

# ACKNOWLEDGEMENTS

Task I-E-2  
Preliminary Market Analysis Final  
Houghton Road Corridor  
Tucson, Arizona

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## ***EXECUTIVE SUMMARY***

### **Preliminary Market Analysis Houghton Road Corridor Tucson, Arizona**

#### Introduction

Elliott D. Pollack & Company has been retained to provide an assessment of the Metro Tucson real estate market under an Urban Planning Permit for State Trust property known as the Houghton Road Corridor (HRC). The property is generally located in the southeast portion of the City of Tucson and is comprised of approximately 11,860 acres. The property is situated along Houghton Road and extends from Irvington Road on the north to south of Interstate 10 on the south.

The scope of work for this study encompasses several tasks, including a review of physical, social, and economic considerations. The primary focus of the report is to provide insight into regional trends within the residential, retail, office and industrial markets. The research concludes with recommendations for long-term planning considerations and land uses within the HRC.

#### Regional Demographics and Economic Outlook

Metropolitan Tucson was a well-established growth area for virtually the entire twentieth century. This trend continued into the twenty-first century. For some historical perspective, from 1960 to 2007, the Metropolitan Tucson population grew by 277.6% while the United States population grew by 67.0%. More recently, over the last decade, the Metropolitan Tucson population grew by 25.6% compared to 10.6% for the United States as a whole.

Metropolitan Tucson's population grew to over 1 million residents in 2007. Population growth in Pima County has been less rapid than in Maricopa County and Arizona as a whole. Within Pima County, the highest growth rates have occurred in Sahuarita and Marana, while Tucson, South Tucson and the county's unincorporated areas realized growth below the county average. As of 2007, according to DES, the County's population reached 1,003,235. During the same time period, employment grew to over 383,000 jobs for a current jobs-to-population ratio of 0.38. The jobs-to-population ratio for Metro Tucson peaked at 0.41 in 2000.

In terms of employment, Metropolitan Tucson grew by 157.6% from 1976 to February 2008 while the United States as a whole grew by approximately 71.9%. Local population growth has been fairly steady, averaging 2.3% annually since 1990. Local employment



growth, which tends to be more cyclical, can realize negative growth in times of recession but can also exceed 6.0% or more in times of expansion.

Over the last five years, the Tucson metropolitan area has accounted for 10.9% of the state's 1,029,474 additional residents and about 10.0% of the state's employment growth of 400,850 jobs. The entire state of Arizona has enjoyed consistent growth in population as well. The Arizona Department of Economic Security projects the 2008 Arizona population to be 6.62 million people, nearly twice the population of 20 years ago.

#### Commercial Markets Overview

The HRC contains some important competitive advantages related to economic and physical assets. These assets will help to accelerate commercial development in a number of ways:

- There are established residential communities within the HRC and the beginning of a retail market. The northern portion of the HRC adjoins the urbanized portion of the City of Tucson where a variety of retail services are available.
- The southern portion of the HRC contains over three miles of interstate freeway and railroad frontage, an important asset for employment growth.
- The southern portion of the HRC also has significant employment generators already in place. Most importantly, this includes the University of Arizona Science and Technology Park that has two million square feet of building space, 7,000 employees and 27 companies including four Fortune 500 companies: 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.
- The southeastern portion of the City of Tucson has the largest employment base in Pima County. Many of the companies located here are in the aerospace and defense industries that pay the highest wages in the region.

Master planning the HRC under the UPP will maximize the value of the land to the State Trust by ensuring that commercial land uses are in proportion to the demand created by the resident population. A more fragmented approach to land planning may not result in the same level of land values.

The southeastern portion of the City of Tucson has, for many decades, been overlooked for urban development. The primary reason for this is the extensive land holdings of the State Trust. Much of the private land available for residential uses has been developed into scattered residential subdivisions. With the economic assets of the area, the HRC is expected to capture a significant market share of commercial uses.



