



Chandler Today,
Foundation for
Tomorrow

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Introduction

Chandler has been dedicated to excellence in planning and community building that has resulted in a quality of life that continues to attract residents, new businesses, and visitors alike. From its early agricultural roots by founder Dr. A. J. Chandler over a century ago, to the thriving high technology companies today, Chandler has been a leader in proactive planning.

Chandler has taken the initiative to ensure the community is well-balanced, serving as an important Valley-wide employment center with exceptional subdivisions and a full range of housing. The community strives to exceed national standards for parks, recreation, and public safety resulting in a quality of service delivery residents have come to expect. During years of rapid growth, Chandler leaders made decisions to stay-the-course and not become just another bedroom community; this visionary leadership has allowed the community to thrive and provides a strong future foundation from which to grow.

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Chandler today is at a pivotal point in history. Pressure on how to use the remaining undeveloped land and challenges associated with continued redevelopment have never been greater. Additionally, neighborhoods, housing stock, parks, and infrastructure are aging and, as a result, require new strategies to meet citizens' expectations. The ability to prosper requires Chandler to continue as a leader in understanding challenges impacting cities around the U.S. and proactively finding innovative solutions that best meet community needs.

In March 2007, the city of Chandler engaged a consulting team and mobilized a steering committee that delivered a paper titled: *Next Twenty: A New, Progressive Agenda for Chandler*. The effort resulted in the identification of a vision and agenda for Chandler to pursue. Many of the topics discussed in *Next Twenty* are still relative today. This paper, *Chandler Today, Foundation for Tomorrow*, is intended to build on many of the relevant concepts from the previous research report and planning process, providing a snapshot of Chandler today and framing the discussion about community opportunities and issues to help inform the development of the General Plan Update.

In this report, you'll see side-bars denoting future considerations. These thought-provoking items are intended to serve as discussion starters for what the General Plan Update needs to address. While we may not know what the future holds, we do know that Chandler must continue to innovate and develop solutions that best meet the needs of the community as it matures.

More detailed demographic and community statistics can be found in Chandler's *2013 City Profile* (found online at www.chandleraz.gov).

From Outer to Inner Suburbs

The term “Boomburbs”—suburbs that have grown tremendously fast over the past 20 years—was introduced in *Next Twenty*. Between 1990 and 2000, Chandler was the 7th fastest growing city in the U.S.¹ Figure 2 indicates growth patterns (slowing or accelerating) for the Phoenix area over time. From 2000 to 2010, Chandler’s population growth was slowing. Chandler’s current estimate population is 246,677 as of March 1, 2015. Forecasts from Maricopa Association of Governments (MAG) through 2030 (Figure 1) anticipate Chandler’s growth will continue to slow.

Figure 2: Phoenix Metropolitan Population Growth

City	1990 Population	2000 Population	1990-2000 Change	2010 Population	2000-2010 Change	Growth Status
Avondale	16,169	35,883	19,714	76,238	40,355	Accelerating
Buckeye	5,038	6,537	1,499	50,876	44,339	Accelerating
Chandler	90,533	176,581	86,048	236,123	59,542	Slowing
Gilbert	29,188	109,697	80,509	208,453	98,756	Accelerating
Glendale	148,134	218,812	70,678	226,721	7,909	Slowing
Goodyear	6,258	18,911	12,653	65,275	46,364	Accelerating
Mesa	288,091	396,375	108,284	439,041	42,666	Slowing
Peoria	50,618	108,364	57,746	154,065	45,701	Slowing
Phoenix	983,403	1,321,045	337,642	1,445,632	124,587	Slowing
Scottsdale	130,069	202,705	72,636	217,385	14,680	Slowing
Surprise	7,122	30,848	23,726	117,517	86,669	Accelerating
Tempe	141,865	158,625	16,760	161,719	3,094	Slowing

Source: U.S. Census

Figure 1: Forecasted Population Growth of Phoenix-Area Cities (2010-2030)

Municipal Planning Area (MPA)	2010 Estimate	2020 Forecast	2030 Forecast	2010-2030 Change	% of County Growth
Avondale	77,911	96,591	121,500	43,589	2.8%
Buckeye	62,807	103,550	183,795	120,988	7.9%
Chandler	244,636	283,052	307,539	62,903	4.1%
Gilbert	212,431	259,113	293,139	80,708	5.3%
Glendale	252,773	291,461	343,456	90,683	5.9%
Goodyear	68,031	115,307	167,650	99,619	6.5%
Mesa	482,503	543,353	620,265	137,762	9.0%
Peoria	162,482	214,412	276,207	113,725	7.4%
Phoenix	1,501,259	1,711,641	1,953,806	452,547	29.5%
Queen Creek	32,208	50,130	67,808	35,600	2.3%
Scottsdale	217,443	252,275	282,977	65,534	4.3%
Surprise	127,623	159,171	241,901	114,278	7.4%
Tempe	162,116	183,864	211,740	49,624	3.2%
TOTAL Maricopa County	3,824,056	4,506,949	5,359,497	1,535,441	95.6%

Source: MAG (2013)

¹ Cities of a population more than 100,000

Growth has slowed from 95 percent during the 1990 to 2000 period to 34 percent from 2000 to 2010; it's projected to decrease to 16 percent from 2010 to 2020 and 98 percent from 2020 to 2030.

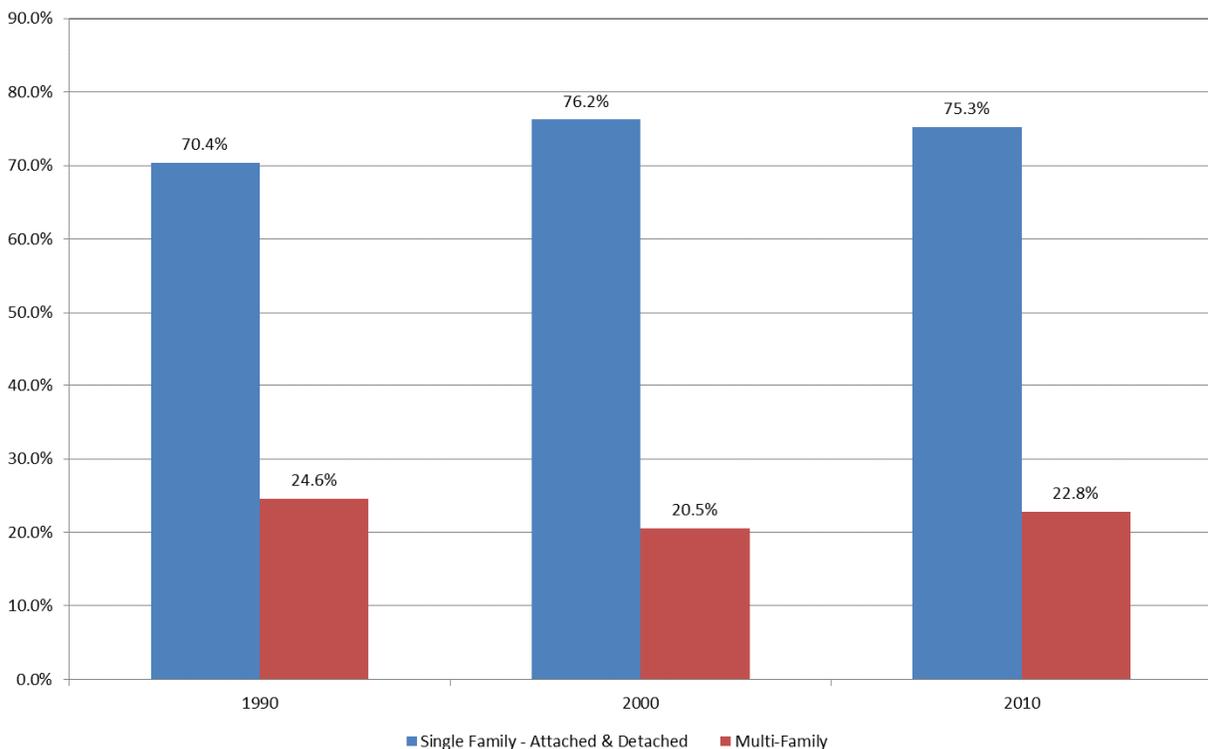
Through its period of rapid growth, Chandler has evolved from a suburb on the fringe of development to one that has transitioned to an "inner suburb". Housing development has now leapt over Chandler to places such as Maricopa and San Tan Valley where vacant land is plentiful. Chandler will continue to become a mature suburb serving outlying communities as an employment and entertainment center.

Future Consideration

The challenges associated with maturing suburbs require a different mindset to find innovative solutions. Addressing older infrastructure, aging housing stock, transitioning commercial centers, traffic congestion, changing industry trends and business turnover, and maintaining a strong tax base are just some of the issues confronting maturing suburbs.

