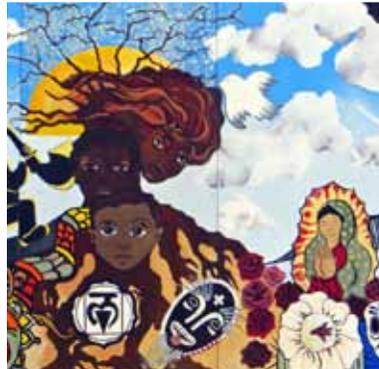


# FINAL DRAFT PLAN TUCSON

CITY OF TUCSON GENERAL & SUSTAINABILITY PLAN 2013



# FINAL DRAFT

# PLAN

# TUCSON



**CITY OF TUCSON GENERAL & SUSTAINABILITY PLAN 2013**

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# FORMAL ACTIONS ON PLAN TUCSON

**Mayor & Council** March 22, 2011, Public Participation Program, Resolution # 21705  
[others to be inserted upon completion]

**Voter Ratification** [to be inserted]

**Public Hearing:  
Mayor & Council** [to be inserted]

**Public Hearings:  
Planning Commission** [to be inserted]

**Public Meetings:** [to be inserted]

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# PHOTO CREDITS

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- City of Tucson and SPG Solar: Page 3.61
- City of Tucson Department of Transportation: Page 3.97
- City of Tucson Parks and Recreation Department: Page 3.49
- D. Ketelson/NOAO/AURA/NSF: Page 3.82
- Davis Sanders: Page 2.6: *"Bike Church"* by artists Blessing Hancock and Joseph O'Connell
- Desert Archeology Inc.: Page 3.33: Tucson's birthplace
- Evren Somez: Appendices
- Gina Chorover: Pages 3.42, 3.60
- Jennifer Gonzalez: Page 3.46
- Manuel Padilla: Page 2.4
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# EXECUTIVE SUMMARY

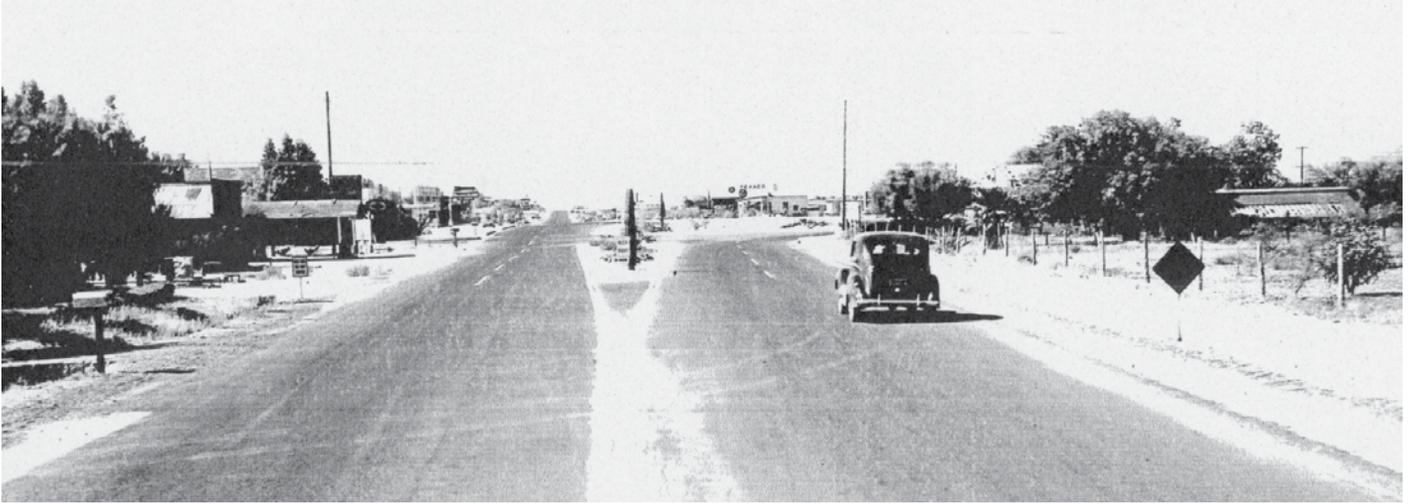
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# CHAPTER 1

## INTRODUCTION

- Plan Purpose & Use ..... 1.1
- Plan Organization ..... 1.2
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- Public Participation ..... 1.2
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Highway 89, northern gateway to Tucson, 1939.

# INTRODUCTION

Historically, planning and the resulting plans have helped shape cities. The focus of early plans ranged from roadway systems to move citizens and troops, to parcel development with a focus on land speculation, to grand avenues and plazas to celebrate the nation's greatness. In the nineteenth century, the large number of people arriving in America

seeking a better life put a strain on city living conditions. In response, planning broadened to address substandard conditions through such means as tenement law, sanitation systems, and open space provision. Planning expanded in the twentieth century to include zoning and subdivision regulations with the intention of improving urban conditions through controlling how land was used. The return of troops at the end of World War II and the popularity of the automobile spurred the growth of cities outward. Affected cities sought solutions to the impacts of sprawl through planning. Today, using tools such as general plans, cities continue to focus on improving the urban environment with an increasing understanding of the dynamic interrelationship of citizens' values, city form and function, and technical information.

The current Arizona State requirements for general plans are based on the Growing Smarter Act, which became effective on August 21, 1998. On May 18, 2000, Growing Smarter Plus became law. The Act requires cities and counties to address issues associated with urban growth and development and specified several additional elements for inclusion in cities' general plans. Plan Tucson addresses the required elements, as well as other topics of increasing importance to the community in recent years.

## Plan Purpose & Use

Plan Tucson replaces the General Plan adopted by Mayor and Council and ratified by the voters in 2001. State law requires that every ten years, a jurisdiction revisit its existing general plan and either readopt that plan or adopt a new plan.<sup>1</sup> The City chose to

<sup>1</sup>In June 2010, the Arizona Legislature passed House Bill 2145, which extended the deadline for readopting an existing general plan or adopting a new general plan until July 1, 2015.

prepare a new plan because it provided an opportunity to take a look at how Tucson has been developing socially, economically, environmentally, and physically since 2001 and to determine if that development has been consistent with community values, demographic trends, and best practices. Plan Tucson is a long-term policy document intended to guide decisions affecting elements that shape the city, such as housing, jobs, land use, transportation, water, and energy resources. Key to the Plan are goals and policies that provide a framework to guide future actions with the understanding that how the City has grown in the past will not necessarily work in the future. Used to best advantage, the Plan provides both a place to start and a place to end for the public, staff, and decision makers involved in developing or approving actions. That is, those proposing actions should do so with the Plan Tucson goals and policies in mind, and those reviewing proposed actions should assess whether the actions do in fact advance the Plan's goals and policies.

## Plan Organization

Plan Tucson consists of four chapters. This first chapter provides background on the Plan, while Chapter 2 highlights the historic and contemporary context for the Plan, including a look at

community and governmental initiatives in recent years that served as stepping stones into Plan Tucson. Chapter 3, which presents goals and policies for Tucson's future, is the cornerstone of the Plan. The goals

and policies are categorized into three focus areas: the Social and Economic Environment, the Natural Environment, and the Built Environment. Each focus area begins with a set of goals, and is followed by related elements and policies. Chapter 4 describes how the Plan is administered and implemented. The document concludes with a glossary. Four appendices, which are listed in the Table of Contents and provided under separate cover, round out the Plan.

## Element Integration

A key emphasis of this Plan is the integrative nature of the elements addressed. While government departments and offices generally focus on specific functions such as housing, water, and transportation, effective community building requires constant consideration of how these functions relate to each other, can strengthen each other, or may conflict with each other. To highlight this point, each element narrative references City entities with key roles in that element, and a table is included at the end of each set of policies that references relevant policies from other Plan elements. Finally, to acknowledge the particular interrelationship of land use, transportation, and urban design, these three elements are presented together in one section.

## Public Participation

Public participation is critical to the identification of issues about which the community cares and should be considered in any planning effort. Participation provides an opportunity for education of and input and feedback from the general public and stakeholders; for recognition and acknowledgment of shared values; for identification of opportunities and constraints; for collaborative development of goals

Geronimo Plaza,  
University Boulevard,  
2011.



and policies; and for evaluation and comparison of alternative scenarios and selection of a preferred scenario. The importance of public participation to not only Plan Tucson, but to City of Tucson planning, program, and project development in general is confirmed by its inclusion in the section on Governance and Participation in Chapter 3 of this document.

Growing Smarter legislation recognizes the importance of public participation, and Arizona State Law lays out requirements for participation in Arizona Revised Statutes (A.R.S.) Section 9-461.06. This section specifies that a written program laying out how public participation will be undertaken in the development of the General Plan be developed and approved by Mayor and Council. The written program that was used in undertaking public participation for Plan Tucson was approved by Mayor and Council on March 22, 2011 (Resolution No. 21705). The Public Participation Program is provided as an appendix to this Plan. Program activities include:

- 6 general public introductory meetings in six different geographic locations throughout Tucson
- 2 stakeholder orientation meetings focused on challenges and opportunities
- 39 Policy Working Groups at which interactive processes were used with stakeholders, including not-for-profit organizations, institutions, and governmental agencies, as well as with members of the general public to identify ideas for policies
- 2 Policy Forums at which results of the Policy Working Groups were presented and feedback sought through oral and written comment from the public
- 5 Community Workshops held in five different geographic locations of Tucson to provide information



**Participants map their ideas for future land use and connections at a 2012 Plan Tucson Community Workshop.**

on growth projections and national demographic and housing trends, to consider two alternative growth scenarios, and to develop additional scenarios

- 5 Open Houses to present the Draft Plan, solicit feedback, and answer questions
- 19 on-request presentations
- Plan Tucson website with information on Plan Tucson activities and progress, working documents, meeting agendas and meeting summaries, as well as a Facebook page and comment opportunities
- Planning Commission and Mayor and Council public hearings (A.R.S. 9-461.00)
- Inclusion of Plan on ballot for ratification by voters (A.R.S. 9-461.06).

## Mandated Elements

The elements mandated by A.R.S. Section 9-461.06 for inclusion in general plans are addressed in the Social and Environment, the Natural Environment, and the Built Environment sections of Chapter 3. Reference to the particular required elements covered in each section is included in the last paragraph of the introductory narrative preceding the goals. See Appendices for Mandated Elements Matrix.

# CHAPTER 2

## TUCSON PLANNING CONTEXT

- Tucson Over Time . . . . . 2.1
- Tucson in Recent Years. . . . . 2.3
- Community Values & Visions . . . . . 2.8
- A Sustainable Community . . . . . 2.9
- Neighborhoods: The Foundational Unit. . 2.13
- Goals . . . . . 2.17





# TUCSON PLANNING CONTEXT

Tucson is an evolving community. Understanding that evolution is important to addressing the range of topics covered in the City's General Plan. This chapter considers Tucson's context in six parts. The first part highlights Tucson over time, from prehistoric days to 2001, the year the previous General Plan was adopted.

The second part focuses on recent years, 2001–2012, looking first at variables that help define the community, from its natural setting, to its demographics, to land use patterns, and then at City plans, policies, and initiatives undertaken during this period. The third part addresses how values and visions identified through various activities in recent years served as a starting point for Plan Tucson. Building on the values and visions, the fourth part introduces sustainability as integral to the Plan's goals and policies, while the fifth part considers the neighborhood as the foundational unit that sustains a city. The sixth, and concluding part, presents the goals toward which the City will strive

through the implementation of policies presented in Chapter 3.

## Tucson Over Time<sup>1</sup>

Tucson is the oldest permanently settled community in the United States, going back about 4,000 years to the Hohokam Culture. Three hundred years ago, the Franciscan Order arrived in Tucson and established Mission San Xavier del Bac, a mission that has been restored and continues to serve the Tohono O'odham Nation. The Tucson Presido, established in 1775 under Spanish rule, is the official birthplace of the City of Tucson. The territory that would become Arizona was purchased by the United States from Mexico in

<sup>1</sup>A Brief History of Tucson; [http://cms3.tucsonaz.gov/history/tucson\\_history](http://cms3.tucsonaz.gov/history/tucson_history)



**Old Main, University of Arizona, 1889.**

1854. The Southern Pacific Railroad, which reached Tucson in 1880, improved access for new settlers and brought goods from the east. That year the population reached 8,000.

In 1862 the Morrill Act provided federal funds for the establishment of land-grant colleges to focus on agriculture and mining. In 1891, the University of Arizona opened its doors with 32 students and 40 donated acres. The University of Arizona's enrollment grew to 13,058 students in 1960 and 39,000 full and part-time students in 2011.

In 1912, Arizona became the 48th state in the Union and, in 1919, Tucson had the distinction of opening the first municipally owned airport in the nation. The airport was later moved to a larger site which, in 1927, was dedicated by Charles Lindbergh for two Tucsonans who had lost their lives in aviation accidents—Lieutenants Samuel H. Davis and Oscar Monthan. Davis-Monthan Field accommodated both civil and military aircraft and became the largest municipally owned airport in the nation.<sup>2</sup> In 1941, the City purchased the current site of the Tucson International Airport, and the Tucson Airport Authority was established in 1948 to

operate the airport.

Between 1940 and the end of WWII, Tucson grew from about 40,000 to 120,000 due, in large part, to activities associated with Davis-Monthan. Tucson continued to grow rapidly after the war for three key reasons. First, military personnel who had trained at Davis-Monthan returned to Tucson after the war to settle down. Second, the advent of affordable, residential air conditioning made living in a hot climate more appealing to many. Third, the emerging, post-war, automobile-owning middle class sought single family houses on large lots, which were readily available in Tucson. By 1960, Tucson boasted a population of 220,000, and by 2000, a population of 486,699, making Tucson the 30th largest city in the nation.

In the 1950s, the City began an aggressive campaign to annex the subdivisions that had sprung up outside the City limits.<sup>3</sup> Beginning in the 1960s, real estate development sustained local growth, fueled in part by the interest of California investors in “cheap” land and the advent of the “retirement community.” In 1960, the City covered 70 square miles, which more than tripled by 2000 to 227 square miles (*Exhibit T-1*).

The Hughes Aircraft Company, now Raytheon Missile Systems, opened in 1951 to produce missiles and other military equipment. In the 1950s, Hughes employed over 5,000 workers, becoming the largest technology employer in Arizona and spurring growth in the region.

Along with real estate and technology, tourism has been a major contributor to the local economy. The warm, dry climate; unique natural environment;

<sup>2</sup>Davis-Monthan Air Force History; <http://www.dm.af.mil/library/factsheets/factsheet.asp?id=4318>; Posted 6/2/2009

<sup>3</sup>Tucson Post World War II Residential Subdivision Development, 1945–1973 October 2007, City of Tucson Urban Planning and Design Department, Historic and Cultural Resources; October 2007 [http://cms3.tucsonaz.gov/sites/default/files/imported/resources/publications/wwii\\_102207.pdf](http://cms3.tucsonaz.gov/sites/default/files/imported/resources/publications/wwii_102207.pdf)

**EXHIBIT T-1 Tucson Population & Land Area Change**

Year	Population	% Change in Population	Land Area (sq. miles)	% Change in Land Area (sq. miles)
1990	405,371		157.5	
2000	486,699	+20.0%	195.5	+24.1%
2010	520,116	+6.8%	227.7	+16.5%

Source: U.S. Census Bureau and City of Tucson IT-GIS Section

Hispanic and Native American cultures; and the western ranching lifestyle have lured visitors to Tucson since the 1920s. Tourism dollars rose from \$28.5 million in 1954 to \$900 million in 1959, a thirty-two fold increase in only five years. By 2000 tourism dollars had reached \$1.8 billion.

**Tucson in Recent Years**

**Natural Setting:** Tucson is located in the Sonoran Desert at an approximate elevation of 2,400 feet. The City is surrounded by mountain ranges and federally-protected lands. Tucsonans enjoy 350 days of sunshine per year with an average daytime temperature of 83 degrees. Average annual rainfall in Tucson is 12 inches per year. Precipitation typically falls during two seasons, with half of the rainfall coming during the summer monsoon season and half during the winter months. The Sonoran Desert is home to a diverse array of plants and animals. Some are found nowhere else in the world, including the iconic saguaro cactus and the ironwood tree.

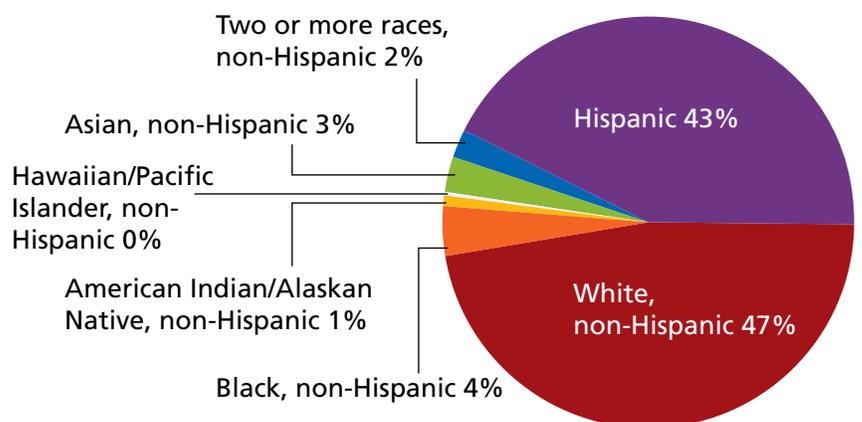
**Population:** In 2011, Tucson had a diverse population of 525,798 people, with 47.1% identifying as White, non-Hispanic and 42.8% identifying as Hispanic (*Exhibit T-2*). The median age of Tucsonans was 33.8 years with children under 18 years representing 22.3% and people over 65 years representing 12.0% of the population.<sup>4</sup>

Tucson’s population increased by 6.9% between 2000 and 2010.

In 2011, the median household income was \$35,362, while the national median income was \$50,502. Median household income increased by 18.2% between 2000 and 2010 and fell 2.9% between 2010 and 2011. *Exhibit T-3* presents income trends.

**Economy:** The University of Arizona plays a prominent role in the local economy and was the largest regional employer in 2012 with 11,604 full-time employees. The University’s economic impact is approximately \$2.1 billion annually. Raytheon Missile Systems, with 11,500 employees, is the region’s second largest employer (*see Exhibit ED-2, Economic Development, Chapter 3*).

**EXHIBIT T-2 Racial/Ethnic Composition of Tucson, 2010**



Data Source: U.S. Census and American Community Survey

<sup>4</sup>Demographic data for 2011 is from the American Community Survey.

Davis-Monthan Air Force Base is another major contributor to the local economy with a workforce of 6,000 military and 1,700 civilian personnel in 2011.

Tucson is a national leader in several fields. In 2011, *Business Facilities* ranked Tucson first in the nation as an Alternative Energy Industry Leader and sixth in Aerospace and Defense manufacturing. Tucson is also recognized as a leader in the optics, astronomy, and medical industries. In 2007, Tucson was designated by the United States Department of Energy as one of 25 Solar America Cities, acknowledging the City's efforts to accelerate the adoption of solar energy technologies for a cleaner, more secure energy future. Tucson Regional Economic Opportunities, Inc. estimates that more than 1,200 high-tech

businesses in the region employ more than 50,000 workers.

Tourism is a large part of Tucson's economy. The Metropolitan Tucson Convention and Visitors Bureau estimates that almost 22,000 jobs were supported by tourism in Tucson and Pima County in 2011 and \$2.4 billion in direct travel spending was generated by visitors in the same year. Events such as the Tucson Gem and Mineral Show and the El Tour de Tucson bicycle race are well known nationally and internationally, bringing visitors and associated revenue from all over the world. A 2007 report conducted for the Metropolitan Tucson Convention and Visitors Bureau estimated more than \$100 million was spent locally during the 2007 Gem Show, with food/lodging/local transportation being the largest category of expenditures. The associated local taxes paid were over \$9 million, constituting about 4% of the City's sales tax receipts that year.

Tucson experienced the recession of 2007–2009 in much the same way as the rest of the country. Median household income in Tucson was \$35,362 in 2011, which was below the national median household income of \$50,054. While national household income fell 1.5% from 2010 to 2011, household income in Tucson fell 2.9% in the same period (*Exhibit T-3*). The unemployment rate rose from a low of 3.6% in 2007 to a high of 9.4% in 2010 and then dipped to 8.4% in 2011. *Exhibit T-4* presents employment data for Tucson between 2001 and 2011.

**Education:** Seven school districts operate within the City limits, including Amphitheater, Catalina, Flowing Wells, Foothills, Sunnyside, Tucson Unified, and Vail. Elementary, middle, and high school education is provided

### EXHIBIT T-3 Median Household Income in Tucson

Year	Median Household Income
2011	\$35,362
2010	\$36,428
2009	\$35,565
2008	\$36,640
2007	\$36,096
2006	\$36,095
2005	\$34,241
2000	\$30,819

### EXHIBIT T-4 Employment in Tucson

Year	Employment	Unemployment Rate
2011	426,406	8.40%
2010	433,795	9.40%
2009	441,966	9.00%
2008	446,651	5.60%
2007	438,680	3.60%
2006	429,323	3.90%
2005	418,214	4.50%
2004	417,457	4.60%
2003	405,584	5.30%
2002	399,021	5.70%
2001	395,453	4.30%

Source for Exhibits T3-T4: U.S. Census and American Community Survey

through over 800 public and private schools within the City. The largest post-secondary educational institutions are the University of Arizona, with an enrollment of 39,236 students in 2011, and Pima Community College, with an enrollment of 62,199 students in the same year. Five of six Pima Community College campuses are located within the City.

The City of Tucson supports lifelong learning through a variety of programs for different age groups. In 2011, the Parks and Recreation Department served over 250,000 seniors through its senior center programming, more than 50,000 adults and children through its therapeutic recreation programs, and 4,300 youth through its out-of-school programming.

**Activities:** Recreational activities are varied and the region's mild climate encourages outdoor recreation. As of 2011, the Tucson metropolitan area had more than 27,000 acres of park lands, 732 miles of designated bikeways, and more than 40 public and private golf

courses. In the same year, the City Parks and Recreation Department managed 125 parks, 26 pools plus 1 splash pad, 16 recreation centers, 3 senior centers and 9 senior clubs, 5 golf courses, and 202 ball fields and multipurpose fields. In 2011, well over 1.1 million people attended classes, events, programs, or facilities managed by the Parks and Recreation Department.

Tucson hosts many sporting events. The most prominent of these include the University of Arizona Wildcats football and basketball games; the Tucson Padres baseball team, a Triple-A affiliate of the San Diego Padres; the Fort Lowell Shootout, a youth winter soccer tournament drawing soccer players from across the country and internationally; and El Tour de Tucson, attracting over 9,000 cyclists of all ages and abilities from the United States and many other countries.

#### **Development Patterns &**

**Transportation Networks:** To a large extent, land use patterns in Tucson are a result of the transportation system. The



**Aerial view of Midtown Tucson looking east showing development in response to street grid pattern.**



Walk-in sculpture in Barrio Anita made of bicycle parts.

relatively flat topography has enabled the development of a street grid pattern in which the major roads (arterials) support commercial uses and the smaller streets (collectors and residential) accommodate residential uses. Interstates 10 and 19 are the only major highways that traverse Tucson, making arterials and collectors the primary means of traffic circulation within the city.

