead to greater congestion and raise the cost of living. The numerous and multiple levels of jurisdiction in the Sun Corridor also make it more difficult to develop plans and strategies on a mega regional scale.

**Progress to date:** In December 2009, the Maricopa Association of Governments, Pima Association of Governments and Central Arizona Association of Governments signed a joint planning agreement to coordinate their planning activities and work together to advance the Sun Corridor in the global economy. The Joint Planning Advisory Council was established to advance regional decision-making and coordinate planning efforts. The agreement is considered a major milestone, solidifying the Sun Corridor as a geographic entity. As the Sun Corridor concept has taken root, various state and regional organizations have undertaken studies to advance discussion about the needs and potential of the region. In 2009, the Greater Phoenix Economic Council and Tucson Regional Economic Opportunities launched
the partnership, “Arizona Sun Corridor: Open for Business,” with the goal of attracting high-wage jobs to the region. Flagstaff, Yuma and Pinal County have also joined.

**Major implications:** The Sun Corridor is clearly moving from a metropolitan area to a mega region, a fast-growing region with tremendous economic potential plugged into the global economy. The Sun Corridor is a southwestern gateway that links Arizona with the world. The Sun Corridor concept has raised public awareness about the region’s strengths, challenges and potential, and has led to greater cooperation in planning efforts among various governments and business communities. The emphasis on diversifying the Sun Corridor’s economy and improving trade has helped focus attention on building ties with Mexico and southern California.

**Opportunities for alignment:** Arizona Commerce Authority and other economic development groups promoting trade and investment with Mexico, Latin America and other emerging markets. Public, private and non-profit groups supporting expansion of knowledge infrastructure to support current and emerging economic sectors, and improve the educational levels of youthful population. Local, state, federal and private sectors partnering in the financing and construction of infrastructure, especially an inland port and transportation (notably proposed Interstate 11, linking Phoenix and Las Vegas, and enabling linkage from Mexico to Canada).

**Background:** For decades, Arizona has been one of the fastest-growing states in the country. Much of that growth has taken place within the Sun Corridor, home to about 80 percent of Arizona’s population. The population is highly mobile, with an estimated 21 percent of residents moving every year. Only 35 percent of Sun Corridor residents were born in the state, compared to 60 percent nationally. Almost one out of three new domestic migrants to Arizona come from California. Some 16 percent of residents were born outside the country, the majority in Latin America.

The Sun Corridor is the economic anchor of Arizona, generating 88 percent of the state’s Gross Domestic Product. The region’s opportunities for growth include its proximity to Mexico (the world’s 13th largest economy) and California (the world’s eighth largest economy). Other factors in the area’s projected growth include the CANAMEX trade corridor running through the state, Phoenix’s Sky Harbor International Airport and the growing reputation of its research institutions.

Over the past decade, increases in population and employment have driven growth in the Sun Corridor. Population growth between 2000 and 2009 averaged 3.1 percent compared to 1.1 percent nationwide. Employment growth was also strong, averaging 1.9 percent between 2000 and 2008, compared to 0.3 percent nationally.
The Sun Corridor is projected to grow to 11.3 million people by 2050, up from 4.8 million in 2005. It’s estimated that two-thirds of the housing units that the region will need in 2050 will have been built since 2007. It’s also projected that the Sun Corridor will have to build one-half of the transportation infrastructure that will be needed in 2050.

Between 2001 and 2008, the region outperformed the nation and three comparable regions – the Texas Triangle, southern California, and the Front Range – with a 3.6 percent annual rate of growth in gross domestic product. However, the Sun Corridor trailed the nation and the three comparable regions in GDP per capita with just 0.4 percent average annual growth. That suggests the Sun Corridor’s growth is due more to the size of the labor force than an increase in the quality of the labor force.

The future is infrastructure, education, trade and innovation

Identifying opportunities for future economic growth in the Sun Corridor requires identifying emerging sectors and clusters, as opposed to mature sectors. These emerging sectors exhibit high growth rates as well as high productivity growth. In addition, if the Sun Corridor is to achieve full economic potential, it will need to pursue government policies that support the development of infrastructure (including transportation, energy and water), education and training, trade and investment, and innovation.

Arizona is underrepresented in most of the nation’s top 10 growth sectors, based on 2007 data. Arizona ranks highest in computer and electronic product manufacturing, with its share almost twice the national average. Arizona also ranks higher than the national average in air transportation. Other sectors in which Arizona shows promise are other professional services and information and data processing services.

Based on the national findings and other studies of the Sun Corridor or recommendations by commentators, nine sectors with emerging market opportunities for the Sun Corridor are:

- Computer and electronic component manufacturing. The three largest subsectors by employment are semiconductors, electronic instruments, and computer and peripherals. Employment in this sector is likely to be limited due partly to the recession, threat of offshore production and exceptional productivity (reducing the need for more people). The number of high-tech manufacturing employees in Arizona dropped to 75,000 in 2009 from a peak of 100,000 in 2000. Despite the challenges, the sector is expected to continue to provide high-wage jobs.

- Air transportation. This is a mature industry with plenty of significant growth potential remaining in Arizona. In Arizona, real output for this sector grew by 10.3 percent per year between 1997 and 2007 compared to 3.2 percent nationally. Tourism is a driver and beneficiary of the Sun Corridor’s
air sector. More flights and connections to cities would further enhance tourism as well as business travel. Air cargo is likely to be a high-growth niche within the sector, further improving the appeal of the area to potential manufacturers that ship by air.

- Other professional services. This sector consists mostly of architectural, engineering, financial, consulting, and advertising services (excluding legal and computer design services). The sector is relatively mature, but it pays relatively high wages and should be supported to ensure the Sun Corridor serves as a regional center for these services.

