

**NOTICE OF POSTING  
OF  
LAND USE ASSUMPTIONS REPORT**

ARS §9-463.05, as amended, requires that cities adopt new development impact fees for Necessary Public Services on or before August 1, 2014.

Under the statute, a Necessary Public Services is defined as any facility that has a life expectancy of 3 or more years and that are owned and operated by or on behalf of the city. A city desiring to assess a development impact fee to offset the costs of providing a Necessary Public Service must adopt a Land Use Assumptions Report and Infrastructure Improvement Plan (separate posting) before adopting the Development Fee Report establishing any new development impact fee.

In the City of Scottsdale, the only Necessary Public Services for which development impact fees are collected are for Water and Wastewater Services.

Posted with this **NOTICE** is the City of Scottsdale's proposed Land Use Assumptions Report

The Land Use Assumptions Report sets forth projections in land uses, densities, intensities and population for the City's Service Area over a period of at least 10 years, and pursuant to the City's General Plan.

The backup documents on which the Land Use Assumptions Report is based are available for review at the Administrative Offices of the Water Resources Department,  
9379 E. San Salvador Dr., Scottsdale, Arizona  
Contact: Gina Kirklin  
(480) 312-5685  
EnterpriseFinance@ScottsdaleAz.Gov

***The Public Hearing on the Land Use Assumptions Report and the  
Infrastructure Improvement Plan will be held at the  
City Council meeting  
Tuesday, October 22, 2013 at 5:00 p.m.  
3939 N. Drinkwater Blvd., Scottsdale, Arizona***



City of Scottsdale

## LAND USE ASSUMPTIONS

August 20, 2013

**Community and Economic Development Division**

**Water Resources Division**

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## LAND USE ASSUMPTIONS

August 20, 2013

### **Introduction**

Effective January 1, 2012, A.R.S. §9-463.05 required that before August 1, 2014, for the City to continue to collect its Water and Wastewater Development Impact Fees, it must comply with the requirements of this revised statute. One of those requirements is the preparation and adoption of a Land Use Assumption (LUA) report which shows:

“projections of changes in land uses, densities, intensities and population for a specified service area over a period of at least ten years and pursuant to the General Plan of the municipality.”

This Land Use Assumptions Report is prepared in compliance with that statutory requirement and covers the period 2013 through 2023. For long term planning purposes, this LUA report may cover periods out to 2030, but this LUA will be updated every five (5) years with the City's Infrastructure Improvements Plans. The LUA Report sets forth the City's current demographic estimates and its projections for future development for residential, commercial, and industrial development within the City's service area. The current demographic estimates (January, 2013) are used to (1) calculate current levels of service (LOS) being provided by the City for Water and Wastewater Services for *existing* development by the City's existing Water and Wastewater Infrastructure, and (2) calculate the levels of service necessary to provide Water and Wastewater Services to *future* development by either planned new Capital Projects or the use of excess capacity currently existing in the Capital Facilities in anticipation of future development. The development projections in this LUA report will also be used in the Infrastructure Improvements Plan and the Development Impact Fee Report to forecast the amount and cost of infrastructure required by future development, as will be documented in those two separate documents.

The City's General Plan was adopted on October 30, 2001, and has been subsequently updated annually by non-major and major General Plan amendments to the Land Use Map, current as of April, 2013.

### **Acknowledgments**

This LUA report is based on the professional services of several consultants who have provided their expertise to the City and whose services the City gratefully acknowledges.

The City of Scottsdale General Plan Economic Analysis: Development Forecast Update, prepared by Applied Economics in October 2011 (the "Applied Economics Forecast"). The original report was completed in August 2010 and was updated in October 2011 to reflect the population and housing data of the decennial Census, as well as population and employment forecasts based on updated regional projections developed by the University of Arizona. This report is a comprehensive analysis of the future growth of the community in three subareas: South, Central, and North.

The Water Reuse Master Plan Update was prepared by Water Works Engineers with Carollo Engineers and includes information obtained from the City. The forecast in the Water Reuse Master Plan Update was based on the Applied Economics Forecast and assumptions developed by Carollo.

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Elliott D. Pollack & Company (EDPCo) has been conducting research on land use and zoning activity in Scottsdale. Their research has included reviewing development forecast documents, land use plans, character plans, the City's adopted General Plan, individual zoning cases in redevelopment areas and similar activities. This effort culminated in a report that distributes expected growth into smaller sub-areas and updates the 2011 Applied Economics development forecast with the most up to date activity and expected future growth.

Finally, the City would recognize the services of CH2MHILL for their thorough analytical work in providing the data that has gone into this report.

### **Water Service Area**

The estimates and projections of existing and future residential, commercial, and industrial development in this LUA report are for the City of Scottsdale's Service Areas as defined by the statute, which is the area within the corporate limits of the City. However, the existing service areas for water and wastewater are not identical and there are some variations as the City has historically served small areas with water and wastewater services that are outside the City's boundaries.

The City of Scottsdale's historic water service area is about 185 square miles as shown in Figure 1-A. It encompasses the area within the City limits with two exceptions:

- EPCOR Water Arizona, Inc. serves about 1,420 customers in the area west of the Arizona Canal between Jackrabbit Road and Indian Bend Road, which is about one square mile.
- EPCOR also serves about 200 customers near the boundary of Town of Fountain Hills.

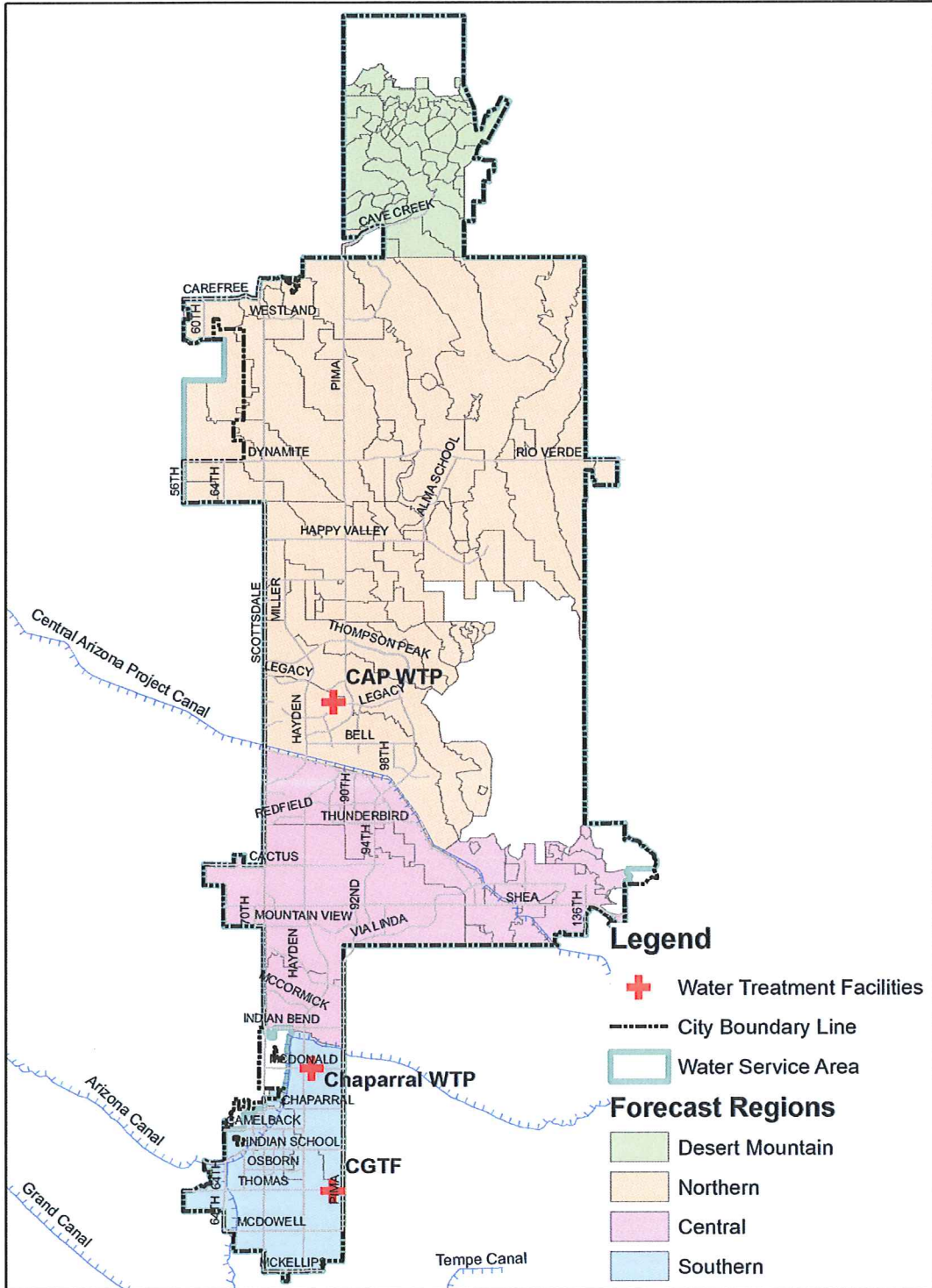
Due to its size, the water service area is sub-divided into regions and further sub-divided into pressure zones to regulate the water pressure for customers across the City's many elevation ranges. The water system is also flexible in that water supplies from the north may be conveyed to the south and vice versa.