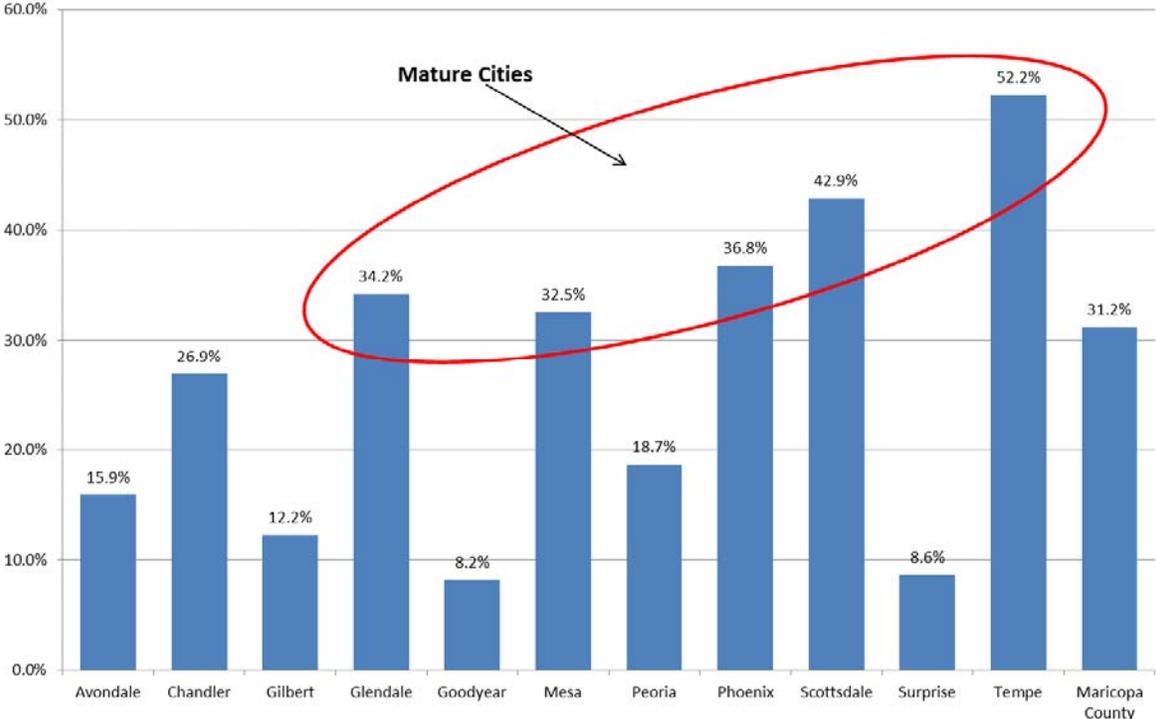
As the "outer suburbs" continue to develop, the "inner suburb" Chandler will likely be impacted by an intensification of development. The percentage of Chandler's housing stock that is classified as multi-family has remained fairly constant over the past 20 years. In 2010, the percentage of multi-family housing stood at 23 percent of total housing units (see Figure 3). Comparatively, multi-family units make up 25 percent of Maricopa County's housing stock. As depicted in Figure 4, many mature cities in the Valley have much higher levels of multi-family housing, including in Tempe (52 percent) and Scottsdale (43 percent). Chandler will likely experience a similar trend as it grows towards build-out of its residential land.

Figure 3: Percentage of Chandler Housing Units by Type (1990-2010)



Source: U.S. Census

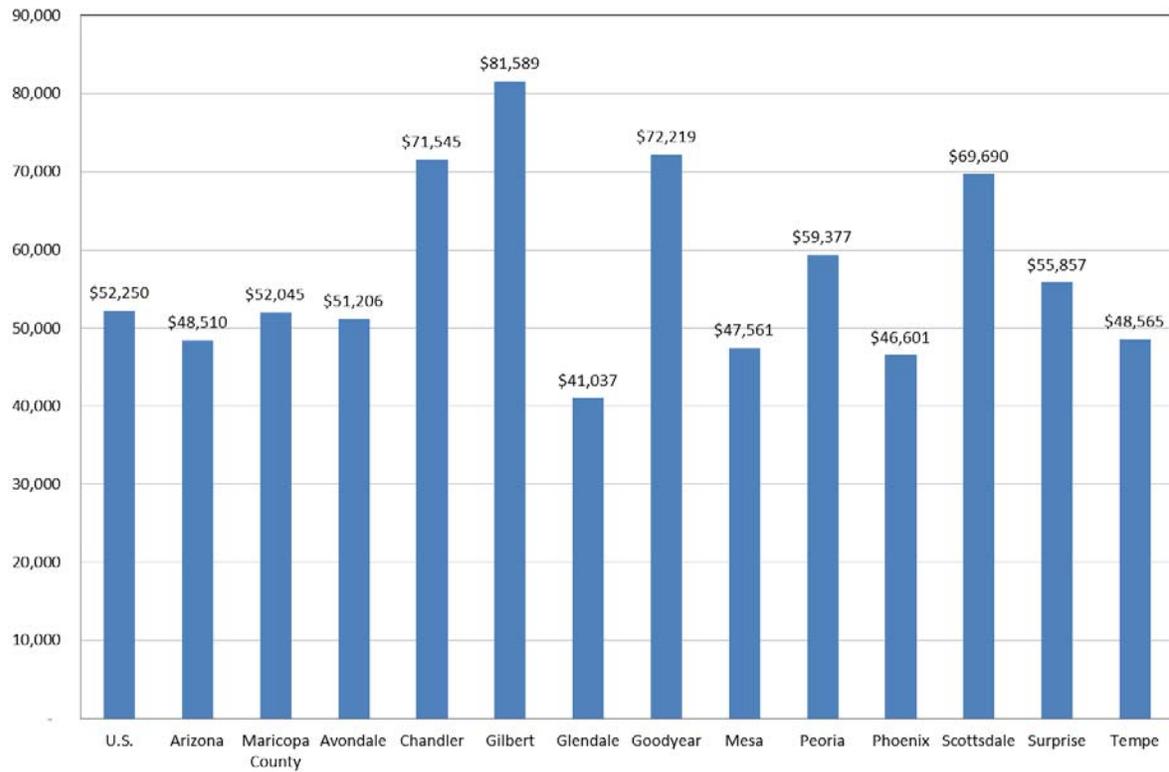
Figure 4: Multi-Family and Townhome Units as a Percentage of Total Housing Units (2010)



Source: U.S. Census

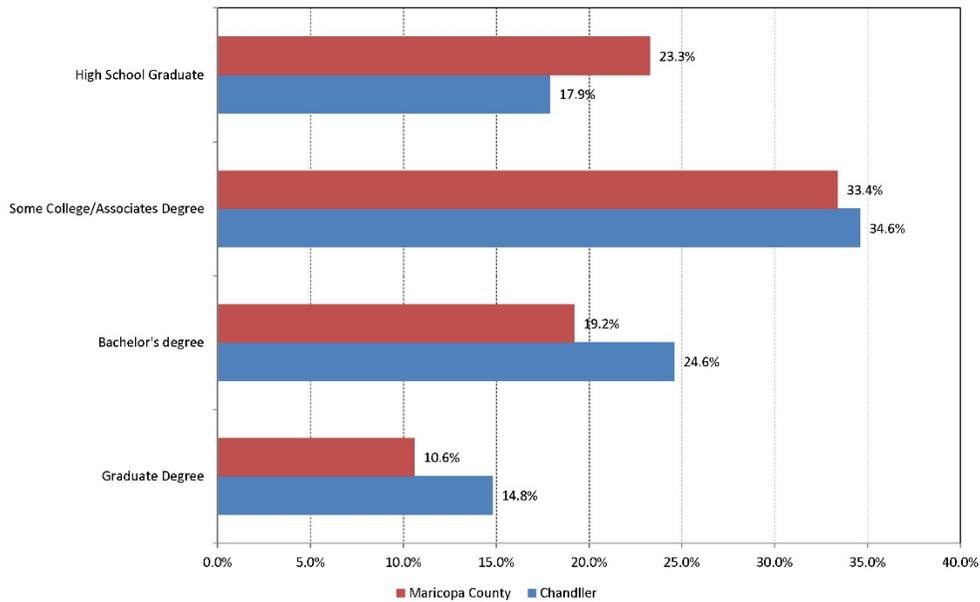
Today, Chandler is among the top three Valley cities in median household income (Figure 5) and its educational attainment is well above the county average (Figure 6). These realities provide a strong foundation for continued economic growth.

Figure 5: Median Household Income (2013)



Source: U.S. Census

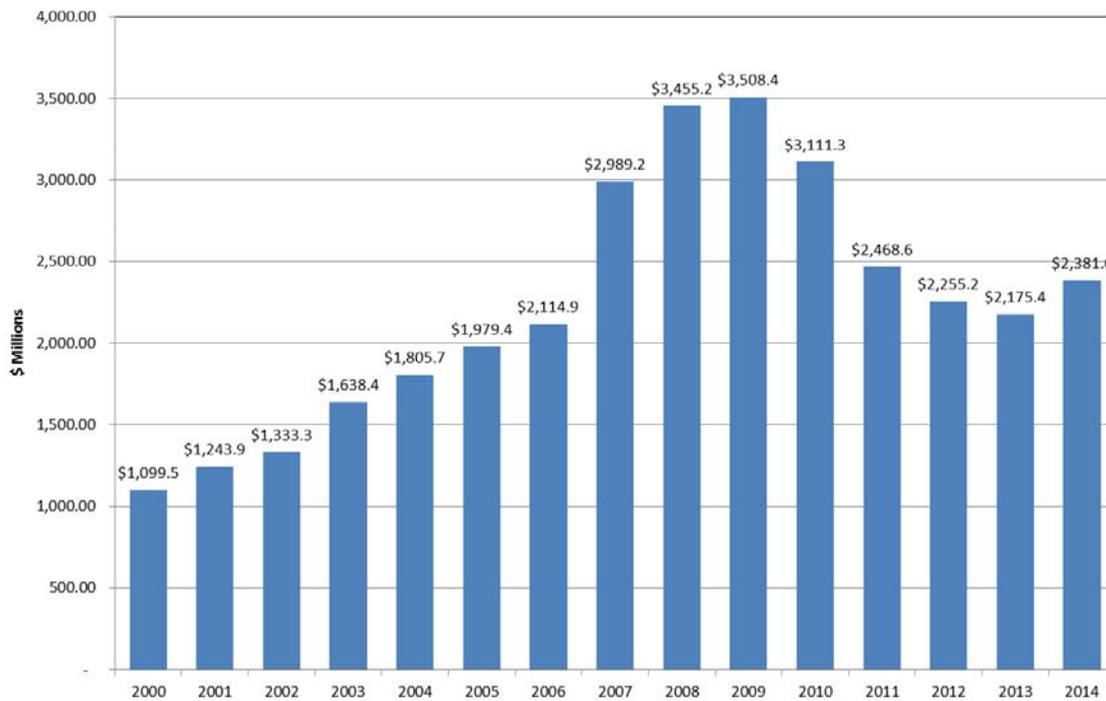
Figure 6: Educational Attainment – Last Year Completed in School (25 years and older)