- Information and data processing services. This sector represents less than 1 percent of the economies of the United States and Arizona. But it has grown rapidly in Arizona, 19.5 percent per year between 1997 and 2007. This suggests it may well continue to grow in the medium term, adding jobs in the Sun Corridor.

- Transportation, logistics and warehousing – the inland port vision. The North America Next report by the North American Center for Transborder Studies, in particular, makes the case for the Sun Corridor as a transportation and logistics hub because of its location at the crossroads of two major trade corridors. Inland ports involve the co-location of intermodal terminals and warehouses with the aim of cutting transportation costs and providing for more efficient supply chain management. The hope is that other businesses locate nearby to assist with transportation, logistics and warehouse services, as well as manufacturing eventually locating nearby.

- Aerospace and defense. The Sun Corridor has a strong presence in this mature sector, employing about 35,000 people at wages well above average. Avionics software development is a niche with high-growth potential for the Sun Corridor. Challenges include strong competition from Texas, Washington, and Mexico; industry’s dependence on federal contracts; and attracting and retaining skilled workers as workforce ages.

- Renewable energy. There is high market growth potential, but the sector’s presence in the Sun Corridor remains limited outside of water and wastewater treatment. Long-term growth potential depends on how effectively the sector competes with conventional energy sources as well as deals with such challenges as access to venture capital, uncertainty of public policies for promoting research and development, and limited commercial-scale opportunities in solar energy if production and distribution costs remain high.

- Bioscience and related pharmaceutical activities. This is an emerging sector with high growth potential. The sector is anchored by higher education and research institutions, including the Translational Genomics Research
Institute in greater Phoenix and Flagstaff, and biosciences R&D at Innovation Park in Oro Valley. Among the challenges facing bioscience are ability to develop, attract and retain a highly educated workforce, access to venture capital funding, and uncertainty of public and private sector research funding.

• Agriculture. This is a mature sector that accounts for less than one percent of the private sector in Arizona. Nevertheless, high-growth niches include gourmet/niche agriculture for the tourism and hospitality sector, and local crop production for the “locavore” movement.

**Four enabling conditions for development**

Certain enabling conditions are required if private enterprise is to make wise investment decisions and seize opportunities to build businesses. Policy makers at all levels of government need to support public infrastructure, education and training, trade and investment, and innovation. From these conditions emerge four themes of particular significance if the Sun Corridor is to enhance economic development:

**Inland port:** Building an inland port for the Sun Corridor is an ambitious vision that could elevate trade with emerging markets in Mexico and other parts of Latin America. An inland port would take advantage of the Sun Corridor’s location at the crossroads of two major transportation corridors – the east-west corridor that links the Midwest and the southern U.S. to the Asia-Pacific economies through the sea ports of Los Angeles and Long Beach, Calif., (I-10/Union Pacific Sunset Route and I-40 Burlington Northern Santa Fe Transcon Corridors) and the North-South CANAMEX trade corridor that links western mainland Mexico to the western U.S. and western Canada (proposed I-11 Corridor). An inland port could serve not only as a hub for logistics, but include manufacturing, final assembly, and supporting services. Whether a port is built or not, removing trade and investment barriers with Mexico would improve the Sun Corridor’s economy.

**Trade with Mexico:** The proximity of Mexico with its rapidly growing markets is a major opportunity for the Sun Corridor. Increasing trade requires a renewed commitment by Arizona and local governments, as well as joint planning with Mexico to build key infrastructure to spur international trade. It’s vital that the Sun Corridor speak with one voice in addressing trade and Mexico, particularly in seeking federal involvement in building infrastructure.

**Public infrastructure challenges:** The Sun Corridor must improve transportation networks to realize its economic potential. Potential projects include a high-speed rail line between Phoenix and Tucson, the I-11 corridor between Phoenix and Las Vegas, and a north-south multimodal transportation corridor in Pinal County.
Public funding crunch: Funding, or the lack of it, will affect most public policy and economic development strategies in the Sun Corridor. Funding constraints present an opportunity to explore such financing methods as user-pay principles in providing such services as transportation, water, and wastewater; a greater role for public/private partnerships; and taking advantage of new or upcoming federal funding initiatives.

Exploring next steps
One of the most promising next steps for promoting economic development within the Sun Corridor would be construction of an inland port that would serve as a transportation, logistics and warehousing hub. The feasibility of such a project in the next decade must still be proven, but it stands as a powerful vision that can bring together many interests in pursuit of such goals as promoting international trade and investment, improving public infrastructure, particularly highways, and further developing the knowledge infrastructure to improve the educational attainment of youths, some of whom are from emerging markets and could provide linkages back to these markets.

Among the requirements of an inland port: a minimum of 500 acres of relatively flat land; easy access to major highway corridors, Class I railroad mainlines, and air cargo; designated Foreign Trade Zone status; major public sector investment in supporting infrastructure; and a workforce skilled in logistics, warehousing and storage.

While the Sun Corridor seems well positioned to fulfill many of these requirements, the decisions and commitments that would move the Sun Corridor in this direction would be of great value regardless of whether an inland port is built in the immediate future. Consider such potential infrastructure projects as construction of the I-11, a North-South freeway in Pinal County), border port of entry upgrades, and railroad improvements, including a freight rail connector (Hassayampa Freight Rail Connector) linking the Union Pacific and Burlington Northern Santa Fe in western Maricopa.

Reducing barriers to trade with Mexico and other emerging markets, as well as western Canada, benefits the Sun Corridor and Arizona. And further development of the educational system, from kindergarten through college, would provide the professionals that will ensure the Sun Corridor’s economy is productive, competitive and innovative.