The City also serves about 1,400 customers outside the City limits in Maricopa County north of Dynamite Boulevard generally between 56<sup>th</sup> Street and 68<sup>th</sup> Street. This area is built out.

In addition, the City has agreements with the Tonto Hills Domestic Water Improvement District and Carefree Water Company to treat and deliver their Central Arizona Project (CAP) allocations outside the City limits, however, these customers are subject to the rates, charges, and development impact fees of their respective utilities.

(See Figure 1-A on next page)

# Map of City Water Service Area



**Legend**

- + Water Treatment Facilities
- City Boundary Line
- Water Service Area

**Forecast Regions**

- Desert Mountain
- Northern
- Central
- Southern

Figure 1-A

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## **Wastewater Service Area**

The City of Scottsdale provides sewer service to an area which largely coincides with the City Boundary. In addition to wastewater flows that are generated within Scottsdale's City boundaries, the City has entered into agreements with neighboring communities to transport and/or treat relatively small portions of wastewater originating in those communities. Some Phoenix wastewater flows (up to 10 million gallons per day [mgd]) enter the Scottsdale collection system through metering stations designated as PV01 and PV02 and pass through the Scottsdale collection system to the Sub-Regional Operating Group (SROG) system per an existing contract exchange agreement. Some of these Phoenix flows can be pumped to the Water Campus for treatment. Paradise Valley flows of up to 1.3 mgd enter through 13-metered connections along the border with Scottsdale. Residual flows and overflows from the Black Mountain Sewer Company and a small area in the Town of Fountain Hills (13 parcels) enter Scottsdale interceptors. There is a small area within the City limits on the east side at around Cactus Road which has sewer flows that enter the Fountain Hills Sanitary District facilities. Some areas in the City currently use septic systems and therefore do not contribute wastewater flows. The historic Wastewater Service area is shown on Figure 1-B.

(See Figure 1-B on next page.)

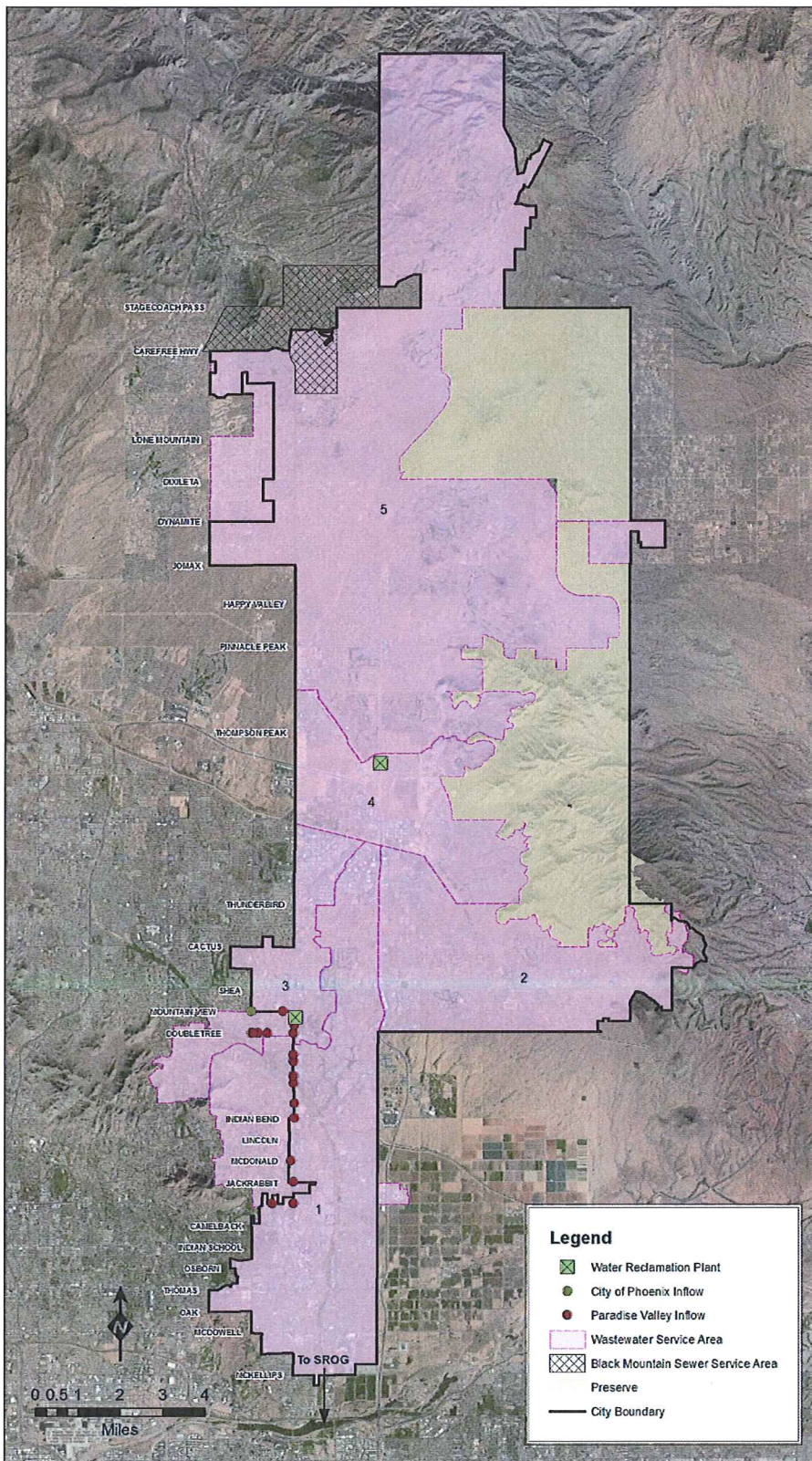


Figure 1-B

Map of City Wastewater Service Area



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## **Background Research**

Three studies have provided background and research for the analysis on which this LUA report has relied. The first was prepared by Applied Economics and is entitled City of Scottsdale General Plan Economic Analysis: Development Forecast Update, October 2011(Forecast Update). The second was prepared by Water Works Engineers working with Carollo Engineers and is entitled the 2012 Water Reuse Master Plan Update (Water Reuse Update). The third report was prepared by Elliott D. Pollack & Company as part of the Scottsdale Water Master Plan Update entitled Land Use and Economic Forecasts. As a final step in completing the analysis for the LUA report, the consultants conducted interviews with the City's Planning Staff.

### ***(1) City of Scottsdale General Plan Economic Analysis: Development Forecast Update***

This Forecast Update report was initially completed in August, 2010 and was updated in October, 2011 to reflect the population and housing data of the decennial Census, as well as population and employment forecasts based on updated regional projections developed by the University of Arizona. It is a comprehensive analysis of the future growth of Scottsdale by three sub-areas: South, Central, and North.

- The South sub-area includes Downtown and extends from McKellips Road to Indian Bend Road.
- The Central sub-area extends from Indian Bend Road to Deer Valley Road.
- The North sub-area is everything north of Deer Valley Road.

The forecast of growth is compiled from these three sub-areas. While the report is important for establishing a long-term forecast for the City, it does not correlate growth with specific, smaller zoning designations of the City within the three sub-areas.

The forecast of growth is built from metro-wide forecasts prepared by the University of Arizona's Forecasting Project and includes both a population and employment forecast which is translated into land use demands. The forecast for Scottsdale relies on an assumed capture of a certain percentage of forecasted Greater Phoenix growth over the next 20 years. Based on the citywide forecast, the Forecast Update indicates that the City could face residential land constraints that will limit residential growth in the long term, meaning the development of new residential properties and subdivisions located on vacant land will slow dramatically over time. However, redevelopment activity in various parts of the City will keep the population growing. Also, the Forecast Update suggests that the City will continue to grow fairly significantly from an employment perspective; there is enough vacant employment and mixed-use property to accommodate non-residential uses into the distant future.

A summary of the residential development forecast by sub-area is provided on the following table (Table 1) showing expected unit counts and the change in the number of units within the three (3) sub-areas through 2030. With the City's overall adoption of this Forecast Update, this report was initially used as the basis for more refined and detailed sub-area forecasts. The study is an important document that set the foundation for further analysis.

(See Table 1 on next page)

**Residential Development Forecast By Sub-Area**  
**Applied Economics**  
**City of Scottsdale General Plan Development Forecast Update**

SUB-AREA	UNITS					CHANGE IN UNITS BY 5-YEAR PERIODS				
	2010	2015	2020	2025	2030	2010-15	2015-2020	2020-25	2025-30	Total
<b>North Scottsdale</b>										
Rural Residential Inventory (Units)	9,900	10,391	11,117	11,796	12,183	491	726	679	387	2,283
Suburban Residential Inventory (Units)	8,124	8,260	8,511	8,673	8,774	136	251	162	101	650
Urban Residential Inventory (Units)	649	684	826	938	1,053	35	142	112	115	404
<b>Central Scottsdale</b>										
Rural Residential Inventory (Units)	7,636	7,769	7,967	8,155	8,284	133	198	188	129	648
Suburban Residential Inventory (Units)	31,888	32,160	32,724	33,158	33,511	272	564	434	353	1,623
Urban Residential Inventory (Units)	20,577	21,340	23,708	25,730	27,571	763	2,368	2,022	1,841	6,994
<b>South Scottsdale</b>										
Rural Residential Inventory (Units)	651	655	662	668	672	4	7	6	4	21
Suburban Residential Inventory (Units)	24,622	24,628	24,640	24,651	24,661	6	12	11	10	39
Urban Residential Inventory (Units)	20,112	20,390	21,223	21,919	22,546	278	833	696	627	2,434
<b>City Totals</b>										
Rural Residential Inventory (Units)	18,187	18,815	19,746	20,619	21,139	628	931	873	520	2,952
Suburban Residential Inventory (Units)	64,634	65,047	65,875	66,482	66,947	413	828	607	465	2,313
Urban Residential Inventory (Units)	41,338	42,413	45,757	48,587	51,171	1,075	3,344	2,830	2,584	9,833

Table 1

***(2) 2012 Water Reuse Master Plan Update***

The second report relied on information obtained from the 2012 Water Reuse Master Plan Update prepared by Water Works Engineers with Carollo Engineers. The forecast for the Water Reuse Update is based on the above mentioned Forecast Update together with the assumptions developed by Carollo. Specific assumptions included the rate and location of growth, population projections, and the type of development. The information was portrayed in a graphical information system (GIS) format and included the following.