Similar to many cities across the nation, Tucson has taken a greater interest in transit in recent years due in part to higher gas prices, increased sensitivity to environmental issues, and a desire for a more walkable, less car-dependent community. The public transit system in Tucson is comprised of bus service operated for the City by Sun Tran. As of 2011, the bus service was made up of 40 fixed routes with 20 million passenger trips, an increase in transit ridership of 36% in ten years. A new addition to the transit system is the Modern Streetcar system currently under construction. The system, designed to connect the University of Arizona, the Fourth Avenue Business District, downtown Tucson, and historic westside

neighborhoods, is anticipated to not only provide an alternative to the automobile, but also to generate more public-private development along the route.

**Neighborhoods:** Neighborhoods are integral to Tucson's sense of place. The Neighborhood Preservation Ordinance was enacted to ensure the health, safety, and welfare of residents and to protect residents from neighborhood deterioration. As of October 2012, there were 134 neighborhood associations registered with the City.

Housing has historically been affected by market factors including consumer preferences, land availability, and household size. Other factors that influence Tucson's housing stock are demographics; transportation access, including public transit; and economics. In addition to wanting housing that meets family needs, Tucsonans value safe, accessible, and identifiable neighborhoods in which to live.

The character of Tucson's neighborhoods is defined, in large part, by architecture and historic resources. As of 2012, Tucson had 31 National Register Historic Districts, 6 locally-designated Historic Preservation Zones, and 2 Neighborhood Preservation Zones. Architectural styles are diverse and represent many building periods, extending from the mid-to late-1840s through the 1960s. Styles include Sonoran, Territorial, Queen Anne, Mission Revival, Colonial Revival, Art Deco, Craftsman Bungalow, Moderne, International, and post WWII Suburban Ranch.

**Culture:** Tucson's rich culture is founded in its heritage, architecture, demographics, and economy. The Tucson region has over 500 non-profit organizations focused on arts and culture. Cultural events and festivals

## EXHIBIT T-5 Tucson Awards and Recognitions

Year	Award or Recognition	Organization recognizing Tucson
2012	Fifth highest spending per capita on cyclist/pedestrian amenities	Alliance for Biking and Walking
2011	One of the "10 Best Places to Retire if You Love the Outdoors"	AARP
2011	One of the "10 Great Retirement Cities in the U.S."	Kiplinger
2011	Ranked #9 in "Top 10 Cities for Veterans"	Livability.com
2011	Ranked #15 in top "25 Best Places to Retire"	CNN Money
2011	Included in Outside Magazine's "Best Towns 2011"	Outside Magazine
2011	Ranked #6 for Aerospace/Defense Manufacturing	Business Facilities
2011	One of "10 Great Places for City Cycling"	USA Today Travel
2011	Ranked #1 "Best Cities for Renters"	Forbes
2011	Ranked #4 Best Cities for Public Transportation and Job Access	Brookings Institution
2011	One of the "World's Most Underrated Cities"	Yahoo Travel
2011	One of the City's ranked in "Housing Markets: Best Recovery Bets"	CNN Money
2010	Ranked #10 "25 Best Places to Retire"	CNN Money
2010	Named Best Town for Road Biking	Outside Magazine
2010	Ranked #1 in alternative energy leadership	Business Facilities
2010	Ranked #19 in "America's Most Innovative Cities"	Forbes
2010	Included as one of "20 towns of the future"	Sunset
2010	Ranked #8 "best cities for commuters"	Forbes
2009	Ranked #1 "Best Affordable Places to Retire."	Bloomberg Business Week
2009	Included, as one of the "Best Adventure Towns"	National Geographic
2009	Ranked #1 "Best Places to Live a Simple Life"	AARP
2009	Included, "Fast Cities"	Fast Company
2009	Ranked #13, "Top 25 Fittest Cities"	Men's Fitness

are held throughout the year and cater to people of all ages and backgrounds. Well-known events that attract visitors from outside the region include Tucson Meet Yourself, focusing on cultural diversity and food; Dia de Los Muertos All Souls Procession; the Fourth Avenue Street Fair; the Mariachi Conference; the Tucson Rodeo; and the world's largest Gem and Mineral Show.

Music and theater performances are abundant in Tucson, and popular venues include the Temple of Music and Art, the Tucson Music Hall, the Fox Theater, the Rialto Theater, and the University of Arizona Centennial Hall. Prominent museums include the Tucson Museum of Art, the Center for Creative Photography, the Children's Museum,

the Pima Air and Space Museum, the Museum of Contemporary Art, and the University of Arizona Art Museum. Major statewide cultural institutions such as the Arizona Historical Society, Arizona Opera Company, Arizona Theatre Company, and the Tucson Symphony Orchestra were founded in Tucson.

The Tucson Pima Arts Council administers the Percent for Art programs for the City and Pima County. One percent of the construction budget of major public construction projects is put toward the creation and installation of public art pieces. Since 1986, over 200 public art projects have been completed in metropolitan Tucson and Pima County.

**Exhibit T-5 illustrates the many accolades received by Tucson in recent years.**

**Prior Planning Efforts:** Since adoption of the 2001 Tucson General Plan, the City's Mayor and Council have endorsed or approved a variety of studies, plans, and reports and have adopted policies and directives. A review of these documents was conducted in the preparation of Plan Tucson (*Exhibit T-6, page 2.10*).

## Community Values & Visions

Long-term planning for a community, such as that done for a General Plan, should acknowledge shared values and envision a future built on those values. The 2001 General Plan was informed by the 1997 Livable Tucson Vision Program, which explored Tucsonans' values and visions for the city through a series of forums and workshops and which still has much to contribute to Plan Tucson. Subsequent to that program and the adoption of the 2001 Plan, there were further efforts initiated by both governmental and nongovernmental entities to understand and integrate values and visions into community planning. These efforts included Town

Halls; Community Conversations; and in 2010 the Imagine Greater Tucson Project (IGT), a regional project focused on producing a vision for the Eastern Pima County region.

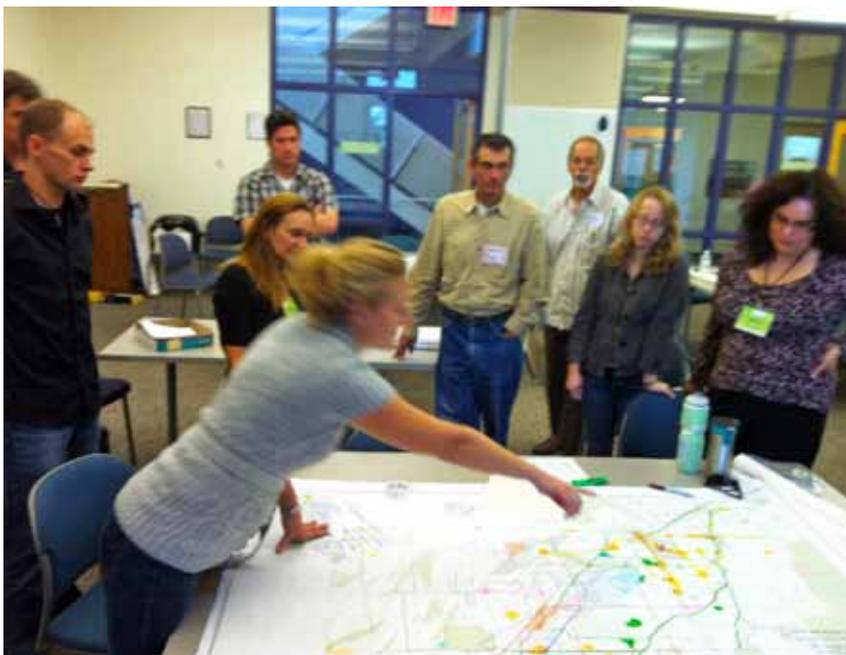
These visioning efforts provided a starting place for Plan Tucson. Rather than conducting a separate visioning effort, the Plan Tucson approach was to:

- review the values and visions provided through the other efforts to determine if there were any basic inconsistencies
- explore with Plan Tucson participants their aspirations for Tucson's future and to consider those in light of the earlier values and visions
- look carefully at participants' input during Plan Tucson workshops, meetings, and forums for any underlying values that ran counter to those identified through the other efforts

Perhaps not surprisingly, this visioning approach revealed remarkable consistency between values overtly stated in previous efforts and those that were implied in the goal and policy development process for Plan Tucson. In summary those shared values are:

- good jobs
- a strong economy
- quality education
- a clean and safe built environment
- a protected natural environment
- a healthy population
- cohesive and attractive neighborhoods
- access to multiple forms of transportation
- a vibrant and diverse cultural life
- a sustainable development pattern
- a distinctive character for both Tucson and for the region
- an efficient, effective, and transparent government

Community meeting working on smart growth issues.



These shared values together create a vision of a community that will not just survive, but will thrive, for years to come—that is, a sustainable community as discussed in the next section.

## A Sustainable Community

In a very general sense, sustainability refers to a condition in which human activities enhance economic development, social equity, and environmental health while remaining within the carrying capacity of the natural environment. In Tucson this means fully embracing the knowledge that this is a desert community and then applying that knowledge to all aspects of community life to ensure that the city is a place in which future generations can and will want to live.

which the community has said it wishes to go, and will guide the City’s strategic efforts toward a more sustainable future. As such, Plan Tucson also serves as an essential foundation for establishing a community sustainability plan.

To achieve the long-term goals presented at the end of this chapter requires that Tucson continue to be a place where multiple generations of families choose to live because they value the quality of life, and because their children have ample opportunities to find jobs, establish careers, and ultimately provide a good future for their own families. Tucson must also be a place that maintains and supports local businesses while drawing high-tech, high-wage industries to the area. High-tech industries look for locations where

*A modern sustainability vision for Tucson is to be the world’s leader and source of innovation for more efficient, more prosperous, and healthier desert living.*

In April 2012, the Mayor and Council directed staff to update the City’s “Framework for Advancing Sustainability,” adopted by Mayor and Council in 2008. The purpose of the update was to provide a more comprehensive vision for a sustainable future for Tucson. The resulting updated “framework for sustainability” is integrated throughout Plan Tucson.

How a community pursues sustainability is shaped by its particular context and values. The goals and policies in Plan Tucson reflect and support community values and are the catalyst for preserving and improving the community’s quality of life. The goals and policies signal the direction in

the quality of life appeals to the highly-skilled workers who are in demand and, therefore, have more options to choose where they locate. Additionally, Tucson needs to continue providing, along with its weather, the quality of life and venues that attract tourists, winter visitors, and sporting, cultural, and other special events. All of these are essential to the community’s long-term economic prosperity and social continuity, which translates to its sustainability.<sup>5</sup>

While Tucson’s pursuit of sustainability must respond to local factors, the community is part of a larger national and international context, and Tucson must consider its sustainability efforts within this larger context also.

<sup>5</sup>The STAR Rating System: <http://www.starcommunities.org/rating-system>

**EXHIBIT T-6 Plans, Studies, & Other Initiatives Approved by Mayor & Council**

Plan, Study or Report	Year
Grant Road Improvement Plan	In progress
Silverbell Road Design Concept Study	In progress
Sustainable Land Use Code Integration Project	In progress
Specific Plans (Subregional, Redevelopment, Area and Neighborhood Plans) —years vary, from 1970's to present	in progress
Land Use Code Simplification Project (Uniform Development Code)	2012
5-year Agency Plan—Public Housing	2011
El Paso and Southwestern Greenway	2011
Historic Landmark Signs Preservation Program	2011
Jefferson Park Neighborhood Design Manual	2011
Oracle Area Revitalization Project	2011
2040 Regional Transportation Plan	2010
Avra Valley Habitat Conservation Plan	2010
City of Tucson and Pima County 5-Year HUD Consolidated Plan	2010
City of Tucson Strategic Technology Plan	2010
Downtown Links Urban Overlay District: Background Study and District Proposal	2010
Eastern Pima County Trail System Master Plan	2010
Planned Land Use Data Conversion Project	2010
Regional Transportation Plan	2010
Feldman's Neighborhood Design Manual	2009
Greater Tucson Solar Development Plan	2009
High Capacity Transit (HCT) System Plan	2009
Solar Integration Plan	2009
Transit-Oriented Development Handbook	2009
Tucson Fire Strategic Plan: 2009-2011	2009
Tucson Modern Streetcar Project	2009
Tucson Regional Plan for Bicycling	2009
Tucson Solar Initiative	2009
University of Arizona Comprehensive Campus Plan Update	2009
Water and Wastewater Infrastructure, Supply and Planning Study • Phase 1 (2009) & Phase 2 (2009) Final Reports • 2011-2015 Action Plan for Water Sustainability (February 2010)	2009

**EXHIBIT T-6 Plans, Studies, & Other Initiatives Approved by Mayor & Council** (continued)

Plan, Study or Report	Year
Downtown Urban Design Reference Manual	2008
Framework for Advancing Sustainability	2008
Greater Southlands Habitat Conservation Plan	2008
Pima Cultural Plan: Needs Analysis and Strategies	2008
Update to the Water Plan: 2000-2050	2008
Urban Landscape Framework	2008
Downtown Infrastructure Study	2007
Emergency Operations Plan	2007
Tucson Post World War II Residential Subdivision Development Report (1945-1973)	2007
City of Tucson Parks and Recreation Ten-Year Strategic Service Plan	2006
Drought Response and Preparedness Plan	2006
Regional Transportation Authority Plan	2006
Stone Avenue Corridor Project	2006
Tucson Economic Blueprint, Strategic Analysis Report	2006
U.S. Mayor's Climate Protection Agreement	2006
Water Efficiency: Water Conservation Program Recommendations for Tucson Water's Future	2006
Greater Tucson Strategic Energy Plan	2005
Greyhound Transportation and Feasibility Study	2005
Human Services Plan, Fiscal Years 2007 & 2008	2005
Ronstadt Transit Center Transportation and Feasibility Study	2005
Urban Environmental Accords	2005
Affordable Housing in Downtown Tucson	2004
Downtown Parking Master Plan	2004
Plan for Annexation	2004
Tucson Historic Warehouse Arts District Master Plan	2004
Transportation Access Management Guidelines for the City of Tucson	2003
Patriot Act's Critical Infrastructure	2001
Rio Nuevo Master Plan, 10-Year Development and Long-Range Vision	2001
Sonoran Desert Conservation Plan	2001

The City’s “framework for sustainability” not only reflects community values and visions, but also aligns with emerging national sustainability guidelines. One framework, the STAR Community Rating System, provides the most comprehensive, quantitative, and vigorously-developed approach to assessing community sustainability. STAR is “the nation’s first voluntary, self-reporting framework for evaluating, quantifying, and improving the livability and sustainability of U.S. communities.”

Together STAR’s guiding principles, goals, and objectives define community-scale sustainability, and present a vision of how communities can become more prosperous, more inclusive, and healthier across the following seven categories:

1. **Built Environment:** Achieve livability, choice, and access for all where people live, work, and play.
2. **Climate & Energy:** Reduce climate impacts through adaptation and mitigation efforts and increase resource efficiency.
3. **Economy & Jobs:** Create equitably shared prosperity and access to quality jobs.
4. **Education, Arts & Community:** Empower vibrant, educated, connected, and diverse communities.
5. **Equity & Empowerment:** Ensure equity, inclusion, and access to opportunity for all residents.
6. **Health & Safety:** Strengthen communities to be healthy, resilient, and safe places for residents and businesses.
7. **Natural Systems:** Protect and restore the natural resource base upon which life depends.

A comparison of the STAR categories with the shared values and visions and the goals identified in Plan Tucson underscores the consistency with

which sustainability is viewed across communities. This comparison also underscores the value of and rationale for combining the City’s “framework for sustainability” with the City’s General Plan to enable Plan Tucson to serve as the City’s General and Sustainability Plan.

The STAR rating system was used to build a comprehensive sustainability framework for Tucson in several ways as follows:

- The STAR system includes a broad array of local actions that can be taken by government, community groups, businesses, and residents to meet the sustainability goals identified in the rating system. This list of potential actions was compared against the policies in Plan Tucson to ensure there was adequate policy guidance to support, in a broad sense, the full range of sustainability elements captured in STAR.
- The STAR objectives were integrated with local community values to describe a long-term vision of a resilient community based on a vibrant economy, social equity, and a healthy environment. This vision is expressed in 37 “principles of sustainability,” which are intended to clearly articulate the elements of that long-term community vision within a framework that also reflects national priorities
- The STAR system includes a set of desired community outcomes that provide a mechanism for quantitatively assessing community sustainability by establishing indicators of success. These indicators and outcomes comprise the City’s sustainability framework that is now integrated into Plan Tucson.

The success of both a General Plan and a Sustainability Plan is determined by on-the-ground results. Details about how success may be measured

for Tucson is presented in Chapter 4, which addresses the implementation of Plan Tucson goals and policies. Included in Chapter 4 as *Exhibit IA-2* is the Sustainability Indicators Matrix. In addition, STAR indicators are shown as a starting point for assessing progress in the implementation of Plan Tucson, and will be supplemented with locally-derived indicators as these are developed.

## Neighborhoods: The Foundational Unit

At a fundamental level, the sustainability of a community is interwoven with the sustainability of its neighborhoods. Neighborhoods are the smaller systems that are part of the larger system that is the community. These systems need each other; the community needs the neighborhoods to establish its identity and basic quality of life, and the neighborhoods need the larger community, which provides infrastructure, services, and facilities, all of which cannot be located in any one neighborhood. Addressing this interconnectedness in a way that

recognizes the importance of the neighborhood both as an individual entity and as a part of the greater community is one purpose of a General Plan.

Once upon a time a neighborhood might literally have been a resident's world; today physical and virtual modes of transport allow many residents to go far beyond the boundaries of their neighborhoods on a daily basis. Despite this ability, however, it is generally the neighborhood through which a resident establishes his or her initial relationship with the larger community.

Neighborhoods may be formally or informally defined. In Tucson, there are 134 Neighborhood Associations, registered with the City. These associations function with all-volunteer groups of neighbors that work with the City to keep the residents and businesses within the Association boundaries informed about activities, public meetings, and events that may be of interest to the neighborhood. In addition to the neighborhood associations, there are other neighborhood scaled units in the form of Homeowner Associations

The iconic Paul Bunyan figure (below left) at Stone and Glenn has become a gateway feature announcing arrival into the Coronado Neighborhood.

Historic home with recent renovations (below right).



and subdivisions that residents may perceive as neighborhoods. It is worth noting that many of Tucson's current neighborhood associations were originally subdivisions.

The major land use in most neighborhoods is housing, ranging from single family, to multifamily, to townhomes. A resident's house is often his/her largest asset, and the quality of the neighborhood can impact the value of that asset. Therefore, better neighborhood conditions are often equated with more owner-occupied housing because owner occupants have a particular vested interest in the condition of their property. However, Tucson has a high rental rate in many of its neighborhoods. Some of these renters are college students; others are members of the "baby boomer" or "Y" generations, who prefer not to have the responsibilities of property maintenance, and many are individuals or families without the income to afford a house. More affordable housing would benefit the latter individuals and families, and the neighborhoods would benefit

from the pride and care that often accompanies homeownership.

In many neighborhoods, businesses are located along the periphery or along traversing collector or arterial streets. While Tucson's neighborhoods have traditionally been focused on residential issues, services provided by many local businesses help make a neighborhood an even more desirable place to live as the emphasis on sustainable lifestyles, including the option of walking to daily services, is increasing. Businesses also often provide a regular presence and daytime activity that can be helpful in deterring neighborhood crime. Additionally businesses, such as restaurants, may become informal, gathering places for neighbors. Residents, local businesses, and institutions working together can strengthen a neighborhood.

Other vital components of a neighborhood are the public infrastructure and facilities that allow a neighborhood to stay connected internally and externally, provide services such as electricity and water, offer gathering spaces, and often create

**A traffic calming circle in the Miles Neighborhood was the outcome of neighbors' proactive response to safety concerns.**



a first impression through landscaping, signage, and other features. The pursuit of projects to enhance the public realm is often what brings neighbors together. Examples of common projects are traffic calming improvements, gateway features, and planting trees for shade to encourage pedestrian activity and to beautify streetscapes.

While the physical make-up of neighborhoods is important, it's the people who reside in those neighborhoods that make them come to life. The more vested residents are in their neighborhoods, the more stable those neighborhoods will be. Tucsonans' investments in their neighborhoods come in many forms beyond purchasing

or renting a home or purchasing goods or services at a local store. All of these investments contribute to strengthening not only the neighborhood, but the community as a whole. *Exhibit T-7* provides examples of ways in which neighborhoods participate regularly as community builders.

While residents of many neighborhoods invest time and energy in addressing neighborhood issues, it is important to recognize the type and extent of those issues vary greatly. The City's 2012 Poverty and Urban Stress report identifies indicators of neighborhood stress, including crime, income, poverty, education, and housing. Working to address disparities

#### EXHIBIT T-7 **Neighborhoods as Community Builders**

##### **Some ways Tucson Neighborhoods have contributed to building community**

**By volunteering** to eradicate graffiti through timely painting over or cleaning up graffitied areas to reduce the spread

**By starting** One-Can-a-Week programs to assist the Community Food Bank to address hunger in the community

**By fostering** community spirit through architectural & garden tours, historic & cultural events, potlucks, clean-ups & more

**By organizing** Neighborhood Watch programs, creating email & phone message trees & working with local businesses to combat crime

**By initiating** tree planting & stormwater harvesting projects, lessening heat island effect, providing shade, & reducing flooding

**By partnering** with Tucson Clean & Beautiful to adopt local parks and roadways to keep them clean

**By joining** forces with Pima Council on Aging to form Neighborhood Care Alliances & Lend-a-Hand programs to assist with aging in place

among neighborhoods, so that more neighborhoods become and stay stable, is critical to the overall health of the community and its residents.

Stable neighborhoods strengthen the city socially, economically, and physically in a variety of ways. Some key ways include:

- providing a safe and pleasant places for residents to live
- maintaining property values
- preventing deterioration and blight
- maintaining the tax base
- providing affordable housing options to promote homeownership
- support local business and area employment
- providing conditions that support aging in place
- creating a sense of community

All of the elements included in Plan Tucson, which apply to the community as a whole, also apply to neighborhoods. To emphasize the integrative nature of these elements, the policies relevant to neighborhoods are included across the

elements presented in Chapter 3. While there is one goal and twenty-one policies that include the word “neighborhood,” the majority of Plan Tucson’s 21 goals and 163 policies are important to enhancing, maintaining and creating stable neighborhoods. Following the argument that the neighborhood is the foundational unit of the city, then what affects the neighborhood will affect the city as a whole and vice versa.

## Goals

All of the Plan Tucson goals are presented below and repeated as applicable in Chapter 3 at the beginning of each focus area: (1) The Social & Economic Environment, (2) The Natural Environment, and (3) The Built Environment.

Together the goals speak to a sustainable community that embraces prosperity, equity, and a healthy environment.

Each goal below is a desired outcome for Tucson’s future, completing the sentence that begins “The City strives for...”

# GOALS

## The City strives for:

### THE SOCIAL AND ECONOMIC ENVIRONMENT

- 1** A mix of well-maintained, energy-efficient housing options with multi-modal access to basic goods & services.
- 2** A stabilized local economy with opportunities for diversified economic growth supported by high-level, high-quality public infrastructure, facilities, and services.
- 3** A community where no one lives in poverty.
- 4** A safe community and secure neighborhoods.
- 5** A community whose economic stability and sense of place reflects its commitment to arts and culture and its care for the natural environment.
- 6** A community that is healthy physically, mentally, economically, and environmentally.
- 7** A sustainable urban food system.
- 8** An educated citizenry.
- 9** Timely, accessible, and inclusive processes to actively engage a diverse community in City policy, program, and project planning.