The above summary of HRC assets refers, in general, to the entire commercial real estate market. However, with respect to the retail sector, the area surrounding the HRC is not a land-constrained market. There are numerous privately-owned parcels along Interstate 10 that can accommodate regional or power center retail uses. In fact, approximately 3.75 million square feet of retail space is planned in Southeast Tucson in four centers along I-10. Major anchor tenants for two of those centers have been announced. It is important for the State Land Department to be proactive in bringing land to the market for retail purposes before anchor tenants have staked out their territories at other retail sites. The lead time for conceptualizing, leasing and marketing planned retail centers is extensive. Over the next year or two, there will likely be a lull in forward leasing activity as the residential market slows and retail projects are postponed. Now is the time for the State Trust to join the competition for regional and power center anchor tenants in the HRC.

The commercial real estate opportunities are outlined on the following table. The acreage demand forecast is based on existing and future populations within and around the HRC. In total, more than 1,600 net acres will be demanded for retail, office and industrial uses through 2030. Most of the acreage falls in the retail category (705 acres) followed by industrial at 682 acres. Lastly, the demand for office space in the HRC could exceed 200 acres. The acreages cited below are general estimates that could vary depending upon actual FARs achieved on individual sites.

Summary of Commercial Demand Houghton Road Corridor		
Type	Net Acres*	Total Net Acres
Retail		
Non-Regional Shopping Center & Street-Side Commercial	435	
Regional Retail	145	
Auto Mall	125	
Total Retail		705
Office		227
Industrial		682
Total		1,614
* Net acres exclude street rights-of-way and other public facilities.		
Source: Elliott D. Pollack & Company; Metropolitan Tucson Land Use Study		



### HRC Retail Market Opportunities

The Houghton Road Corridor is essentially a blank slate in terms of retail development opportunities. Only two neighborhood retail centers exist in the area and a third small specialty center is currently under construction. These local-serving retail centers serve the existing population base estimated at a minimum of 20,000 persons in 2008 living within nearby subdivisions such as Rita Ranch and Civano. All other retailing needs of the local population are satisfied outside the study area.

Even within five miles of the intersection of Houghton and Valencia Roads, there are limited retail centers. The presence of Davis Monthan AFB explains part of the reason for the limited retail inventory. The only shopping centers that are in close proximity to the HRC are two older neighborhood properties on Golf Links Drive. The closest discount department store is a Target located at the northeast corner of 22nd Street and Harrison more than three miles north of the northern-most boundary of the HRC. From all indications, the HRC and the surrounding trade area is on the cusp of having the population mass to support big box retailers. As noted previously, approximately 3.75 million square feet of retail space is planned in Southeast Tucson in four centers along I-10 and a major home improvement store chain has committed to a site in the southern portion of the HRC planning area.

For this study, two market areas are assessed to determine the future demand for retail uses within the Houghton Road Corridor. Those market areas include:

- The Houghton Road Corridor bounded by Davis-Monthan AFB on the west, Irvington Road on the north, the Pantano Wash on the east and I-10 on the south. This market area includes State Trust land north of I-10 and the current residents living in the area. The retail demand estimate for this market area would include non-regional retail uses such as power, community and neighborhood centers.
- A ten mile radius surrounding the intersection of Houghton Road and I-10. In the future, this intersection will possess the potential for significant regional commercial uses. In fact, the trade area extends well beyond the typical ten-mile radius into Cochise County where retail services are limited.

### HRC Non-Regional Retail Opportunities

Based on analysis of the growth of the retail market in Metro Tucson, the following retail demand is expected to develop through 2030 for the HRC at the conclusion of final zoning of the property. The demand estimates are intended to show potential long term, build-out demand. It should be noted, however, that demand for additional retail uses is occurring today within the HRC. Demand will accelerate further as the master planning effort continues and retailers can anticipate the introduction of new residents into the HRC.