- **Land Use and Zoning**

Two data layers were provided by the City of Scottsdale. First the GIS zoning layer identified the zoning classifications for developed land within the City. This information was used to identify the type of development that currently exists throughout the City. Secondly, so as to conform to the analysis provided in the Forecast Update, the Scottsdale 2001 General Plan with Amendments land use GIS data layer was utilized to identify the type of development that is anticipated at build out within the City's service area. This data layer contains only General Plan land use classifications.

- **Population Projections**

Population projections from the Forecast Update were used to estimate the magnitude and rate of growth within the City. The timing of development that is expected to occur using the Scottsdale 2001 General Plan future land use map, as updated, is set to correspond to the increase in population. Figure 2 shows the residential population of Scottsdale using the 2010 census and projections used by the City. This rate of population increase is then reflected in the wastewater flow projections.

### Projected Population Growth

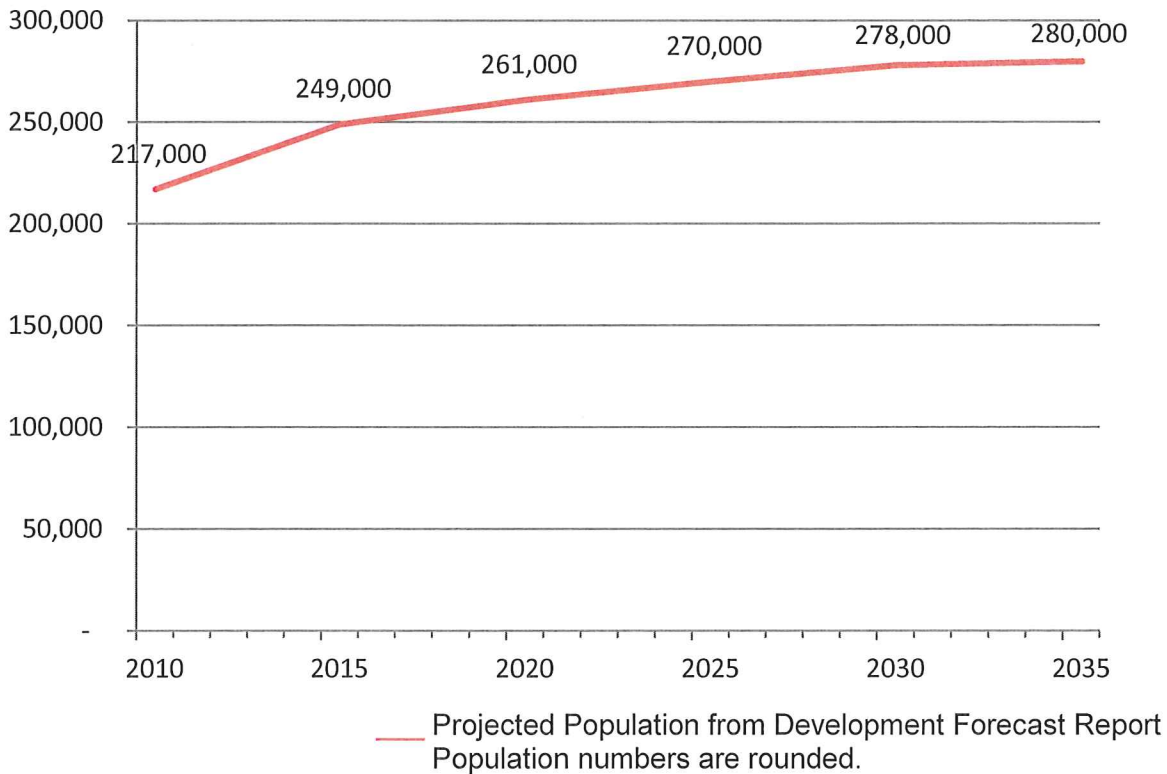


Figure 2

- **People per Household**

The recent downturn in the economy is affecting occupancy rates for both residential and some commercial properties. In addition to current economic conditions, Scottsdale also has a seasonal population that increases in the winter and decreases in the summer. Vacancies also occur as a result of properties that are in transition from one owner to another. Based on the 2010 Census, the current residential occupancy rate is 2.15 persons per household.

- **Growth Forecasts**

The Forecast Update describes the type and rate of growth that is anticipated in the City through year 2030. However, it is anticipated that not all properties will be developed by 2030, and year 2035 is the final planning year established for the Master Plan Update. The following Table 2, excerpted from Table 21 and Table 22 from the Forecast Update, summarizes the acreages that are expected to develop in each planning period based on the Forecast Update.

(See Table 2 on next page)

<b>Land Absorbed by Forecasted Development (Acres)</b>						
<b>Applied Economics Development Forecast Update</b>						
		<b>2010-2015</b>	<b>2015-2020</b>	<b>2020-2025</b>	<b>2025-2030</b>	<b>Total</b>
Rural Residential	South	5.10	6.85	6.26	4.01	<b>22.22</b>
	Central	145.77	218.23	207.83	142.12	<b>713.95</b>
	North	722.38	1,067.64	998.24	568.86	<b>3,357.12</b>
	Subtotal	<b>873.25</b>	<b>1,292.72</b>	<b>1,212.33</b>	<b>714.99</b>	<b>4,093.29</b>
Suburban Residential	South	1.01	2.34	2.03	1.89	<b>7.27</b>
	Central	61.61	127.09	97.09	78.56	<b>364.35</b>
	North	33.97	62.70	40.68	25.25	<b>162.60</b>
	Subtotal	<b>96.59</b>	<b>192.13</b>	<b>139.80</b>	<b>105.70</b>	<b>534.22</b>
Urban Residential	South	15.60	46.86	39.11	35.27	<b>136.84</b>
	Central	62.90	195.23	166.64	151.78	<b>576.55</b>
	North	4.95	20.30	16.04	16.44	<b>57.73</b>
	Subtotal	<b>83.45</b>	<b>262.39</b>	<b>221.79</b>	<b>203.49</b>	<b>771.12</b>
Retail	South	7.33	13.46	9.69	8.82	<b>39.30</b>
	Central	24.44	172.42	126.69	80.95	<b>404.50</b>
	North	22.83	18.40	65.16	37.65	<b>144.04</b>
	Subtotal	<b>54.60</b>	<b>204.28</b>	<b>201.54</b>	<b>127.42</b>	<b>587.84</b>
Resorts	South	6.56	21.51	10.79	6.96	<b>45.82</b>
	Central	25.29	85.24	44.54	30.64	<b>185.71</b>
	North	14.45	66.30	47.51	51.06	<b>179.32</b>
	Subtotal	<b>46.30</b>	<b>173.05</b>	<b>102.84</b>	<b>88.66</b>	<b>410.85</b>
Cultural/Inst/Pub	South	3.42	17.87	16.35	15.35	<b>52.99</b>
	Central	10.38	56.62	50.16	45.66	<b>162.82</b>
	North	13.22	20.20	18.45	14.71	<b>66.58</b>
	Subtotal	<b>27.02</b>	<b>94.69</b>	<b>84.96</b>	<b>75.72</b>	<b>282.39</b>
Warehouse	South	0.34	1.91	1.02	0.73	<b>4.00</b>
	Central	0.94	4.53	2.58	1.99	<b>10.04</b>
	North	-	-	-	-	<b>-</b>
	Subtotal	<b>1.28</b>	<b>6.44</b>	<b>3.60</b>	<b>2.72</b>	<b>14.04</b>
Manufacturing	South	1.25	0.57	0.19	0.08	<b>2.09</b>
	Central	8.35	40.51	15.38	7.68	<b>71.92</b>
	North	0.51	2.04	0.65	0.28	<b>3.48</b>
	Subtotal	<b>10.11</b>	<b>43.12</b>	<b>16.22</b>	<b>8.04</b>	<b>77.49</b>
Standard Office	South	5.76	32.20	29.15	22.65	<b>89.76</b>
	Central	21.71	97.61	81.00	55.96	<b>256.28</b>
	North	7.64	36.28	36.13	20.80	<b>100.85</b>
	Subtotal	<b>35.11</b>	<b>166.09</b>	<b>146.28</b>	<b>99.41</b>	<b>446.89</b>
Medical Office	South	3.21	3.46	2.54	2.60	<b>11.81</b>
	Central	26.04	28.84	22.08	19.38	<b>96.34</b>
	North	17.68	21.21	12.13	10.52	<b>61.54</b>
	Subtotal	<b>46.93</b>	<b>53.51</b>	<b>36.75</b>	<b>32.50</b>	<b>169.69</b>
<b>Total Development</b>	<b>South</b>	<b>49.58</b>	<b>147.03</b>	<b>117.13</b>	<b>98.36</b>	<b>412.10</b>
	<b>Central</b>	<b>387.63</b>	<b>1,026.03</b>	<b>813.99</b>	<b>614.72</b>	<b>2,842.46</b>
	<b>North</b>	<b>837.63</b>	<b>1,315.07</b>	<b>1,234.99</b>	<b>745.57</b>	<b>4,133.26</b>
	<b>TOTAL</b>	<b>1,274.64</b>	<b>2,488.42</b>	<b>2,166.11</b>	<b>1,458.65</b>	<b>7,387.82</b>