Source: American Community Survey (2009-2013)

While Figure 5 and Figure 6 assist in evaluating the city’s job base and help to show the health of the local economy, the city is not without some issues from a financial standpoint. The Great Recession has harmed the ability of cities to raise funds for capital improvements. Taxable property values declined dramatically due to the bursting of the housing bubble, but are on the rise again. From peak to trough, city property values declined by 46 percent between 2009 and 2013 (Figure 7). With the approval of Proposition 117 in 2012 by the electorate, property values can now only rise by a maximum of five percent per year. This will limit the rise of property values in the future and require additional time for values to return to previous heights. Combined with the recent restrictions on development impact fees and other legislative measures, cities have fewer resources to deal with capital improvement needs.

Figure 7: Chandler Secondary Assessed Property Value



Source: Maricopa County Treasurer

Land Rich to Land Poor

Next Twenty was prepared in 2007 before the recession and prior to the completion of a number of land use studies undertaken by the city. Even then, *Next Twenty* stressed that the day of cheap dirt in Chandler is over and that the community was transitioning from being land rich to land poor, forever changing development dynamics. Today, 85 percent of Chandler’s land (31,042 acres, excluding right of way and infrastructure tracts like railroads and canals) is already developed; only 15 percent of land within the city remains undeveloped with no annexation opportunities beyond its municipal planning area.

As noted in *Next Twenty*, “Chandler’s future cannot be the same as its past. As the land supply dwindles, Chandler must focus on new things. Now is the time to be clear that the goal is quality. Chandler can no longer afford to accept whatever developers offer.” Rethinking, reimagining, and re-strategizing revitalizing areas will create capacity for growth and continue to provide opportunities for Chandler.

The Game has changed for Chandler.
Prosperity comes not from developing
raw land but from using existing areas
more wisely
NEXT TWENTY (2007)

Recognizing the importance of ensuring that remaining land resources are developed effectively, two efforts have been conducted: the *South Price Road Employment Corridor Study* (2013) and the creation of the Mayor’s 4-Corner Retail Committee in 2011 which issued a report on its findings. The results of these efforts should be considered and concepts incorporated into the General Plan Update.

- The *South Price Road Employment Corridor Study* recommended that the city consider balancing its policy that restricts development to large, single-user campus employment (generally 15 acres in size or greater) by allowing smaller or multi-user developments under certain performance conditions that complement the Corridor’s development standards and campus-like environment. The conditions are those that achieve high-value employment uses, support greater employment densities, recognize building reuse, and support a common theme or purpose. All of these conditions should further an active, enhanced campus-like environment with a high-level of architectural quality standards. The current General Plan (2008) suggested an alternative use of the area as an “innovation zone” hub where research and industry intersect within a campus environment.
- The final report issued by the Mayor’s 4-Corners Retail Committee highlighted the need to address vacant storefronts, shifting traffic pattern, new retail trends, and aging infrastructure and neighborhoods. The Committee took a hard look at these challenges and offered a number of solutions. The report’s recommendations need to be reviewed and perhaps discussed in relation to the General Plan Update. This may evolve into the discussion of reuse of developed commercial sites and use of currently vacant sites at major intersections.

In the same vein as discussed in these previous studies, prosperity comes from using existing areas more wisely and being more selective about new development. Single-user employer policies could have harmful effects over the long term. In cases where a company dissolves or splits (as in the case of Motorola, which had a large campus in the South Price Road Corridor), problems associated with redevelopment occur; in cases like these, it’s often difficult to re-lease a campus facility to a new tenant. A multi-tenant approach to the South Price Road Corridor is one way of providing for long term stability. Corporations come and go in today’s economy and reliance on large, single users could put the city at risk.

Chandler Airpark is another example of an area that is important to the community's economic future. However, because of development pressures surrounding the Airpark, land uses could limit or constrain important future development opportunities. The future of Chandler's Airpark needs to be addressed in the General Plan Update and to determine if it's a corridor that should help diversify Chandler's employment base.

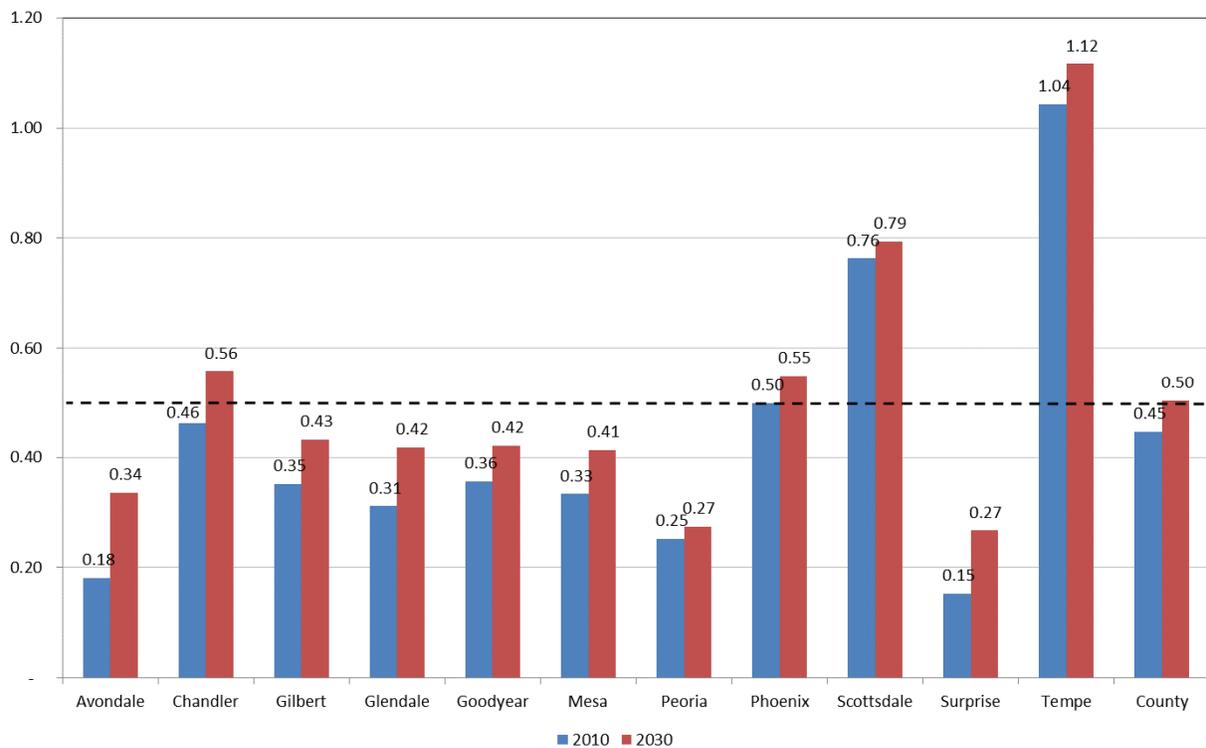
Future Consideration

Chandler has developed a reputation as a high tech community that will continue to attract knowledge-based employers and employees who likely will desire a more urban environment. With a limited land resource, redevelopment of obsolete sites and development of vacant property may lead to more urban high-density products. Where are the appropriate locations for urban-type development and how does Chandler ensure high quality development over time?

Big and Corporate to Small and Nimble

With its high tech employment focus, Chandler has been one of the region's success stories. Its jobs-to-population ratio is similar to a more mature city. Of the peripheral suburbs, Figure 8 demonstrates how Chandler has one of the highest jobs-to-population ratios—a ratio that is expected to grow well into the future.