### THE NATURAL ENVIRONMENT

- 10** A reputation as a national leader in the development and use of locally renewable energy technologies, water conservation, waste diversion and recovery, and other emerging environmentally-sensitive industries.
- 11** A reduction in the community's carbon footprint and greater energy independence.
- 12** A community that is resilient and adaptive to climate change.
- 13** Abundant and appropriate use of native plants and trees.
- 14** A network of healthy, natural open space managed for multiple benefits.
- 15** A secure, high quality, reliable, long-term supply of water for humans and the natural environment.
- 16** A comfortable, attractive, and pollution-free environment
- 17** Sound, efficient, ecological policies and practices in government and in the private sector.



## THE BUILT ENVIRONMENT

- 18** Well-maintained public facilities and infrastructure that support coordinated cost-effective service delivery for current and future residents.
- 19** A community that respects and integrates historic resources into the built environment and uses them for the advancement of multiple community goals.
- 20** Strategic public and private investments for long-term economic, social, and environmental sustainability.
- 21** An urban form that conserves natural resources, improves and builds on existing public infrastructure and facilities, and provides an interconnected multi-modal transportation system to enhance the mobility of people and goods.

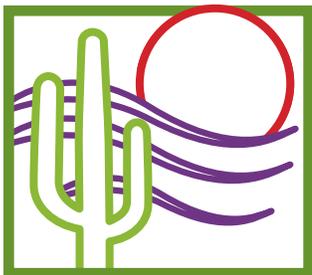
# CHAPTER 3

## FOCUS AREAS & POLICIES



### THE SOCIAL & ECONOMIC ENVIRONMENT

Housing.....	3.5
Economic Development.....	3.12
Public Safety.....	3.22
Parks & Recreation.....	3.26
Arts & Culture.....	3.32
Public Health.....	3.38
Urban Agriculture.....	3.42
Education.....	3.46
Governance & Participation.....	3.52



### THE NATURAL ENVIRONMENT

Energy & Climate Readiness.....	3.61
Water Resources.....	3.67
Green Infrastructure.....	3.72
Environmental Quality.....	3.78



### THE BUILT ENVIRONMENT

Historic Preservation.....	3.87
Public Infrastructure, Facilities & Cost of Development.....	3.94
Redevelopment & Revitalization.....	3.102
Land Use, Transportation, & Urban Design.....	3.109



Tucsonans value a community in which basic needs are met, creativity pursued, diversity embraced, and the sun shines in the face of challenges.



# THE SOCIAL & ECONOMIC ENVIRONMENT



- **Housing**
- **Economic Development**
- **Public Safety**
- **Parks & Recreation**
- **Arts & Culture**
- **Public Health**
- **Urban Agriculture**
- **Education**
- **Governance & Participation**

## Introduction

During discussions at public forums, Tucsonans often talk about their desire for an improved or enhanced “quality of life.” When they elaborate on what determines that quality, it generally begins with having a decent place to live, a job, enough food on the table;

an opportunity for education; safety from crime and disasters; health and access to medical care; and a sense of identity within the community. The City has direct and indirect responsibilities that impact people’s assessment of their quality of life in Tucson. A city’s social and economic environment is where many of the “quality-of-life” determinants are addressed, with particular focus on the human scale. The City’s role in meeting residents’ needs is twofold: first is to provide core services relating to the general welfare of the public as defined in the City Charter, and second is to support opportunities for personal advancement and growth. The goals and policies for the Social and Economic Environment Focus Area are primarily focused on programs and services, while those associated with the Natural Environment and Built Environment Focus Areas reflect the City’s authority in the regulation and development of physical resources and the landscape.

This section addresses the nine topics shown above, all of which are important to the future of Tucson’s social fabric and its economy. The Plan Tucson goals related most directly to the Social and Economic Environment are presented together on the next page, followed by introductory narratives and policies for each of the referenced topics. The Arizona State Statute requirements for general plans addressed in this section include housing, safety, and recreation.

**Jr. BIOTECH, operated by the UA’s BIO5 Institute, provides classroom visits for modeling hands-on biotechnology activities.**





# GOALS

## The City strives for

- 1** A mix of well-maintained, energy-efficient housing options with multi-modal access to basic goods and services.
- 2** A stabilized local economy with opportunities for diversified economic growth supported by high-level, high-quality public infrastructure, facilities, and services.
- 3** A community where no one lives in poverty.
- 4** A safe community and secure neighborhoods.
- 5** A community whose economic stability and sense of place reflects its commitment to arts and culture and its care for the natural environment.
- 6** A community that is healthy physically, mentally, economically, and environmentally.
- 7** A sustainable urban food system.
- 8** An educated citizenry.
- 9** Timely, accessible, and inclusive processes to actively engage a diverse community in City policy, program, and project planning.

**Sonora Cohousing in Tucson is designed to build community through shared spaces that foster social interaction.**





# Housing

Shelter is a basic human need, making housing a key component of any urban plan. The availability, affordability, and quality of a community's housing relate directly to its livability. A snapshot of some key Tucson 2011 housing statistics<sup>1</sup> is shown below:

- Housing units within City limits: 230,906
- Renters: 50.2%
- Owners: 49.8%
- Average number of people in a household: 2.51

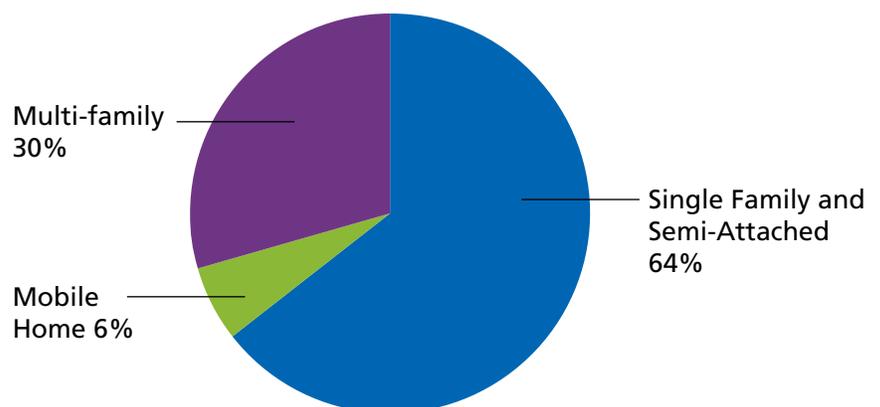
Tucson's housing is made up primarily of single-family detached and semi-attached structures and is constructed of a mixture of building materials that include brick, block, frame and stucco, and adobe. Factors, such as the warm desert climate, Tucson's rich history and cultural diversity, and its proximity to Mexico, have shaped much of the city's residential character. Predominant housing types include historic mansions and barrio row houses built as early as the late 1800's; single family post-war ranch style subdivisions of the mid-1950s; and townhouse, apartment, and single family planned communities in suburban locations built between the 1980s and 2005. Some southwestern design features that are commonly seen in Tucson include flat roof and beam construction, porches, courtyards, living spaces that orient to the outdoors and low-maintenance desert landscaping. These features are reflected in new residential developments, such as the Mercado District of Menlo Park Planned Area Development (PAD), for which the special zoning designation contains a development design theme to integrate with the surrounding neighborhood context and history of the project site.

*Exhibit H-1* shows the distribution of housing types in Tucson, and *Exhibit H-2* maps housing location and age.

The two City of Tucson functions directly related to housing are: (1) the review and enforcement of residential building codes and land-use regulations, and (2) the administration of local housing and community development programs that are supported by funding from the federal government.

The City's Planning and Development Services Department (PDSD) is responsible for regulating the location, development, and maintenance of housing community wide. PDSD oversees land use and permitting processes and has legal authority to enforce health and safety standards. This department also creates, revises, and enhances local building codes related to structural integrity, design, energy efficiency and conservation, and use of

**EXHIBIT H-1 Housing Types in Tucson, 2010**

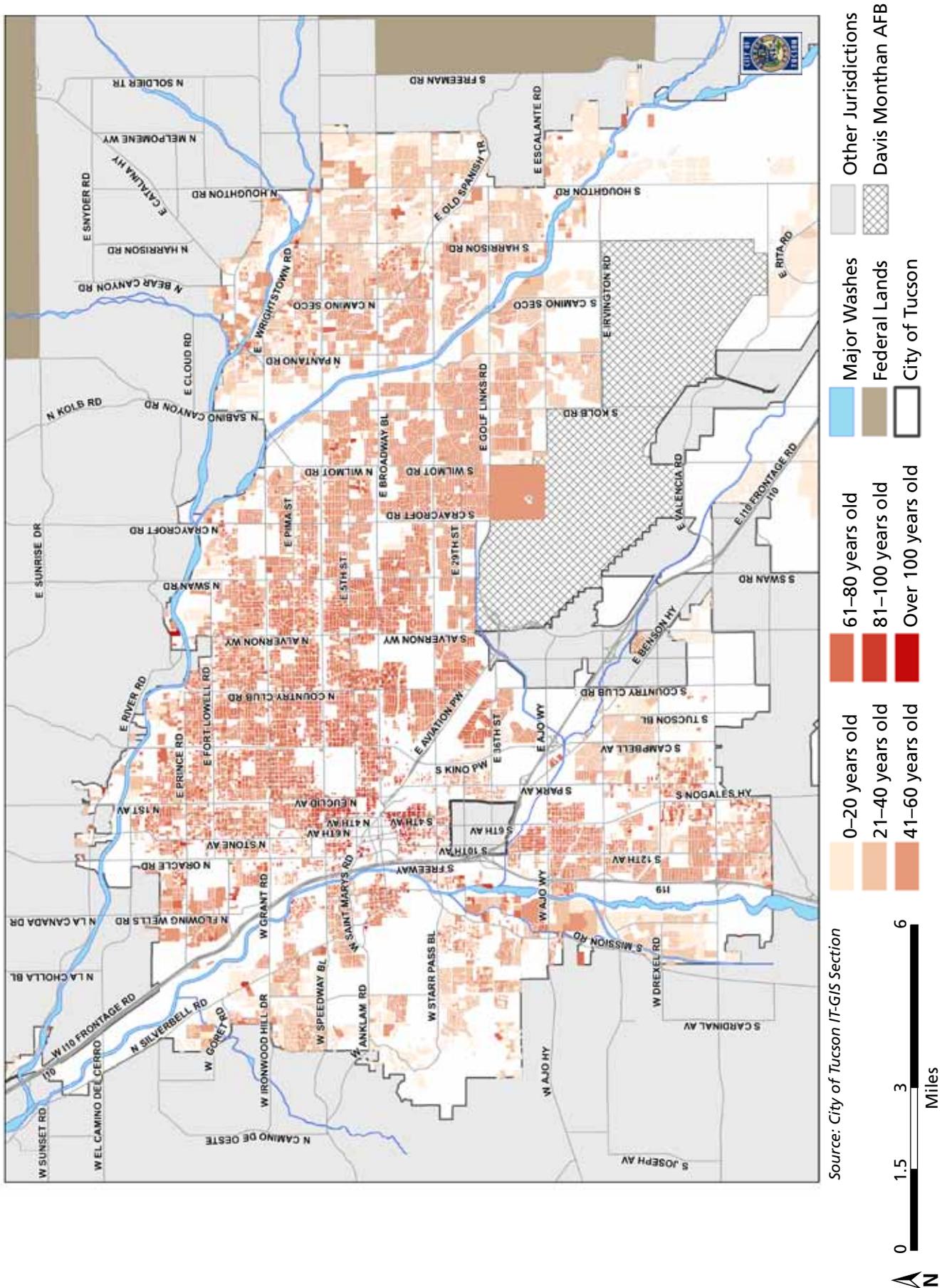


Source: 2006 American Community Survey 5-Year Estimate

<sup>1</sup>2011 American Community Survey, United States Census Bureau



EXHIBIT H-2 Age of Housing in Tucson, 2011





**The photo on left is a newly constructed home in the Mercado District of Menlo Park mixed-use and transit-oriented infill project. The photo on the right shows an older home in the surrounding neighborhood of Menlo Park, a subdivision dating back to the 1940's.**

materials. Building code inspections are conducted by the Code Enforcement Division of the City's Housing and Community Development Department.

The U.S. Department of Housing and Urban Development (HUD) provides an annual allocation of entitlement funds to the City of Tucson to support local housing and community development programs. Expenditures of these HUD funds are restricted to targeted investments in affordable housing, human services, and low-income neighborhoods as defined by federal regulations. Two agencies, both located in the City's Housing and Community Development Department (HCD), administer the City's HUD-funded programs. These agencies are the local Public Housing Authority (PHA) and the Community Development Office (CDO).

The PHA owns and operates 1,500 public housing units scattered throughout the city, and manages contracts that provide an additional 5,000 housing units on public and privately owned properties through the Section 8 program. Rent-restricted leases for this inventory of 6,500 affordable housing units offer subsidies to low-

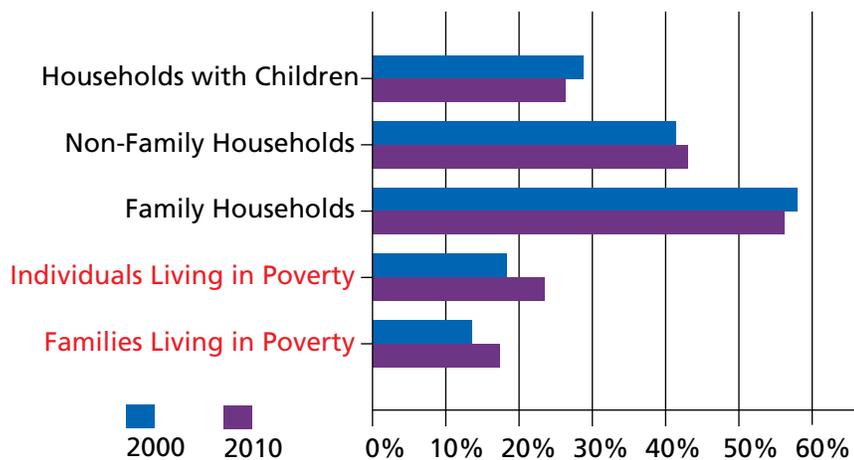
income households that qualify based on federally established criteria.

Funding from HUD for community development is used to support programs that assist low-income households and neighborhoods address a variety of needs, including housing-related support services, housing repair and rehabilitation, new residential infill, removal of blight conditions, and restoration of historic structures.

To receive federal funding, HCD must have an approved City of Tucson/Pima County 5-Year HUD Consolidated Plan outlining local priorities and goals related to affordable housing. This planning document is the foundation for an Annual Action Plan that earmarks project-specific investments designed to address the needs of the community's most vulnerable populations, including seniors, persons with disabilities, and the local homeless population. Both the Consolidated Plan and the Action Plan are used to document local housing needs and leverage additional funding from outside sources, such as State low-income housing tax credits and community reinvestment financing programs administered by local banks.



## EXHIBIT H-3 Demographics &amp; Poverty



Source: U.S. Census Bureau

Through the funding sources and local affordable housing programs, the City forms a variety of partnerships with other governmental agencies and non-profit and for-profit organizations to address local housing needs. City contracts for affordable housing development and related services may include partnerships with Pima County, the Arizona Department of Housing, the City and County Industrial Development Authorities, national and local lending institutions, private investors and developers, or local non-profit organizations specializing in housing and supportive services. Among the non-profits are fourteen HUD-designated Community Housing Development Organizations (CHDOs) that are eligible to receive special funding set-asides to expand the supply of housing that is affordable to low-income residents. The Metropolitan Housing Commission, an advisory body appointed by the Mayor and Council, makes recommendations regarding local housing needs and affordable housing production.

The City's relationship with local private sector builders and developers of residential properties is typically based on conducting plan reviews and

issuing building permits for market-driven housing through the Planning and Development Services Department (PDSD). In the 1990s, for-profit developers responded to an escalated market demand for suburban housing with the construction of subdivisions containing spacious single-family houses with flexible floor plans; large lots; indoor-outdoor living space; neighborhood common areas; recreation facilities; and structured homeowners associations. These multi-acre planned communities dominated growth in the local residential market through 2007. During this period of housing production, parts of Pima County were recognized as the fastest growing areas of the United States due to the rapid construction of subdivisions at the edge of Tucson.

During the 2000–2010 decade, the emphasis on conserving natural resources increased with more focus on making housing more energy efficient and on rehabilitating existing housing. In 2000, the Mayor and Council adopted the International Building Code (IBC), which incorporates energy conservation and green building technologies. “Green building” was further promoted when a policy to pursue Leadership in Energy and Environmental Design (LEED) building standards was adopted by the Mayor and Council in 2006.

Tucson's residential development patterns have shifted in recent years due to changes in demographics and fluctuations in the economy. As presented in *Exhibit H-3*, family households and households with children decreased between 2000 and 2010, while non-family households increased. *Exhibit H-3* also shows in the same decade an increase in the poverty rate for both individuals and families.

After a housing boom in 2007, when home prices reached an average



of \$272,601<sup>2</sup> per unit, new housing production in Tucson slowed. Homeownership rates dropped as a result of single-family residential housing foreclosures. In the first quarter of 2012, Tucson ranked 42nd in the nation among cities with high foreclosures rates,<sup>3</sup> with 1 out of every 150 homes in Tucson in foreclosure proceedings. As a result, investors are anticipated to own and control a larger share of the housing that was previously owner-occupied by families and individuals. In the aftermath of the housing market crash and with the escalation of foreclosed properties, it became increasingly difficult for local families and individuals, particularly those with middle and lower incomes, to own a home.

The City has two related strategies to initiate and maintain new home ownership opportunities for families with limited incomes. Under the 2009

Federal Recovery Act Neighborhood Stabilization Program (NSP), the City of Tucson and Pima County were awarded the largest federal grant in the United States for the acquisition, rehabilitation, and resale of foreclosed properties. The City and County jointly created a community land trust to preserve this new homeowner housing in perpetuity. The community land trust purchases homes with grant funds and then sells the homes to low-income buyers at low rates. The land trust retains title to the land under any home sold. If the buyer ever decides to sell that home, it must be to another low-income buyer.

City initiatives designed to promote public-private investment in housing are in place and can be used to address unmet housing needs on a broader scale. These include the sale of City-owned property and investment in new infrastructure as a catalyst for

**In 2011, the City provided assistance for the rehabilitation of 73 units occupied by disabled and elderly low-income homeowners. Before and after photos of one project are shown above.**

*The number of housing units in Tucson that are 50 years old or older increased by 30,000 over the last decade from 17,888 in 2000 to 48,171 in 2010.*

—U.S. Census Bureau

<sup>2</sup>MLS Year in Review, 2007 Residential Statistics Report, Tucson Association of Realtors © Multiple Listing Services, Inc.

<sup>3</sup>"Tucson 42nd in Foreclosure Activity," Inside Tucson Business, Thursday, April 26, 2012. (Article cited source as RealtyTrac, Irvine, CA.)



**The Martin Luther King Jr. Apartments—a public housing building—is part of a mixed-use, transit oriented infill project, offering low-income seniors and persons with disabilities handicapped accessible apartments and on-site activities.**

redevelopment. In the upcoming years, due to the increase in aging and historic structures, the City will continue its investment in housing rehabilitation and neighborhood preservation and revitalization.

Based on demographic trends and preferences and on resource considerations, the focus of future residential development is anticipated to shift from suburban lower-density patterns of previous decades to infill and mixed-use development opportunities. Based on existing and forecasted

housing needs, the map showing Opportunity Areas for future growth (*Exhibit LT-7*, Land Use, Transportation & Urban Design section) incorporates a balanced housing model. This model, which is illustrated in *Exhibit LT-10* in the Land Use Transportation & Urban Design, takes into account shifts in market demand relative to housing quality, affordability, and variety in the existing housing stock. Additionally the model considers the shift in household family size—generally decreasing—in Tucson and the nation, and the influence of the two largest generations (i.e., “baby boomers” born between 1946 and 1964 and “Generation Y” born in the 1980s) on housing market trends with a greater demand for rental housing, as well as a desire for convenience, connectivity, and work-life balance. Based on these projections, the highest demand for the 188,586 new housing units needed between 2010 and 2040 is anticipated to be first in the multi-family category (39%), and second in the single-family homes on small lots (32%).

In its capacity as both the Public Housing Authority and the Community Development Office, the City will continue to provide housing assistance to the most vulnerable residents in Tucson, including low-income renters and homeowners, elderly persons, individuals with disabilities, and the homeless. The policies that follow reflect this direction for housing.

*Housing “affordability” is achieved when the income of the resident is adequate to cover the cost of the housing and pay typical living expenses, such as food, utilities, transportation, personal items, and health care. Individual circumstances and opportunities determine housing affordability.*



# POLICIES

## Housing (H)

- H1** Evaluate the social, physical, and spatial needs related to housing program design and location, including neighborhood conditions and access to basic goods and services.
- H2** Focus public and private investment on documented housing needs and priorities considering long-term housing supply and demand.
- H3** Improve housing conditions in aging neighborhoods.
- H4** Improve housing conditions in historic neighborhoods.
- H5** Include historic properties in the City's programs and partnerships to develop affordable housing.
- H6** Take multiple approaches to reduce housing costs and increase affordability.
- H7** Increase access to safe healthy and affordable housing choices, including mitigating the impacts of foreclosure.
- H8** Address the housing needs of the most vulnerable populations in the community, including those at risk of homelessness.
- H9** Promote safe, decent, and affordable housing and neighborhoods that support aging in place.
- H10** Provide housing, human services, public facilities, and economic development programs to end homelessness.

### Other Related Policies

ELEMENT	Policy #	PAGE #
<b>Housing</b>		<b>3.11</b>
Economic Development	ED1, ED11	3.20
Public Safety	PS3, PS4, PS6, PS9, PS10	3.25
Parks & Recreation	PR3, PR10–PR12	3.30
Arts & Culture	AC3	3.37
Public Health	PH1, PH8	3.41
Urban Agriculture	AG1	3.45
Education	E4, E7	3.50
Governance & Participation	G1, G2, G7, G11	3.56
Energy & Climate Readiness	EC5, EC9	3.66
Water Resources	WR1–WR3, WR5, WR6, WR8, WR10	3.71
Green Infrastructure	GI1, GI3, GI4	3.77
Environmental Quality	EQ4–EQ6	3.83
Historic Preservation	HP1, HP2, HP4, HP7	3.93
Public Infrastructure, Facilities & Cost of Development	PI1	3.101
Redevelopment & Revitalization	RR5, RR6	3.108
Land Use, Transportation & Urban Design	LT1, LT3, LT4, LT7, LT9–LT12, LT14, LT17, LT23, LT26	3.126



# Economic Development

Economic development activities are designed to make a positive impact on the standard of living in a community. “Standard of living” is typically measured by a series of indicators that include but are not limited to educational achievement, housing and neighborhood conditions, general health and safety, employment opportunities, wages, household income, and poverty rates and wages of its citizens.