Table 2

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**Scottsdale Water Master Plan Update - Land Use and Economic Forecasts**

The GIS data layer provided by Carollo for the Water Reuse Update was parcel specific, with expected growth allocated according to the Forecast Update. The work performed by Elliott D. Pollack allocated expected growth into sub-regions or analysis areas throughout the City for more accurate water demand and infrastructure planning. In addition, Elliott D. Pollack & Company combined the parcel specific information provided by Carollo into these analysis areas that were no less than one square mile in size. Through this method, the broader Applied Economics forecast could be generally relied upon but in more refined areas of focus. The analysis areas are shown on the following two maps, Figures 3 and 4.

(See Figure 4 on next page)

North Half of City

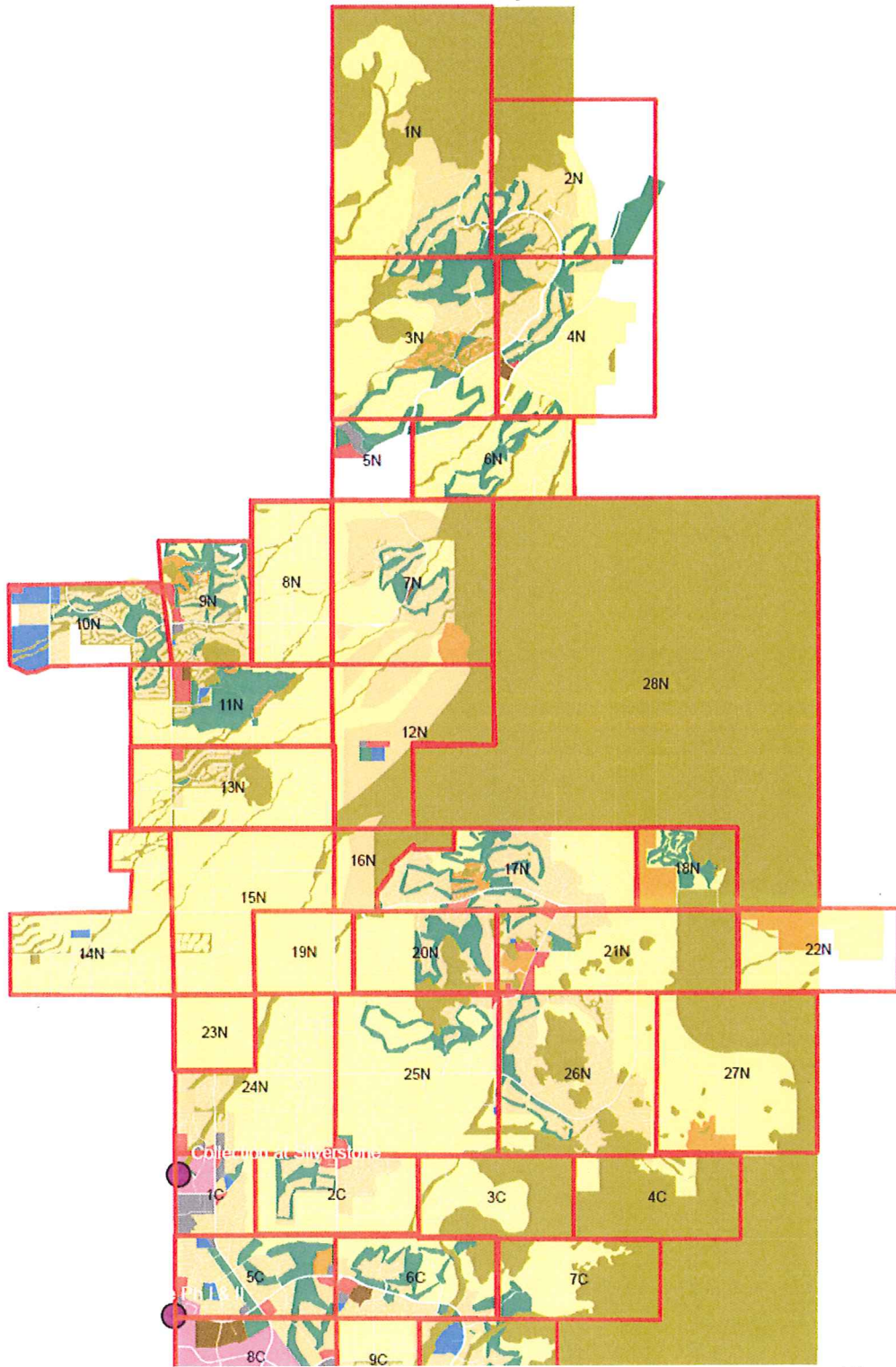


Figure 3

## South Half of City

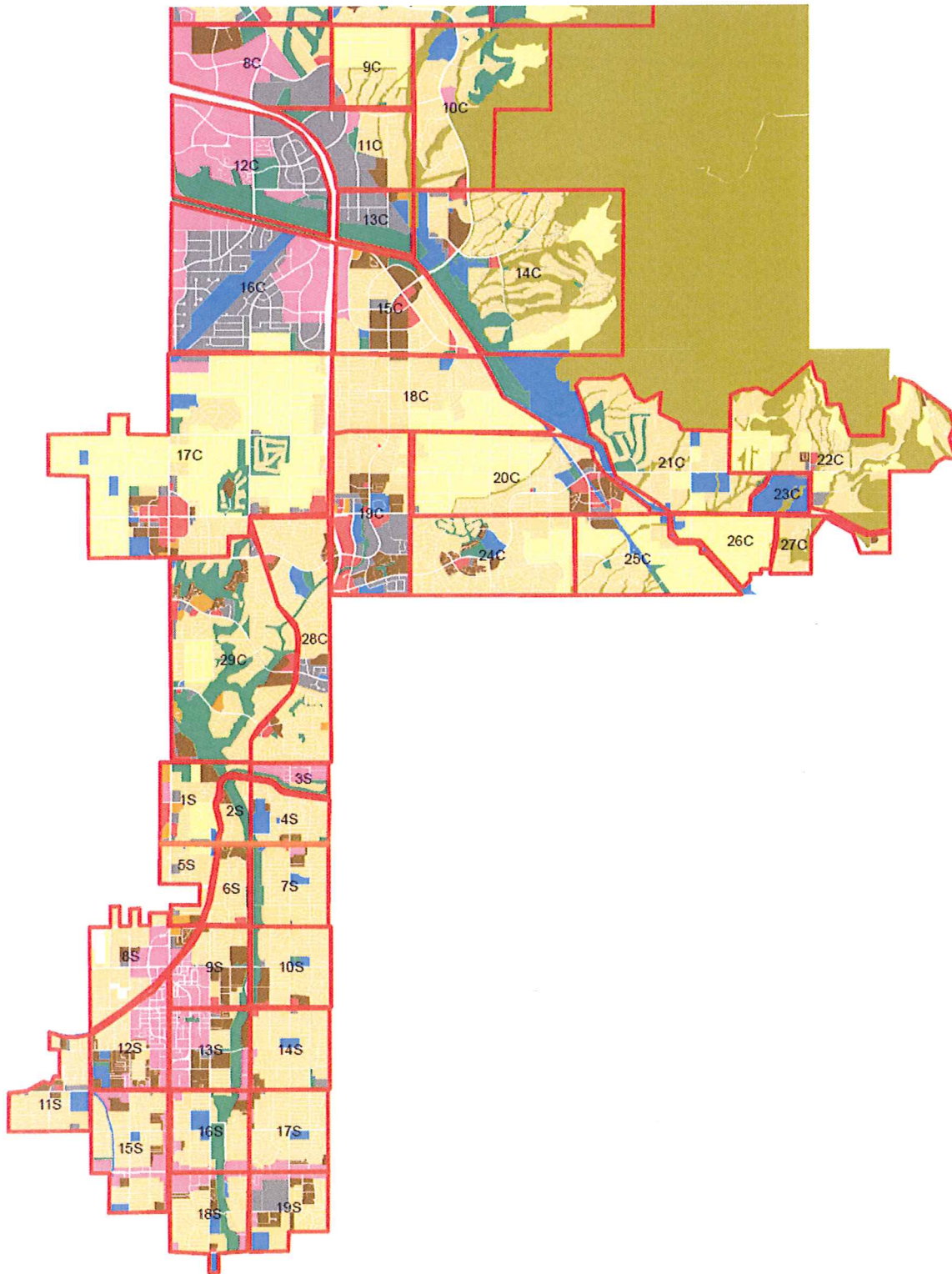


Figure 4

Based on the data collected from the Water Reuse Update, Elliott D. Pollack & Company translated the Forecast Update from the three large General Plan analysis sub-areas to smaller, more detailed analysis areas as outlined in red and shown in Figures 3 and 4. The results of these efforts are reflected in this LUA report and use this refined data.