Based on the population growth potential within the HRC (including residents living there today), a total of 435 acres of non-regional retail development can be justified within the HRC. The tables below show the net acreage demand based on a 0.25 FAR excluding street rights-of-way and other public facilities. This acreage could increase if actual FARs are lower than 0.25.

Forecasted Non-Regional Retail Demand Houghton Road Corridor			
2030 Population:	112,602		
	Street-Side Commercial	Shopping Centers	Total Retail
Demand (SF)	1,429,886	3,498,775	4,928,661
Existing Inventory (SF)	-	(195,979)	(195,979)
Future Demand (SF)	1,429,886	3,302,796	4,732,682
Acreage Demand	131	303	435
Note: Table shows net acreage demand based on 0.25 FAR. If actual FAR is lower than 0.25, acreage may increase.			
Source: Elliott D. Pollack & Company; Metropolitan Tucson Land Use Study			

Within the Houghton Road Corridor, retail opportunities are extensive due to the lack of competition at the current time. The following table outlines the pool of anchor tenants that may be interested in entering the Houghton Road Corridor. Interest in the HRC market area by retail chains will vary over time. Some retailers will be interested in the early stages of growth of the HRC by staking out their territory early and attempting to curtail competition. Other retailers will show interest when the market area is more mature and the risk of failure is reduced. Timing is also an important element. If a retail chain has an existing outlet nearby, it may wait to enter the HRC until the population is large enough that it will not cannibalize sales at the nearby store.

Retailers identified on the following table include major and sub-major anchors typically found in power or community centers, the number that would be expected to locate in the HRC and the potential square footage of floor area. Neighborhood retail anchors, typically grocery stores, are also identified. The table does not include small shop tenants, out parcels or pad tenants and users.

The table thereafter identifies the expected configuration of the retail centers by type. The retail opportunities have been designed to meet the potential retail demand of 3.5 million square feet of shopping center space in the HRC.



Retailer Opportunities Houghton Road Corridor			
Major Anchors	Typical Retailers	No. of Anchors	Total SF Potential
Discount Department Stores	Wal-Mart, Target	2	350,000
Warehouse Stores	Sam's Club, Costco	1	120,000
Home Improvement	Home Depot, Lowe's	2	240,000
Theaters	Harkins, Century	1	60,000
<b>Total</b>		<b>6</b>	<b>770,000</b>
Sub-Major Anchors			
Discount Apparel	Marshall's, Ross, Stein Mart, Kohl's, Mervyn's	5	400,000
Arts, Crafts, Hobbies	JoAnn, Michael's	2	50,000
Books and Music	Barnes and Noble, Borders	2	50,000
Electronics	Best Buy, Circuit City	2	60,000
Fitness Centers	Bally's, LA Fitness	2	60,000
Imported Goods	Cost Plus, Pier One	2	40,000
Linens and Bath	Bed, Bath & Beyond, Linens 'N Things	2	50,000
Office Supplies	Office Depot, Office Max	2	50,000
Pet Supplies	Petco, PetSmart	2	50,000
Sporting Goods	Sport's Authority, Big 5	2	50,000
Toys/Kids/Babies	Toys R Us, Babies R Us, Kids R Us	3	100,000
<b>Total</b>		<b>26</b>	<b>960,000</b>
Local-Serving Retail Anchors			
Grocery Anchors	Fry's, Safeway, Basha's, Wal-Mart Neighborhood	6	360,000
Specialty Grocery Anchors	AJ's Fine Foods, Whole Foods, Trader Joe's	2	60,000
<b>Total</b>		<b>8</b>	<b>420,000</b>
<b>Total Potential Anchor Tenants</b>			<b>2,150,000</b>

Source: Elliott D. Pollack & Co.

Suggested Retail Center Configuration Houghton Road Corridor	
Community/Power Centers	SF
Anchor and Sub-Anchor Tenants	1,730,000
In-Line Shops, Freestanding Pads	519,000
<b>Sub-Total</b>	<b>2,249,000</b>
Local Serving Retail Centers	
Grocery Anchors	420,000
In-Line Shops, Freestanding Pads	540,000
<b>Sub-Total</b>	<b>960,000</b>
Unanchored Specialty Centers	291,000
<b>Total Retail SF</b>	<b>3,500,000</b>

Source: Elliott D. Pollack & Co.



