WHITE PAPER

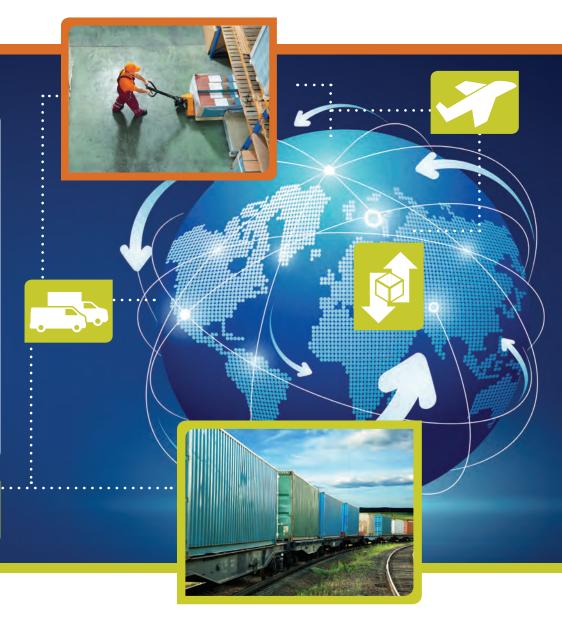
Tucson, Arizona.

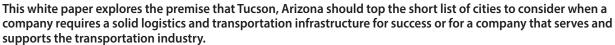


A Growing Southwest Logistics & Transportation Hub? Yes. Actually, a Global Hub.



Companies involved in importing, exporting, manufacturing or distributing goods need to know that Tucson, Arizona is a growing Southwest logistics and transportation hub to international ports and destinations. Anyone with plans to start a company, relocate or expand would do well to examine what Tucson has to offer.





Contact Michael Coretz, your Tucson commercial real estate partner, for more information.



Commercial Real Estate Group of Tucson LLC



Table of Contents

Introduction: What Exactly is Logistics?	3
U.S. Logistics & Transportation Industry: Facts & Figures	4
Tucson & Arizona: Statistics on Transportation	5
Specialized Commercial Real Estate Needs	5
Tucson, Arizona A Growing Southwest Transportation Hub?	6
Tucson to Mexico – Just an Hour's Drive!	7
Mexico – A Few Facts	7
Arizona & Mexico Trade A Few Facts	7
Local Support & Initiatives	9
The City of Tucson	9
Pima County	10
TREO (Tucson Regional Economic Opportunities)	10
The Port of Tucson	10
A Local First for Tucson Pet Food Direct from Tucson to Osaka Saves 20% of Export Co	osts 12
Guaymas Port, Mexico	12
Foreign Trade Zone	12
The CANAMEX Corridor & Interstate 11	12
The Arizona Sun Corridor	13
SALEO – Your Logistics Learning Connection	13
Arizona Forward	13
Proven Success - Tucson Distribution Centers	14
But Wait There's More!	15
Conclusion	16
Resources & Citations	16



Introduction

What Exactly is Logistics?

Most people can visualize what we mean by transportation of some sort – trucks, airplanes and trains, for example.

However, logistics is sometimes a little tougher to define. Ask mathematicians to tell you their initial thoughts when they hear the word *logistics* and you'll likely get responses involving words like *algorithms* and *systems*.

Ask engineers from the Advanced Traffic and Logistics Algorithms and Systems (ATLAS) program in the University of Arizona's College of Engineering and the response will be more in-depth.

Ask the CEO of an aerospace manufacturer supplying crucial parts to the world's aviation industry and you'll more than likely hear words and phrases like distribution, transportation, supply chain, shipments, parts and customer deadlines.

All three are valid and in Tucson, Arizona you'll likely to hear all three answers. Tucson is a city of over half a million people in a metropolitan area twice that size and you're just as likely to meet an engineer or mathematician from the University of Arizona as you are the CEO of an aerospace company.

Logistics, defined broadly for use in this white paper, involves the planning, coordination and organization of sets of events, people and things. We can think of it as a way to get things done to aid in the manufacture, warehousing and distribution of goods.