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The final step in developing background and research for this report was interviews with the City's Planning Staff on current projects and opinions related to future growth parameters, particularly with respect to redevelopment opportunities. Based on those discussions, a map was prepared by Elliott D. Pollack & Company showing specific areas of the City that may experience significant growth and/or redevelopment in the future. These areas shown superimposed over the City's General Plan land use map were analyzed by the consultants and are shown as areas 1 through 7 (Figure 5) on page 15. Following is a summary of each area.

1. Area 1 is a triangular State Trust property located east of Pima Road and north of Lone Mountain Road. It surrounds the master planned community of Legend Trail and was previously considered suitable for conservation. It was not shown as a potential development area in the last Water Master Plan. Total land area is approximately 2,500 acres. Based on a major General Plan amendment case in 2002, the number of units planned for the area under the City of Scottsdale 2001 General Plan is approximately 6,273 units.
2. Area 2 consists of two square miles of State Trust land. Assumed density is one unit per acre or 1,280 units.
3. Area 3, the Greater Airpark, primarily contains General Plan designated employment and mixed-use land uses. Some of the major planned projects include Crossroads East (State Trust property), the DMB Stacked 40s project now known as One Scottsdale, and Epicenter.

Crossroads East is the former Core North and Core South projects located on the north and south of the Loop 101 between Scottsdale Road and Pima Road. It is about 1,000 acres in size and has historically been entitled to develop with three and four story office buildings, similar to those found in the Perimeter Center, once part of Core South. The maximum FAR<sup>1</sup> in this area ranges from 0.6 to 0.8, but the City's staff is seeing interest in higher FARs – up to 1.4 with proposals for seven and eight story buildings. If buildings of this height are constructed in the area, they would likely occur closer to Scottsdale Road.

The One Scottsdale project has likely been accounted for in water demand studies, but is planned for 1.8 million square feet of retail and office space, a 400-room hotel and 1,100 residential units. The project is likely going to undergo some revision based on economic conditions, perhaps with lower density than originally planned. A company called TDI is proposing a 780 unit, three-story apartment complex on the northern part of this project. City staff expects the project to be approved and built in the near future.

Epicenter is a smaller 28-acre project that may have hotels, office, and retail totaling 360,000 square feet. It is located at the northeast corner of Bell Road and the Loop 101.

4. Area 4 is focused on the Scottsdale Airpark's frontage along Scottsdale Road. Scottsdale Quarter is one example of the type of development that could occur along this part of the corridor. A high-density residential project was recently approved north of Scottsdale Quarter. Crackerjacks will at some point develop into a mixed-use project.
5. Area 5, located on Shea Boulevard east of the Loop 101 is directly impacted by Scottsdale Healthcare Shea Medical Center which will be undergoing expansion with a 10 to 12 story building. The large community retail center to the west of the hospital has zoning for higher intensity. It will likely be redeveloped into a mixed-use center in the future.

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<sup>1</sup> FAR is the common abbreviation for Floor Area Ratio. According to the Scottsdale Zoning Ordinance, FAR is the ratio of the gross floor area of a building to the net lot area of a site (excluding any adjacent street right-of-way). For example, a 20,000 square foot, two-story building located on a 50,000 square foot lot would have an FAR of 0.40.



- 
6. Area 6 is the Downtown. Within this area, the most intense redevelopment activity is expected to occur north of the Arizona Canal and at the Scottsdale Healthcare Osborn Campus. The core tourist area (5<sup>th</sup> Avenue shops for instance) is expected to maintain a lower density.
  7. Area 7 is South Scottsdale. Redevelopment activity is expected to occur along Scottsdale and McDowell Roads although smaller sites off the main roads could occur as well. SkySong is a major catalyst for the area. The project currently has about 300,000 square feet of office space with 325 residential units under construction. Plans are underway to construct two more office buildings totaling 290,000 square feet. In total, the project is planned for 1.2 million square feet with a potential FAR of 0.80.

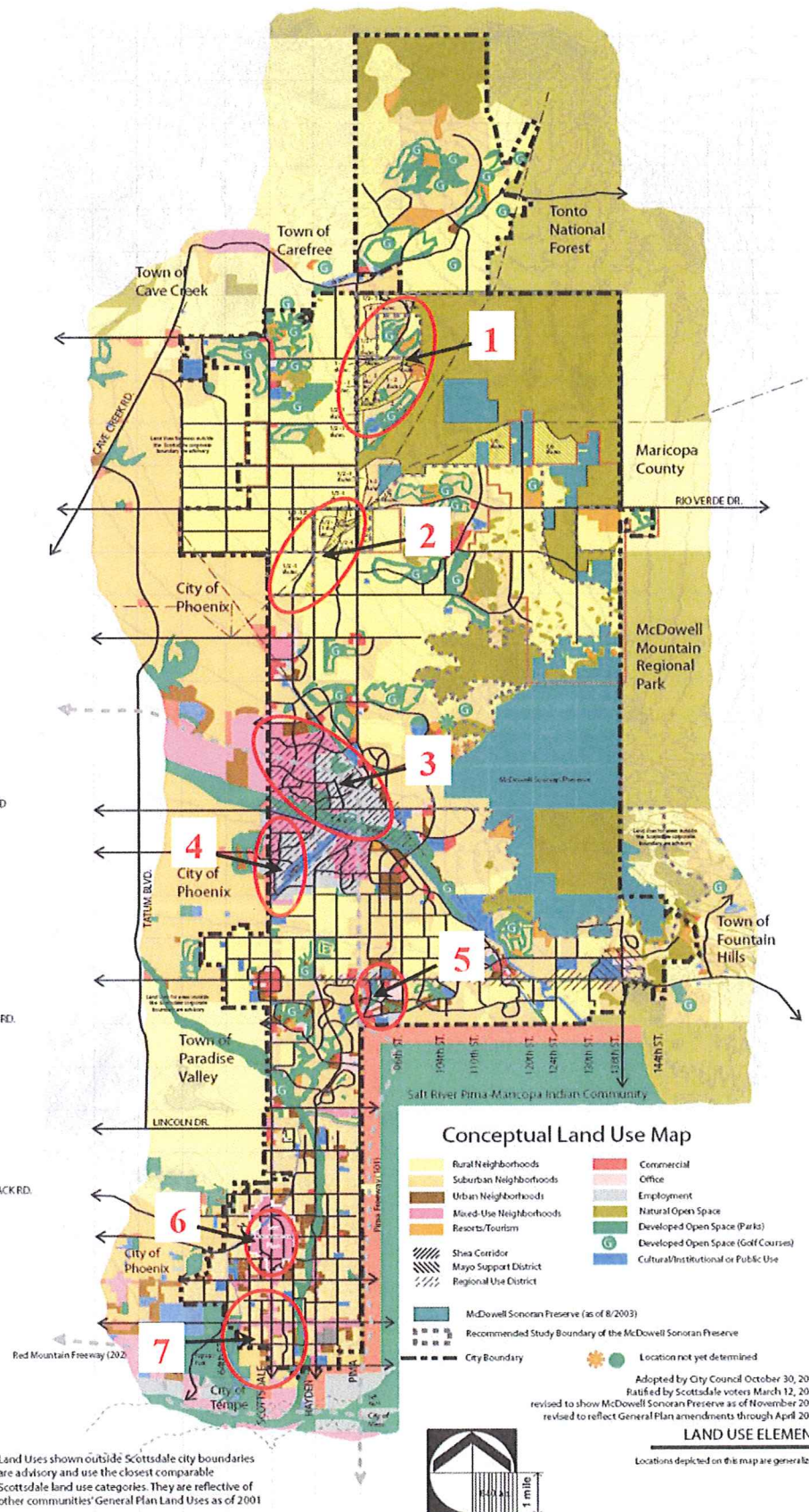
Adjacent to the east of SkySong is a 560-unit apartment complex that is approved and expected to break ground in the near future.

With the loss of a number of car dealerships along McDowell Road west of Scottsdale Road, redevelopment appears imminent. The first of the redevelopment projects is a recently approved multi-family residential project called Las Aguas. This is a 154-unit apartment complex located on the north side of McDowell Road just west of 68<sup>th</sup> Street. Overall density is 31 units per acre and the plan incorporates an existing parking structure into the complex.

The above summary provides an outline of the primary areas of the City that will develop or redevelop over the next 20 years. Vacant land is available to accommodate employment uses into the distant future, primarily in the Airpark area. Vacant residential land will become scarce over the next 20 years and much of the residential development activity will shift to redevelopment.