The location of the retail centers in the HRC is not certain at this time and could change depending upon the decisions of retail anchors to locate in centers close to but outside the HRC. Obvious locations for non-regional retail centers include the intersection of Houghton Road with Valencia Road and Mary Ann Cleveland Way. Neighborhood centers will also likely be dispersed throughout residential neighborhoods to be in close proximity to consumers. Trade areas are always in constant flux and change overtime as the population mass of an area grows. Typically, trade areas shrink as population grows and retail demand increases.

Retail development of the HRC will allow implementation of the latest designs and site plans to maximize the consumer's visits to the centers. Unique and forward thinking designs would likely expand the trade area as consumers search for more entertaining alternatives.

Regional Retail Opportunities

According to PAG projections, by 2030 the population within ten miles of the intersection of Houghton Road and I-10 should reach over 400,000 persons. Depending upon the pace of growth, this market area could reach 240,000 persons by 2020.

Population Projections Ten Mile Radius Surrounding Houghton Road and I-10 Intersection			
	Population	Households	Persons per Household
2000	83,202	28,346	2.94
2005	108,427	37,269	2.91
2010	141,300	49,001	2.88
2015	184,140	64,426	2.86
2020	239,968	84,707	2.83
2025	312,722	111,371	2.81
2030	407,533	146,430	2.78

Source: PAG

A ten mile radius from Houghton and I-10 extends to 22nd Street on the north, Alvernon Way to the northwest and the Nogales Highway on the west. The area encompasses the Davis-Monthan AFB and part of the Tucson International Airport, including the extensive industrial uses nearby. These uses tend to reduce the potential population base of the market area, but the daytime population of employees is also a benefit for retailers and restaurants.

While this trade area is geographically quite large, other parts of southeastern Arizona will also contribute to the demand for regional retail. Essentially, the trade area for a regional retail center extends to the south along I-19 and southeast along Interstate 10 into Graham, Greenlee, Cochise and Santa Cruz counties where retail services are limited. The closest regional center to the east of Tucson is in Las Cruces, New Mexico



some 130 miles east of the Arizona state line. These four counties add more than 200,000 persons to the trade area that will support a regional center in the HRC.

Metro Tucson's current ratio of regional malls is one for every 250,000 persons. Therefore, on its face, the Houghton Road and I-10 intersection would achieve that population level by 2020. However, no new malls have been built in the Tucson area since 1982 when the population stood at 548,100 persons. Based on the growth of Pima County since that time to more than one million persons, additional regional centers are likely warranted today.

In reality, there are only two regional malls of any significance in Tucson: Park Place and Tucson Mall. Park Place at Broadway and Wilmot Roads currently serves the HRC, The only full-service department stores in this part of the region, Dillard's and Macy's, anchor the center. The currently-operating malls in Tucson are of conventional enclosed design. Over the next decade, these malls may begin to suffer some distress with the introduction of large power centers on the periphery of Metro Tucson. In fact, at least two large centers are under consideration in the southeast part of Tucson. Two additional super-regional centers are proposed for the northwest part of Metro Tucson in Marana. The current regional malls will likely need to be repositioned in the marketplace or even demolished for more modern designs over the next 10 to 15 years. This opens the opportunity even more for a regional center in southeast Tucson.

It is speculative to suggest the design and character of a regional center at this location. However, given the decline in the number of available full-service department store chains looking to locate in regional centers, a hybrid model comprised of full-service department stores and discount retailers would not be out of the question. Likewise, a strong entertainment element along with a unique design and shopping experience would assist in capturing market share from any traditional regional malls in the area.

The Houghton Road and I-10 intersection is an ideal location for a future regional center in Metro Tucson and likely the best in southeastern Tucson due to the following reasons.