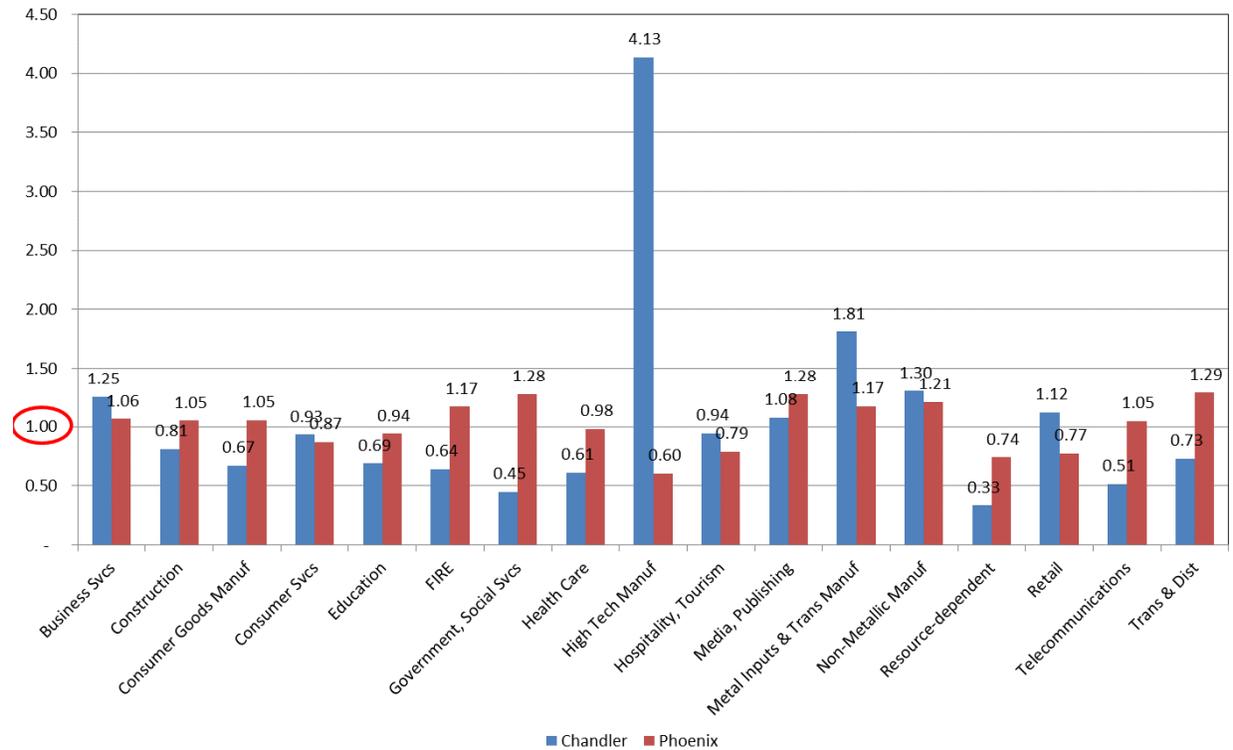
Figure 8: Jobs-to-Population Ratio (2013 Forecast)



Source: MAG

Chandler’s employment base is concentrated in high wage jobs that produce export goods. Figure 9 shows the concentration of employment for Chandler and Phoenix as a ratio to the Maricopa County job base. For instance, high tech manufacturing jobs are 4.13 times more prevalent in Chandler than they are in the county as a whole; any category with a ranking greater than 1.0 means that the city has a greater share of its employment base in that category relative to the county.

Figure 9: Employment Concentration by Cluster Category Compared to Maricopa County Average



Source: MAG

Analyzing business clusters are a way of evaluating the geographic concentration of interconnected businesses, suppliers, and associated institutions in a particular field. Chandler’s employment base is heavily focused in the following clusters: business services, high tech manufacturing, metals inputs and transportation manufacturing, non-metallic manufacturing, and retail. This cluster focus has both positive and negative considerations. On the positive end, these industries have positioned Chandler for long-term growth; high tech industries have driven the national economy over the past few decades and Chandler has benefitted from that growth. On the downside, dependence on one industry or business cluster could lead to serious consequences (e.g., Detroit and the

Future Consideration

Chandler is expected to continue to grow over the next 20 years, although more slowly than in the past. This growth will be stimulated by its employment base which is comprised of knowledge-based industries. This is an enviable position to be in and provides Chandler tremendous opportunities. How does Chandler maintain and protect employment-designated land uses to accommodate future economic development?

auto industry). In recent years, Motorola abandoned its building in the South Price Road Corridor when the company was split and Intel has built a multi-billion dollar plant that sits idle today. Consideration should be given to whether diversification of employment industries is needed in the future.

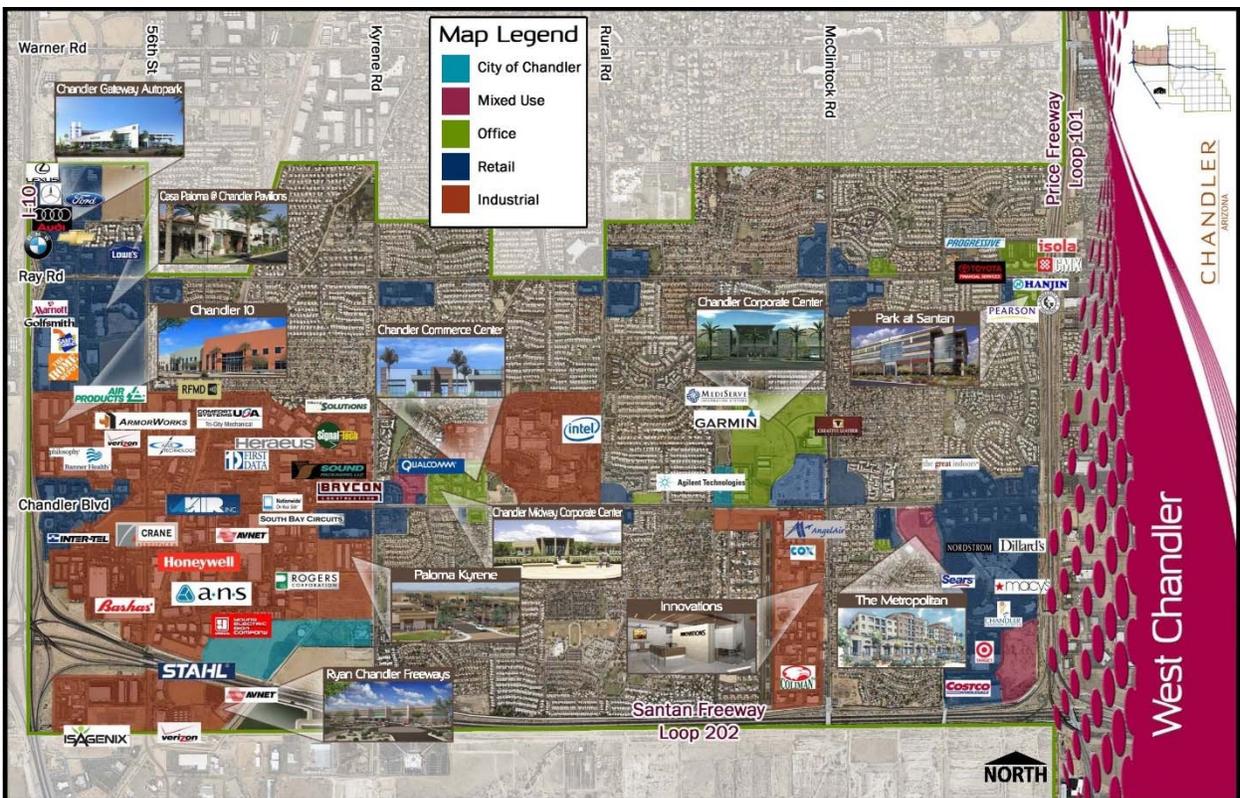
Staying nimble and encouraging smaller businesses is another element of the economic development strategy for Chandler and the creation of the Chandler’s Innovations Science and Technology Incubator is an important component to forwarding this strategy. Additionally, the city—like the rest of the country—has seen a rise in the number of home-based businesses and freelance entrepreneurs that should be considered when planning and preparing for the future of employment.

West Chandler Employment Corridor

Chandler’s western employment center is bordered by Interstate 10 (I-10) and is home to large manufacturing with smaller support businesses (Figure 10). With nearly 145,000 vehicles per day passing by the corridor, businesses located here have tremendous visibility. Key business clusters include aerospace, customer-care, distribution, electronic and nutraceutical.

