ACKNOWLEDGEMENTS

Task I-E-1
Assessment of Regional Economic Issues
Houghton Road Corridor
Tucson, Arizona

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EXECUTIVE SUMMARY

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Houghton Road Corridor
Tucson, Arizona

Introduction

In January 2008, The Arizona State Land Department commissioned Westcor to prepare an Urban Planning study for the Houghton Road Corridor (HRC) State Trust property in Southeast Tucson. As part of the planning team, Elliott D. Pollack and Company was retained to prepare economic and market analyses for the project. The first task of this assignment, the Assessment of Regional Economic Issues, was prepared in association with the University of Arizona.

The purpose of this report is to provide a broad, overarching analysis of the Metro Tucson (Pima County) economy and identify considerations and issues that may affect the future development of the Southeast Tucson area, including the HRC. The analysis will lead to the formulation of recommendations and strategies to address, as necessary, important economic considerations that may affect land use decisions and development matters within the HRC.

Metro Tucson Growth

The population of Pima County has been growing at a faster rate than the United States for several decades. Since 2000 the average annual rate of population growth in Pima County has been slower than that for Arizona as a whole (2.4% vs. 3.3%). However, Pima County's population has grown more than twice as fast the U.S. population (2.4% vs. 1.0%). According to The University of Arizona Economic and Business Research Center and the Arizona Department of Economic Security, Pima County's population grew past the one million person mark in 2007. The County represents 15.4% of Arizona's population.

Topping the one million mark in population is an important milestone. It will make Tucson a target for higher end retail chains and will expand the access to art, music, and cultural activities.

Employment growth is vital to a community's health. The following table shows the most recent employment forecast from the University of Arizona, Economic and Business Research Center. Total nonfarm employment is expected to grow at stronger rate over the next ten years than it did between 2000 and 2007. The highest growth will occur in the Services industries, which are expected to grow at an annual rate of 3.1%. Employment growth in Government, Manufacturing and construction will be relatively slow. Mining growth will become negative.

Tucson MSA (Pima County) Employment Forecast by Sector

				CAGR*	
Sector 2000		**2007**	**2017**	**2000-07**	**2007-17**
Total Private Nonfarm Employment	346,942	383,100	476,738	1.4%	2.2%
Natural Resources and Mining	1,800	1,800	1,620	0.0%	-1.0%
Construction	22,883	26,400	28,343	2.1%	0.7%
Manufacturing	32,883	27,500	30,291	-2.5%	1.0%
Trade, Transportation, and Utilities	54,958	63,900	79,157	2.2%	2.2%
Total Services	161,159	185,600	251,946	2.0%	3.1%
Total Government Employment	73,258	77,900	85,381	0.9%	0.9%

Source: University of Arizona, Economic and Business Research Center 2008 2nd Quarter Economic Forecast.

Current Employment Composition

Besides overall rates of growth, another important measure of an economy's diversity and overall health is its employment concentrations by individual industry. Growth in wealth-generating, base industries leads to higher wages and a more diverse economy.

When a region exhibits relatively high concentrations of employment in high wage industries, the economy tends to be rather healthy, and vice versa. Industry concentration is typically portrayed using a "location quotient." This factor measures the concentration of individual industries compared to the national average. If a quotient is greater than 100%, it means the industry is relatively more concentrated in the local area.

Metro Tucson's employment mix is concentrated in construction, retail trade, professional and business services, education and health services, leisure and hospitality, and government. Throughout its history, Tucson is lightly weighted, however, in the higher paying manufacturing sectors.

Tucson MSA Industry Concentration, 2007

Sector	Location Quotient 2007
Total Nonfarm Employment	100.0%
Natural Resources and Mining	89.4%
Construction 124.6%	
Manufacturing 71.2%	
Retail Trade	104.1%
Wholesale Trade	58.4%
Transportation, Warehousing, and Utilities	64.9%
Information 71.2%	
Financial Activities	77.0%
Professional and Business Services	104.6%
Educational and Health Services	106.2%
Leisure and Hospitality	106.1%
Other Services	101.4%
Total Government Employment	126.0%
Federal Government	139.6%
State and Local Government	124.1%

*CAGR is compound average growth rate.
Source: Arizona Department of Economic Security, CES based on NAICS

Local Area GDP

In 2005, Tucson's Gross Domestic Product (GDP) totaled $27 billion. Compared to ten other cities identified by the Tucson Regional Economic Opportunities (TREO) organization it competes with for economic development opportunities, Tucson had the lowest GDP. Some of those cities include, for example, Albuquerque and much larger cities such as Dallas, Denver, Orlando, Phoenix and San Diego.

However, it is not reasonable to expect Tucson to have as high of a GDP as much larger cities. Except for Albuquerque with a 2007 population of 835,000 persons, all other competitor cities are much larger, averaging nearly 2.5 million persons. After adjusting for differences in population, Tucson ranks last relative to the other ten cities and to the nation as a whole. Tucson's economy generates $29,000 of GDP per capita, compared with $42,000 for the U.S.

Wages

In 2007, the average wages for all industries in Metro Tucson was $35,700. This wage is 84% of the national average. However, not all industry sectors pay below the national average. Some of the highest paying sectors in Tucson are Mining, Manufacturing (dominated by Raytheon), Information and Financial Activities. Of these industries, only Manufacturing and Mining pay higher than the national average wage for the individual industry categories. Large companies in both industries are unionized.