U.S. Logistics & Transportation Industry: Facts & Figures

- According to SelectUSA, a U.S. government department focusing on economic development, as well as business and investment, the *U.S. Logistics and Transportation Industry* is highly competitive. Continued investment in this sector can provide global businesses with an improved ability to move goods and services. The logistics industry is seen as one that benefits from a highly skilled workforce, but has relatively low costs and regulatory barriers.
 - Spending in the U.S. logistics and transportation industry totaled nearly \$1.3 trillion in 2011 and averaged 8.5% of annual gross domestic product (GDP).
 - Rail freight moves more than 70% of the nation's coal, 58% of its raw metal ores and more than 30% of its grain.
 - **Shipping of cargo by water** accounts for about 78% of U.S. exports by tonnage via U.S.- and foreign-flag carriers.
 - Trucks, according to the American Trucking Association, moved 9.2 billion tons of freight in 2011, about 67% of all freight tonnage transported within the U.S. They accounted for \$604 billion in revenues and about 81% of total revenue earned by all domestic transport modes.
 - Air freight shipments are a small percentage (less than 1%) of annual totals of other transportation modes, but continues to grow in both tonnage and the value of goods shipped. Because most air shipments begin and end their journeys by truck, air freight growth creates increases in both truck and intermodal services. Site Selection Magazine's research shows that 70% of the interviewed companies state that airports are an important factor for future location decisions.
 - Intermodal freight, according to the Intermodal Association of North America, is growing
 faster than any other mode of transportation. This transfer of freight using multiple modes of
 transportation truck, rail or ocean carrier can often provide cost-effective, reliable and
 efficient shipping from origin to destination.

Trends & Issues in Logistics & Transportation

The International Warehouse Logistics Association identifies three vital trends supporting the growth of the logistics industry:

- the general trend toward outsourcing
- the unprecedented growth of e-commerce, known as "ship-to-shore-to-store"
- the importance of partnerships in the whole manufacturer/marketer/logistics provider relationship.





Tucson & Arizona: Statistics on Transportation

- Some numbers worth considering regarding Arizona transportation include
 - value of freight shipments overall (2007): \$164.82 million
 - transportation and warehousing employment annual payroll (2011): \$2.9 million

Tucson's Transportation Assets



Trucks

Tucson is located on Interstate 10, one of only three coast-to-coast interstates in the United States, and on Interstate 19, a direct route to the Nogales Port of Entry.

- Trucks deliver 90% of all freight moved within Arizona.
- Truck traffic is projected to increase 45% by 2020.



Planes

Tucson International Airport (TIA) is in close proximity to Interstates 10 and 19, has three active runways and is designated as a U.S. Port of Entry with 24-hour customs and immigration services.

- Arizona ranks second in the nation in terms of goods shipped by air.
- Air freight and mail via planes in Arizona (2011): 150, 804.31 short tons.



Railroad

Tucson is located on one of the most heavily travelled rail lines in the United States, the Union Pacific mainline.

- Miles of railroad used for freight transport (2011): 1,645
- Rail shipments terminating in Arizona (2011): 25,245,000 tons

Tucson's Specialized Commercial Real Estate

Companies that require a robust transportation and logistics infrastructure will have specialized real estate needs. Tucson can fulfill these needs.

The expertise of a local commercial real estate expert is crucial when seeking specialized commercial real estate, especially for manufacturers. This person will understand the needs that are specific to companies who might focus on manufacturing and distribution, including identifying

- adequate warehouse space for materials and end product
- building configurations and infrastructure that optimize production
- locations with easy access to multiple transportation modes
- locations that provide opportunities for expansion.





Tucson, Arizona – A Growing Southwest Transportation Hub?

Yes. Tucson, although in a desert, is certainly no desert island!

The area's central southwestern U.S. location provides a number of advantages that establishes Tucson as a transportation and shipping hub, not only for nearby destinations within Arizona, California, Mexico and other southwestern areas, but for shipping and receiving destinations throughout and outside North America.

Tucson's proximity to the following cities and to Mexico places it in a unique, favorable position to serve not only local markets, but regional and global markets. A quick glance at this table indicates the growing cities within a 500-mile radius of Tucson, a region with a population of over 34 million people.

LEGEND

Major Ports

DISTANCE FROM TUCSON Miles (km)
64 (103 km)
113 (182 km)
238 (383 km)
245 (394 km)
257 (414 km)
318 (512 km)
324 (521 km)
407 (655 km)
413 (665 km)
450 (724 km)
498 (801 km)







Tucson to Mexico – Just an Hour's Drive!

Tucson, located only 64 miles (103 kilometers) north of the Mexican border at the Nogales point of entry, shares more than just a love of local Mexican food and culture. Most importantly, it's the major commercial entry point along Arizona's 300 miles of international border with Mexico.