The corridor also has more than 1 million square feet of retail and restaurants in two centers: Chandler Pavilions and Casa Paloma centers. These commercial businesses serve a local and regional

Figure 10: West Chandler Employment Corridor



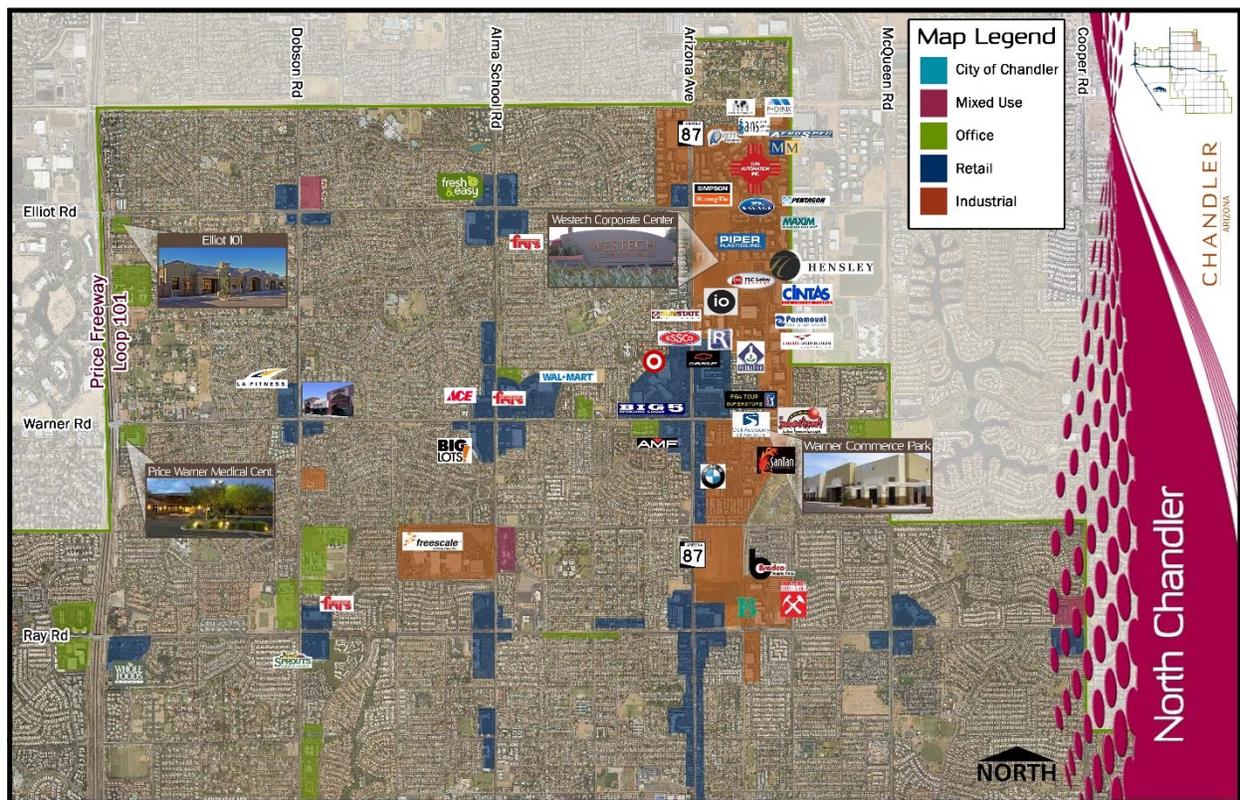
Source: City of Chandler

market. Automobile sales and services—particularly luxury auto dealerships (BMW, Lexus, Mercedes-Benz, and Audi) are located in this employment corridor.

North Chandler Employment Corridor

North Chandler employment corridor is unique with its rail-served industrial sites and easy access to the regional freeway network. The area has a diverse mix of retail, mixed-use business parks, distribution centers, and industrial parks suitable for large and small uses. The North Chandler area is served by a skilled workforce of 1.4 million within a 30-minute commute. A large portion of the corridor is located in an enterprise zone that allows the city to use tools (e.g., property tax reductions or tax credits) to encourage businesses development (see Figure 11).

Figure 11: North Chandler Employment Corridor



Source: City of Chandler

Price Corridor Employment Center

Strategic infrastructure investment and proactive planning has resulted in a regionally significant employment corridor along Price Road (Figure 12). The area stretches to Chandler’s northern boundary and includes the southern defined area of South Price Road Corridor. Complemented by neighborhoods, excellent schools, and thriving commercial centers, this corridor has become a focus for employers and industry leaders. In particular, the South Price Road Corridor is becoming a first class high technology area. Advanced business services, aerospace, high technology research and development/manufacturing, life sciences, and sustainable technology research and development/manufacturing are some of the key industries within the corridor.

Figure 12: Price Road Employment Corridor



Source: City of Chandler

Airpark Area Employment Center

The Airpark is a nine-square mile area strategically located along Loop 202 (Santan Freeway) and anchored by the Chandler Municipal Airport (Figure 13). The employment area includes business parks, retail, hotels and entertainment amenities. Many businesses within the Airpark are able to take advantage of significant incentives as a large portion is located within Chandler’s enterprise zone. Advanced business services, auto dealers, aviation, biosciences, distribution, and light manufacturing are the key industries within the Airpark Area employment center.

Figure 13: Airpark Area Employment Corridor



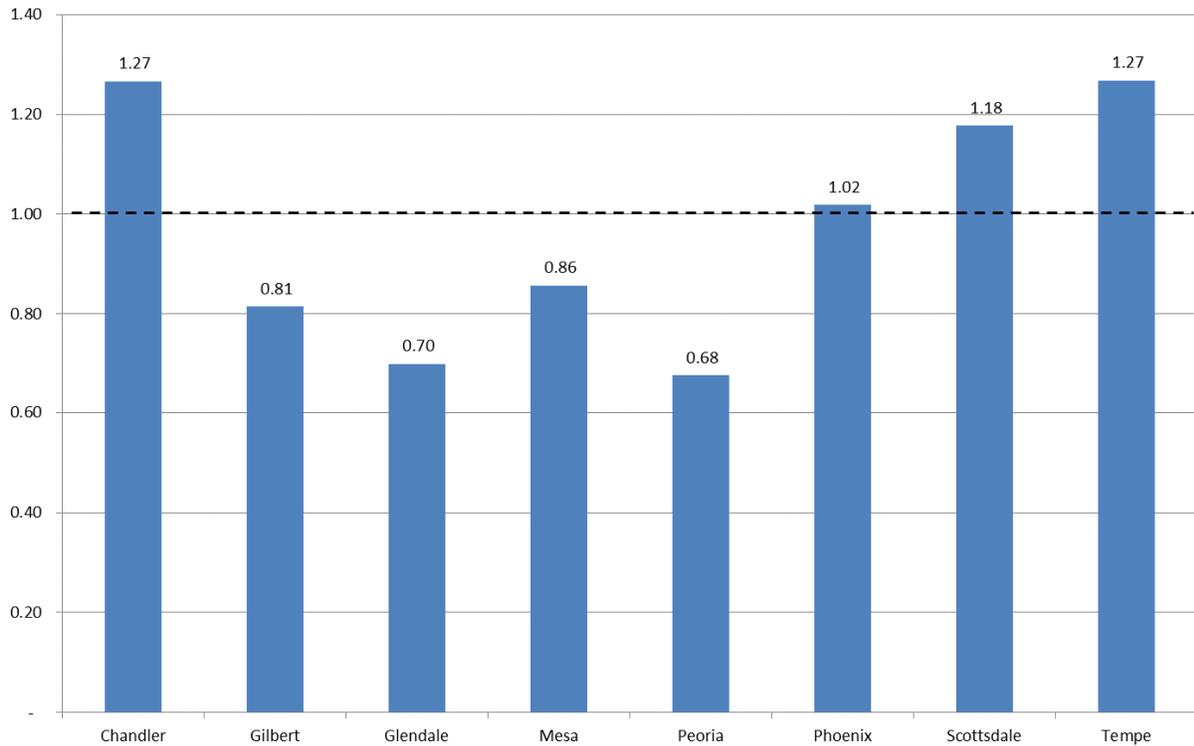
Source: City of Chandler

Land Rich to Talent Rich

Chandler has a very talented resident population and employment base. One of the more recent trends has been to evaluate a local economy according to its “knowledge-based” industries (or those that produce, distribute, and use knowledge and information). At one time, manufacturing was considered the primary knowledge-based business cluster. However, the definition has been expanded to other high tech products such as software and similar-type intellectual property. Knowledge-based industries have a heavy research and development focus. These industries are highly innovative, export-oriented with high growth potential and often include the traditional industry categories such as: manufacturing; professional, scientific and technical services; administration of businesses; finance and insurance; healthcare; and telecommunications. Figure 14

outlines knowledge-based industry employment for selected cities in the Valley. As depicted, Chandler and Tempe have the highest ratings when compared to Maricopa County (1.0 being the average for the county) with 27 percent more employment in knowledge-based industries than the county overall.

Figure 14: Cities Concentration in Knowledge-Based Industries Compared to Maricopa County



Source: MAG

The strength of the Tempe, Chandler, and Scottsdale employment bases is largely reflected in the strength of their office markets. Since the Great Recession, the Greater Phoenix office market has struggled with vacancy rates of as high as 25 percent (2010 and 2011). That rate has now subsided to less than 20 percent for the region, but the vacancy rates for the corridor along Loop 101 (Price Freeway) through Scottsdale and north Tempe are well below those levels (see Figure 15). More than 700,000 square feet of space is under construction in the Loop 101 (Price Freeway) corridor and Tempe is seeing extensive development of the State Farm campus downtown. This data demonstrates the strength of the employment base in the southeast Valley, and especially in parts of Chandler, Tempe, and Scottsdale.

Future Consideration

Chandler is well positioned from an economic standpoint to compete in the future for new industries. The presence of a highly educated workforce is one of the major decision-making criteria for companies and start-ups. This workforce will likely be quite nimble and will be able to adjust to changes in the local employment market. How can updating the General Plan help to address the needs of attracting, developing, and maintaining a quality workforce?