Based on these indicators, the City’s ability to retain and attract businesses for the purpose of employing the local workforce is essential to successful economic development. To create and sustain an environment in which businesses can thrive, the City must capitalize on its unique strengths, and mitigate those market conditions that businesses find challenging. Tucson Regional Economic Opportunities, Inc. (TREO), the regional economic development agency that is focused on bringing new firms with primary jobs to the Tucson region, has defined Tucson’s strengths as its higher educational resources, cultural diversity, quality of life, leisure and recreational assets,

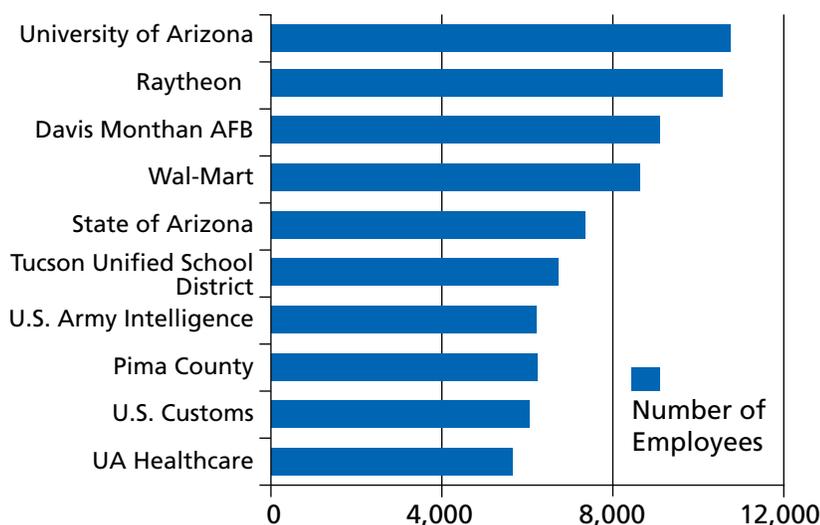
defense related facilities, and geographic proximity to Phoenix and Mexico.<sup>1</sup>

The challenging conditions that Tucson businesses face are similar to the market conditions in other cities across the country. These challenges include developing and keeping a well-trained workforce, maintaining and expanding public infrastructure, and fostering a regulatory environment that facilitates new development while protecting valuable community assets such as the natural environment, established neighborhoods, and historical features.

The U.S. Census American Community Survey (2006-2010) shows that by 2010 Tucson’s 207,000 households had a median income of \$35,362. This was comparatively lower than the \$50,000 median household income reported for Arizona and the United States. Census figures indicate that as of 2011 approximately 60% of Tucson’s population over the age of 16 was employed in the local workforce.

As of 2012, Tucson had almost 20,000 registered businesses within its boundaries. One-third of Tucson registered businesses were categorized as “retail enterprises” and one third as “service oriented.” Commercial uses are generally located along major transportation corridors or in economic development activity clusters, such as the central business district and around

**EXHIBIT ED-1 Top 10 Employers in Tucson**



Source: Tucson Regional Economic Opportunities

<sup>1</sup> Tucson Economic Blueprint – Strategic Analysis Report, KMK Consulting Team / Tucson Regional Economic Opportunities (TREO), December 27, 2006



the University of Arizona. *Exhibit ED-1* identifies the top ten employers in the Tucson metropolitan area. *Exhibit ED-2* shows Tucson's commercial land use distribution and zoning classifications in 2012.

The City's economic development activities typically fall into four categories:

- Maintaining a safe and clean environment with high functioning public infrastructure, facilities and services
- Enforcing laws and regulations related to the development, maintenance and operation of businesses.
- Pursuing economic growth opportunities taking into account community needs related to urban redevelopment, education, businesses, and job creation
- Investing City resources to make Tucson an attractive place to live, attend school, work, and/or run a business

The City's ability to provide and maintain public infrastructure, facilities and services is dependent on the City's General Fund, 40% of which is funded from sales tax revenues. Funding levels, therefore, are contingent on the health of the local economy. Fluctuations in tax revenues can impact the City's budget related to:

- transportation infrastructure
- water infrastructure
- public safety
- sanitation services and the city's overall cleanliness
- parks, recreational opportunities, and open space

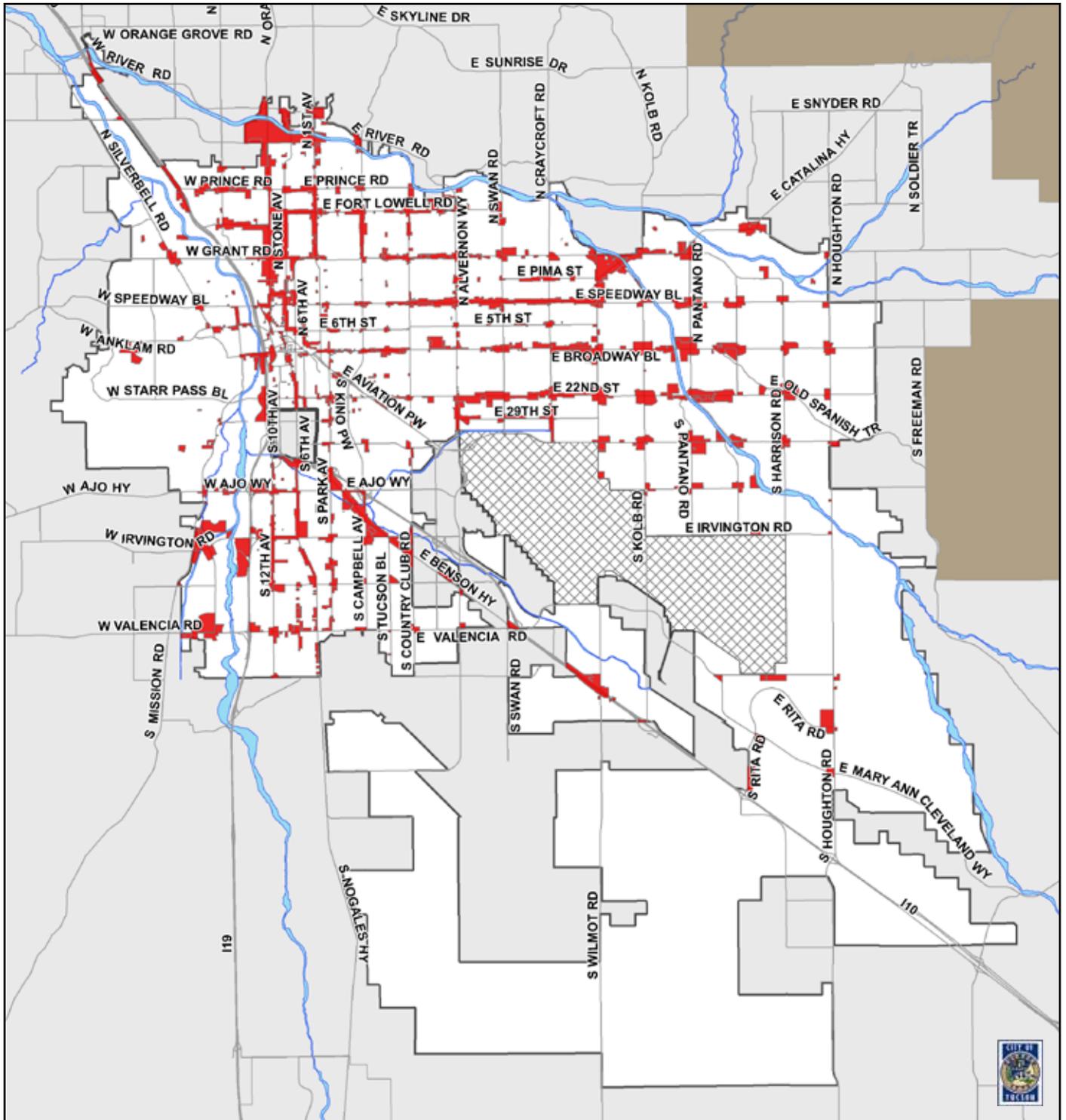
The City's Planning and Development Services Department (PDSD) is the lead agency responsible for regulating the location, development, and maintenance of businesses community wide. PSDS oversees land use and permitting processes and has legal authority to enforce health and safety standards. This department creates, revises, and enhances



**UniSource Energy's new 11,000 headquarters at 88 E. Broadway became fully occupied in November 2011. The nine story building provides 170,000 square feet of office space for more than 500 people working for Tucson Electric Power, Unisource Energy's principle subsidiary.**



EXHIBIT ED-2 Distribution of Commercial Land Uses in Tucson



Source: City of Tucson IT-GIS Section

- Federal Lands
- Major Washes
- Davis-Monthan AFB
- City of Tucson
- Other Jurisdictions
- Zoning Commercial





local building codes related to structural integrity, design, energy efficiency and conservation, and use of materials. The City's Finance Department issues and renews business licenses, and oversees tax revenues.

Pursuing economic growth taking into account residents' needs and investing strategically for economic development are interrelated. An example of this interrelationship is illustrated when considering education. A study conducted by Tucson's largest school district suggests that students are more likely to succeed academically if they are not subjected to the conditions associated with poverty. Statistics shown in *Exhibit E-3, Poverty Rate for Population 25 years & Over by Educational Attainment Level*, in the Education section of the Plan, emphasize the relationship between economic stability and education. Based on studies, a stable home and school environment is an indicator of educational attainment. Educational success has a direct correlation to household income and quality of life.

For decades, like many other cities, Tucson's development and economic activity shifted away from a thriving central business district to malls and suburban shopping centers. A sustained lack of investment in the urban core significantly impacted the built environment, resulting in pockets of poverty and urban decay. These conditions made Tucson less attractive to prospective businesses and industries relocating in the Southwest. To reverse this cycle and build on local assets, the City implemented specific economic development efforts to strengthen its urban core, combining downtown revitalization with infill strategies and an emphasis on its relationship with the University of Arizona. Catalyzed by the announcement of construction of the Modern Streetcar line, as well as other public investment, the private sector responded with development of new residential units, restaurants, and office and retail space. The route extends from University Medical Center through the University of Arizona campus,



**Several major parcels of vacant land in Tucson's Downtown became the location for new mixed-use transit-oriented development, adding new housing, retail, entertainment venues and professional offices along the Modern Streetcar line.**



the Main Gate Shopping District, the Fourth Avenue District, and Tucson's downtown, connecting to westside neighborhoods. Numerous other private sector developments are being planned and built along the Modern Streetcar route.

In the aftermath of the 2007–2009 recession, the City's role expanded beyond these revitalization efforts to overcome setbacks in the economy and re-establish financial stability and new opportunities for economic growth.

As an initial step toward restructuring, the City Manager created the Office of Economic Development. An early effort of the Office was the consolidation and enhancement of 21 City initiatives that are designed to attract, support, and retain businesses with the ultimate goal of increasing jobs. In October 2012, the Office released a brochure highlighting financial incentives, loan programs, business assistance, development service programs, and incentive districts available throughout the City.

Before the recession, Tucson was identified as one of the cities in the United States that holds specific economic growth potential. In 2002, author and economist Richard Florida introduced the term “creative class,” which includes two types of workers: (a) those whose economic function is to create meaningful new forms, i.e., new ideas, new technology and/or creative content, and (b) those whose function is to think about and create new approaches to problems.<sup>2</sup> At that time, Florida ranked cities based on their potential for economic growth related to the creative class. Tucson was identified as third in the top ten medium-sized communities. In 2012, Florida took another look at cities' creative class rankings; Tucson ranked twentieth.<sup>3</sup> *Exhibit ED-3* shows this comparison of Tucson to other cities with a strong creative class.

The City's role in future economic growth will expand beyond the economic recovery of recent years to attract and retain a wide range of new businesses. TREO's 2006 Economic Blueprint listed Aerospace and Defense, Bioscience, Solar



**This 2012 brochure (above) provides information on incentives and assistance available to businesses through the City of Tucson. A companion website offers an interactive listing that allows a user to identify incentives and assistance based on a specific address.**

<sup>2</sup>The Rise of the Creative Class, Richard Florida, Basic Books, 2002

<sup>3</sup>The Creative Class Revisited, Richard Florida, Basic Books, 2012



Technologies, and Transportation and Logistics as the top growth industries. In addition to targeting these industries for business expansion and recruitment, the City will increase business connections in Arizona, the Southwest, and Mexico. The City will continue to pursue economic benefits related to downtown revitalization and the University of Arizona, including development along the Modern Streetcar line.

The Office of Economic Development will focus its efforts on five Economic Development Strategic Priorities, adopted by the Mayor and Council in early 2013:

1. Business Recruitment, Retention and Expansion
2. International Trade
3. Entrepreneurship
4. Investment in Key Commercial Areas
5. Annexation

The City will continue to collaborate with its partners (*Exhibit ED-4*) to

implement a broad range of activities related to economic development such as community messaging, business



**Both the public and private sectors have played a significant role in the revitalization of Tucson's downtown where, over a five-year period between 2008 and 2013, private investment exceeded \$200 million.**

### EXHIBIT ED-3 Sample Comparison from Top 20 Creative Class Cities

City and 2012 Ranking out of 20	Median Household Income	Cost of Living	Unemployment	Household Poverty Rate
<b>Tucson, AZ (20)</b>	\$48,563	96.5	8.5%	20.2%
Austin, TX (16)	\$72,650	95.5	6.1%	14.6%
Boston, MA (3)	\$75,394	132.5	7.8%	17.8%
Boulder, CO (1)	\$92,134	N/A	4.8%	7.6%
Minneapolis, MN (18)	\$68,664	111	7.1%	16.4%
Portland, OR (13)	\$67,443	111.3	6.8%	14.1%
San Diego, CA (15)	\$81,144	132.3	6.7%	11.2%
San Jose, CA (12)	\$99,062	156.1	7.2%	8.3%
Seattle, WA (4)	\$85,945	121.4	5.2%	7.8%

Based on US Census Data: 2011 American Community Survey



incentives and financing tools; real estate development, business training and technical assistance, additional infrastructure improvements and transportation enhancements, and planning and research.

The map in *Exhibit ED-5* shows areas of economic activity as of March 2013. This map provides as base information as

of this date and will be used to show new economic development activity over the 10-year planning period.

The policies that follow provide general guidance regarding the City’s economic development direction in the coming years.

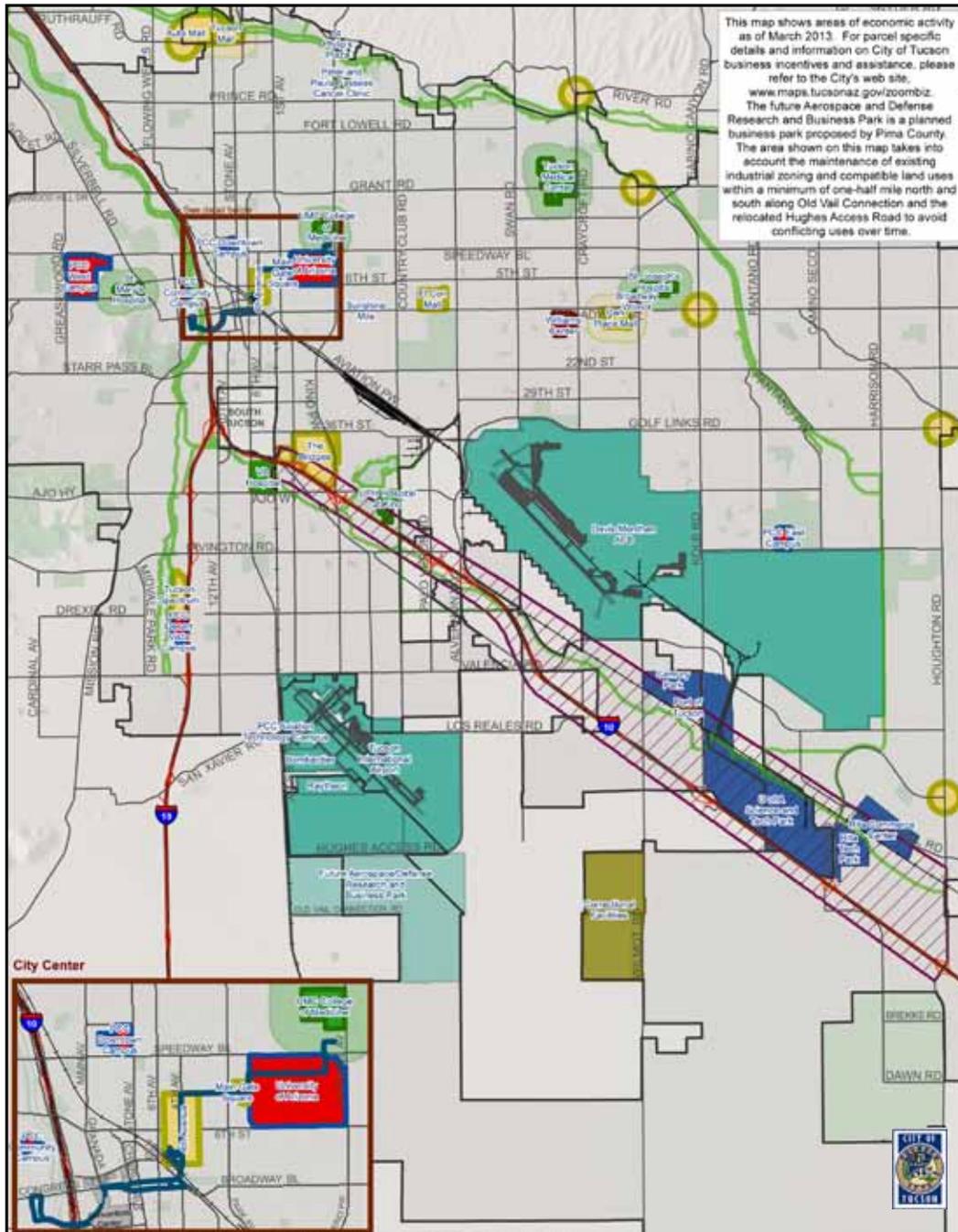
**EXHIBIT ED-4 City Partners in Economic Development**

Chambers of Commerce
Federal Government
Merchants Associations
Metropolitan Tucson Convention and Visitors Bureau
Mexican Government Officials and Agencies
Non-Profit Organizations
Pima Community College
Pima County
Private For-Profit Businesses
Technical and Trade Schools
Tucson Regional Economic Opportunities
Tucson Small Business Commission
Small Business Administration
State of Arizona
University of Arizona

Source: *City of Tucson Housing & Community Development and Office of Economic Development*



**EXHIBIT ED-5 Economic Activity Areas**



Source: City of Tucson IT-GIS Section

**Economic Development Areas**

- Correctional Facilities
- Educational Institutions
- Financial Centers
- Medical Centers
- Technology Parks
- Transport Logistics Center
- Retail Centers
- Aerospace and Military Operations
- Future Aerospace/Defense Research Business Park Proposed by Pima County

**Sunlink Street Car**

- I-10 Technology Corridor
- The Loop
- Parks and Open Space





# POLICIES

## Economic Development (ED)

- ED1** Recognize that a high quality of life is the foundation for economic success by supporting a safe environment, recreational opportunities, multi-modal transportation, a vibrant downtown, stable neighborhoods, good education, primary and secondary employment opportunities, arts and entertainment venues, and accessible air service.
- ED2** Continue to develop and implement local strategies, services, and incentives to maintain and enhance a business friendly environment.
- ED3** Increase and promote environmentally sensitive businesses, industries, and technologies.
- ED4** Recruit, retain, and expand businesses in key economic sectors, including aerospace, bio-science technologies, renewable energy technologies, and tourism to increase market competitiveness and high-quality, high-paying job opportunities.
- ED5** Leverage investment by promoting local assets, including but not limited to the Modern Streetcar; the University of Arizona; Pima Community College; Tucson's cultural heritage, diversity, and events; and the natural environment.
- ED6** Collaborate with the University of Arizona, Pima Community College, local training and technical schools and Pima County to develop a well-educated, well-trained, and diverse local workforce.
- ED7** Support and expand entrepreneurship through partnerships, technical assistance, and incentives.
- ED8** Increase economic partnerships with Mexico.
- ED9** Promote and support local, minority-owned, independent, and small businesses involved in the sale and purchase of locally produced goods and services.
- ED10** Create long-term community benefit and economic vitality through targeted investment in the redevelopment of key commercial areas, including downtown, major corridors, arts and entertainment districts, and mixed-use and commercial sites.
- ED11** Support the conditions and services, such as transportation, childcare, and nutrition, that facilitate workforce stability and advancement.



### Other Related Policies

ELEMENT	Policy #	PAGE #
Housing	H1, H2, H10	3.11
<b>Economic Development</b>		<b>3.20</b>
Public Safety	PS1 – PS3, PS5, PS10	3.25
Parks & Recreation	PR1, PR2, PR9, PR10	3.30
Arts & Culture	AC2, AC4–AC6, AC9	3.37
Public Health	PH7	3.41
Urban Agriculture	AG1, AG2, AG4	3.45
Education	E1, E3–E6	3.50
Governance & Participation	G8, G10, G11	3.56
Energy & Climate Change	EC7	3.66
Water Resources	WR1, WR3, WR6, WR8, WR10, WR11	3.71
Green Infrastructure	GI1, GI4, GI5	3.77
Environmental Quality	EQ2M EQ6	3.83
Historic Preservation	HP3, HP4, HP8	3.93
Public Infrastructure, Facilities & Cost of Development	PI1–PI5	3.101
Redevelopment & Revitalization	RR1, RR3 – RR6	3.108
Land Use, Transportation & Urban Design	LT1, LT3, LT4, LT7–LT13, LT17, LT22, LT24 – LT26	3.126



# Public Safety

Keeping the public safe is a fundamental responsibility of government. Traditionally public safety has been related to natural hazards (e.g., wildland and urban interface fires, floods, earthquakes, hurricanes, tornadoes) or to manmade hazards (e.g., oil spills, hazardous material releases, transportation accidents, and crime). While preventing and reacting to such hazards

continues to be the primary day-to-day focus of the City, the terrorist attacks of September 11, 2001, and Hurricane Katrina in 2005, catalyzed attention on the potential for major disruptions to energy and information technology infrastructure, as well as for the use of chemical, biological, radiological, nuclear, and high-yield explosive weapons.

Public safety policy and related measures generally fall into the two categories suggested above:

- preventive, which is focused on preventing occurrences that are unsafe to humans

- reactive, which addresses unsafe situations that are predicted or have occurred (*Exhibit PS-1*)

Being prepared to react to situations threatening public safety is critical, and a community's ability to react in an efficient and timely manner is a factor affecting other City concerns such as economic development.

Working to prevent situations that jeopardize public safety has long been a primary mission of City government, as reflected in the adopted measures of many departments. However, greater understanding of the relationship of such areas as education and health to public safety has heightened the importance of preventive measures for a safer, more resilient community over time. Preventive measures are taken by both

## EXHIBIT PS-1 Preventive/Reactive Examples

Preventive Measures	Reactive Situations
• Preventive education	• Burglary
• Building design	• Building fires
• Development location	• Code Enforcement
• Neighborhood Watch	• Natural Disasters
• Roadway design	• Traffic accidents
• Safe Routes to School	

**Safe Routes to School Program allows children to walk safely to school, alleviating parental fears of traffic accidents and crime.**





governmental and non-governmental agencies. Some are in the form of rules and regulations such as land use codes, building codes, development standards, roadway design standards, and stormwater regulations. Other preventive measures consist of programs focused on helping people learn to address or avoid potential hazards (e.g., driving and bicycling classes, swimming lessons, physical and mental health clinics, Neighborhood Watch).

One example of the interrelationship of situations that can threaten public safety if not addressed through preventive measures is deteriorating properties that become targets for antisocial behavior in the form of vandalism and other crimes. This became an escalating problem in Tucson with the recession of 2007–2009 and related foreclosures. The antidote to this “broken window syndrome” is to address the deteriorating conditions as quickly as possible to prevent vandalism and other crimes and related devaluation of surrounding properties. Another example is public spaces whose design does not include elements, such as sidewalks, shade, and destinations, that encourage regular use of the spaces. Such use puts more “eyes on the street,” which helps deter unwanted activity.