- In addition to a large Metro Tucson population within ten miles of the site, it would be positioned to attract shoppers from southern and southeastern Arizona as well as Mexico.
- Houghton Road is the longest continuous arterial roadway extending throughout eastern and southeastern Pima County. It extends from the Foothills area on the north to south of Corona de Tucson, linking to Sahuarita Road and the City of Sahuarita. It has been identified in several transportation studies as a priority corridor for traffic movement over the long term.
- The Houghton Road and I-10 interchange is one of the very few in southern Tucson that is not constrained by government restrictions or future or current roadway improvements. The Rita, Kolb and Valencia road interchanges with I-10 are all constrained by either city ordinances or interchange design.



A super-regional center would require 145 acres to accommodate 1.25 million square feet at a 0.20 FAR. In addition, a modern auto mall of 125 acres would be another retail element that would create a significant commercial presence in the HRC.

Office Market Opportunities

Similar to the retail market within the Houghton Road Corridor, the office market is basically a blank slate with much opportunity for future growth as the area develops. The office market is typically the last sector of the real estate market to enter a growing suburban area. In the initial stages of the growth of a community, the office market is typically oriented toward services demanded by the nearby population. These uses may include real estate agents, title companies, insurance agencies, attorneys, doctors, dentists, urgent care facilities and chiropractors. As the population grows, the office market may expand to accommodate corporate or small company tenants that desire to operate their businesses in the area.

Future demand for office uses in the HRC will come from companies that wish to locate in the area and businesses that provide services to the nearby population. Based on analysis of the growth of other similar areas of Metro Tucson, the following office demand projection has been developed.

Projected Demand for Office Space Houghton Road Corridor			
	Population Forecast	Cumulative Office Demand (SF)	Cumulative Office Demand (Acres)
2000	10,754	64,500	6
2005	15,906	95,400	9
2010	23,527	141,200	13
2015	34,798	208,800	19
2020	51,470	669,100	61
2025	76,129	1,674,800	154
2030	112,602	2,477,200	227

Source: PAG, MTLUS, Elliott D. Pollack & Co.

The forecast for the HRC is modest through 2020 after which demand would accelerate as the area matures and the population base becomes more sustainable for employment growth. The introduction of a hospital complex in the northern portion of the Corridor could stimulate demand earlier in the growth cycle.

It is anticipated that the office market would be dispersed throughout the HRC. Office development typically follows well behind retail development and grows slowly over time. In the early stages of growth of the HRC, office uses would likely occupy space in neighborhood centers, street-side commercial areas or small office buildings. As the HRC grows in population, the office market would transition to more conventional and



larger office buildings. If regional retail uses are developed near the I-10 corridor, office buildings would likely follow due to the amenities presented by a regional center. Office building heights may be limited in this area by the Davis-Monthan overflight zones and FARs may be in the range of 0.20. In other locations north of the Union Pacific RR, FARs would likely exceed 0.30. The proposed construction of a hospital at the northern end of the HRC could stimulate extensive medical office demand north of Valencia Road. The mix of office space at build-out would total nearly 2.5 million square feet on 227 acres.

### Industrial Market Opportunities

The opportunities for industrial uses within the Houghton Road Corridor are extensive. The area contains the assets that are vital to businesses and companies who utilize industrial buildings and sites. In addition, airport zoning for Davis-Monthan AFB places restrictions on land uses along the I-10 corridor. These restrictions make the area suitable for industrial uses.

The assets of the Houghton Road Corridor for industrial uses 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 are recognized as the center of employment in the Tucson region.
- 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.
- 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.
- The construction of a 975,000 square foot fulfillment center by Target Corporation for its on-line business on Old Vail Road.
- Economic development marketing strategies for the 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.