Figure 15: Office Market Activity (4th Quarter 2014)

Submarket	Buildings	Inventory (SF)	Vacant (SF)	Vacancy Rate	Under Construction
Midtown	88	10,908,482	2,880,437	26.4%	-
Downtown	42	7,347,302	1,307,348	17.8%	-
44th Street	41	3,363,955	595,642	17.7%	-
Arrowhead	23	1,475,242	450,552	30.5%	-
Camelback Corridor	75	7,397,947	1,653,427	22.3%	-
Chandler/Gilbert/202	29	1,310,101	248,116	18.9%	450,830
Deer Valley	71	7,384,667	1,254,252	17.0%	-
East-Central Phoenix	44	2,020,173	348,008	17.2%	-
Glendale/Peoria	15	967,591	281,212	29.1%	-
Mesa	21	838,528	159,131	19.0%	100,000
Metrocenter	64	4,586,409	1,138,010	24.8%	-
N Phoenix/Desert Ridge	36	2,534,993	541,386	21.4%	-
Piestewa Peak Corridor	32	1,972,910	507,646	25.7%	-
Price/101 Corridor	50	5,041,268	573,647	11.4%	701,308
Scottsdale Airpark	146	9,856,901	2,021,376	20.5%	169,189
Scottsdale Central	66	5,187,817	599,443	11.6%	-
Scottsdale South	34	3,520,030	428,432	12.2%	-
Sky Harbor	55	4,783,823	986,523	20.6%	-
South I-10/Ahwatukee	57	3,210,524	545,861	17.0%	-
Superstition Corridor	48	2,565,285	639,734	24.9%	-
Tempe North	84	7,529,675	710,523	9.4%	1,435,262
West Phoenix	40	1,803,343	389,804	21.6%	-
Total Market	1,161	95,606,966	18,260,510	19.1%	2,856,589

Source: DTZ

Implications of Regional Dynamics

In order to effectively plan, appreciation for the role Chandler plays in a larger setting and consideration of broader regional and national trends is critical to understanding what may influence the community's future economic viability.

Arizona's Connectivity to World Class Markets

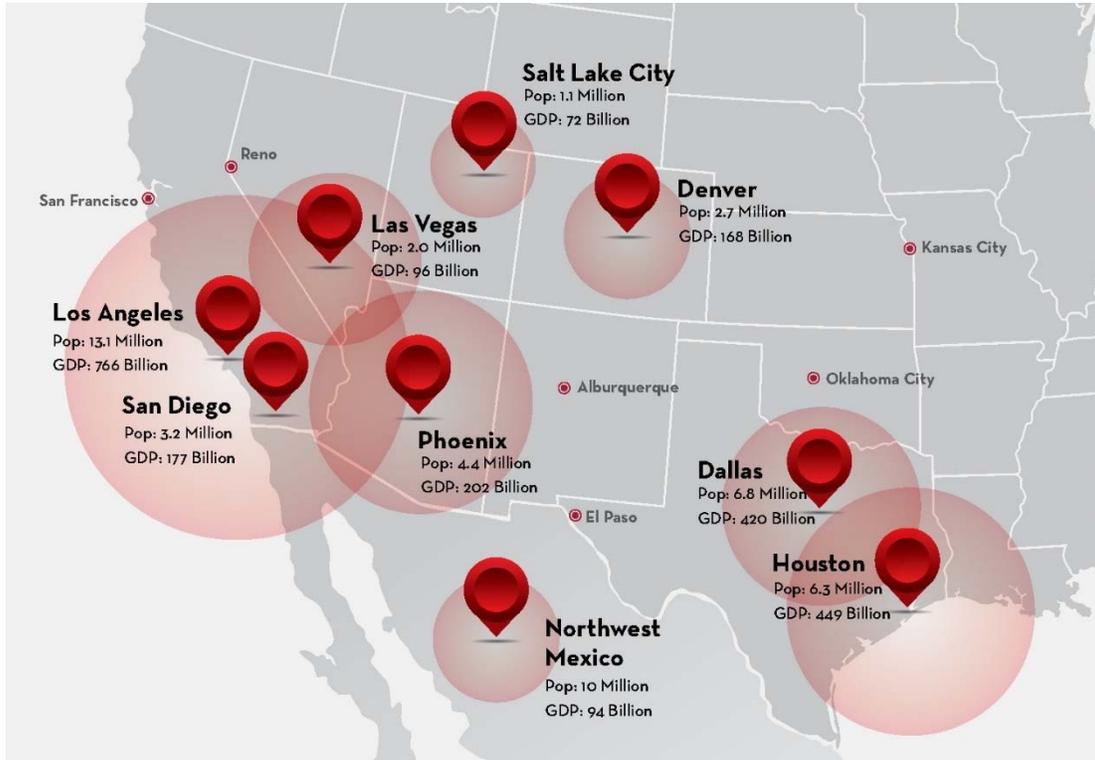
In 2014, the Arizona Transportation and Trade Corridor Alliance released its strategic positioning report: *The Roadmap: Arizona's Path to Global Market Expansion*. The report makes a case for Arizona to focus attention on tradable goods and services that tend to be high-value, resulting in higher wages important to fueling a strong economy. As presented in Figure 16, *The Roadmap* argues that Arizona's strategic position in the center of three dynamic market economies (Southern California, central Texas, and northern

Future Consideration

How does Chandler take advantage of its logistical positioning (i.e., Loops 101 and 202, I-10) and access to a larger global marketplace? How will future "big idea" projects (e.g., I-11, Superstition Vistas) impact the community?

Mexico) is a critical asset to Arizona’s business development efforts, particularly for tradable goods and those focused on exporting.

Figure 16: Arizona’s Strategic Market Position



Source: Transportation and Trade Corridor Alliance (2014)

If realized, *The Roadmap's* strategic direction to become a more export-driven economy (where we make things here and sell them elsewhere) will result in an expanded economy in Arizona and will:

- Create and grow high-value trade and investment.
- Improve connectivity to markets.
- Ensure alignment among stakeholders and decision makers.

The Regional Context

The Greater Phoenix Economic Council and its partners are committed to attracting and building high-quality, high-wage jobs across a wide range of industries. This industry focus aligns with the city of Chandler’s growing industries, including:

- Renewable energy
- Biomedical and personalized medicine
- Advanced business services
- Manufacturing and distribution
- Mission critical activities
- Aerospace and aviation
- Emerging technology

These economic strategies at the state and regional level align well with Chandler's economic foundation. Chandler historically has built a strong manufacturing presence with high technology, high-pay jobs in companies such as Motorola, Microchip, Freescale, and Orbital Sciences. Globally, manufacturing is changing and communities can no longer take these types of companies for granted and assume they will continue to play a significant role in local economies. For many reasons—including Chandler's quality of life and educated workforce—the community has served as an incubator for many small companies and entrepreneurs. Entrepreneurial enterprises are important to the future vitality of local economies and these homegrown businesses can spin off and become larger companies with considerable impact in the area.

In addition to the economic dynamics within the region, there are other major projects and developments that could influence or impact Chandler's future. Figure 17 highlights some of these big ideas.

Figure 17: Regional Projects and Developments



Sources: ADOT; Phoenix-Mesa Gateway Airport; Superstition Vistas; Valley Metro

Land Use Trends

As residents and community leaders begin the discussion about future planning, exploring land use trends that are occurring can assist in framing a dialogue about what makes most sense for Chandler. The General Plan Update is intended to provide policy direction for making decisions about how the community should develop and redevelop.

Building Quality Neighborhoods

Quality neighborhoods throughout Chandler are a point of pride. The community has earned an outstanding reputation for quality suburban development with parks and other amenities in close proximity. In fact, the annual average home sales price in Chandler was \$288,400 as of February 2015 according to the Cromford Report (ASU). As discussed previously in this paper, infill development and redevelopment is critical to maintaining the quality of the community and meeting future housing demands. It's important to understand that infill projects are much different than suburban sprawling residential developments that have occurred over the past 30 years. Infill development is typically smaller scale, context sensitive (i.e., each site is unique), and requires consideration for the next generation of land uses or application of adaptive reuse of buildings and sites.

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As discussed in *Next Twenty*, higher residential densities and mixed-use developments have become a typical component of communities transitioning to mature suburbs. Ensuring that this type of development is appropriately located, however, is vital. Additionally, ensuring that a diverse mix of housing exists for people at different stages of life and at different income levels are important aspects that contribute to a community's long-term economic viability. Targeting higher densities and mixed-use developments in key selected locations—like downtown, along commercial corridors, and other high-capacity corridors—should continue to be a strategy for Chandler to consider.

Providing a competitive, diverse housing stock is not the only component to building quality neighborhoods. Communities across the country are concerned about public health trends (chronic diseases such as obesity, type II diabetes and heart related disease) and the relationship that the built environment has on these trends. Healthy communities and neighborhoods can be supported through design that facilitates an active lifestyle. Chandler's neighborhood planning policy of including a park and/or school in every square mile has helped to address community wellness and access to recreational amenities. The issue remains how to integrate this healthy community design policy throughout Chandler.

Future Consideration

Quality neighborhoods is a cornerstone of Chandler's quality of life. Lifestyles are changing and existing neighborhoods are maturing, creating challenges that the city must address. How should the General Plan Update ensure that desirable neighborhoods and a range of housing choices exist in the future?

Transportation and Land Use Linkage

Maturing cities must continue to evaluate and address the connection between the movement of people and goods with the location of various land uses. This connection is critical and requires careful planning. People's attitudes about where they want to live, work, shop, and play are changing.

According to the National Association of Realtors 2013 Community Preference Survey and highlighted in *Restore: Commercial and Mixed-Use Development Trends in the Rocky Mountain West* (Sonoran Institute, 2014), 60 percent of respondents favor a neighborhood with a mix of houses, stores, and other businesses within walking distance as opposed to neighborhoods requiring driving between home, work, and recreation. Respondents indicated that while the size of a home or yard does matter, most are willing to compromise size for a preferred neighborhood and less commuting. In fact, 55 percent of respondents were willing to forgo a home with a larger yard if it meant they could live within walking distance of schools, stores, and restaurants.