Arizona, and in particular Tucson, just a one-hour drive north of the Mexican border, is uniquely and strategically located as a gateway for international trade. Companies considering locating near the border in either Arizona or Sonora, Mexico will find Tucson to be especially valuable for its logistics and transportation infrastructure.

Mexico – A Few Facts

- Mexico is expected to become the largest economy in Latin America by 2020, overtaking Brazil.
- Mexico's Gross Domestic Product (GDP) reached \$1.178 trillion in 2012, making it the 14th largest economy in the world at the time.
- The International Monetary Fund projects that Mexico's economy will grow by 3.8% through 2018.
- Mexico President Enrique Peña Nieto recently announced that "in the first half of 2013, Mexico
 received close to \$24 billion in Foreign Direct Investment (FDI) with the expectation that by the
 end of 2013 some \$35 billion will have been invested in Mexico from countries all over the world
 in almost every sector of the economy."

Arizona & Mexico Trade – A Few Facts

Exports

- Arizona exports \$6.29 billion worth of goods to Mexico annually, more than to any other country.
- Arizona posted merchandise exports of \$7.1 billion to Mexico in 2013, representing 36.5% of the state's total merchandise exports. Mexico was followed by Canada with \$2.2 billion worth of exports.

Imports

In 2013, over \$ 18.3 billion of imports came to the United States via Arizona, with 37% of those goods coming from Mexico.

Jobs

In 2012, over 111,000 jobs in Arizona relied on trade with Mexico.



Maquiladora Industry

Arizona benefits greatly from the proximity of the maquiladoras, the Mexican manufacturing plants located just south of the Arizona border in the state of Sonora. According to a June 2013 report from the Economic & Business Research Center at the University of Arizona, several studies have shown that maquiladoras made significant and positive economic impacts on the economy of Arizona. Operating in a free trade zone allows these 100-plus manufacturing plants to import raw material and equipment on a duty-free and tariff-free basis, assemble the products and then export the completed goods back to the U.S. manufacturer. The report indicates that the majority of Arizona's exports of manufacturing products and services to Mexico are linked to the maquiladora sector and that accounts directly and indirectly for a large number of jobs in Arizona.

Major industries with manufacturing activities within these Sonoran maguiladoras include

- computer/electronic products
- transportation equipment
- fabricated metal products
- plastics and rubber products
- paper products

- apparel
- aerospace components and parts
- machinery
- · chemical.







Local Support & Initiatives

A number of prominent organizations in Tucson understand the significance and importance of supporting and growing the area's role as a central hub for logistics and transportation. There are numerous initiatives supporting the idea of Tucson continuing to grow into a Southwest center for international trade.

The City of Tucson

In May 2014, Tucson Mayor Jonathan Rothschild received Mexico's Ohtil Award, the highest citation the country gives to U.S. citizens, for his efforts to promote trade and cultural exchange between Tucson and Mexico. Earlier in December 2013, he had unveiled his new two-year plan by introducing the idea of the 5T's that Tucson's modern economy is based on.

- 1. Technology
- 2. Tourism
- 3. Teaching
- 4. Trade
- 5. Transportation

Trade and Transportation, two of the five T's, are inextricably linked and crucial for the success of the central Southwest hub.



Located just 60 miles from the Mexican border, at the intersection of two interstate highways and the Union Pacific Railway System, Tucson is set to become a logistics hub. We are the nearest major U.S. city to the expanding deep-water port at Guaymas – a gateway not only to Central and South America, but to the Pacific Rim. These natural advantages are why we're focused on transportation infrastructure that expedites trade, and why you'll find a number of logistics, import and export specialists operating in Tucson and Southern Arizona.

...Jonathan Rothschild, Mayor of Tucson





Pima County

Tucson is located in Pima County, the second largest county in Arizona. Pima County's involvement and support for Tucson as a transportation and logistics hub is evidenced in a number of ways and reflects its history of finding opportunities to grow and sustain jobs and businesses in the community. The County has been actively involved in sponsoring economic development grants and was especially instrumental in helping to obtain U.S. Department of Transportation funds for the Port of Tucson. Another project of interest is the Intermountain West Corridor and two proposed routes for a new Interstate 11.

Pima County has indicated that is sees its role as a catalyst for Tucson to be successful in solidifying its role as an international trade center.