For the purposes of this analysis, the market area for industrial uses within which the Houghton Road Corridor property will compete is defined as southeast Tucson (Districts

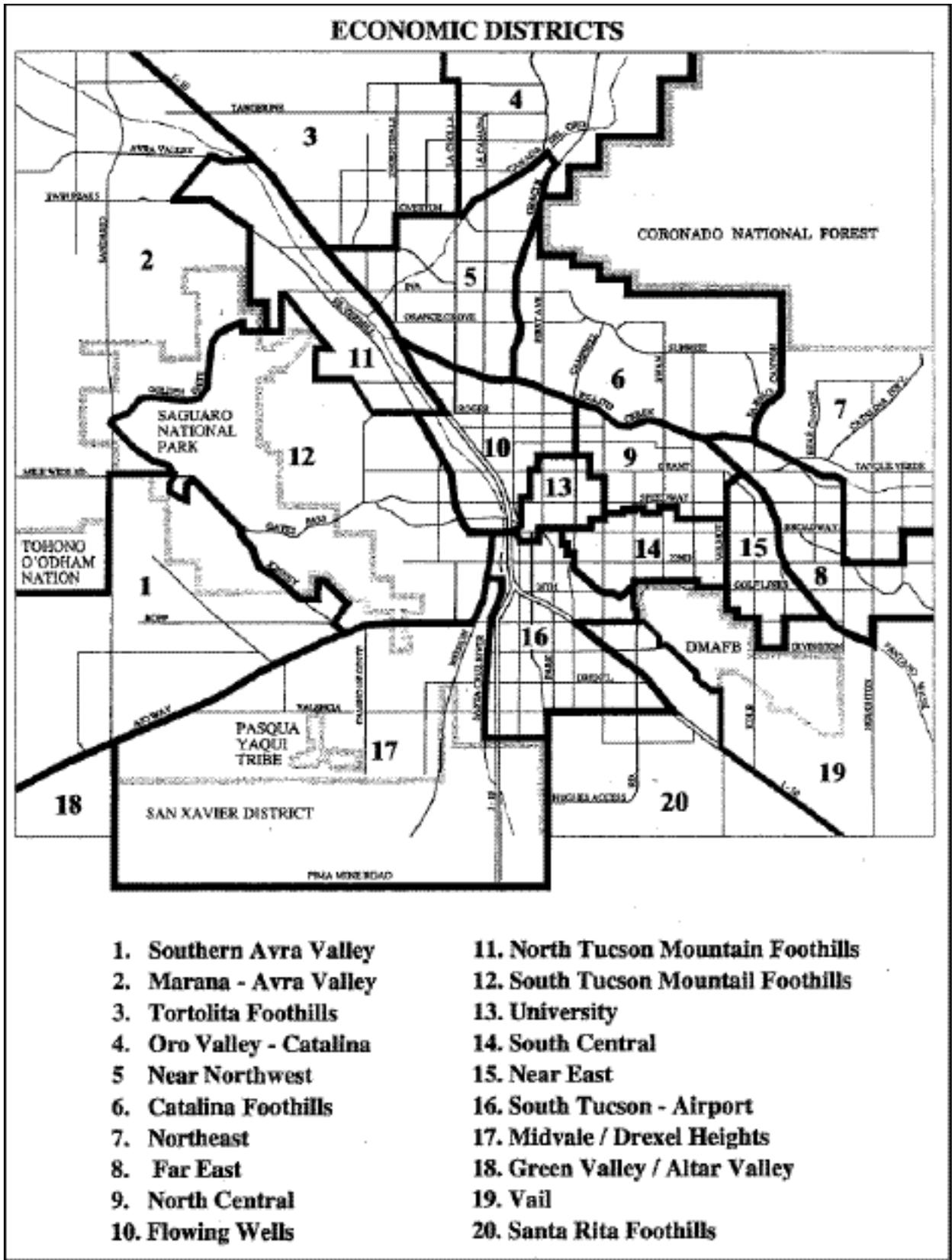


19 and 20 as defined in the Metro Tucson Land Use Survey). These two districts include the Tucson International Airport proper and the I-10 Corridor.