This trend has influenced housing demand and residential products over the last decade. However, people's changing attitudes are also impacting commercial and employment land uses. The linkage between where people want to live, work, and recreate is becoming more important and the desire for shorter distances between these uses are location factors. Technology, particularly online shopping, is also having an impact on commercial development.

Streets Designed for People

Policies that promote streets for people can provide corridors designed to provide safe and efficient access to a multitude of users (e.g., motorized vehicles, pedestrians, bicyclists, and transit for all ages and abilities). Policies can be implemented that consider all modes of travel equally and the specific needs of the different types of potential users. Implementing context sensitive, sustainable solutions that can be integrated into existing, as well as future, planned facilities.

Use of multipurpose transportation corridors have several communitywide benefits including:

- Reduced congestion
- Improved safety
- Improved air quality
- Increased property values
- Increased travel choices and connectivity
- Enhanced economic activity
- Improved mobility for younger, older, and disabled users
- Creating a sense of place

Creation and incorporation of policies aimed at encouraging use of multipurpose streets and corridors can help ensure a consistent approach to communitywide design. Treatments can be implemented as part of new construction or retrofitted into existing locations.

Future Consideration

Chandler, as well as other maturing communities, are seeing smaller-format commercial projects in locations where there is higher foot-traffic (such as mixed-used developments where housing, office space, services, and jobs are all located near retail). The General Plan Update may need to revisit and fine-tune policies to better address transitional development patterns between existing and new development.

Examples of multipurpose corridor treatments include:

- Enhanced pedestrian accommodations (e.g., high visibility crosswalks, wide sidewalks)
- Transit facilities (e.g., dedicated bus/rail lane, transit stop shelters)
- Reduction of vehicular through lanes (e.g., “road diet”)
- Dedicated bicycle lanes and parking racks
- On-street parking
- Traffic calming devices (e.g., traffic circles, speed tables)
- Art
- Landscaping

Chandler has often been at the forefront of implementing these type of applications. As an example, in 2006, the city of Chandler was the first city in Arizona to implement a “queue jumper” lane at a signalized intersection allowing buses to cut in line at intersections four seconds sooner than other vehicles or bicycles stopped at the same light. Chandler has also added bus- and bike-only lanes along Arizona Avenue in an effort to transform it into a high-capacity corridor.

Providing safe and efficient circulation within neighborhoods is also an important consideration. When there is a need to “calm” neighborhood traffic, the city has a process for evaluating what potential measures² might be warranted. Such options might include: chokers (curb extensions midblock or at intersections that interrupt the flow of traffic), speed humps, traffic circles, raised crosswalks, chicanes (build outs in a road that narrow the lane and force traffic to slow down), and truck restrictions.

Traffic Management for Economic Development

At a local level, it is important that a city’s transportation system is comprehensive and regionally connected to support economic development and positioned to adapt to evolving economic conditions or changing markets for industrial and commercial uses. But, connecting economic vitality and a quality transportation network have also become important conversations statewide. *The Roadmap* of Arizona’s Transportation and Trade Corridor Alliance is a focused strategy on creating high quality, high income employment in the state through a “modern and efficient infrastructure to ensure effective connectivity to both domestic and global markets.”

In 2011, ADOT kicked off the Passenger Rail Study to study the viability of a passenger rail connection between Tucson and Phoenix. While these two metropolitan areas are connected by I-10, the need to study the potential for passenger rail was identified based on projected population and employment growth in the center of Arizona, as well as growing congestion on I-10 (which ADOT claims is the

² The city does require traffic calming applications along all newly constructed local streets with single family residential frontage on straight segments over 600 feet in length.

Future Consideration

Chandler has often been a leader in implementing policies and standards that provide safe and efficient travel. The General Plan Update should consider developing initiatives and policies that broaden the efforts of the city and developers to encourage safe and efficient access to a multitude of roadway users.

most heavily traveled corridor in the state). The Study ultimately identified three alternatives to study further. All three of the recommended routes run through or adjacent to the city of Chandler. Although there is no construction schedule or funding currently identified, the General Plan Update could identify policies to support passenger rail should that be the decision of the stakeholders. Other recent regional transportation efforts that impact or can affect Chandler include future I-11 (anticipated west of the Valley), North-South Corridor (a new transportation corridor anticipated to traverse north from Eloy to a point west of Loop 202 (Santan Freeway) along US 60), and the completion of Loop 202 with the construction of South Mountain Freeway.

Business development activities also reflect the importance of a quality multimodal transportation network. Federal Express Ground is developing a 302,000 square foot package distribution facility at Chandler's Airpark. With hubs in Tempe and near Sky Harbor Airport, coupled with its emphasis on calculated and reliable delivery time, Federal Express and other entities rely on a safe, efficient, and reliable transportation system to move vehicles through the city and connect regionally to access destinations.

It is important to identify the best options to move goods and services through the city, and maintain quality of life for residents and businesses. In doing so, the entirety of the circulation system must be considered: the city arterial system needs to support the local network but also the regional roadway system, including Loop 202, Loop 101 and I-10. Strategies that could be employed include designated routes and managed lanes for freight movement.

Urban-Type Development

According to the Bureau of Labor Statistics, there are more one-person households today than previously. One factor is that many people in their 20s and 30s are extending the adolescence stage of life and are marrying later, or not at all. This coupled with a high divorce rate has resulted in a higher percentage of single-person households than any time in U.S. history. Trends in urban development are evolving in response to these rapidly shifting demographics.

In the Valley, demand for urban development near public transit has grown; as such, planning for and construction of light rail extensions are occurring; Chandler is already evaluating how to create development opportunities along future transit corridors. In 2012, the city completed a light rail feasibility study for Arizona Avenue and found that the corridor is the best option for light rail extension as higher density development could occur in support of the amenity. General Plan Update discussions will need to explore how redevelopment might occur along Arizona Avenue in response to the potential of extending high capacity transit.

Future Consideration

Chandler must be well-connected—locally and regionally—in order for businesses to move products efficiently and for employees to get to work. Ensuring reliability is critical to economic viability. However, the regional transportation environment might change dramatically over the next 10 years; the General Plan Update must address these new opportunities.

The city has also focused on the south Arizona Avenue corridor, completing a study in 2006 and adopting design guidelines in 2010 to promote high- and medium-density residential development, build a more pedestrian-friendly street experience for Arizona Avenue, to further develop cultural amenities and opportunities. 123 Washington is Chandler's first urban, high-density apartment development; it's located downtown and targets the Millennial market (those born within the early 1980s and early 2000s) that want to live a walkable, amenity-filled lifestyle. The current General Plan (2008) includes policies that encourage this type of high-density residential along with other mixed-use projects such as office, retail, and entertainment located within a half-mile of future public transit stations.

There are a variety of mixed use development designs. One concept Chandler has supported consists of single-use buildings on distinct parcels in a range of land uses. This type of development allows the mixture of compatible uses within a horizontal and cohesive pattern. In 2014, the city approved development plans for Chandler Viridian, a 25-acre mixed-use development planned to include a hotel, multi-family apartments, and 250,000 square feet of office and retail space with a pedestrian promenade to Chandler Fashion Center Mall. Another form of mixed-use development is the integration of different uses within the same building. Typically, the first and/or lower floors are utilized by commercial uses with residential uses located on the floors above. While the city has adopted policies that encourage this type of development within the downtown urban core, the community may want to consider policies that promote further mixed-use development along major high-capacity corridors, such as Chandler Boulevard and Price Road employment corridors.

Another development trend occurring across the country is three or more generations living in one dwelling unit or on a single lot. This trend, known as multigenerational housing, has become more common in recent years. According to a Pew Research Report, a record 57 million Americans—or 18.1 percent of the population—lived in a multigenerational household in 2012. Chandler may need to consider guidelines for addressing land use implications regarding multigenerational households.

Lastly, as a result of both changing demographics and cultural norms, the small house movement is occurring nationwide. The demand for micro-apartments and smaller houses on small lots is growing in many urban cities today. Micro-apartments and mini-houses are typically a one room, self-contained living space designed to accommodate a sitting area, sleeping space, bathroom, and kitchenette within an area between 250 and 400 square feet. Residents have access to communal recreational/entertainment rooms, outdoor patios, and garden areas. Micro-apartments are gaining interest and popularity in cities where there is a lack of housing affordability, growing population of single adults, and desire to live in city centers.

Future Consideration

As a maturing city approaching build-out, policies that guide how the Chandler will integrate new types of development projects in response to changing demographics need to be explored. The challenge will be determining how the city fully optimizes undeveloped and/or under-utilized property in relation to new development trends.

Aging Infrastructure

As infill and higher density projects are developed and growth continues, higher traffic counts are realized and demands on facility use, water, and sewer increase. Additionally, infrastructure across the country has suffered from lack of maintenance and Arizona is not immune. The American Society of Civil Engineers' *2013 Report Card for America's Infrastructure* reveals these disturbing realities here in Arizona:

- \$7.4 billion in drinking water infrastructure needs over the next 20 years.
- \$5.2 billion in wastewater infrastructure needs over the next 20 years.
- Seven percent (approximately 503 of a total of 7,190 miles) of major roads that are in poor condition.
- \$6.4 billion in school infrastructure funding needs.