There have been many explanations about why the wage rate in Tucson has historically been below the U.S. wage rate. Some explanations include the following:

- Tucson's proximity to Mexico provides low cost immigrant labor that tends to drive down wages for unskilled jobs.
- The University of Arizona students, military spouses and retirees are frequently willing to work part-time or in temporary jobs that pay lower wages than they would accept in a fulltime, permanent position.
- There is a "Sunshine Premium" to the Tucson lifestyle. Some people may be willing to accept lower wages in return for enjoying the Tucson lifestyle.
- The industry mix in Tucson employment is heavily weighted toward the Service and Trade sectors, which tend to offer lower wages than goods producing industries.
- Arizona is a "Right-To-Work" state that does not require companies to unionize.

Tucson MSA Industry Wage, 2006

Sector	Average Wage 2006	Tucson Wage % of U.S. Avg.
Total Nonfarm Employment	$35,681	84%
Natural Resources and Mining	$47,553	111%
Construction $34,745		78%
Manufacturing $63,950		124%
Trade, Transportation, and Utilities	$31,330	86%
Information $50,465		77%
Financial Activities	$46,589	68%
Professional and Business Services	$35,629	69%
Educational and Health Services	$37,977	97%
Leisure and Hospitality	$14,949	84%
Other Services	$27,619	103%

*CAGR is compound average growth rate.
Source: Arizona Department of Economic Security, CES based on NAICS

Metro Tucson's Economic Opportunities

The Economic Blueprint prepared by TREO, Metro Tucson's economic development agency, provides an extensive analysis of Metro Tucson's assets and liabilities to compete for high paying, skilled jobs and outlines strategies for achieving a more dynamic economy. Based on the findings of TREO and the analysis contained in this report, following are the primary strengths and weaknesses of the regional economy and how they may affect land uses and development of the HRC.

From a regional perspective, Metro Tucson's competitive assets include the following:

- Proximity to California and Mexico markets
- Quality of life (sunshine, small town atmosphere)
- Image as a place for leisure, entertainment and recreation
- A strong tourism industry
- Leisure and recreation assets within close proximity
- High quality executive housing
- Cultural diversity
- Relatively low business costs including moderate wage levels
- Relatively low tax rates
- A highly educated workforce
- Higher education resources (U of A, Pima College)
- Transportation resources: Interstate 10 and Union Pacific RR's Sunset Route
- Industry strengths in:
  - Aerospace and defense-related industries (Davis Monthan, Raytheon)
  - Pharmaceutical and medicine manufacturing
  - Computer and electronic product manufacturing

Metro Tucson's liabilities include:

- Comparatively low wages and income
- Small manufacturing sector dominated by one company (Raytheon)
- High crime rate
- A perceived poor K-12 education system with high dropout rates and comparatively low test scores
- A weak Downtown commercial area which detracts from the vibrancy of the larger metro area.

The above assets and liabilities will affect the ability of the State Trust's Houghton Road Corridor property to compete nationally for high quality employers. On an individual basis, there is little the Trust can do to change the underlying dynamics of the region other than to recognize the area's weaknesses and actively participate in joint economic development efforts with TREO and other organizations that are involved in recruitment and retention. Over time, if TREO's strategies prove successful, the HRC will be a major beneficiary as a result of its location in Tucson's primary employment area.

Impact of Metro Tucson Economy on HRC

For any company that has chosen Tucson as a site for business expansion or relocation, the HRC will be an effective competitor relative to other parts of the Tucson region. The area contains the assets that are vital to businesses and companies who utilize industrial buildings and sites. From Houghton Road westward toward Tucson International Airport is the largest industrial real estate market in the region, including some of Tucson's largest employers such as Raytheon, IBM, Citi, Universal Avionic Systems, Bombardier and American Airlines among others. The assets of the Houghton Road Corridor for employers are:

- Proximity to I-10, one of the main transcontinental highways extending across the southern U.S.
- Proximity to the Union Pacific Railroad Sunset Route, a transcontinental rail line connecting the two largest seaports in the U.S.: Los Angeles and New Orleans. Today, with 24 percent of all the freight cars handled by Union Pacific originating or terminating in Southern California, the Sunset Route is experiencing record traffic volumes. UP is in the process of expanding the route from a single to a double track.
- An established base of industrial buildings and uses that is available for immediate occupancy.
- The presence of the U of A Science and Technology Park comprised of approximately 1.9 million square feet of industrial and office space. The University has a long term vision for expansion of the Park which is situated on 1,345 acres and currently home to 27 companies including IBM, Raytheon, Citigroup and General Dynamics. The University is planning an expansion of the Park that includes an additional 2 million square feet of space.
- Century Park, located just to the west of the HRC, is a 263 acre transportation and logistics center for rail and interstate transport. The Park is registered as a Foreign Trade Zone.
- Economic development marketing strategies prepared for the southeast area by the Tucson Commerce Corridor, a consortium of private and public entities formed to promote the I-10/Union Pacific railroad corridor between Houghton Road and Alvernon Way.

Given these assets, the long term outlook for the HRC from an employment perspective is very positive with unmatched competitive advantages within the Tucson region. As TREO implements its marketing strategies, the HRC should be able to capture a large portion of Metro Tucson's job growth.

Summary of Metro Tucson's Economic Opportunities

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In fact, for any company that has chosen Tucson as a site for business expansion or relocation today, the HRC will be an effective competitor relative to other parts of the Tucson region. The area contains the assets that are vital to businesses and companies who utilize industrial buildings and sites. From Houghton Road westward toward Tucson International Airport is the largest industrial real estate market in the region, including some of Tucson's largest employers such as Raytheon, IBM, Citi, Universal Avionic Systems, Bombardier and American Airlines among others. The assets of the Houghton Road Corridor for employers are:

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Given these assets, the long term outlook for the HRC from an employment perspective is very positive with unmatched competitive advantages within the Tucson region. As TREO implements its marketing strategies, the HRC should be able to capture more than its fair share of new job growth.