(See Figure 5 on next page)

JENNYLYNN  
 CIRCLE MOUNTAIN  
 HONDA BOW  
 ROCKAWAY HILLS  
 DESERT HILLS  
 JOY RANCH  
 STAGECOACH PASS  
 CAREFREE HWY.  
 DOVE VALLEY  
 LONE MOUNTAIN  
 DIXILETA  
 DYNAMITE  
 JOMAX  
 HAPPY VALLEY  
 PINNACLE PEAK  
 DEER VALLEY  
 BEARDSLEY  
 OUTER LOOP  
 UNION HILLS  
 BELL RD./FRANK LLOYD WRIGHT BLVD.  
 GREENWAY RD.  
 THUNDERBIRD RD.  
 CACTUS RD.  
 SHEA BLVD.  
 DOUBLE TREERANCH RD.  
 MCCORMICK PKWY.  
 INDIAN BEND RD.  
 McDONALD DR.  
 CHAPARRAL/CAMELBACK RD.  
 CAMELBACK RD.  
 INDIAN SCHOOL RD.  
 THOMAS  
 McDOWELL RD.  
 McKELLIP'S RD.



Land Uses shown outside Scottsdale city boundaries are advisory and use the closest comparable Scottsdale land use categories. They are reflective of other communities' General Plan Land Uses as of 2001

Anticipated Areas of Future Growth

Figure 5

### Elliott D. Pollack & Company Analysis

The Forecast Update was initially used by Elliott D. Pollack and Company as the basis for sub-area forecasts. This forecast includes a population and employment growth forecast which is translated into land use. Carollo Engineering also utilized the Forecast Update as a foundation for its work; which was analyzed and partially adopted as the GIS data layer files that helped match existing parcels to future expected land use.

The primary goal is to allocate expected growth into smaller sub-regions or analysis areas within the larger three forecast sub-areas for more accurate water demand and infrastructure planning. The framework of the Forecast Update is followed as closely as possible and the longer-term forecasts have generally been adopted. However, it became apparent that the short-term forecasts and ultimately, the aggregate 20-year totals for residential development needed to be modified. This is reflected in the recommended forecast that follows. Thus, the forecast does not identically match the Forecast Update nor does it perfectly correlate with the reported forecast by Carollo Engineering as utilized in the Water Reuse Update.

Real estate plans have accelerated in certain areas of Scottsdale that will far outpace the original forecast. The most drastic examples relate to residential development. Significantly more high density, multi-family projects are currently planned to be built in the next 5 years compared to what was originally anticipated by the Forecast Update over the next 20 years. This is especially true in South Scottsdale, but also for the Central Scottsdale region near the Scottsdale Airpark. For instance, the Forecast Update suggests that the inventory of urban residential units will increase by 2,434 units between 2010 and 2030. However, as shown on the following Table 3, the number of units in process or already approved in South Scottsdale is more than 3,600. While not all projects will be built in the immediate future, there is reasonable belief that they will be built at some point in the next 5 to 10 years. Based on this finding, the forecasted unit count for South Scottsdale was increased. Table 3 outlines the multi-family development information collected from City records.

<b>Multi-Family Development Pipeline City of Scottsdale</b>					
<b>Sub-Area</b>	<b>Name</b>	<b>Address</b>	<b>City</b>	<b>Status</b>	<b>Units</b>
<b>NORTH</b>					
	Collection at Silverstone	7215 E Silverstone Dr	Scottsdale	Zoning Approval Received	262
<b>CENTRAL</b>					
	Archstone DC Ranch	18245 N Pima Rd	Scottsdale	Development/Design Review Approval Pending	220
	Crackerjack Site	16001 N Scottsdale Rd	Scottsdale	Zoning Approval Received	720
	Jefferson on One Ph I & II	20001 N Scottsdale Rd	Scottsdale	Zoning Approval Received	677
	LIV N Scottsdale	15509 N Scottsdale Rd	Scottsdale	Zoning Approval Received	240
	94th and Bell	NWC: 94th St and Bell Rd	Scottsdale	Zoning Approval Received	412
	Scottsdale Quarter III	SEC: Scottsdale Rd & Greenway	Scottsdale	Rezoning Requested	350
<b>Sub-total</b>					<b>2,619</b>
<b>SOUTH</b>					
	Alla Scottsdale	8418 E Indian School	Scottsdale	Rezoning Requested	261
	Bauhaus Flats and Studios	3009 N Scottsdale Rd	Scottsdale	Zoning Approval Received	282
	Blue Sky I & II	4605 N Scottsdale Rd	Scottsdale	Zoning Approval Received	749
	Bristol Stadium Lofts	3510 N Miller Road	Scottsdale	Zoning Approval Received	224
	Broadstone at Lincoln	6510 N Scottsdale Rd	Scottsdale	Under Construction	264
	Broadstone Waterfront	7025 E Via Soleri Dr	Scottsdale	Zoning Approval Received	259
	Las Aguas	6640 E McDowell Rd	Scottsdale	Rezoning Requested	154
	Optima Sonoran Village	6801 E Camelback Rd	Scottsdale	Zoning Approval Received	210
	Portales Place	4900 N Portales Place	Scottsdale	Zoning Approval Received	369
	74th and McDowell	E of 74th St and S of McDowell Rd	Scottsdale	Zoning Approval Received	560
	SkySong	1301 N Scottsdale Rd	Scottsdale	Under Construction	325
<b>Sub-total</b>					<b>3,657</b>
<b>Total All Sub-Areas</b>					<b>6,538</b>
Sources: City of Scottsdale, Elliott D. Pollack & Co.					

Table 3

The 2002 major General Plan amendment approving residential development on State Trust land in the North sub-area (east of Pima and north of Dynamite Road) was also more accurately documented and prompted an increase in the forecast for that area by approximately 6,300 units.

**Forecast Recommendation**

The following Table 4 compares the cumulative results of the Forecast Update for residential uses to Elliott D. Pollack & Company’s forecast by major sub-area. In total, the residential unit count has increased by 10,106 units above the Forecast Update over the next 30 years. The majority of that increase is in the North sub-area on the State Trust property (6,330 units) with the remainder primarily in the South sub-area (3,956 units).

Forecast Comparison - Cumulative Change in Residential Units by Type Applied Economics vs. Elliott D. Pollack & Co.													
	Rural Neighborhoods (units)				Suburban Neighborhoods (units)				Urban Neighborhoods (units)				20-Year Totals
	2015	2020	2025	2030	2015	2020	2025	2030	2015	2020	2025	2030	
<b>NORTH</b>													
Applied Economics	491	1,217	1,896	2,283	136	387	549	650	35	177	289	404	3,337
Elliott D. Pollack & Co.	516	1,414	2,263	2,783	201	1,570	4,056	6,480	35	177	289	404	9,667
<b>Cumulative Difference</b>	<b>25</b>	<b>197</b>	<b>367</b>	<b>500</b>	<b>65</b>	<b>1,183</b>	<b>3,507</b>	<b>5,830</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,330</b>
<b>CENTRAL</b>													
Applied Economics	133	331	519	648	272	836	1,270	1,623	763	3,131	5,153	7,174	9,445
Elliott D. Pollack & Co.	133	331	519	648	272	836	1,270	1,623	1,777	4,222	5,663	6,994	9,265
<b>Cumulative Difference</b>	<b>0</b>	<b>(0)</b>	<b>(0)</b>	<b>-</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,014</b>	<b>1,091</b>	<b>510</b>	<b>(180)</b>	<b>(180)</b>
<b>SOUTH</b>													
Applied Economics	4	11	17	21	6	18	29	39	278	1,111	1,807	2,434	2,494
Elliott D. Pollack & Co.	4	11	17	21	6	18	29	39	2,883	4,151	5,302	6,390	6,450
<b>Cumulative Difference</b>	<b>-</b>	<b>(0)</b>	<b>(0)</b>	<b>(0)</b>	<b>-</b>	<b>-</b>	<b>0</b>	<b>0</b>	<b>2,605</b>	<b>3,040</b>	<b>3,495</b>	<b>3,956</b>	<b>3,956</b>
<b>Cumulative City-Wide Difference</b>	<b>25</b>	<b>197</b>	<b>367</b>	<b>500</b>	<b>65</b>	<b>1,183</b>	<b>3,507</b>	<b>5,830</b>	<b>3,619</b>	<b>4,131</b>	<b>4,005</b>	<b>3,776</b>	<b>10,106</b>

Table 4

The following Table 5 compares the results of the Forecast Update for commercial uses to Elliott D. Pollack & Company’s forecast by major sub-area. In total, the Forecast Update appears reasonable over the next 30 years. However, based on current market conditions and commercial development activity between 2010 and 2015, the timing of development has been modified. These adjustments were made after analysis of current plan submittals and development pipeline activity over the next few years.