TREO (Tucson Regional Economic Opportunities)

TREO, as the primary economic and business development agency in the Tucson region, offers a number of reasons for Tucson to be on a short list for site selectors considering moving or expanding. TREO contends that Tucson is much more developed as a transportation hub than many might think and they cite a number of supporting facts:

- There are already 150-plus companies involved in the general logistics, transportation and
 warehousing industry that call Tucson home. Accounting for the employment of over 72,000
 local people, these companies already are reaping the benefits of being located in a city
 where, within a radius of 500 miles, there are over 34 million people.
- The convergence of rail, air and interstate highways for trucking provides these businesses a competitive advantage over their competition in such places as Phoenix 120 miles away.
 Many people don't realize that to get to Phoenix from Mexico and from destinations farther south, trucks and trains need to go through Tucson.
- Another advantage Tucson has over the deep water ports of Southern California is the lack of congestion that exists in those ports. Tucson can act as an efficient, cost-effective alternative to that congestion.



The Port of Tucson

A port in the desert? While Tucson has zero miles of inland waterway, it does have a port – a rail port. Located in southeast Tucson on 767 acres, the Port

of Tucson is a warehousing, manufacturing and distribution hub – an intermodal rail facility made up of 50,000 feet of working rail track provided by Union Pacific.



The Port of Tucson provides a wide variety of rail-oriented transportation options for movement of goods in and out of the Southwest region and far beyond. It even provides the ability to ship goods directly to and from Asia via rail through southern California ports.

Companies in Tucson and surrounding areas no longer need railroad infrastructure directly to their buildings. A company's product can be placed in containers right at their own loading dock, then driven by truck to the Union Pacific rail hub at the port of Tucson, where the container is loaded directly onto a train and heads off to a nearby seaport.

In addition to having the ability to handle intermodal containers, provide boxcar access and team track facilities, there also is public warehousing available (scalable from 30,000 square feet to 1,000,000 square feet), including the ability to store frozen goods.

The biggest benefit is that local businesses will be able to be part of the global economy, whether receiving or exporting. Local businesses are really the ones that will benefit. The alternative of rolling a 120-car, double-stacked train through town takes 240 trucks off the road, lowering fuel costs and shortening delivery time.

Alan Levin, Owner, Port of Tucson, (Arizona Daily Star, September 1, 2013)

The Port is registered as a Foreign Trade Zone to allow shipping and receiving of product in bond.

The entire park with its rail hub has been designed with expansion of facilities and rail tracks in mind. Initially funded primarily by the Port of Tucson's owner, Alan Levin and his family, the Port of Tucson was awarded a \$5 million grant by U.S. Department of Transportation in the fall of 2013. The grant has allowed significant expansion and put the region "in a new league."





A Local First for Tucson

Pet Food Direct from Tucson to Osaka Saves 20% of Export Costs

In September of 2013, a Tucson-based company, Azmira Holistic Animal Care, with the Port of Tucson a mile from its plant, was the first to take advantage of the new capability to directly ship ocean freight to outbound ports. Before the Port of Tucson was available, the company had to rent an empty freight truck to pick up product and then drive it to the Los Angeles port for export. Not only was that process

time-consuming and expensive, but the company was limited as to how much they could ship. Now product is loaded onto an ocean container at the Port of Tucson and from there it's taken by rail to Los Angeles with the final destination of Osaka, Japan.

"As a small company competing in a big pet-food industry, for us to be located a mile from the port is huge for us. Over the road, we're restricted by weight to 40,000 pounds. Now we can load upwards of 55,000 pounds. Just there we're adding value.

Rob Carr, Azmira Holistic Animal Care, (Arizona Daily Star, September 29, 2013)

According to Tucson Mayor Jonathan Rothschild, having the Port of Tucson available for importers and exporters and having it in a State of Arizona Enterprise Zone makes Tucson and Southern Arizona much more attractive places to do business for companies that rely on those imports or exports.

Guaymas Port, Mexico

Tucson isn't the only city offering itself as a transportation hub. Just over 300 miles south of Tucson, the Mexican deep-water seaport is being expanded. Within the next year a multimillion-dollar investment will result in an additional nine docks. This will then allow Guaymas to accept ocean vessels carrying a variety of goods, including coal, grain, durable goods and automobiles. This will strengthen Tucson's role as a Southwest logistics and transportation hub and a crucial U.S. shipping point to the port.