In Tucson, the departments referred to as the “public safety agencies” are Police and Fire, which together oversee Emergency Management and Homeland Security. Other key City departments concerned with public safety include Environmental Services, which handles the disposal of hazardous materials; Transportation, which designs, constructs, maintains, and operates transportation facilities; Housing and Community Development, which provides support to a variety of social service organizations and addresses code violations; Planning and Development Services, which regulates where and how

development is undertaken; and Parks and Recreation, which offers preventive education, such as swimming lessons and structured after-school youth programs.

The World Trade Center and Hurricane Katrina disasters resulted not only in increased planning for such emergencies, but led to increased consideration about the most effective ways to coordinate services required to maintain public safety within and across jurisdictions and with non-governmental agencies and the private sector.

In 2007, the City’s Mayor and Council adopted the Emergency Operations Plan (EOP), which lays out a local and regional approach to incident management designed to integrate the efforts and resources of local, regional, private, sector, nongovernmental, state, and federal agencies, departments, and organizations. As stated in the EOP, “the approach ties together a complete spectrum of incident management activities to include the prevention of, preparedness for, response to, and recovery from terrorism, major natural disasters, and other major emergencies.”

**Community engagement allows Tucson Police officers to hear residents’ and businesses’ concerns first-hand.**





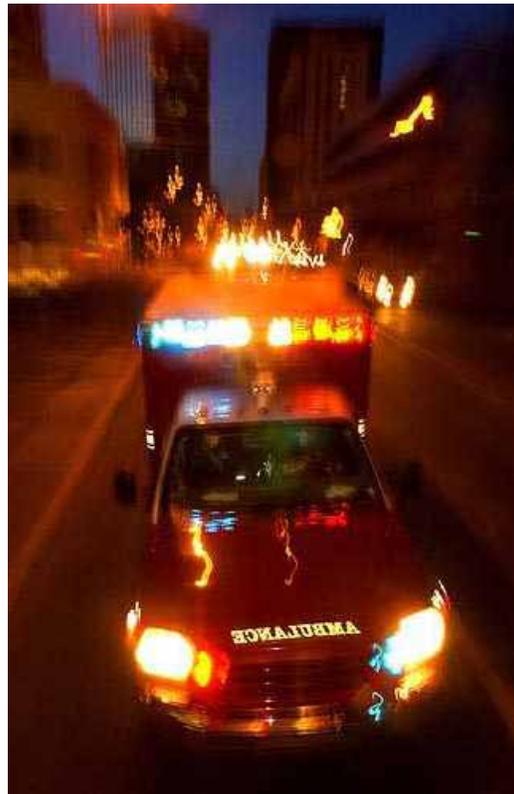
The EOP confirmed the importance of involving a wide range of players in keeping the public safe. This is true whether it's a major incident or a minor incident. Such coordinated efforts not only help ensure safety, but

may help reduce costs. For instance there are services that some social service organizations can provide more inexpensively than the Tucson Police Department, such as providing transportation for someone who needs to be taken to a shelter. Examples of agencies, organizations, and institutions that City public safety agencies work with to implement preventive and reactive measures are shown in *Exhibit PS-2*.

Finally, preventive measures are related to sustainability. For instance, the increased awareness of the potential for emergency situations that may cut off access to food, water, and energy from outside the region has increased interest in how the City and region may become more sustainable so that more basic needs can be provided locally.

The following policies address preventive and reactive measures, the importance of recognizing the interrelationship of a variety of areas to public safety, and the demonstrated need for coordination among City and non-City agencies and organizations to keep the community safe.

**In 2007, about 85 percent of the Tucson Fire Department's dispatched calls were for Emergency Medical Services (EMS). Programs focused on addressing physical and mental conditions could help reduce EMS calls and associated costs.**



**EXHIBIT PS-2 City Partners in Public Safety**

Area hospitals	Pima County	Union Pacific Railroad
Davis-Monthan Air Force Base	Public school districts	University of Arizona
Major shopping malls	Social service organizations	Utility companies
Pima Community College	Tucson International Airport	Neighborhood Associations



# POLICIES

## Public Safety (PS)

- PS1** Identify, implement, and maintain standards for high quality, efficient, and cost effective law enforcement services.
- PS2** Maintain high quality, efficient, and cost effective fire and hazardous material response and emergency medical services.
- PS3** Reduce potential harm to life and property in natural hazard areas and from hazards resulting from human activities and development through preventive measures.
- PS4** Prioritize property maintenance and order as a preventive measure against crime and disorder.
- PS5** Recognize and strengthen the role of social networks in public safety through increasing lawful activity in public spaces and through information sharing.
- PS6** Direct resources to education and prevention programs, such as Neighborhood Watch, that encourage residents to be proactive regarding personal property and traffic safety.
- PS7** Ensure coordinated communication among City agencies and between City and other governmental agencies and nongovernmental service providers in the event of an emergency.
- PS8** Prioritize funding of prevention and support programs that reduce the work and expense of public safety agencies.
- PS9** Ensure that all residents have access to food, water, shelter, and medical services in the event of an emergency.
- PS9** Pursue design for public spaces and encourage design for private spaces that incorporates principles of defensible space.

### Other Related Policies

ELEMENT	Policy #	PAGE #
Housing	H1, H3, H4, H7, H9	3.11
Economic Development	ED1, ED2	3.20
<b>Public Safety</b>		<b>3.25</b>
Parks & Recreation	PR3, PR7, PR11, PR12	3.30
Arts & Culture	AC1	3.37
Public Health	PH3, PH4, PH6	3.41
Urban Agriculture	—	3.45
Education	E1, E2, E5, E7	3.50
Governance & Participation	—	3.56
Energy and Climate Change	EC9	3.66
Water Resources	WR1, WR11	3.71
Green Infrastructure	GI1, GI2	3.77
Environmental Quality	EQ1, EQ4, EQ6	3.83
Historic Preservation	—	3.93
Public Infrastructure, Facilities & Cost of Development	PI1, PI3, PI5,	3.101
Redevelopment & Revitalization	RR5, RR6	3.108
Land Use, Transportation & Urban Design	LT1, LT4, LT12, LT14, LT22, LT23, LT25	3.126



# Parks & Recreation

When public parks and recreational facilities and programs were first introduced into urban areas in the United States over a century ago, the emphasis was on the restorative qualities of the natural environment and the opportunities for healthful physical activity particularly for those whose living conditions were substandard. In the intervening years, evidence shows that parks and recreation can be integral to strengthening the health, safety, economy, and natural environment of a city by:

- providing opportunities for physical activity, a key intervention for reducing diseases, such as cancer, heart disease, and Type 2 diabetes (*Exhibit PH-1, Public Health*)
- offering spaces, programs, and activities that foster life-long learning and social cohesion
- assisting in the preservation and celebration of the city's cultural heritage
- playing a preventive public safety role by offering programs to combat negative, antisocial behaviors
- contributing to the stabilization and revitalization of neighborhoods
- increasing property values and tax revenue
- offsetting reactive investments in health and social justice infrastructure
- promoting tourism
- protecting habitat, improving air quality, and reducing urban heat islands

The Tucson Parks and Recreation Department has primary responsibility for parks and recreation facilities and programs in the City. The Department works closely with other City entities to address acquisition and development of parks and facilities, land annexations, regional planning issues, connections, master planned communities, cultural resource preservation, environmental conservation, and grant funding.

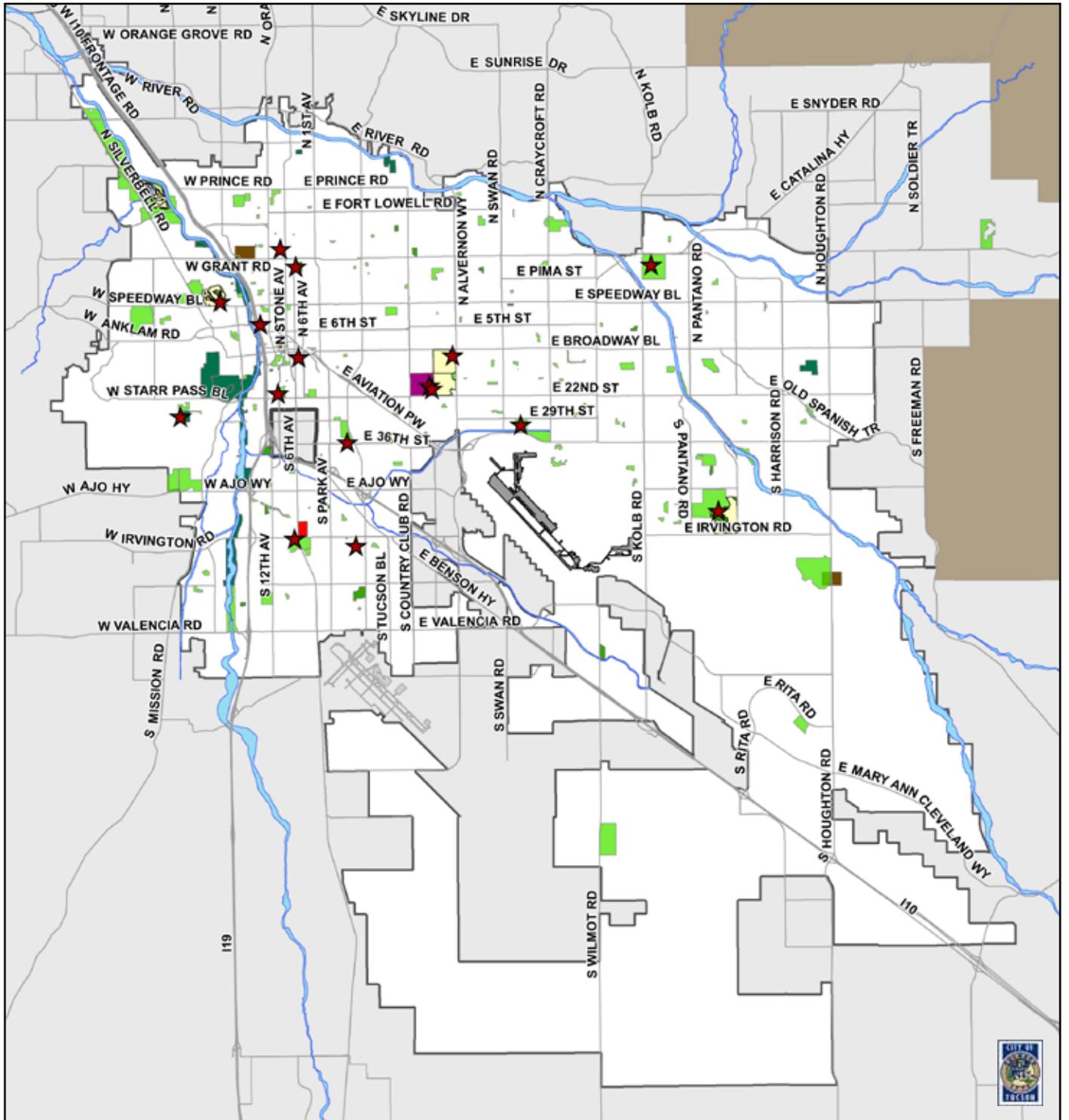
As of 2010, City parks totaled 6,358 acres, which represents approximately 4% of the City's total acreage, and offered over 500 individual programs with thousands of participants. The Parks and Recreation Department is actively engaged in planning for both existing and future parks, facilities, and programs as reflected in the 2006 *Parks and Recreation Ten-Year Strategic Service Plan*, which lays out the department's vision, mission, and strategic direction. *Exhibit PR-1* shows the locations of parks and recreational facilities within the City, while *Exhibit PR-2* highlights the types, descriptions, and determinants of programs offered by

**Reid Park Zoo offers leisure and learning opportunities.**





EXHIBIT PR-1 Parks & Recreation Facilities in Tucson



City of Tucson IT-GIS Section and Parks and Recreation Department

- ★ Recreation Centers
- Major Washes
- Zoo
- Special Interest Areas
- Golf Courses
- Natural Resource Parks
- School Parks
- City Parks
- Undeveloped Park Property
- Federal Lands
- City of Tucson
- Other Jurisdictions





the Department. These programs and services provide lifelong and healthy living opportunities.

In 2010, Parks and Recreation received national accreditation from the Commission for Accreditation of Park and Recreation Agencies (CAPRA), becoming one of only 97 cities to hold this distinction. To obtain this accreditation, Department staff conducted an extensive analysis of its facilities, programs, staffing, and finances in response to CAPRA standards.

While Tucson has many well-used facilities and well-attended programs, it continues to fall below national standards in the number of parks and the diversity of amenities it offers (*Exhibit PR-3*). The Parks and Recreation Department's strategy has been to emphasize the enhancement of existing park facilities and amenities in the urban core where land for parks is limited, and to focus development of new park facilities outside the core area where land is more available. With the economic recession of 2007–2009, the Department was forced to weigh ongoing maintenance needs against

new or upgraded facilities.

To expand resources, Parks and Recreation partners with other agencies and non-profit organizations. For example, the Department has an Intergovernmental Agreement with the Tucson Unified School District (TUSD) that enables Parks and Recreation to utilize TUSD schools for after school programming, aquatics programs, and other special activities, and enables TUSD to use park facilities and equipment for their programming purposes at no cost. The Department also has several agreements with Pima County for funding, development and construction of various parks and facilities. Nonprofit organizations, such as the Salvation Army, Community Food Bank, El Rio Health Clinic, Arizona Children's Association, and the Tucson Urban League use Parks and Recreation neighborhood centers to provide a variety of services to the community. In addition, a number of organizations, including Neighborhood Associations, have formally adopted neighborhood parks through Tucson Clean and Beautiful, helping to keep

### EXHIBIT PR-2 Parks Recreation Programs Services

Program/Service	Brief Description	Program Determinant*
Adult Sports	Programs for youth ages 5 to 15 at centers & schools.	1,2,3,4,5
Aquatics	Structures and leisure programming for adults ages 50+.	1,2,3,4,5
Leisure Classes	Varied social service agencies located in neighborhood centers.	1,2,3,4,5
Out-of-School	After school, school's out, and summer leisure recreation programs for youth ages 5 to 15 at centers and schools.	1,2,3,4,5
Senior	Structure and leisure programming for adults ages 50+.	1,2,3,4,5
Social Services	Varied social service agencies located in neighborhood centers.	2,3,4,5
Therapeutics	Youth and adult programs for clients with disabilities.	1,2,3,4,5

\* (1) Conceptual foundations of play, recreation, & leisure, (2) Constituent needs & interests, (3) Community opportunities, (4) Agency mission & vision statements, (5) Experiences desirable for clientele

Source: Excerpted from "City of Tucson Parks and Recreation Program/Service Matrix," *National Accreditation Self-Assessment Workbook*, Tucson Parks and Recreation Department, March 2, 2010, pg. 4.



## EXHIBIT PR-3 City Park Facility Needs

Facility Type	2000 Total**	Current Facility/ Population Ratio (2000)	Core/ Mid-City Guidelines	Edge/ Future-City	Additional Needs		
					Core/ Mid-City	Outside Core	Citywide
<b>Parks (acres)</b>							
Mini Park	5	.01/1,000	N/A	N/A	0	0	0
Neighborhood***	515	1.1/1,000	2.5/1,000	2.5/1,000	188	355	543
Community	504	1.1/1,000	3/1,000	3/1,000	795	388	1,183
Metro	1,450	3.1/1,000	1.5/1,000	3.5/1,000	0	201	201
Regional	619	1.3/1,000	N/A	2/1,000	0	0	0
All Parks	3,092	6.5/1,000	7/1,000	11/1,000	982	944	1,926
<b>Field Sports</b>							
Adult Baseball	30	1/15,848	1/12,000	1/12,000			18
Youth Baseball	42	1/11,596	1/10,000	1/10,000			16
Soccer Fields	33	1/14,858	1/12,000	1/12,000			16
Softball Fields	36	1/13,207	1/10,000	1/10,000			21
<b>Active Recreation</b>							
Park-site pathways (miles)	10	1/47,545	1/15,000	1/15,000			39
Playgrounds	105	1/4,755	1/2,500	1/2,500			133
Centers (sq. ft.)	333,528	.7/person	1/person	1/person			244,737

\*Original calculations by consultant for additional parks and facilities needed were adjusted to allow for a 13-year planning period (2000-2013) versus 10-year (2000-2010). Calculations were increased based on the estimated annual population increase for the 3 years between 2010 and 2013.

\*\*Totals include City of Tucson facilities only.

\*\*\*Includes school-park facilities under existing Intergovernmental Agreement.

N/A = Not applicable

Source: City of Tucson Parks & Recreation Ten-Year Strategic Service Plan, October 31, 2007.

the parks clean and well maintained.

A strategic direction for which the Parks and Recreation Department has undertaken additional planning in recent years is connectivity between parks, open space and recreational facilities. Identification of trails and trail connections within the City's urban core are provided in the 2010 *Pima Regional Trail System Master Plan*, a collaboration of Parks and Recreation and the Pima County Department of Natural Resources.

Existing access to parks and recreational destinations is generally provided by the Department of

Transportation through roadway, sidewalk, and bicycle facilities. These facilities also can be used for recreational walking and biking though they are not designed specifically for an enhanced recreational experience and are fragmented and in poor condition in some locations. Further discussion about connections and alternative modes of transportation can be found in Plan Tucson under Land Use, Transportation, and Urban Design.

The following general policies are in alignment with and reinforce the Department of Parks and Recreation, existing plans.



# POLICIES

## Parks and Recreation Policies (PR)

- PR1** Maintain and implement the Commission for Accreditation of Park and Recreation Agencies standards addressing such characteristics as park size, service area radius, and operations.
- PR2** Prioritize repairing, maintaining, and upgrading existing recreational facilities.
- PR3** Ensure equitable distribution of recreational resources to reach all populations throughout the City and make them affordable to all.
- PR4** Ensure a range of recreational opportunities from passive to active.
- PR5** Provide lifelong recreational opportunities for people of all ages and abilities.
- PR6** Foster the integration of different generations and abilities through shared activities and facilities.
- PR7** Emphasize the role of public recreation programs in public safety (preventive) and public health (physical and mental).
- PR8** Support the integration of environmentally and historically sensitive building materials and methods in public recreational facility development and operation.
- PR9** Develop an urban multipurpose path system that provides mobility options, with recreational and health benefits, to access parks, residential areas, places of employment, shopping, schools, recreational facilities, transportation hubs, natural resources, and watercourses for people of all abilities.
- PR10** Collaborate with neighborhoods, local businesses, not-for-profit organizations and agencies, school districts, institutions of higher education, museums, Davis-Monthan Air Force Base, private partnerships and foundations, and other jurisdictions in developing approaches to meeting recreational needs, including the provision of shared use facilities.
- PR11** Encourage community and neighborhood events and ensure their safety through accessible City permitting and coordination.
- PR12** Expand outreach and partnerships with neighborhoods to facilitate the adoption and care of existing neighborhood parks.



## Other Related Policies

ELEMENT	Policy #	PAGE #
Housing	H1	3.11
Economic Development	ED1, ED5	3.20
Public Safety	PS5, PS10	3.25
<b>Parks &amp; Recreation</b>		<b>3.30</b>
Arts & Culture	AC2, AC4, AC5, AC8	3.37
Public Health	PH1, PH8	3.41
Urban Agriculture	—	3.45
Education	E1, E2, E7	3.50
Governance & Participation	—	3.56
Energy & Climate Change	EC1, EC3, EC4, EC6, EC8, EC9	3.66
Water Resources	WR2, WR3, WR4, WR8,	3.71
Green Infrastructure	GI1–GI6	3.77
Environmental Quality	EQ3	3.83
Historic Preservation	HP3, HP5	3.93
Public Infrastructure, Facilities & Cost of Development	PI1, PI2, PI3, PI4,	3.101
Redevelopment & Revitalization	RR3, RR5, RR6	3.108
Land Use, Transportation & Urban Design	LT1, LT2, LT3, LT4, LT6, LT14, LT16, LT25	3.126



Senior Olympics long jump, Frank Sancet Field, University of Arizona.



# Arts & Culture

Tucson's arts and culture, which contribute greatly to its "sense of place" and overall livability, are influenced by the distinctive landscape of the Sonoran desert. This includes the natural and built environments; the City's multifaceted history and diverse populations; and an economy that promotes an array of shopping experiences, performance venues, and educational opportunities.

Tucson's warm climate, open space, and exotic desert landscape attract people who like to participate in outdoor activities, including sports, dining, ecotourism, and sightseeing. Tucson's natural environment also serves as a stage for the deeply-rooted celebrations and traditions of its indigenous cultures, and is a source of inspiration for the local abundance of Southwestern architecture, art, literature, and film. Tucson's built environment is layered with artifacts that provide connections to the past and a foundation for the future. The layers reflect the evolution of this known "birthplace of North America," from the early agricultural settlements along the Santa Cruz River, to a Spanish settlement, to an industrialized railroad stop en route

to California. In recent years, Tucson's historic neighborhoods have become a catalyst for community discussions about the relationship of the past, present, and future.

Complementing Tucson's history as a determinant of arts and culture are Tucson's diverse populations whose tastes and traditions help shape and reshape community heritage. Central to this diversity is the City's ongoing physical, social, and economic relationship to Mexico and its adjacency to the Tohono O'odham Nation and Pascua Yaqui Tribe. The close proximity to the International Border and the prominence of Native American cultures are reflected in local food, crafts, fashion, arts, literature, and music.

**Tucson's past, present, and future are reflected in the downtown.**





*“Arts and culture impact how we understand, communicate with, and relate to each other in a civil society.”*

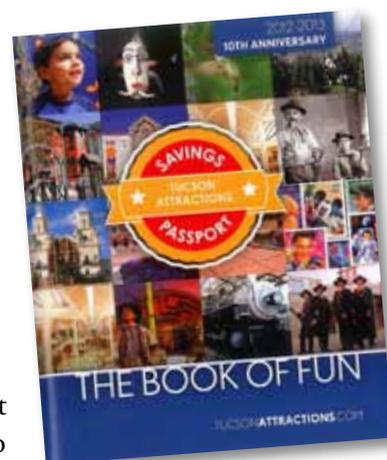
—Governor’s 98th Arizona Town Hall Report, May 2011, Tucson

In more recent years, Tucson’s music scene, college town culture, and grassroots artists have emerged in and around the centrally located University of Arizona campus and the downtown area. The University attracts students and faculty from around the world, and is a major contributor to local arts and culture, with year-round musical and theater performances, seasonal athletic events, and several museums and lectures open to the public.