(See Table 5 on next page)

**Forecast Comparison - Cumulative Change in Non-Residential Uses by Type  
Applied Economics vs. Elliott D. Pollack & Co.**

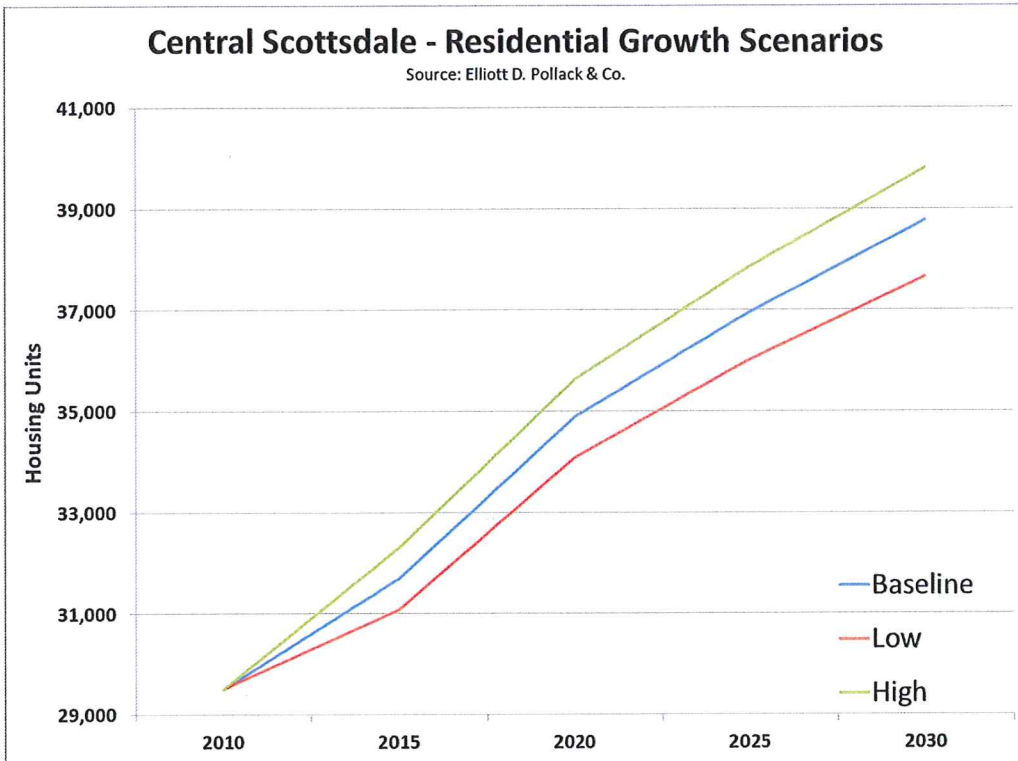
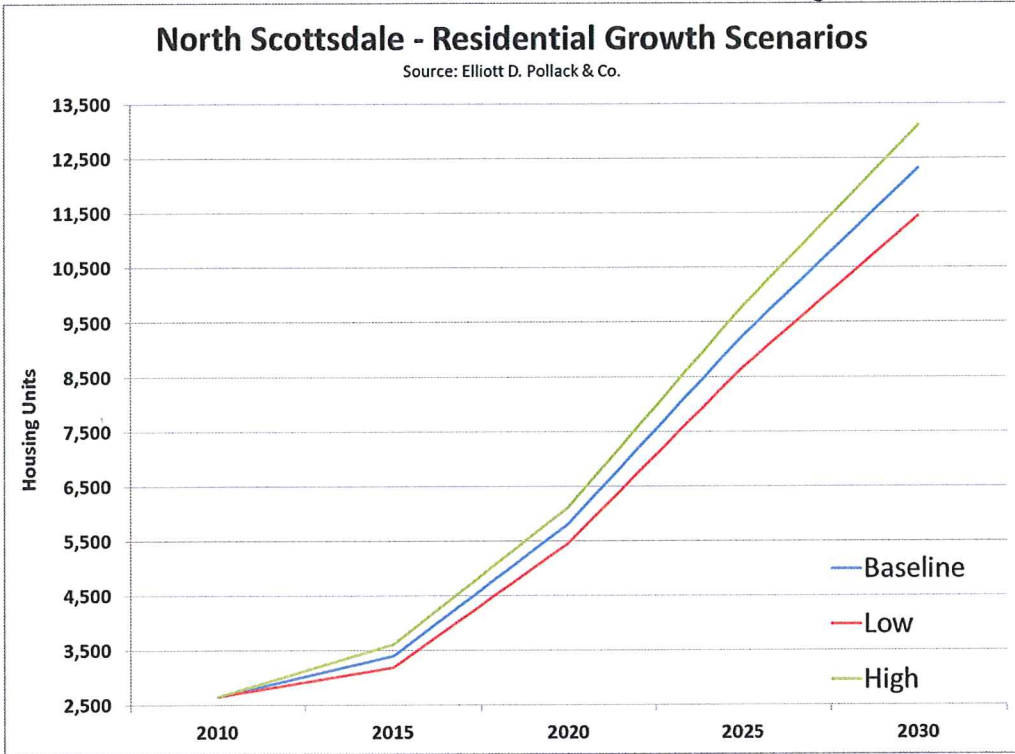
Sub-Area	Commercial (Square Feet)				Employment (Square Feet)			
	2015	2020	2025	2030	2015	2020	2025	2030
<b>NORTH</b>								
Applied Economics	129,294	241,497	667,277	913,282	144,167	533,375	938,778	1,229,849
Elliott D. Pollack & Co.	-	241,808	667,391	913,282	-	533,375	938,778	1,229,849
<b>Cumulative Difference</b>	<b>(129,294)</b>	<b>311</b>	<b>114</b>	<b>0</b>	<b>(144,167)</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>CENTRAL</b>								
Applied Economics	199,749	1,711,747	2,836,408	3,563,862	635,512	2,847,846	4,505,072	5,657,968
Elliott D. Pollack & Co.	213,631	1,655,120	2,789,498	3,563,862	457,816	2,378,960	4,027,304	5,657,968
<b>Cumulative Difference</b>	<b>13,882</b>	<b>(56,627)</b>	<b>(46,910)</b>	<b>0</b>	<b>(177,696)</b>	<b>(468,886)</b>	<b>(477,768)</b>	<b>0</b>
<b>SOUTH</b>								
Applied Economics	79,954	243,636	356,327	461,063	188,185	994,045	1,706,979	2,268,119
Elliott D. Pollack & Co.	22,000	241,174	355,096	461,063	208,700	954,885	1,696,184	2,268,119
<b>Cumulative Difference</b>	<b>(57,954)</b>	<b>(2,462)</b>	<b>(1,231)</b>	<b>0</b>	<b>20,515</b>	<b>(39,160)</b>	<b>(10,795)</b>	<b>0</b>
<b>Cumulative City-Wide Difference</b>	<b>(173,366)</b>	<b>(58,778)</b>	<b>(48,027)</b>	<b>0</b>	<b>(301,348)</b>	<b>(508,046)</b>	<b>(488,563)</b>	<b>0</b>
Sub-Area	Cultural/Institutional/Public (Square Feet)				Resort/Tourism (Square Feet)			
	2015	2020	2025	2030	2015	2020	2025	2030
<b>NORTH</b>								
Applied Economics	57,583	149,959	238,559	312,725	48,149	269,088	427,404	597,565
Elliott D. Pollack & Co.	57,583	149,959	238,559	312,725	-	269,381	427,551	597,565
<b>Difference</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>(48,149)</b>	<b>293</b>	<b>147</b>	<b>0</b>
<b>CENTRAL</b>								
Applied Economics	59,767	422,176	753,298	1,066,756	112,348	491,101	688,996	825,124
Elliott D. Pollack & Co.	59,767	422,176	753,298	1,066,756	102,895	491,101	700,450	825,124
<b>Difference</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>(9,453)</b>	<b>0</b>	<b>11,454</b>	<b>0</b>
<b>SOUTH</b>								
Applied Economics	26,284	173,335	311,741	448,234	48,149	205,963	285,121	336,169
Elliott D. Pollack & Co.	26,284	173,335	311,741	448,234	48,149	205,963	285,121	336,169
<b>Difference</b>	<b>0</b>	<b>-</b>	<b>-</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Cumulative City-Wide Difference</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>(57,602)</b>	<b>293</b>	<b>11,601</b>	<b>0</b>

Table 5

In addition to the baseline forecast, two additional forecasts were prepared to illustrate a range of possible outcomes for the City. This was accomplished by reviewing the most recently available long-term forecast provided by the University of Arizona's Forecasting Project. These projections provide a low, mid-range, and high forecast scenario for employment, population, and housing, among others. The margin between these scenarios was used to adjust the City's forecast for both a more conservative and more aggressive forecast scenario. Charts illustrating the residential and commercial forecasts by sub-

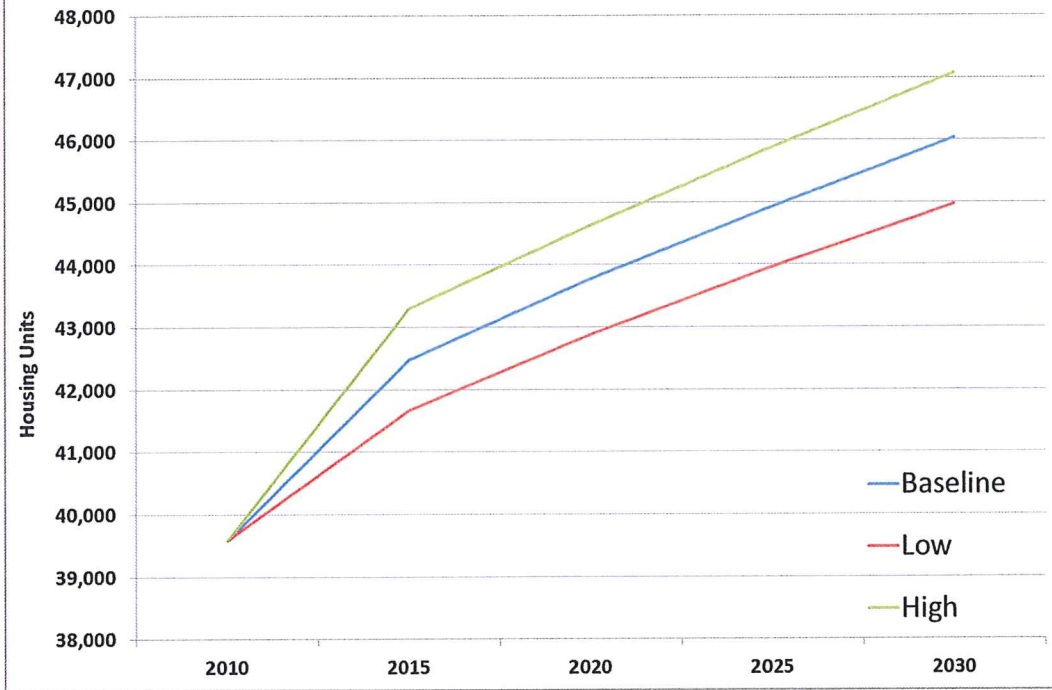
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areas as identified by the Forecast Update are provided on the following pages. Each chart utilizes Forecast Update 2010 estimates of existing inventory as the starting point. All Charts together are Figure 6.