Foreign Trade Zone

As a Foreign Trade Zone, Tucson provides many advantages from a manufacturing standpoint. Businesses who are importing parts from overseas for final delivery into Mexico could gain considerable savings. Alan Levin, the owner of the Port of Tucson, provides examples of product coming to Tucson from Russia and Brazil, shipped in bond and then stored until they are ready for transport to their final destination.

The CANAMEX Corridor & Interstate 11

This Trade Corridor was initially envisioned in 1994 at the start of the North American Free Trade Agreement (NAFTA). Its goal is to maximize the free trade opportunities among Mexico, Canada and the United States. When complete, this north-south trade corridor will consist of a continuous four-lane highway from Mexico City through Arizona to Edmonton, Canada.

The infrastructure is continuing to be built to travel from Nogales, Mexico to Tucson (via Interstate 19), and then from Tucson to Phoenix (via Interstate 10), then north through Nevada, Utah, Idaho and Montana to the Canadian border. The part of the highway from the Mexican border to Las Vegas, Nevada is still under development. This proposed Interstate 11 will cross Arizona from north to south in a 56-mile corridor. A similar concentrated industry the Aerospace & Defense Corridor, known as *The Sonoran Corridor*, also is part of this larger Interstate 11 initiative.





The Arizona Sun Corridor

The Sun Corridor, as Arizonans have come to know it, is a coalition of economic development groups representing the major Arizona metropolitan areas of Flagstaff, Phoenix, Pinal County, Tucson and Yuma. The goal of the coalition is "to promote the collective business, educational and technological assets to help shape the Sun Corridor's economic future." This "megaregion" or "megapolitan area" covers an area equivalent to Indiana in both size and population. It offers

- a favorable tax climate with low operating costs
- low regulation and quick permitting
- geographic proximity to major markets and suppliers
- a uniquely distinctive quality of life and affordable cost of living.



SALEO – Your Logistics Learning Connection

The Southern Arizona Logistics Education Organization (SALEO) is one of several projects that promote and grow the transportation and logistics industry in Southern Arizona. SALEO brings together industry experts and trade specialists to promote the potential impact of an inland port. SALEO describes itself as a "gateway to education and workforce development in logistics."



Arizona Forward

The Arizona Forward organization is an advocate for maintaining a balance between economic development and environmental quality as the state continues to grow. It brings state leaders together to foster collaboration and cooperation on critical sustainability issues.

"Arizona's future economic development will be tied closely to the state's willingness to commit funding and resources to improving and expanding its statewide transportation system."

..Diane Brossart, President & CEO, Arizona Forward.





Proven Success - Tucson Distribution Centers

Companies already operating distribution centers in Tucson include Target, Horizon Moving Systems and Arizona Canning Company.

Target

Target's first e-commerce fulfillment facility was built in Tucson in 2008 and is located in a 100-acre facility with about one million square feet of floor space. When planning started in 2007, Target's goal was to ship nearly 18 million packages annually from its Tucson location and to efficiently service its customers west of the Mississippi. From its location near Interstate 10 on the south side of Tucson, trucks can easily access the freeway and can also reach the airport in 15 minutes.

"Tucson is a vibrant community and has a skilled work force, which makes it a great fit for us."

..Mitch Stover, SVP, Distribution Services, Target, (www.treoaz.org)

Horizon Moving Systems (Suddath Relocation Systems)

It describes itself as Arizona's premiere mover since 1924. The company, acquired by Suddath Relocation Systems in July 2013, specializes in local, statewide, interstate and international moving services. Headquartered in Tucson, the company also offers office and industrial moving, distribution and logistics management. The local Tucson storage space of 85,000 square feet is a climate-controlled, modern warehouse.

Arizona Canning Company

ACC has been in Tucson since 2006 and is owned by Conservas La Costeña, a wholly Mexican-owned company. Its Mexican food products are canned and shipped from this Tucson location. When the owners originally decided to establish a U.S. presence, they found a state-of-the-art facility near Interstate 10 with easy rail access. Their choice of Tucson as a location has been so successful that they are planning to expand the kinds of product they distribute through this center by adding 92,000 square feet of warehouse space to their existing facility.

Established Manufacturing Base

Tucson's manufacturing environment provides an experienced and knowledgeable workforce

Geographically, Tucson for distribution works extremely well. We're right off the Interstate 10 freeway, which also connects to Interstate 8 without having to go through Phoenix, so that works well to get to the southern California markets.
A lot of our product also ships to the east out of Laredo, Texas so we're right off of Interstate 10 for that. We also bring in quite a bit of product on rail cars. Beans from the Red River Valley come in on rail cars and the proximity to rail works well for us.