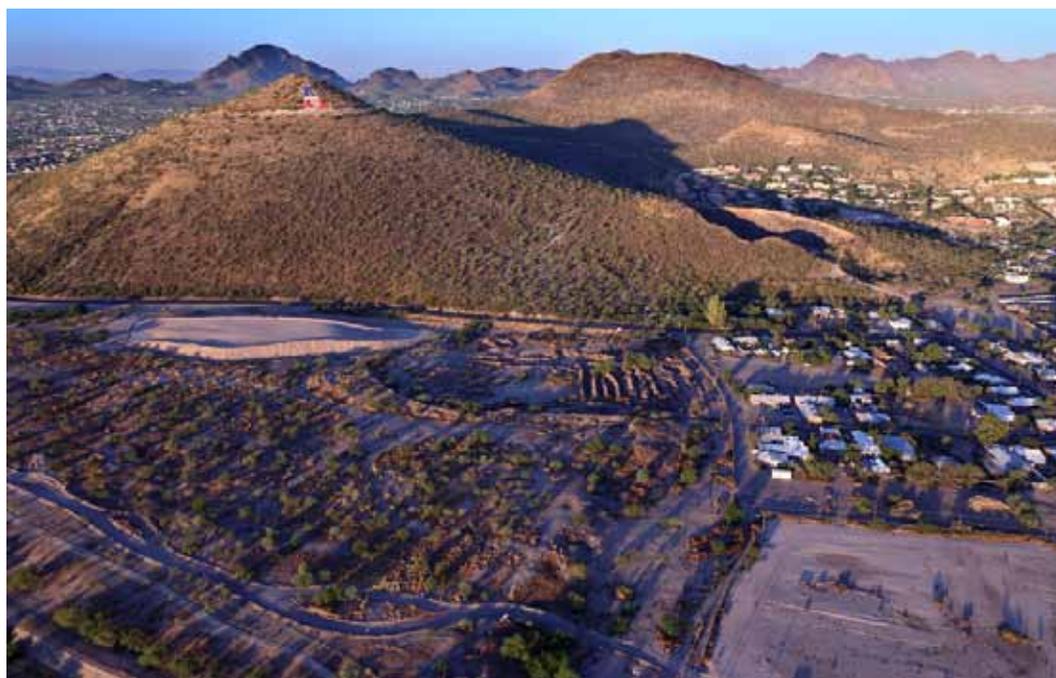
Tucson’s local economy is bolstered by its many arts and cultural venues, which include art galleries, performance centers, concert halls, movie theaters, sports facilities, desert gardens, hiking trails, heritage sites, resorts, and over 50 libraries and museums. The Tucson greater metropolitan area is home to many famous regional attractions, including the world renowned Arizona-

Sonora Desert Museum, the Kitt Peak National Observatory, the Saguaro National Monument—East and West Units, the historic Mission San Xavier del Bac, and the 309th Aerospace Maintenance and Regeneration Center, also known as the “Boneyard,” located at Davis Monthan Air Force. Tucson is also known regionally and internationally for hosting high profile events that attract visitors and vendors from around the world, generating significant revenue for the community. Among these events are:

- Día de Los Muertos All Souls Procession
- El Tour de Tucson Bicycle Race
- Fourth Avenue Street Fair
- Gem, Mineral and Fossil Show
- Spanish and Portuguese Film Festival
- Tucson International Mariachi Conference



**The Tucson Passport of Attractions provides a map, discounts and information on local attractions.**



**Tucson’s birthplace.** Archeologists have confirmed that land along the Santa Cruz River at the base of Sentinel Peak (aka, “A” Mountain) has been continuously occupied by different peoples for at least 4,000 years.



Thousands of people come out for Tucson's Annual Dia de los Muertos All Souls Procession (above left).

The historic, downtown Fox Theater, closed to the public for 26 years, reopened in 2006 after a major effort to restore its Southwestern Art Deco features (above right).

Local non-profit organizations, such as the Tucson Arts Brigade, have created new venues for science and environmental education through arts activities and cultural events.



- Tucson Festival of Books
- Tucson Meet Yourself
- Tucson Rodeo and Rodeo Parade
- Yaqui Easter Lenten Ceremony

Stewardship of Tucson's natural resources, including its solar energy and water conservation and protection of natural habitat and wildlife, is an important aspect of local arts and culture relating to both tourism and innovative approaches to public education. The Governor's 98th Arizona Town Hall, "Capitalizing on Cultural Heritage and the Arts," held in Tucson in May 2011, presented research documenting a unique connection between the arts and economic trends in the region.

In two separate statements the report concludes, "The tourism industry uses the arts as a key element in marketing the west. Arizona's economy is highly dependent upon tourism for jobs, regional income, and tax revenues," and "Creativity, often learned by studying the arts, is a key to success in other areas, such a science and business."<sup>1</sup>

The City of Tucson's role in arts and culture focuses on the installation and maintenance of public art, the protection

of local heritage sites, support for multi-cultural events and celebrations, arts-related economic development, and overall community development efforts. Activities that are related to carrying out this role are mutually dependent on public and private partnerships. Ongoing commitments of City funding, land, technical assistance, open space, civic facilities, infrastructure, and marketing are a catalyst for private investment and philanthropic support of arts and culture.

In recent years, there has been increasing national recognition of the role of the arts in urban redevelopment and revitalization. More specifically this translates into arts-generated businesses, and defining the arts and



<sup>1</sup>Report on the Governor's 98th Arizona Town Hall Capitalizing on Cultural Heritage and the Arts, May 2011 Herberger Institute, Arizona State University (ASU), Background Research



local artists as a community asset for tourism, employment, education, and international relations. Tucson has been actively engaged in revitalization efforts for decades, and more recently has identified arts districts to capitalize on the economic and social benefits of arts-related redevelopment.

In 2004 the City Mayor and Council adopted the Tucson Historic Warehouse Arts District Master Plan. Created with intensive community input, the primary goal of the plan is to develop the Historic Warehouse District in downtown Tucson “as the center for incubation, production, and exhibition of the arts, with artists at its heart.” (*Exhibit AC-1*).

In 2008, the City of Tucson in partnership with Pima County and the Tucson/Pima Arts Council (TPAC) commissioned the Pima Cultural Plan—Needs Assessment and Strategies. This Cultural Plan primarily focuses on commerce related to the arts and is intended to promote Tucson’s “sense of place.” The Cultural Plan also proposes to preserve and celebrate local cultural resources that “are threatened by rapid growth, a weak cultural infrastructure, and a lack of support,” citing research that shows Tucson’s public and private

per capita funding is among “the lowest in the nation.” The Plan’s 24 strategies are divided into eight categories:

1. Identity and Distinctiveness
2. Creative Economy and Enterprise
3. Arts, Cultural and Natural Spaces and Facilities
4. Public Art
5. Capacity Building and Business Development
6. Arts and Cultural Education
7. Government Policy
8. Resources

The Cultural Plan strategies provide guidance for the City’s ongoing role related to arts and culture with a specific focus on ways in which to increase revenue; build relationships among diverse organizations; expand business services to support artists; and undertake urban design, planning, and marketing that result in arts-generated economic benefits.

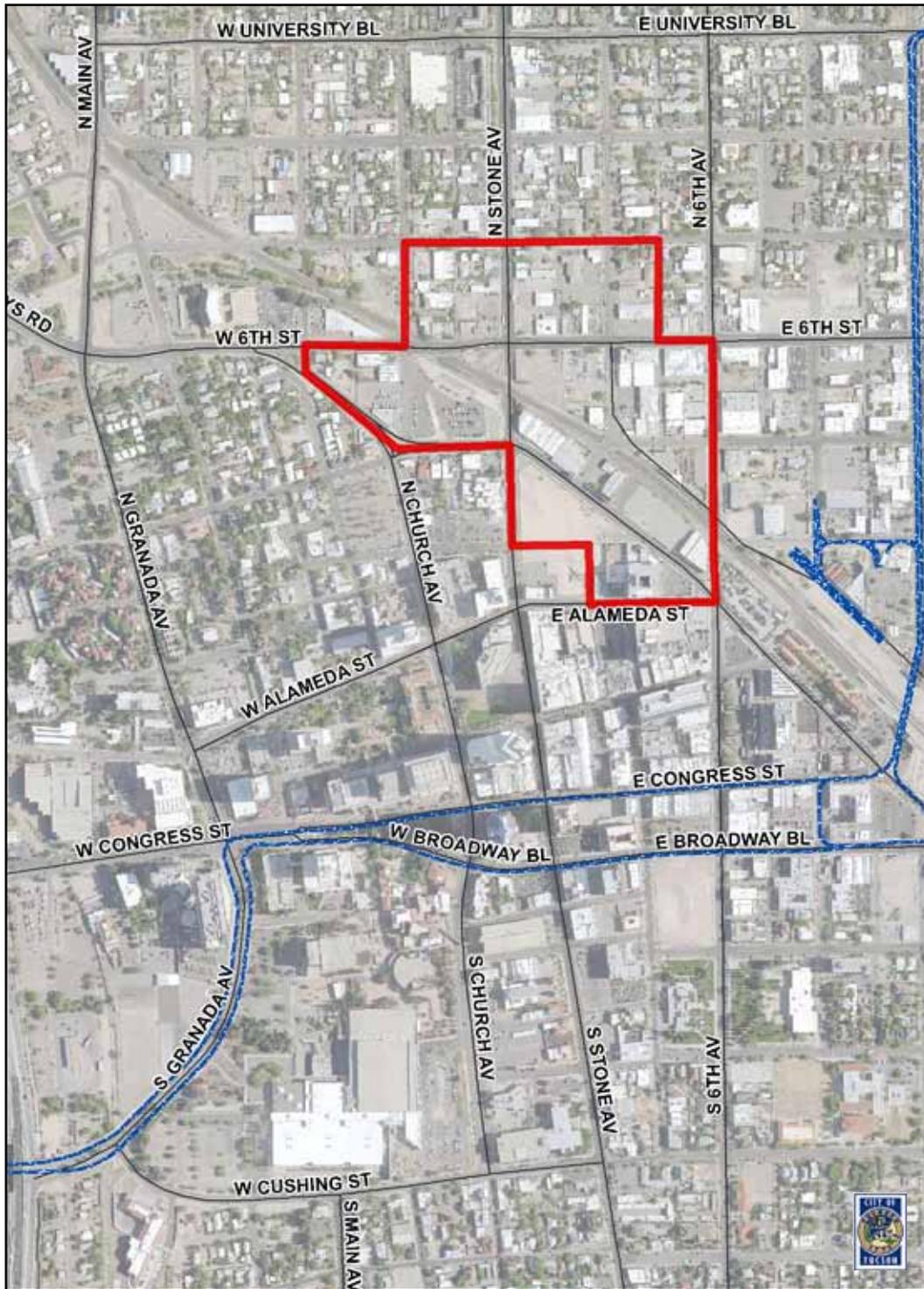
The City’s overall emphasis in the coming years is to more fully integrate arts into the built environment, the economy, and the branding of Tucson. The following policies support this emphasis.

*“The Historic Warehouse Arts District shall be recognized for the important contribution that the arts make to our local and regional economy. The focus of the arts shall strive to be outward looking, encouraging exhibition, sales, education, festivals, and the participation of the public. An outdoor performance venue is a high priority. Coordinated arts programming is an essential part of a successful arts district.”*

—Goals, Tucson Historic Warehouse Arts District Master Plan, 2004



EXHIBIT AC-1 Warehouse Arts District Master Plan Area in Tucson



Source: City of Tucson IT-GIS Section





# POLICIES

## Arts & Culture (AC)

- AC1** Improve the quality of life and livability of the community through the arts by supporting avenues for expression and creativity that strengthen and enhance the social, civic, and cultural participation of citizens.
- AC2** Promote heritage destinations and annual heritage events regionally, nationally and internationally
- AC3** Implement site specific and neighborhood-scaled development strategies that incorporate cultural heritage and the arts.
- AC4** Increase the capacity of and access to buildings and open spaces to expand arts-related activities and public programming throughout the community.
- AC5** Support the installation and maintenance of public art throughout the community.
- AC6** Target public investment to leverage additional capital for heritage, arts, and cultural activities.
- AC7** Recognize and celebrate Tucson's cultural diversity through the arts.
- AC8** Increase access and participation in arts and cultural activities for all.
- AC9** Connect arts with science and technology as a catalyst for innovation.

### Other Related Policies

ELEMENT	Policy #	PAGE #
Housing	H4	3.11
Economic Development	ED1, ED4, ED5, ED7–ED11	3.20
Public Safety	PS10	3.25
Parks & Recreation	PR3, PR4, PR6, PR9 – PR12	3.30
<b>Arts and Culture</b>		<b>3.37</b>
Public Health	PH8	3.41
Urban Agriculture	—	3.45
Education	E1 – E7	3.50
Governance & Participation	G7	3.56
Energy & Climate Change	EC3	3.66
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Historic Preservation	HP2–HP5, HP7, HP8	3.93
Public Infrastructure, Facilities & Cost of Development	PI1–PI3	3.101
Redevelopment & Revitalization	RR1, RR3–RR7	3.108
Land Use, Transportation & Urban Design	LT1, LT3, LT5, LT10, LT12–LT16, LT22	3.126



# Public Health

In the past, public health has often been integrated with public safety in general plans, but in recent years, public health has assumed a prominence of its own as the relationship of the built environment and public health has been “rediscovered.” In the early 20th century, this relationship was reflected in the development of zoning and other development regulations to protect

the health, safety, and welfare of the general public primarily through separation of residential and industrial land uses. The relationship, however, grew apart and little effort was expended through subsequent decades to adapt urban land use regulations and transportation design standards to contribute to healthier living.

Public health focuses on maintaining and improving the health of everybody in the community through developing policies aimed at promoting health and wellness and addressing policies that contribute to disease. While traditional public health matters are overseen at the local level by the Pima County Health Department through powers delegated to it by the Arizona Department of

Health Services, the City of Tucson participates in promoting public health through actions it undertakes on a regular basis. For example, the Parks and Recreation Department provides opportunities for people to engage in physical activity; the Housing and Community Development Department works to improve housing options and conditions, which are determinants of health for individuals and families; the Tucson Water Department ensures that all water meets environmental standards to protect public health; and the Department of Transportation facilitates alternative forms of transportation that contribute to healthy living, such as walking and biking.

*Exhibit PH-1* presents statistics related to causes of death in Arizona and interventions that could help in preventing such causes. The majority of interventions identified are ones in which the City can play a more active role. For instance one intervention identified for several causes of death is “opportunities for people to get more exercise.” A City initiated action such as constructing a sidewalk—which not long ago was considered simply a way to provide safer access than walking in the street—is now understood as providing an opportunity for people to get easy and affordable exercise. Additionally, landscaping—which in the past was often viewed as a beautification measure—is now recognized as a way to provide cooling and shade that makes outdoor activity safer and more comfortable. Shade

**Street trees help shade a sidewalk on Fourth Avenue, creating a more comfortable space for pedestrians.**





### EXHIBIT PH-1 Leading Causes of Death in Pima County, 2010 & Preventions\*

Causes of Death	Environmental Interventions
1. Cardiovascular disease	<ul style="list-style-type: none"> <li>• Built environment that provides opportunity for physical activity</li> <li>• Access to healthy food</li> <li>• Access to prevention and treatment services</li> </ul>
2. Malignant neoplasms	<ul style="list-style-type: none"> <li>• Reduced exposure to environmental toxins</li> <li>• Built environment that provides opportunity for physical activity</li> <li>• Access to healthy food</li> <li>• Access to prevention and treatment services</li> </ul>
3. Accidents (motor vehicle, poisoning, drowning, falls)	<ul style="list-style-type: none"> <li>• Safe environments</li> </ul>
4. Chronic lower respiratory illness	<ul style="list-style-type: none"> <li>• Clean air (indoor and outdoor)</li> <li>• Access to prevention and treatment services, including smoking cessation</li> <li>• Access to healthy food</li> </ul>
5. Cerebrovascular disease	<ul style="list-style-type: none"> <li>• Built environment that provides opportunity for physical activity</li> </ul>
6. Drug induced deaths	<ul style="list-style-type: none"> <li>• Access to prevention and treatment services</li> </ul>
7. Diabetes	<ul style="list-style-type: none"> <li>• Opportunities for physical activity;</li> <li>• Access to healthy food</li> <li>• Access to prevention and treatment services</li> </ul>
8. Alzheimer's Disease	<ul style="list-style-type: none"> <li>• Unknown</li> </ul>
9. Suicide	<ul style="list-style-type: none"> <li>• Access to mental health services</li> <li>• Built environment that provides opportunities for physical activity (stress reduction)</li> </ul>
10. Injury by firearms	<ul style="list-style-type: none"> <li>• Access to mental health services</li> </ul>

\*Source: Pima County Community Health Needs Assessment, March 2012. Accessed on 3/6/13 online at: <https://www.tmcas.com/files/2012%20Pima%20County%20Community%20Health%20Needs%20Assessment.pdf>.

Note: The causes of death for 2010 are classified by the Tenth Revision of the International Classification of Diseases (ICD-10).

provided through street trees also reduces ambient temperatures and, therefore, helps prevent heat-related illness.

Environmental interventions, such as opportunities for physical activity or access to healthy food, are generally related to addressing health risks, such as obesity, that may contribute over the long-run to illnesses leading to hospitalization or death. Some key aspects of the City of

Tucson that contribute to obesity can be addressed through policy. Of particular note are the community's physical form, which has been largely shaped by the automobile, and the disparity in access to healthy food. The City has undertaken initiatives in recent years that are contributing to improvements in the physical form and access to healthy food. Some of these include new bicycle and



pedestrian connections and revisions to the land use code to address barriers to local food production.

Along with physical health, the City can also contribute to improved mental health by combatting isolation and reducing stress through planning for mixes of land uses that allow people, in particular seniors, to more easily meet daily needs while interacting with other people. Similarly interaction through recreational and educational activities, such as those offered by the Parks and Recreation Department, can reinforce positive, stimulating interactions for people of all ages.

The City's infrastructure not only provides opportunity for exercise, but also provides connections to hospitals, doctors' offices, and clinics. For some residents, the challenge is getting to the services needed if they are without a car or unable to drive. This challenge can be offset in part by providing multiple modes of transportation between residences and medical services and expanding transit services in areas with low rates of car ownership.

The policies on the next page reinforce existing initiatives and promote new initiatives that will contribute to individual and community health.

**Public transportation helps provide connections for many people including to medical services.**





# POLICIES

## Public Health Policies (PH)

- PH1** Pursue land use patterns; alternate mode transportation systems, including multipurpose paths; and public open space development and programming that encourage physical activity, promote healthy living, and reduce chronic illness.
- PH2** Improve access to healthy, affordable food particularly in underserved areas of the City.
- PH3** Coordinate with nongovernmental health and preventive service providers to make healthcare accessible to the most vulnerable and in-need populations, including finding new ways to provide access to healthcare at home.
- PH4** Increase access to healthcare services through provision of reliable, affordable transportation options.
- PH5** Support educational programs that promote healthy living.
- PH6** Collaborate with Pima County Health Department on emergency service preparedness and to improve knowledge about and service to the many mental and physical health services offered through the Pima County Health Department.
- PH7** Continue to provide and support workforce wellness programs.
- PH8** Support streetscape and roadway design that incorporates features that provide healthy, attractive environments to encourage more physical activity.

### Other Related Policies

ELEMENT	Policy #	PAGE #
Housing	H1, H7, H8–H10	3.11
Economic Development	ED1, ED6, ED11	3.20
Public Safety	PS2–PS10	3.25
Parks & Recreation	PR3–PR7, PR9, PR10	3.30
Arts & Culture	AC1, AC4	3.37
<b>Public Health</b>		<b>3.41</b>
Urban Agriculture	AG1, AG2, AG3	3.45
Education	E1, E2, E5, E7	3.50
Governance & Participation	—	3.56
Energy & Climate Change	EC3, EC9	3.66
Water Resources	WR1, WR5, WR11	3.71
Green Infrastructure	GI2–GI5	3.77
Environmental Quality	EQ2, EQ3, EQ4	3.83
Historic Preservation	HP4	3.93
Public Infrastructure, Facilities & Cost of Development	PI1	3.101
Redevelopment & Revitalization	RR3, RR5, RR6	3.108
Land Use, Transportation & Urban Design	LT1, LT3, LT4, LT6, LT9, LT10, LT12–LT16, LT23, LT24, LT25	3.126



# Urban Agriculture

The City of Tucson is in a position to promote healthy eating and active living, while also making Tucson a more attractive, livable place. “Urban agriculture” has emerged in cities across the United States as a way to increase access to affordable food and provide more green and active space for residents. “Agriculture” has traditionally been associated with “rural” areas; however,

the increase in attention to locally grown food has led to many cities updating urban policies involving land and water use, waste removal, development standards, and human service programs to account for and improve a changing urban “food system.”

There are several ways in which the City of Tucson can play a direct role in the future of urban agriculture within its boundaries. One is through land use decisions and the other is through land provision. Through its Sustainable Land Use Code Integration Project in 2012, the City began addressing barriers faced by individuals and groups to starting

their own gardens and selling locally produced food. As a first step, the Project included recommendations supportive of urban agriculture, such as allowing the onsite sale of food grown in community or backyard gardens in residential zones and allowing community gardens to be counted toward open space requirements for new development.<sup>1</sup>

In keeping with a national trend of repurposing vacant and underutilized public lands for urban agriculture, the City has made available some public land for community gardens. For example, in 2012 the City oversaw the construction of the Blue Moon Community Garden on an underutilized parking lot adjacent to a public housing complex in an area of the city that was identified as a food desert— that is, an area with limited access to fresh, affordable food. Additionally, some public schools within the City have located community gardens on their sites both as an educational opportunity and to provide fresh food for the community.

Urban agriculture takes a number of forms, including home and backyard gardens, community gardens, and small-scale farms and commercial gardens producing a vast range of edible produce and decorative plants. These spaces may also involve the raising of animals for purposes of personal consumption and/or sale or donation. When done at an

**The Blue Moon Community Garden, an accessible public garden constructed on City property to increase availability of fresh produce.**



<sup>1</sup>City of Tucson Sustainable Land Use Code Integration Project: Phase 1 Diagnostic Report, City of Tucson Planning and Development Services, 2011.



appropriate scale, raising animals in urban settings can provide many benefits including fresh eggs, milk, and honey.

Home and backyard gardening are widespread and the number of community gardens in Tucson has more than doubled in the past five years; in 2012 there were 43 community gardens available to the public. These gardens are communal spaces where individuals or groups rent garden plots for the purpose of growing edible and decorative plants. Additionally, there are many school gardens. According to the Centers for Disease Control and Prevention, community gardens provide mental and physical health benefits beyond access to healthy fresh fruits and vegetables, including opportunities to:

- Engage in physical activity, skill building, and creating green space
- Beautify vacant lots
- Revive and beautify public parks
- Decrease violence in some neighborhoods and improve social wellbeing through strengthening social connections
- Revitalize communities in industrialized areas<sup>2</sup>

Access to affordable healthy food and recreational facilities is important to public health. A study conducted by the University of Arizona found that 81 percent of Pima County residents have access to healthy foods and recreational facilities compared to just 72 percent statewide, although Tucson

*A “food system” is a collaborative effort to integrate agricultural production with food distribution to enhance the economic, environmental, and social well-being of a particular place—that is, a neighborhood, city, county, or region.*



**Middle school students plant a raised bed in the community garden at Doolen Global Academy.**

<sup>2</sup>“Community Gardens,” Healthy Places, Centers for Disease Control and Prevention, 2010. (Retrieved from <http://www.cdc.gov/healthyplaces/healthyfood/community.htm>.)



and Pima County still perform below the national benchmark of 92 percent for this category.<sup>3</sup> Studies have shown a 10x10 meter garden plot with favorable growing conditions can provide most of a household's total yearly vegetable needs at a fraction of the cost of produce purchased from retail food outlets, at the same time providing opportunities for physical activity and positive social interactions with fellow gardeners.<sup>4</sup> In addition to these sorts of individual physical and mental health benefits, urban agriculture provides benefits to the built and natural environments.

Open vegetated spaces, such as community gardens and small-scale urban farms, reduce the impact of the "urban heat island effect." This type of green space often replaces unused areas of pavement, which absorb sunlight throughout the day and radiate heat in the evening. Gardens also help

water evaporate during the day, further lowering the temperatures around them.<sup>5</sup> Vegetated spaces also improve stormwater and watershed management by providing more pervious service.