Chandler is a relatively new city in that its growth has occurred over the last few decades. Water lines and treatment facilities, sewer lines, streets, sidewalks, traffic control, parks, and city buildings that have been built in the last 20 to 30 years may not have the dire need for repairs that eastern cities and even older Arizona cities now require. However, maintenance and new construction costs do exist for Chandler; as outlined in the city's *2015-2024 Capital Improvement Program*, such costs alone will be in excess of \$918 Million over the next ten years.

In looking at transportation funding in particular, cities are coming to realize that future funding must increasingly come from local sources as federal and state resources continue to dwindle. Highway User Revenue Funds (HURF) are collected from gasoline taxes and other motor vehicle-related fees. While HURF funds are intended for highway construction and other transportation needs, the state legislature has swept HURF funds to fund other projects. The Local Transportation Assistance Fund (LTAF), funded from the state lottery, has also been swept into the states' general fund in recent years to close the budget gap. Adding insult to injury, the gas tax just doesn't go as far as it used to, having not increased since 1993 (18.4 cents/gallon) and compounded by the growing demand for fuel efficient vehicles.

Diminishing coffers have required cities to find unique solutions to address ongoing funding shortages for capital costs. In fiscal year 2011-2012, the Council had the foresight to establish an Infrastructure Maintenance Reserve (IMR) to help fund projects to maintain Chandler's existing infrastructure for parks capital maintenance, street repaving, and other street capital projects. The IMR will fund over \$32 Million in capital maintenance projects over the next three years.

Communities and agencies are increasingly using public-private partnerships to develop and maintain infrastructure. Chandler has used private-public partnerships in a number of ways, including building the Ocotillo Treatment Plant, sharing facilities with school districts, and working with the

Future Consideration

As a maturing community, maintaining infrastructure over time becomes a bigger consideration. From roadways to neighborhood parks, as the community ages, these public facilities must be maintained and replaced. Much of Chandler's infrastructure are amenities that are important to what makes the quality of life so desired. How should the General Plan Update address aging infrastructure and related issues?

New Town program to fund housing repairs and homeowner training. Another example is the ASU Chandler Innovation Center, a public-private partnership between the city, Arizona State University, and TechShop. The project partnership is comprised of the city-owned 35,000 square foot building, TechShop-provided equipment, and ASU-provided classrooms to deliver a high tech entrepreneurial facility in the community. In another venture, the city has partnered with the University of Arizona, providing 9,000 square feet of classroom space in the Community Center to offer several university programs in the city's downtown core. Continuing to identify opportunities for public-private partnerships is important to ease the growing government burden related to the costs of public service delivery and helps to maintain the quality of life that will continue to retain and attract residents and employers to Chandler.

Smart Cities

Information technology has opened the door to unlimited possibilities for communities to engage citizens, provide efficient services, improve service delivery or operations, and address public issues. Employing information technology at every level of government is the culture of the "smart cities" movement.

Utilization of information technology to communicate with residents about issues of importance, such as emergencies or changing weather conditions, and to engage citizens in local decision making is the new norm. For example, Chandler's website can utilize questionnaires and polls to understand citizens' position on select topics or communicate emergencies, events, and meeting notices—even stream city Council meetings. Smart cities use and integrate technology to coordinate and speed emergency response to meet community challenges and needs. Transportation officials in particular have begun to actively incorporate technological enhancements to monitor circulation systems. By coupling technology into transportation system management and operations allow cities to address and respond more quickly and efficiently to congested freeways, gridlock, pollution, and effective public transportation routes.

Environmentally-cognizant design has also begun to take hold. Chandler adopted a green building program in 2008 and declared that all new city buildings larger than 5,000 square feet in size would be designed and constructed to include as many principles of both the LEED program and the city's green building program as feasible. Smart buildings can go beyond just energy efficiency, however, addressing resources including water, technology, and materials. For example, green roofs provide cooling, garden space, and trap rainwater; water monitoring with leak detection conserves water. Smart buildings cut energy costs, lower the carbon footprint, and provide comfortable and healthy environments that contribute to quality of life. Conservation-minded design isn't just good for the environment, but makes good business sense by saving operational costs.

Future Consideration

The challenge for a maturing city like Chandler is continuing to integrate ever-developing technology in existing infrastructure and public systems. However, Chandler's high tech culture has positioned the city to be a leader in optimizing intelligent technologies in the public realm. The city already embraces technology in many aspects of operations and engagement. The goal is to continue to be on the cutting-edge of evolving technology.

Future Considerations Summary

This report is intended to be thought provoking as the city of Chandler embarks on an update to its General Plan. The following catalogs various observations and questions offered herein and can serve as a point of reference during the development of the updated plan.

From Outer to Inner Suburbs

From peak to trough, city property values declined by 46 percent between 2009 and 2013. With the approval of Proposition 117 in 2012 by the electorate, property values can now only rise by a maximum of five percent per year. This will limit the rise of property values in the future and require additional time for values to return to previous heights. Combined with the recent restrictions on development impact fees and other legislative measures, cities have fewer resources to deal with capital improvement needs.

The challenges associated with maturing suburbs require a different mindset to find innovative solutions. Addressing older infrastructure, aging housing stock, transitioning commercial centers, traffic congestion, changing industry trends and business turnover, and maintaining a strong tax base are just some of the issues confronting maturing suburbs.

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Land Rich to Land Poor

Today, 85 percent of Chandler's land is already developed; only 15 percent of land within the city remains undeveloped with no annexation opportunities beyond its municipal planning area.

The results from the Mayor's 4-Corners Retail Committee and the *South Price Road Employment Corridor Study* should inform discussions regarding development and redevelopment policy in the General Plan Update.

Chandler Airpark is important to the community's economic future. However, because of development pressures surrounding the Airpark, land uses could limit or constrain important future development opportunities. The future of Chandler's Airpark needs to be addressed in the General Plan Update and to determine if it's a corridor that should help diversify Chandler's employment base.

Chandler has developed a reputation as a high tech community that will continue to attract knowledge-based employers and employees who likely will desire a more urban environment. With a limited land resource, redevelopment of obsolete sites and development of vacant property may lead to more urban high-density products. Where are the appropriate locations for urban-type development and how does Chandler ensure high quality development over time?

Big and Corporate to Small and Nimble

Dependence on one industry or business cluster could lead to serious consequences (e.g., Detroit and the auto industry). In recent years, Motorola abandoned its building in the South Price Road Corridor when the company was split and Intel has built a multi-billion dollar plant that sits idle today. Consideration should be given to whether diversification of employment industries is needed in the future.

Staying nimble and encouraging smaller businesses is another element of the economic development strategy for Chandler; the city—like the rest of the country—has seen a rise in the number of home-based businesses and freelance entrepreneurs that should be considered when planning and preparing for the future of employment.

Chandler is expected to continue to grow over the next 20 years, although more slowly than in the past. This growth will be stimulated by its employment base which is comprised of knowledge-based industries. This is an enviable position to be in and provides Chandler tremendous opportunities. How does Chandler maintain and protect employment-designated land uses to accommodate future economic development?

Land Rich to Talent Rich

The strength of the Tempe, Chandler, and Scottsdale employment bases is largely reflected in the strength of their office markets. More than 700,000 square feet of space is under construction in the Loop 101 (Price Freeway) corridor and Tempe is seeing extensive development of the State Farm campus downtown. This data demonstrates the strength of the employment base in the southeast Valley, and especially in parts of Chandler, Tempe, and Scottsdale

Chandler is well positioned from an economic standpoint to compete in the future for new industries. The presence of a highly educated workforce is one of the major decision-making criteria for companies and start-ups. This workforce will likely be quite nimble and will be able to adjust to changes in the local employment market. How can updating the General Plan help to address the needs of attracting, developing, and maintaining a quality workforce?

Implications of Regional Dynamics

How does Chandler take advantage of its logistical positioning (i.e., Loops 101 and 202, I-10) and access to a larger global marketplace? How will future “big idea” projects (e.g., I-11, Superstition Vistas) impact the community?

Land Use Trends

Higher residential densities and mixed-use developments have become a typical component of communities transitioning to mature suburbs. Ensuring that this type of development is appropriately located, however, is vital. Additionally, ensuring that a diverse mix of housing exists for people at different stages of life and at different income levels are important aspects that contribute to a community’s long-term economic viability. Targeting higher densities and mixed-use developments in key selected locations—like downtown, along commercial corridors, and other high-capacity corridors—should continue to be a strategy for Chandler to consider.

Communities across the country are concerned about public health trends and the relationship that the built environment has on these trends. Chandler’s neighborhood planning policy of including a park and/or school in every square mile has helped to address community wellness and access to recreational amenities. The issue remains how to integrate this healthy community design policy throughout Chandler.

Quality neighborhoods is a cornerstone of Chandler's quality of life. Lifestyles are changing and existing neighborhoods are maturing, creating challenges that the city must address. How should the General Plan Update ensure that desirable neighborhoods and a range of housing choices exist in the future?

Chandler, as well as other maturing communities, are seeing smaller-format commercial projects in locations where there is higher foot-traffic (such as mixed-used developments where housing, office space, services, and jobs are all located near retail). The General Plan Update may need to revisit and fine-tune policies to better address transitional development patterns between existing and new development.

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