...Shane Gesbeck, Plant Manager, Arizona Canning Company (www.treoaz.org)





But Wait There's More!

Tucson and Arizona have additional benefits to offer to companies of any industry that might plan to move, expand or establish a start-up company here.

Availability of Business Capital and Local Entrepreneurship

- Bloomberg Business Week explains "Why is Angel Investing Hot in Tucson?", July 2013.
- Tucson is called an "Emerging Entrepreneurial Hub" by Entrepreneur Magazine, August 2013.
- Chief Executive Magazine calls Arizona "#6 Best State for Business," May 2013.

Availability of Federal and State Government Funding Programs and Tax Credits

- SBIR (Small Business Innovation Research) grants have been awarded to many Tucson-based companies.
- ACA (Arizona Commerce Authority) provides numerous funding opportunities in the form of grants and loans.
- Arizona also offers various sorts of government tax credits to encourage U.S. companies to
 maintain their competitive advantages through continued innovation and improvements
 primarily in the area of technology.

City of Tucson Incentive Programs

- Tucson offers over 21 different business incentives and assistance programs to companies
 who are considering moving or expanding to the city. Categories include financial incentives,
 loan rograms, business assistance programs, development services programs and
 incentive districts.
- Hundreds of millions of dollars have been invested in Tucson as a result of these incentives, creating hundreds of new jobs.

Strong Research Presence (University of Arizona)

• The University of Arizona's Advanced Traffic and Logistics Algorithms and Software (ATLAS) Center was established in 1998. ATLAS is a Traffic and Logistics Management Research Center, where engineers, students and faculty learn and practice traffic and logistics management.

One of the things that's nice about Tucson is there is a good manufacturing base already established...there's other manufacturing that if people are used to working around machines and equipment they have the technical ability to do what we're looking for because we ask our folks to both operate and maintain the equipment. And we've found that we don't really have an issue finding the people that we're looking for.

...Shane Gesbeck, Plant Manager, Arizona Canning Company (www.treoaz.org)





Conclusion

This paper has identified a number of reasons why Tucson, Arizona is becoming an important Southwest logistics and transportation hub, not only for other regional locations but for international destinations. Tucson will continue to attract companies who value the advantages that the region and its growing transportation systems have to offer.

It also provides evidence of a supportive business community with many local leaders, stakeholders and professionals who are eager to help new or established companies be successful and feel supported if they choose to make Tucson, Arizona, their new home.

Resources, Associations & Publications

Arizona Forward. www.arizonaforward.org

City of Tucson. www.tucsonaz.gov

Pima County Government. webcms.pima.gov/government/economic_development

Port of Guaymas. www.puertodeguaymas.com/home

Port of Tucson. www.portoftucson.net

SALEO. Southern Arizona Logistics Education Organization. www.saleo.org/

TREO. Tucson Regional Economic Opportunities. www.treoaz.org

American Logistics Association. www.ala-national.org

American Society of Transportation & Logistics. www.astl.org/i4a/pages/index.cfm?pageID=1

Community Transportation Association. www.ctaa.org

IANA. Intermodal Association of North America. http://www.intermodal.org/

IWLA. International Warehouse Logistics Association. www.iwla.com/why/industry.aspx

Freight Facts & Figures 2011, Freight Management and Operations. U.S. Department of Transportation. www.ops.fhwa.dot.gov/freight_analysis/nat_freight_stats/docs/11factsfigures/index.htm

U.S. Department of Transportation - Research & Innovative Technology Administration (RITA). www.rita.dot.gov/bts/data_and_statistics/index.html

"Mayor's New Economic Plan Swaps 5C's for 5T's" azstarnet.com/news/local/article_1df48f35-b1d6-5a99-8011-07becbe5ad1d.html

"Shaping the Region's Economy: Transportation and Logistics" www.insidetucsonbusiness.com/news/shaping-the-region-s-economy-transportation-and-logistics/article_e4428e9b-2426-5772-9dcd-e98aeba436dc.html?mode=image&photo=1

Regionally Significant Corridors Study. Pima Association of Governments (PAG). January 2014 www.pagnet.org/Programs/TransportationPlanning/RegionallySignificantCorridorsStudy/tabid/1142/ Default.aspx

"Can 'Airport Cities' Close the Deal?"

http://siteselection.com/issues/2014/mar/airport-cities.cfm#.U2kduM4V4Vk.email