A more localized food system would increase the City's resiliency to emergency food shortages, and would reduce the environmental impacts associated with transporting food long distances. Such a system would also support local businesses involved in growing, processing, and distributing food, and make the community more self-sufficient in the event of an emergency that prevents food from being imported.

The following policies provide direction that would increase the access of affordable, healthy food, while providing the many other benefits of urban agriculture.

**Children learning about gardening at the Tucson Botanical Gardens.**



<sup>3</sup>Pima County Health Needs Assessment, University of Arizona Mel and Enid Zuckerman College of Public Health, prepared on behalf of Carondelet Health Network, Tucson Medical Center, and the University of Arizona Medical Center, March 2012.

<sup>4</sup>"Health Benefits of Urban Agriculture," A.C. Bellow, K. Brown, and J. Smit, Community Food Security Coalition's North American Initiative on Urban Agriculture, 2004.

<sup>5</sup>"As Temps Rise, Cities Combat 'Heat Island' Effect, R. Harris, Wisconsin Public Radio News, 2012



# POLICIES

## Urban Agriculture (AG)

- AG1** Reduce barriers to food production and to food distribution, including home and community gardens, and facilitate access to new markets for small-scale farmers and gardeners.
- AG2** Adopt zoning and land use regulations that promote and facilitate the safe, equitable growth and distribution of locally produced food.
- AG3** Facilitate community food security by fostering an equitable, healthy local and regional food system that is environmentally and economically sustainable and accessible to all.
- AG4** Collaborate with key partners to facilitate new opportunities for urban-scale gardens, farms, gleaning, and distribution systems.

### Other Related Policies

ELEMENT	Policy #	PAGE #
Housing	H1	3.11
Economic Development	ED9, ED11	3.20
Public Safety	PS5, PS9	3.25
Parks & Recreation	PR6, PR9	3.30
Arts & Culture	AC3, AC9	3.37
Public Health	PH1, PH2	3.41
<b>Urban Agriculture</b>		<b>3.45</b>
Education	E2, E6, E7	3.50
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Water Resources	WR2, WR3, WR5	3.71
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Environmental Quality	EQ1	3.83
Historic Preservation	—	3.93
Public Infrastructure, Facilities & Cost of Development	—	3.101
Redevelopment & Revitalization	RR3, RR5, RR6	3.108
Land Use, Transportation & Urban Design	LT1, LT4, LT10, LT25	3.126



# Education

Education is a key component in a community's overall health, helping to shape the local workforce and job market and expanding opportunities for economic and household security.

While the City of Tucson does not have jurisdiction over school curriculum standards or government funding levels for education, City policy can have a significant impact on three areas that are integral to the local school system and that enhance opportunities for citizens to acquire skills and knowledge. These areas are (1) community development, (2) economic development, and (3) community education.

Community development constitutes the City's most prominent role. Community development includes oversight of land use patterns, multi-modal connectivity in transportation opportunities, neighborhood improvements, and the development of infrastructure and facilities that support educational programs and institutions. A large portion of Tucson's

urban fabric is dedicated to school campuses. Maintaining school sites and neighborhood-based after school activities, such as the KIDCO program, promotes a safer environment, offers needed social support for children, and creates economic stability in Tucson neighborhoods.

There are over 800 public and private school campuses within Tucson's boundaries, including pre-schools, elementary schools, middle schools, and high schools.<sup>1</sup> Five of the six Pima Community College campuses are located within City limits. The University of Arizona, centrally located on 430 acres, is the largest State-run public education facility in Tucson. Based on current proposals, it is likely that the City's largest school district, the Tucson Unified School District (TUSD), will continue to close or consolidate schools throughout the community in the coming years.

In 2010 TUSD received 44 proposals for redevelopment of nine schools that had been closed. Among the evaluation criteria for determining a new use for these nine campuses was "Promotes community well-being, especially in the adjacent neighborhoods."<sup>2</sup> *Exhibit E-1* shows all the public schools in Tucson, including closed schools, as of 2012.

Under Title 15 of the Arizona Revised Statutes, the Arizona Department of Education is the umbrella agency for the formal education system. Title 15

**Kids in the KIDCO Program—a City of Tucson after-school and summer recreation program for children ages 5-11, visit the University of Arizona Wildcat basketball team.**

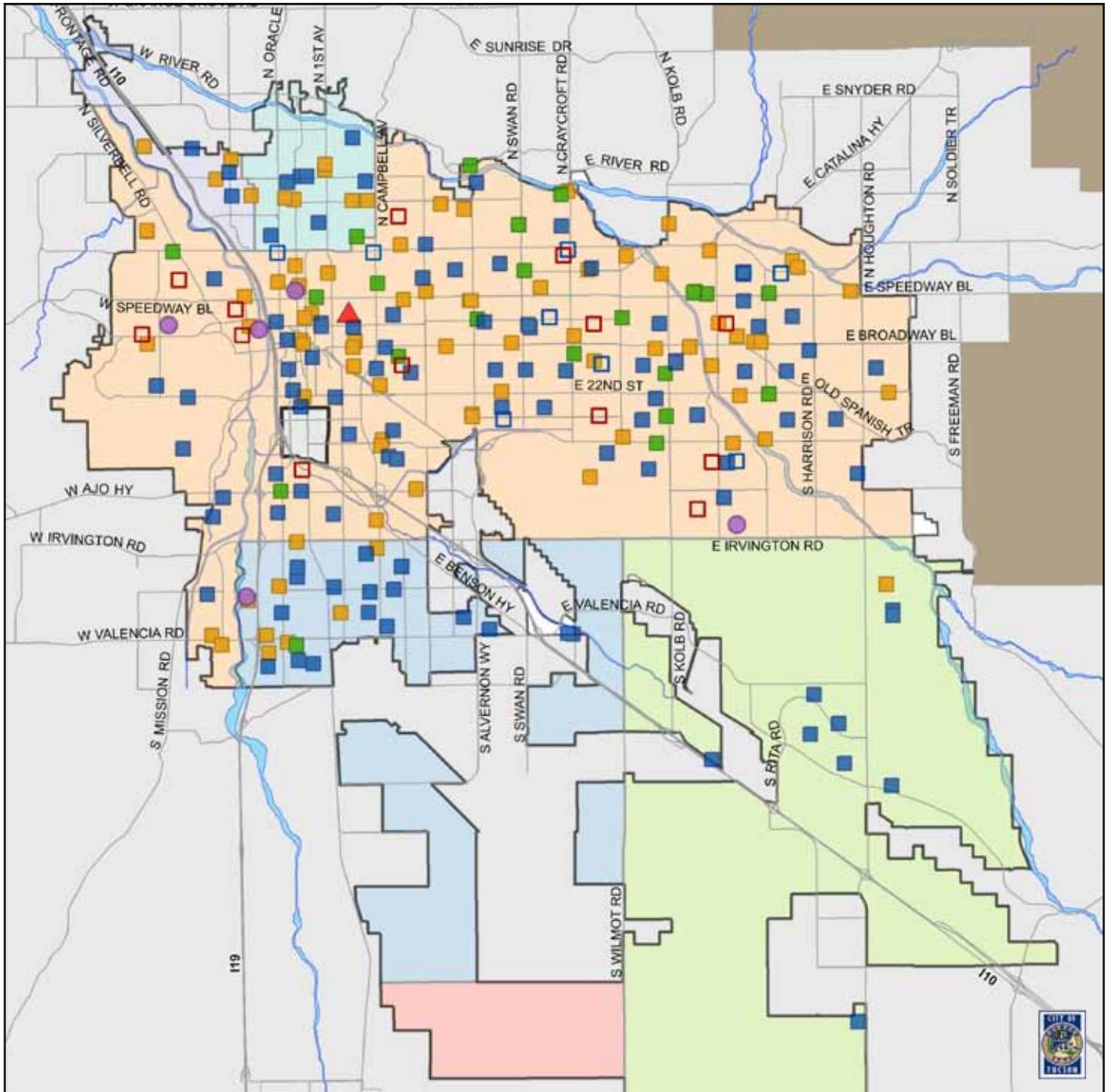


<sup>1</sup><http://www.greatschools.org/Arizona/Tucson>, February 2006

<sup>2</sup>Tucson Unified School District, Accountability and Research Department, Study: Identifying and Quantifying "Stress Factors" in Schools and Their Impact on Student Achievement, February 2006



**EXHIBIT E-1 Primary, Secondary & Post-Secondary Schools in Tucson**



Source: City of Tucson IT-GIS Section and Tucson Unified School District



- |  |  |
|--|--|
| <span style="border: 1px solid red; display: inline-block; width: 10px; height: 10px;"></span> Proposed 2013-14 TUSD School Closures | <span style="background-color: #a68966; display: inline-block; width: 15px; height: 10px;"></span> Federal Lands                             |
| <span style="border: 1px solid blue; display: inline-block; width: 10px; height: 10px;"></span> TUSD Schools Closed 2011-12          | <span style="border: 2px solid black; display: inline-block; width: 15px; height: 10px;"></span> City of Tucson                              |
| <span style="color: red;">▲</span> University of Arizona   | <span style="background-color: #d3d3d3; display: inline-block; width: 15px; height: 10px;"></span> Other Jurisdictions                       |
| <span style="color: purple;">●</span> Pima Community College   |  |
| <span style="color: blue;">■</span> K-12 Public Schools  | <b>School Districts</b>  |
| <span style="color: orange;">■</span> Charter Schools  | <span style="background-color: #c1e1c1; display: inline-block; width: 15px; height: 10px;"></span> Amphitheater                              |
| <span style="color: green;">■</span> Private Schools   | <span style="background-color: #ffffcc; display: inline-block; width: 15px; height: 10px;"></span> Catalina Foothills                        |
| <span style="background-color: #add8e6; display: inline-block; width: 15px; height: 10px;"></span> Major Washes                      | <span style="background-color: #d8bfd8; display: inline-block; width: 15px; height: 10px;"></span> Flowing Wells                             |
|  | <span style="background-color: #f08080; display: inline-block; width: 15px; height: 10px;"></span> Sahuarita (No Schools within City Limits) |
|  | <span style="background-color: #add8e6; display: inline-block; width: 15px; height: 10px;"></span> Sunnyside                                 |
|  | <span style="background-color: #ffcc99; display: inline-block; width: 15px; height: 10px;"></span> Tucson Unified                            |
|  | <span style="background-color: #c1e1c1; display: inline-block; width: 15px; height: 10px;"></span> Vail                                      |



**Pima Community College, Downtown Campus. PCC serves the Tucson metropolitan area at six locations, ranking among the 10 largest multi-campus community colleges in the nation, with more than 70,000 students.**

**EXHIBIT E-2 Metropolitan Education Commission Goals**

To empower and advocate for students, their teachers, and their families

To acknowledge individuals and groups within the community whose exemplary service to students and to education merits such special recognition

To promote graduation from high school as a first step toward an enriched future for students and a realistic sense of their place within the community

Source: MEC, <http://www.tucsonaz.gov/mec>

**EXHIBIT E-3 Poverty Rate for Population 25 Years & Over by Educational Attainment Level**

Educational Attainment	Poverty Rate
Less than a High School Diploma	30%
High School Graduates	18.3%
Some College/Associates Degree	11.6%
Bachelor's Degree	8.2%
Graduate or Professional Degree	5.2%

Source: U.S. Census -2008 American Community Survey 1-Year Estimates

provides legislative oversight for facility operations, classroom standards, and funding for K-12 schools, colleges, and universities statewide. The City of Tucson and Pima County established the Metropolitan Commission on Education (MEC) in 1989 to advise and make recommendations on areas that affect the educational welfare of the City and County. The MEC, composed of 34 Citizen Commissioners appointed by the City Mayor and Council and the County Board of Supervisors, facilitates partnerships and collaboration among educational, business, service, and governmental agencies. *Exhibit E-2* presents the Commission's key goals.

To graduate from an Arizona public high school, a student must pass a standardized test called Arizona's Instrument to Measure Standards (AIMS). Research conducted by TUSD showed a correlation between passing test scores and the socioeconomic status and mobility (maintaining enrollment in the same school) of students in the City's largest school district.<sup>3</sup> Based on local studies of the conditions related to educational attainment and success, the City can have a direct and positive impact on education and its relationship to employment and prosperity.

Through its Housing and Community Development Department (HCD), the City helps fund programs intended to alleviate some of the consequences of poverty that affect school performance, such as poor housing conditions and lack of food in the home. Other efforts to reduce poverty are longer term, such as increasing economic development to produce more opportunities for employment (*Exhibit E-3*). Economic development is dependent on an educated workforce. Tucson Regional

<sup>3</sup>Tucson Regional Economic Opportunities (TREGO) 2012 Survey, Area Development Magazine

<sup>4</sup>Sperling's Best Places, <http://www.bestplaces.net/tools/>, June 2012



Economic Opportunities (TREO) cites “availability of a skilled workforce” as the 4th out of the top 10 reasons a business chooses to locate in one community over another.<sup>4</sup>

In 2012 Arizona ranked as one of the states with the lowest investment in public education, that is a \$4,605 investment per pupil as compared to the national average investment of \$5,691.<sup>5</sup> While the City cannot affect the formal school system directly, it can play an active role in addressing factors, such as “quality-of-life” conditions and skills, that increase a student’s chance of becoming part of a well-educated local workforce.

Community education includes lifelong learning opportunities and is provided through publicly funded programs ranging from early childhood development to crime prevention, household management, recreation, building and landscaping techniques,

trades and crafts, and environmental literacy. The City’s Parks and Recreation Department administers the majority of community education programs, which it provides throughout Tucson at neighborhood and community centers, parks, and libraries.

There are departments within the City that provide educational programs related to their specific missions—Tucson Water, for example, offers water conservation programs. Other departments integrate education about public processes into public outreach for specific projects. However, there is not a coordinated approach to providing citizens with opportunities to become better informed about a range of subjects relevant to City planning, policy development, and governance.

The policies that follow address areas in which the City can play a role in strengthening educational opportunities and outcomes.



**Tucson Parks and Recreation class for motor skill development, at Reid Park.**

<sup>4</sup>Tucson Regional Economic Opportunities (TREO) 2012 Survey, Area Development Magazine

<sup>5</sup>Sperling’s Best Places, <http://www.bestplaces.net/tools/>, June 2012



# POLICIES

## Education (E)

- E1** Support lifelong learning, including early childhood education, community education, literacy, and after-school and continuing education programs.
- E2** Improve cross-cultural understanding through public programs and events.
- E3** Provide well-maintained public facilities and infrastructure that serve educational activities.
- E4** Build and maintain partnerships among neighborhood, community, business, and regional institutions and programs to increase educational opportunities.
- E5** Maximize educational opportunities as a recognized foundation for personal and economic advancement and leadership.
- E6** Work collaboratively with schools regarding planning and community development in the built environment to address community needs.
- E7** Initiate a comprehensive approach to civic education that provides and promotes regular opportunities for members of the public to learn about the functions of the City and to take advantage of programs provided by the City. Suggested subjects should include, but not be limited to:
  - Boards, commissions, and committees
  - City government organization and functions
  - Climate readiness
  - Code enforcement
  - Community energy conservation
  - Historic preservation initiatives
  - Housing information and housing choice
  - Landscape and vegetation
  - Life skills training and household management
  - Neighborhood association designation and organization
  - Permits and licenses
  - Public health opportunities
  - Public safety prevention programs
  - Safe Routes to School
  - Traffic calming
  - Urban heat island mitigation
  - Waste reduction
  - Water conservation programs
  - Volunteer opportunities



### Other Related Policies

ELEMENT	Policy #	PAGE #
Housing	H1, H10	3.11
Economic Development	ED1, ED4–ED6, ED11	3.20
Public Safety	PS6	3.25
Parks & Recreation	PR1, PR3–PR5, PR7, PR9, PR10	3.30
Arts & Culture	AC1, AC4, AC7–AC9	3.37
Public Health	PH5–PH7	3.41
Urban Agriculture	AG4	3.45
<b>Education</b>		<b>3.50</b>
Governance & Participation	G1, G2, G7, G12	3.56
Energy & Climate Change	EC4, EC5, EC7	3.66
Water Resources	WR3, WR7	3.71
Green Infrastructure	GI1, GI3	3.77
Environmental Quality	EQ1, EQ6, EQ7	3.83
Historic Preservation	HP1, HP2, HP8	3.93
Public Infrastructure, Facilities & Cost of Development	PI1, PI3, PI4	3.101
Redevelopment & Revitalization	RR7	3.108
Land Use, Transportation & Urban Design	LT3, LT4, LT14	3.126



# Governance & Participation

The City of Tucson has a charter government as provided for by the State Constitution. A charter allows a city to choose the specific structure of its representative government and the manner in which that government will respond to citizen needs. The City of Tucson Charter, adopted in 1929, provides for the Council to approve the budget and set policy and a city manager to oversee the administration of the organization in what is referred to as a council-manager form of government.

City government derives its legitimacy from the citizens it serves. To effectively determine citizen needs and acceptable ways to meet those needs, City government must interact with residents, businesses, non-governmental organizations, and other governmental agencies, broadly referred to here as the public. The City of Tucson has fostered interaction through processes typically designed to inform and solicit input and feedback on policy, program, and project planning. These processes range from sharing comments at a public hearing, to engaging in a customized public participation program for a particular planning effort, to serving on a board, commission, or committee, to collaborating on a regional planning initiative.

In recent years, City departments have undertaken some more highly interactive processes that begin early in the policy, program, or project planning and invite participants to help create alternatives in contrast to the traditional request for feedback on a predetermined alternative. These more hands-on processes can result in increased “ownership” of an outcome, more trust in public process in general, and less likelihood of eleventh-hour dissension. To help ensure success, such efforts require upfront planning, sufficient resources and time, careful identification of potentially affected populations, a clear understanding by the City and public of each other’s roles, and a commitment to honoring the process or having open dialogue about proposed changes to the process.

**Adults and children participate in visioning sessions for their neighborhoods and surrounding areas.**





Public participation efforts are generally designed to reach both the general public and stakeholder groups, including non-governmental organizations that have interests for which they advocate and members with whom they regularly communicate. These organizations, which may include neighborhood associations, Chambers of Commerce, business associations, educational institutions, environmental groups, social service agencies, and others, can assist in providing information about particular City initiatives to their members through their own known and trusted communication channels, such as newsletters, e-mail, meeting announcements, and others.

A particular challenge in public participation is greater inclusion of underserved populations. This takes commitment and resources to determine who the underserved are, what is preventing their engagement, and how identified barriers may be overcome. Some issues that have been identified and solutions pursued locally are diversifying communication methods, selecting meeting locations served by transit, scheduling meetings around potential participants' likely work schedules, accommodating children too young to be left at home, addressing language barriers, and providing meeting content that takes into account people's immediate concerns and their life experiences.

In addition to public participation for specific plans or projects, there are opportunities for members of the public to participate in the governance process through appointment to a City board, commission, or committee (*Exhibit G-1*). Many Tucsonans volunteer their time and knowledge preparing for and attending board, commission, and committee meetings to assist in

addressing an array of issues related to Tucson's social, economic, natural, and built environments. Effective boards, commissions, and committees require the appointment of interested and qualified people; member orientation regarding purpose and procedures; provision of materials for review in a timely manner, and staff presentations that are clear and informative. The Planning Commission plays a particularly active role regarding planning related to the built environment, advising the Mayor and Council on the adoption of long-range plans, including the General Plan; policies; specific plans; and regulations that affect development.

While City government's authority is limited to its jurisdictional boundaries, there are many issues of importance to the City that are more regional in nature. These issues require multi-jurisdictional collaboration. For example, the City and Pima County have worked together on several key plans in recent years, such as the Water & Wastewater Infrastructure, Supply & Planning Study, 2009, and the Pima Regional Trail System Master Plan, 2010.

**Young children's observations about and wishes for their neighborhood shared at a public workshop.**





**EXHIBIT G-1 City of Tucson Boards, Commissions & Committees**

<b>Boards</b>	<b>Commissions</b>	<b>Committees</b>
Board of Adjustment	Addiction, Prevention, and Treatment, Pima County-City of Tucson	Bicycle Advisory Committee, Tucson-Pima County
Board of Commissioners Public Housing Authority	Civil Service Commission	Broadway Boulevard Citizens Planning Task Force
Citizen Police Advisory Review Board	Commission on Disability Issues	Climate Change Committee
Historic Zone Advisory Boards: Armory Park, Barrio Historico, El Presidio, Fort Lowell, West University	Convention Center Commission	Downtown Links Citizen Advisory Committee
Deferred Compensation Plan Management Board	Gay, Lesbian, Bisexual, and Transgender Issues, Tucson Commission	Economic and Workforce Development Selection Committee
Design Review Board	Historical Commission, Tucson-Pima County	Environmental Services Advisory Committee
Fire Public Safety Personnel Retirement System Board	Human Relations Commission	Fire Code Review Committee
Police Public Safety Personnel Retirement System Board, Tucson	Independent Audit and Performance Commission	Grant Road Corridor Planning Task Force
Rio Nuevo Multipurpose Facilities District Board	Magistrates Merit Selection Commission	Greens Committee
Sign Code Advisory and Appeals Board	Metropolitan Education Commission	Kino-22nd, Citizen Advisory Committee Roadway Development
Supplemental Retirement System Board of Trustees	Metropolitan Energy Commission, Tucson-Pima County	Kolb/Sabino Canyon Road Connection Task Force
Tucson-Supplemental Retirement System Board of Trustees	Metropolitan Housing Commission	Landscape Advisory Committee
	Parks and Recreation Commission	Outdoor Lighting Code Committee
	ParkWise Commission	Public Art and Community Design Committee
	Planning Commission	Redistricting Advisory Committee
	Small, Minority, and Women-Owned Business Commission	Resource Planning Advisory Committee
	Women's Commission, Pima County/Tucson	Rodeo Grounds/Parade Citizens' Oversight Committee
		Sign Code Committee
		Supplemental Retirement System Investment Advisory Council
		Transit Task Force
		Transportation Advisory Committee
		Tucson-Pima County Joint Consolidated Code Committee
		Veterans' Affairs Committee
		Citizens' Water Advisory Committee
		Zoning Examiner Meetings

Source: <http://cms3.tucsonaz.gov/clerks/boardscommissions>, October 2012



The City also works with quasi-governmental entities such as the University of Arizona and Pima Community College on planning efforts that interface with areas under City jurisdiction. A particular area of collaboration between the City and the University of Arizona has been the planning and implementation of the Modern Streetcar route, which will connect Tucson's downtown, surroundings neighborhoods and businesses, and the University's main campus and its medical center.

To engage and work effectively with the public, City departments and offices must also practice regular, coordinated communication internally to lay the foundation for effective communication externally. Such communication should help ensure that policy, program, and project planning reflects an integrated approach responsive to the wide range of issues embodied in community building.

The following policies were developed with public input and reflect areas for improvement and enhancement in processes for general public, stakeholder, and agency participation and collaboration.