Districts 19 and 20, with approximately 14.7 million square feet of industrial space, comprise 36% of the industrial market in Tucson. With the availability of vacant land in the districts, it will be able to accommodate much of Metro Tucson's industrial demand.

A map showing the location of Districts 19 and 20 is provided on the following page. A long term forecast for industrial growth within Districts 19 and 20 is shown on the table after the map. The forecast provides high and low estimates of potential growth based on the forecasted growth of the Metro Tucson industrial market.





Long Term Industrial Forecast Districts 19 and 20 - Metro Tucson					
	Districts 19 & 20 Forecasts				
	Metro Tucson	Building SF		Land Demand (Acres)	
	New Supply (SF)	Low Forecast	High Forecast	Low Forecast	High Forecast
2008	(295,682)				
2009	228,290	82,185	102,731	6.3	7.9
2010	1,151,245	414,448	518,060	31.7	39.6
2011	1,681,220	605,239	756,549	46.3	57.9
2012	1,628,043	586,096	732,619	44.8	56.1
2013	1,158,827	417,178	521,472	31.9	39.9
2014	842,505	303,302	379,127	23.2	29.0
2015	863,565	310,884	388,604	23.8	29.7
2016	1,018,356	366,608	458,260	28.1	35.1
2017	1,099,648	395,873	494,842	30.3	37.9
2018	1,079,364	388,571	485,714	29.7	37.2
2019	1,027,359	369,849	462,312	28.3	35.4
2020	992,654	357,355	446,694	27.3	34.2
2021	992,336	357,241	446,551	27.3	34.2
2022	980,024	352,809	441,011	27.0	33.7
2023	998,173	359,342	449,178	27.5	34.4
2024	1,019,187	366,907	458,634	28.1	35.1
2025	1,025,555	369,200	461,500	28.3	35.3
2026	1,017,171	366,181	457,727	28.0	35.0
2027	1,010,166	363,660	454,575	27.8	34.8
Total	19,518,006	7,132,928	8,916,160	545.8	682.3
Annual Average	1,042,826	375,417	469,272	28.7	35.9

Source: Elliott D. Pollack & Company; Metropolitan Tucson Land Use Study, University of Arizona Forecasting Project

The above forecast suggests that between 546 and 682 acres could be absorbed in the market area over the next 20 years. Buildings such as that being built by Target could produce even higher absorption levels if Tucson becomes recognized as a distribution hub. That portion of the HRC property along the Union Pacific rail line and I-10, particularly within the Airport Overlay Zone imposed by the City of Tucson, are ideally suited to capture a large proportion of the Metro Tucson industrial growth.

Conclusion

Overall, the Houghton Road Corridor property represents one of the most important assets of the State Trust portfolio. The master planning of the nearly 12,000 acres is essentially the first of step to many disposition opportunities for the State Land Department in the Tucson area.

The successful development of the HRC property is directly tied to the health of the Metro Tucson economy. While the short-term outlook shows some difficulties ahead, the long-term regional outlook remains very favorable. Master planning the HRC under the UPP will maximize the value of the land to the State Trust by ensuring that commercial land uses are in proportion to the demand created by the resident population. A more



fragmented approach to land planning may not result in the same level of land values. The retail development that will follow behind the residential development will likely be extensive as the area is largely untouched from a retail perspective. Even more so, the property can accommodate a wide variety of employment uses in the southern area near I-10 and the Union Pacific Railroad.

With respect to the retail sector, it is important for the State Land Department to be proactive in bringing land to the market for retail purposes before anchor tenants have staked out their territories at privately-owned retail sites. There are numerous privately-owned parcels along Interstate 10 that can accommodate regional or power center retail uses and four large regional or power centers are already in the planning stages along the corridor. The long lead time for conceptualizing, leasing and marketing planned retail centers suggests that the State Land Department must act soon to identify a site or sites along I-10 before the retail market passes by the HRC.