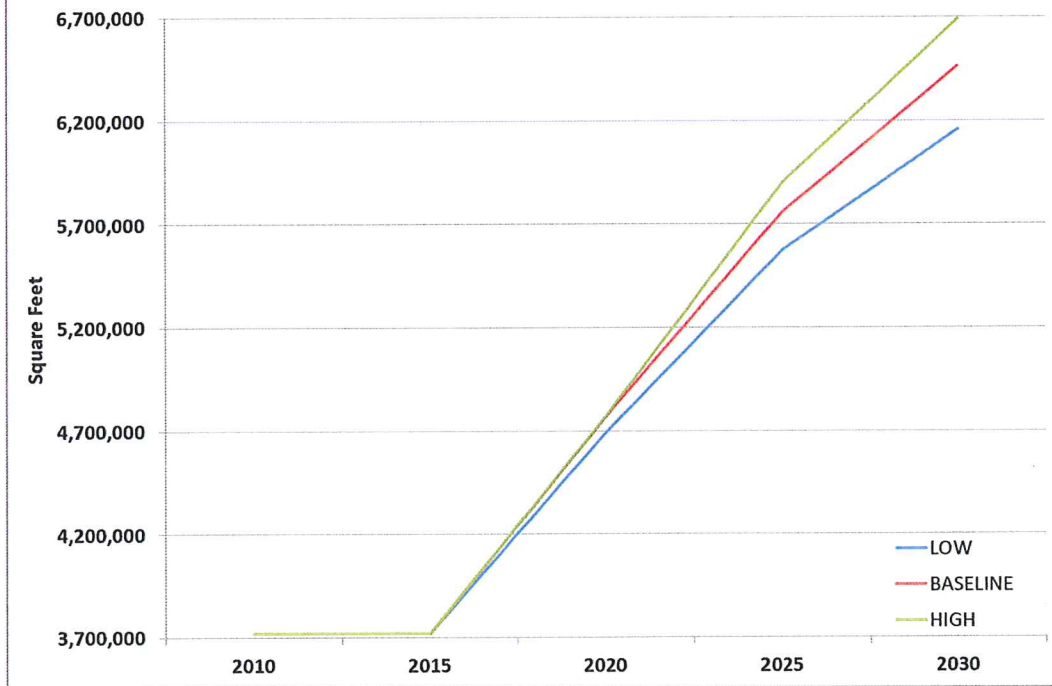
### South Scottsdale - Residential Growth Scenarios

Source: Elliott D. Pollack & Co.

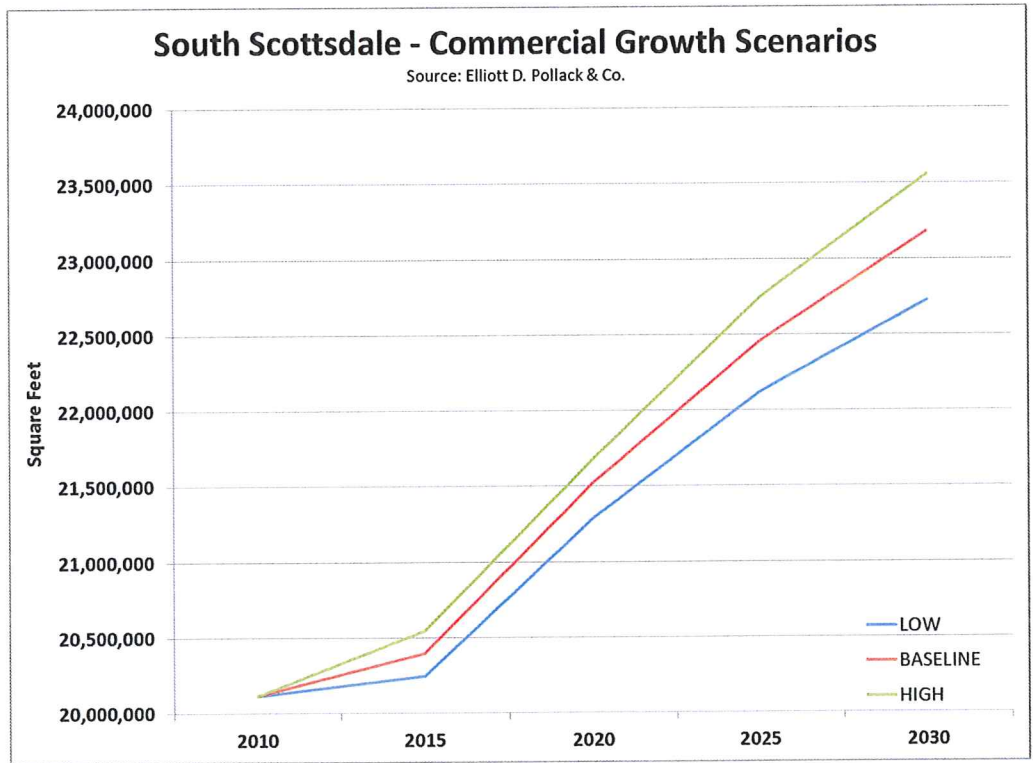
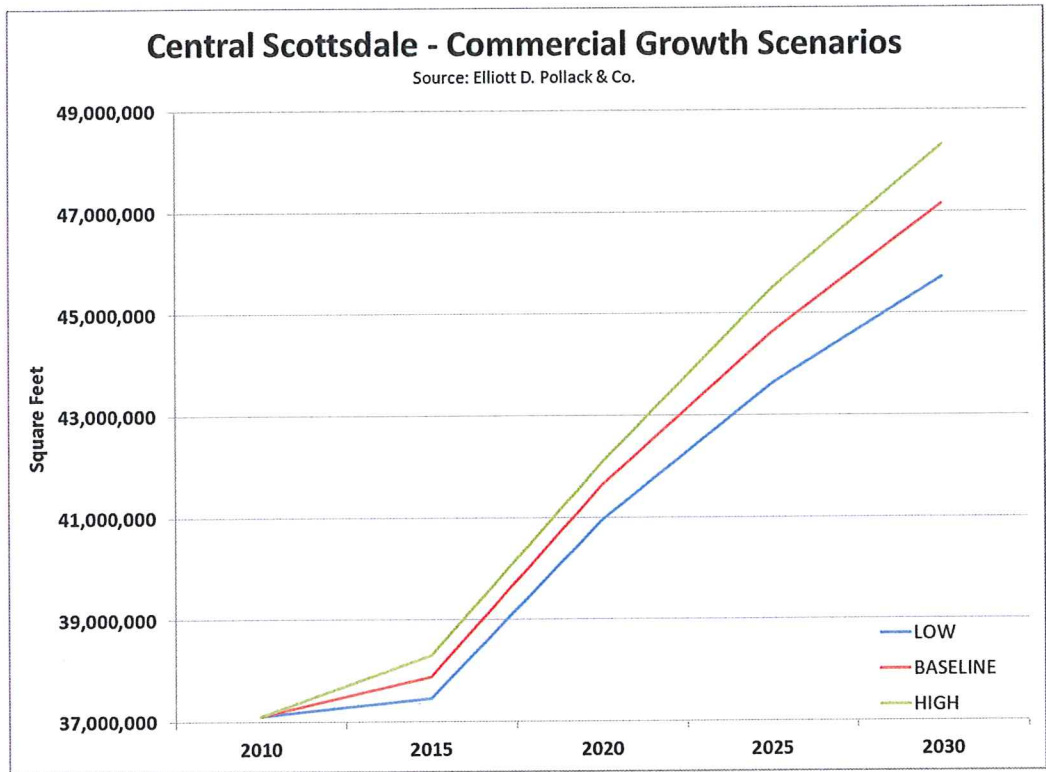


### North Scottsdale - Commercial Growth Scenarios

Source: Elliott D. Pollack & Co.







Overall, the forecasts contained within this report show that the City of Scottsdale will continue to experience growth in both residential and nonresidential development. The effects of the recession are still present and have slowed near term growth prospects. The City is still in recovery but is receiving more attention from developers every day. This is especially true with multi-family development projects.

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Commercial development is also expected to accelerate beyond 2015, the majority of which will be occurring in the growth areas previously identified.

In the longer term, residential development is expected to slow as the supply of developable land diminishes. However, commercial development in the areas of retail, employment, and tourism have very healthy long term prospects and the City will continue to be a destination for redevelopment activity and higher density uses.