**At a Plan Tucson Policy Workshop on Community Participation in November 2011, participants were presented with the following challenge, "Imagine you were asked to create a poster with no less than 3 and no more than 5 words or short phrases that describe the essence of Community Participation, what would your poster include?" Following are samples of the results.**





# POLICIES

## Governance & Participation (G)

- G1** Provide the public with regular communication and sufficient information regarding policy, program, and project planning and decision-making via multiple methods.
- G2** Offer opportunities for productive public engagement in City policy, program, and project initiatives from the beginning of and throughout the planning and decision-making process.
- G3** Emphasize interactive participation methods that solicit input from the public and provide feedback to the public on input received and how it was used.
- G4** Increase participation of the traditionally underrepresented populations in policy, program, and project planning and decision-making.
- G5** Address location, transportation, schedule, language, childcare, and other potential barriers to inclusive public participation.
- G6** Coordinate and collaborate with nongovernmental organizations to increase public participation.
- G7** Develop and maintain strong partnerships with regional and local nongovernmental organizations, including educational institutions, non-profit organizations, and neighborhood and citizen groups.
- G8** Support a representative and balanced multi-jurisdictional, regional approach to short-term and long-term planning.
- G9** Coordinate consistent and integrated policy, program, and project planning across City departments.
- G10** Establish a repository of City planning documents and policies that can be accessed easily by the public.
- G11** Facilitate opportunities for neighborhood representatives, business organizations, not-for-profit organizations and agencies, and other stakeholders to meet regularly with and obtain information from City staff on City initiatives and activities.
- G12** Provide orientation and ongoing training for members of City boards, commissions, and committees to enable them to better serve the public.

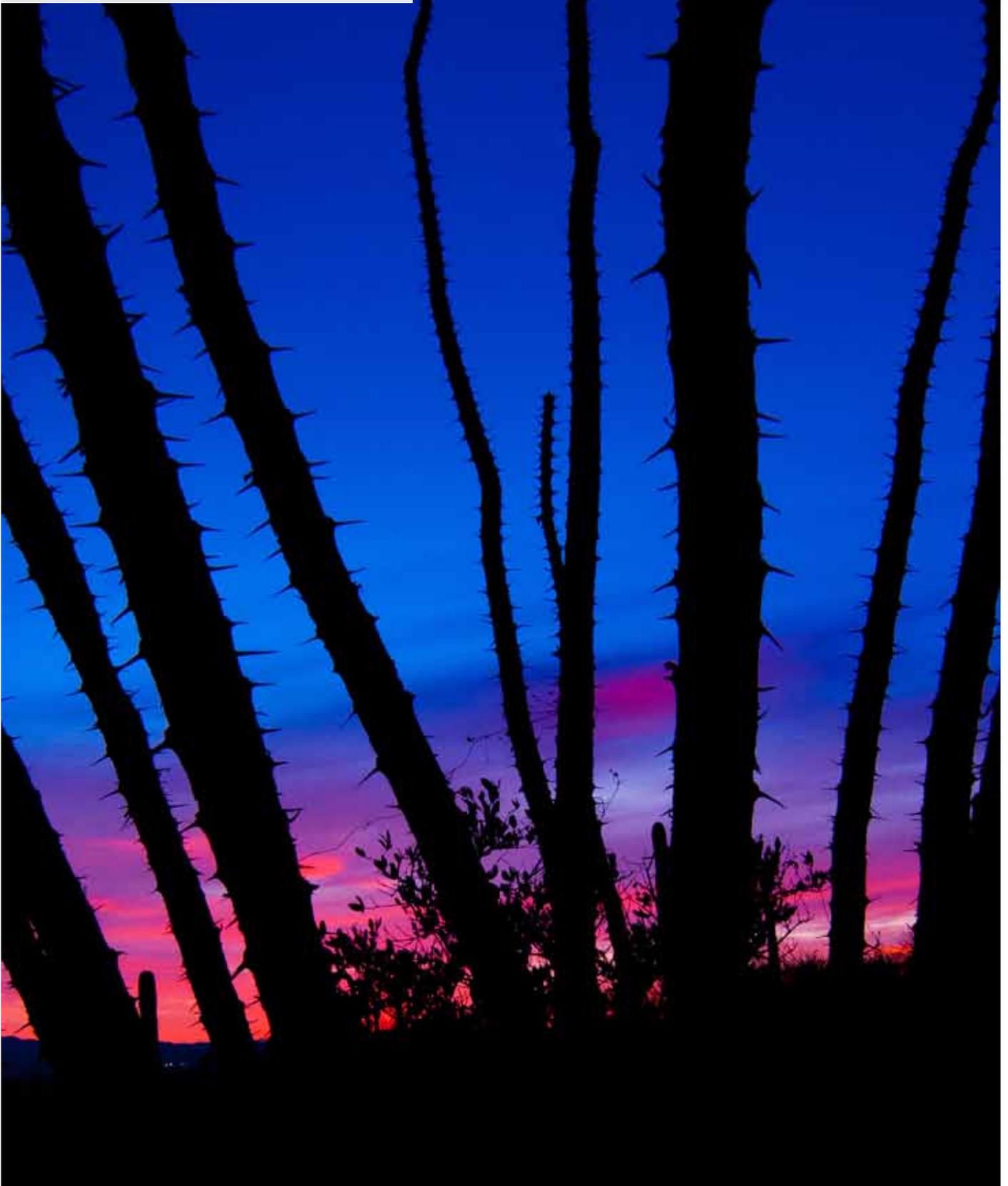


### Other Related Policies

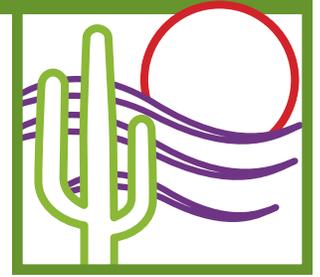
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Education	E1, E2, E4, E6, E7	3.50
<b>Governance &amp; Participation</b>		<b>3.56</b>
Energy & Climate Change	—	3.66
Water Resources	WR7	3.71
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Public Infrastructure, Facilities & Cost of Development	—	3.101
Redevelopment & Revitalization	RR7	3.108
Land Use, Transportation & Urban Design	LT2, LT8, LT22, LT23, LT25	3.126



Located in the environmentally rich Sonoran Desert and surrounded by mountains, the Tucson Basin is renowned for its natural resources and beauty.



# THE NATURAL ENVIRONMENT



- **Energy & Climate Readiness**
- **Water Resources**
- **Green Infrastructure**
- **Environmental Quality**

## Introduction

Tucson has grown rapidly over the past 60 years, both in population and geographically. This growth presents challenges to the protection of the natural environment, including water, air, native vegetation, and open space. A healthy environment is critical to ensuring and sustaining a community that is healthy, productive, and resilient.

Tucson is located in the Sonoran Desert at an elevation of about 2,400 feet above sea level. With average annual precipitation of 12 inches per year regionally, conservation and prudent management of water resources is a high priority for the City. The sun shines about 350 days per year, and summers are long and hot, putting a strain on public infrastructure, the power grid, and people. The City must continue its efforts to address and mitigate these effects.

Provision and maintenance of a healthy and abundant tree canopy cover and associated native vegetation create a comfortable pedestrian environment and reduce energy use in buildings. Pursuing solar use makes sense as an alternative energy source for our community, and offers an opportunity for Tucson to become a national and international leader in the development and use of solar power. Tucson was designated a Solar America City in 2007 by the U.S. Department of Energy, making it one of only 25 cities in the United States to have this designation.

The Natural Environment Focus Area presents goals and policies that address the four topics shown above which are important to the future of Tucson's natural environment and the community as a whole. The goals for the Natural Environment are presented together on the next page, followed by policies for each of the referenced topics.

The Arizona State Statute requirements for general plans that are addressed in this chapter include conservation, open space, water resources, energy, and environmental planning.

**A native pincushion cactus in bloom.**





# GOALS

## The City strives for

- 10** A reputation as a national leader in the development and use of renewable energy technologies, water conservation, waste diversion and recovery, and other emerging environmentally-sensitive industries.
- 11** A reduction in the community's carbon footprint and greater energy independence.
- 12** A community that is resilient and adaptive to climate change.
- 13** Abundant and appropriate use of native plants and trees.
- 14** A network of healthy, natural open space managed for multiple benefits.
- 15** A secure, high quality, reliable, long-term supply of water for humans and the natural environment.
- 16** A comfortable, attractive, and pollution-free environment.
- 17** Sound, efficient, ecological policies and practices in government and in the private sector.

Pedestrians benefit from street trees along Scott Avenue in downtown Tucson.





# Energy & Climate Readiness

While the City of Tucson does not regulate or manage energy utilities, it is a major consumer of electricity, natural gas, and fuels, and a contributor to greenhouse gas emissions. Through its internal operations, transportation and land use policies, development standards, building codes and public education, the City of Tucson can have a significant impact on increasing community energy

efficiency, supporting sources of alternative energy, reducing dependence on carbon-based energy, and preparing for a changing and unpredictable climate.

Since the 1990s, the City has pursued energy efficiency standards. It has been a leader in promoting solar energy technologies for residential, commercial and public buildings, and has been active in efforts to understand how climate change may affect the region and to plan for anticipated impacts. The City's Office of Conservation and Sustainable Development and the General Services Department have been actively involved in energy efficiency and solar energy initiatives and projects. Mayor and Council actions have included:

- Adopting the Sustainable Energy Standards (Resolution No. 10178 and 10417)
- Adopting 2012 International Energy Conservation Code (Ordinance No. 11042)
- Adopting 5% solar requirements for City buildings (Ordinance No. 10178)
- Adopting LEED Silver Standards (U.S. Green Building Council) for new City buildings and renovations over 5,000 square feet (Resolution No. 20322)
- Adopting the voluntary Green Building Program (Resolution No. 21369)
- Establishing requirements that all new single family homes and duplexes be "solar ready" for installation of electric

(photovoltaic) and hot water systems (Ordinance No. 10549)

- Endorsing the Mayors' Climate Protection Agreement (Resolution No. 20443)
- Adopting the Framework for Advancing Sustainability (Resolution No. 21012)
- Approving the Phase 1 Climate Mitigation Report and Recommendations (Resolution No. 21838)
- Adopting cost-recovery solar permit flat fee (February 12, 2013, Mayor and Council Study Session)

Beginning in 1999, the City of Tucson has installed photovoltaic (PV) panels on City facilities including council offices, neighborhood community centers, police substations, reservoir decks, and mounted large systems on the ground at more remote City locations. The City

**The Tucson Convention Center solar project, completed in May 2012, placed 591.4 kw of solar panels on the roof which generates approximately 920,604 kWh/year, enough to power about 85 Tucson homes.**





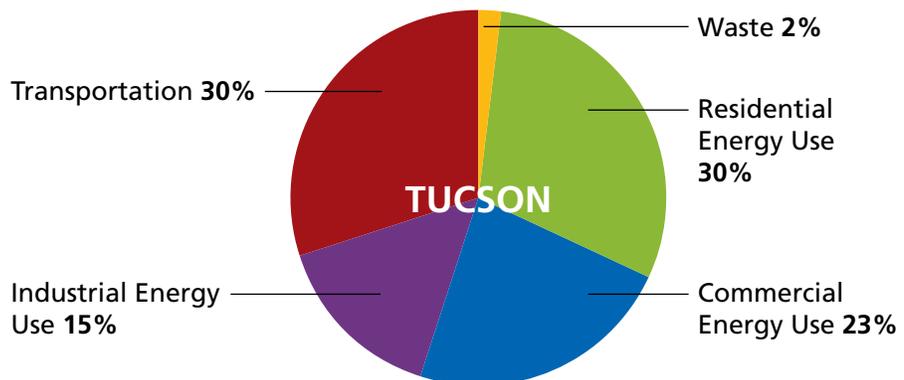
has also installed solar water heating at community gyms, a police and fire training facility, a fire station, and a therapeutic swimming pool. Each of these systems reduces the amount of electricity the City must purchase from energy utilities and sets an example for residents. In addition, the City has sponsored many solar classes and workshops for homeowners to learn more about solar, and working with Pima County, established the Solar One Stop, an educational website for all things solar in Southern Arizona.

The City is committed to removing barriers to solar in the community by streamlining permitting and zoning procedures, protecting solar access, considering solar orientation in new developments, and establishing demonstration programs to facilitate solar installations by businesses and residents. Tucsonans have installed solar in increasing numbers in recent years, including solar panels on homes, on carports at businesses, and on the ground. Solar hot water heaters have become popular and some neighborhoods have installed solar streetlights. The City plans to continue and expand support for solar opportunities in the community.

In 2012 City operations consumed about 150 million kilowatts or \$15 million worth of electricity per year. By increasing energy efficiency and using non-carbon based forms of energy, such as solar, the City and its residents, businesses, and institutions can reduce the cost of energy and decrease greenhouse gas emissions. Most of Tucson’s energy comes from coal-fired power plants, and when coal is burned, greenhouse gases are created. Currently, about 4% of the City’s energy is generated by solar power. The Pima Association of Governments’ Regional Greenhouse Gas Inventory (November 2012) quantified greenhouse gas emissions throughout the region for the period 1990-2010. Total greenhouse gas emissions in Tucson were 7,064,269 million metric tons in 2010, with transportation and residential energy accounting for 30% each of the total (*Exhibit EC-1*). A comparison of per capita greenhouse gas emissions for Tucson and other cities can be found in *Exhibit EC-2*.

Climate scientists understand that human activity is impacting the earth’s climate. Researchers who conducted the recent Southwest Climate Assessment have found that the Southwestern region of the United States has experienced

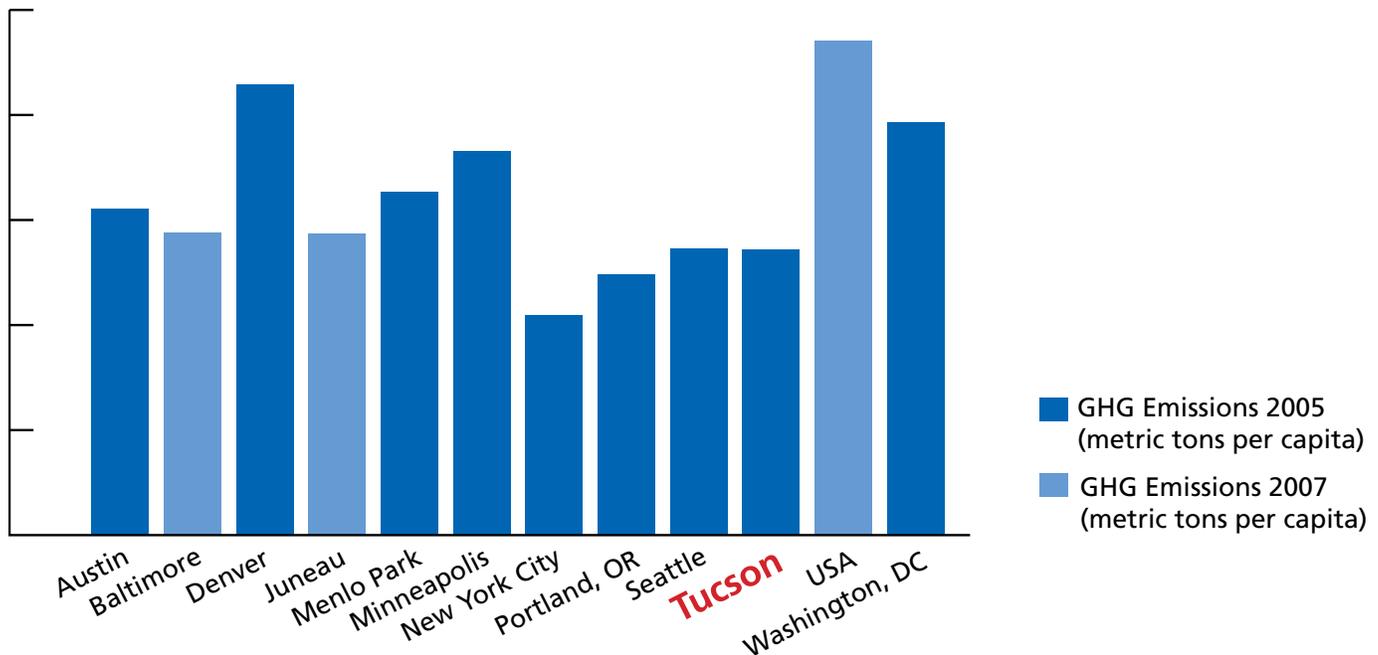
**EXHIBIT EC-1 Tucson Greenhouse Gas Emissions, 2010**



Source: <http://www.pagnet.org/documents/Air/GreenHouseGas-2012-Inventory.pdf>



## EXHIBIT EC-2 Comparison of Greenhouse Gas (GHG) Emissions



Source: Daniel Hoornweg, Lorraine Sugar and Claudia Lorena Trejos Gómez

"Cities and greenhouse gas emissions: moving forward"

Environment and Urbanization 2011 23: 207 originally published online 10 January 2011

average annual temperature increases of about 1.6 degrees Fahrenheit between the years 1901 to 2010.<sup>1</sup> Climate projections from the Southwest Climate Assessment study for the Southwestern region are that the average annual temperature will increase an additional 1-4 degrees between the years 2021 and 2050; 1-6 degrees between 2051 and 2070; and 2-9 degrees between 2071 and 2099. The ranges are due to different greenhouse gas emissions scenarios. Additional projections include an increase in certain season's temperatures—particularly summer and fall.

The amount of rainfall that the region receives may also be affected. Scientists project a decrease in average annual precipitation in the southern part of the

Southwestern region (including Arizona). Spring precipitation is projected to decrease 9-29% between the years 2070 and 2099, depending on the emissions scenario. The region may also experience more rain falling in shorter periods of time. Extreme daily precipitation is projected to increase in the last half of the 21st century, that is, more precipitation may fall in fewer, but more intense, storms.

Other projected climate impacts include more extreme climate-related events, such as prolonged periods of drought, heat waves, and flooding; greater stress on surface and groundwater supplies; climate-related human health risks, including heat stress, aeroallergen-related respiratory illness, rodent- and

<sup>1</sup> Overpeck, Jonathan, Gregg Garfin, Angela Jardine, Dave Busch, Dan Cayan, Michael Dettinger, Erica Fleishman, Alexander Gerunshov, Glen MacDonald, Kelly Redmond, William Travis, and Bradley Udall, 2012. Chapter 1: Summary for Decision Makers. In *Assessment of Climate Change in the Southwest United States: A Technical Report Prepared for the U.S. National Climate Assessment*. A report by the Southwest Climate Alliance [Gregg Garfin, Angela Jardine, Robert Merideth, Mary Black, and Jonathan Overpeck (eds.)]. Tucson, AZ: Southwest Climate Alliance. June 2012 Southwest Climate Summit Draft.

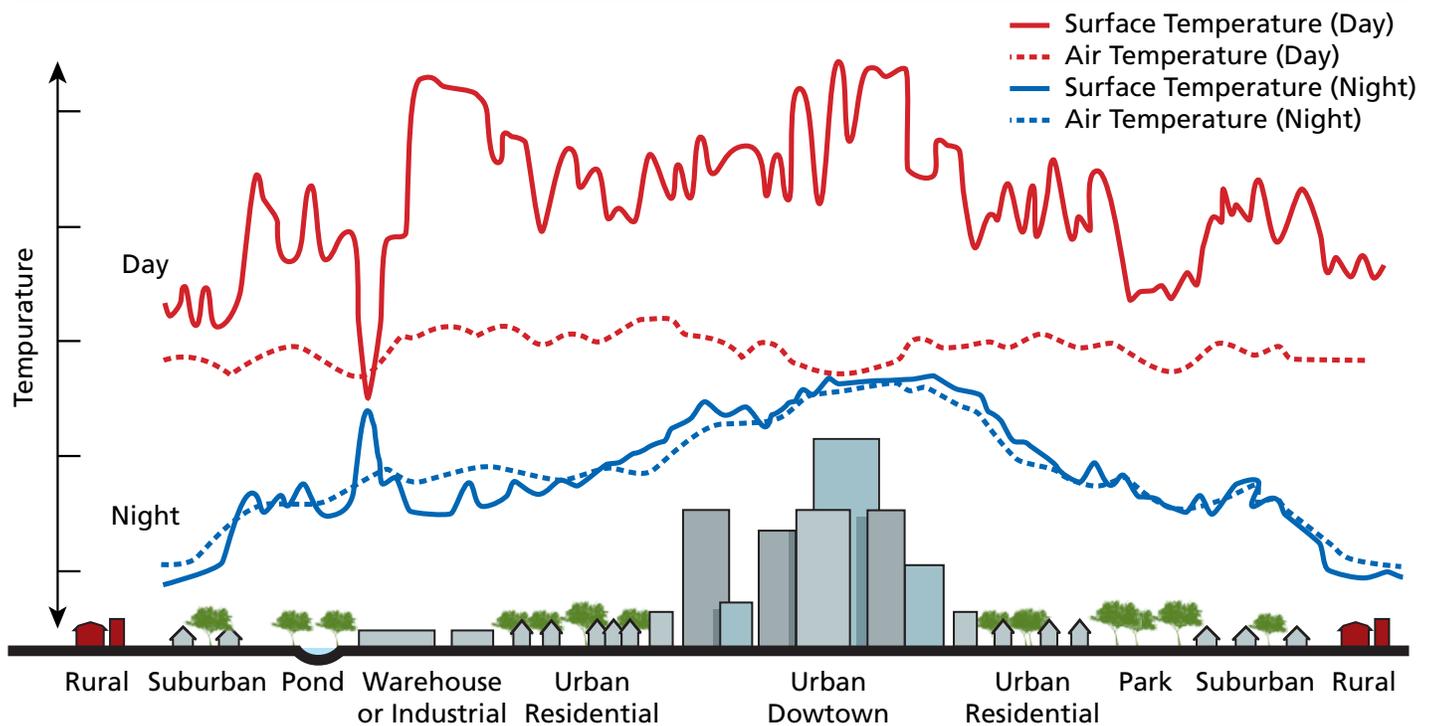


insect-borne diseases; and negative impacts to food affordability and food security.<sup>2</sup> A negative feedback loop is created by an increased demand for air conditioning (and, thus, coal based electricity) as a result of rising temperatures, which further contributes to greenhouse gas emissions. Increased demand for electricity in a warming climate also increases water demand for both electric power plant cooling and for landscaping and agriculture irrigation. In turn, greater water demand requires substantial energy use, mainly to pump, treat, and distribute water supplies.

Land use, urban design, building materials, landscaping, and natural open space all contribute to ambient

temperatures. Cities form “heat islands” because the built environment holds heat longer than surrounding forested and vegetated areas. Heat is retained by concrete sidewalks, buildings, parking lots, roadways, and other structures (*Exhibit EC-3*). When temperatures cool down at night, the developed areas of the city give off heat that has been stored during the day, keeping temperatures higher than in surrounding areas. Areas in the center of a city can be as much as 10-15 degrees warmer than areas outside the city.<sup>3</sup> An analysis of 30 years of temperature data in Tucson indicates that the rate of urban warming is three times greater than warming in the surrounding non-urban areas.

### EXHIBIT EC-3 Urban Heat Island Profile



Source: EPA, Urban Heat Island Effect

<sup>2</sup> Ebi, K.L., F.G. Sussman, T.J. Wilbanks. Analyses of the effects of global change on human health and welfare and human systems. In *A Report by the U.S. Climate Change Science Program and the Subcommittee on Global Change Research*. J.L. Gamble, (ed.). U.S. Environmental Protection Agency, Washington, DC, 2008.

<sup>3</sup> Stiles, Lori. “Heat Island Effect Warms Tucson Faster As City Grows.” *UA News*. September 19, 2000.



The analysis finds that Tucson's urban temperatures have climbed 5.5 degrees over average temperatures 100 years ago. Most of the increase in temperature (3.5 degrees) has occurred in the last 30 years. Higher temperatures put additional stress on people, utilities, infrastructure, water, and vegetation.<sup>4</sup>

An outcome of the Tucson Mayor and Council's endorsement of the U.S. Mayors' Climate Protection Agreement and the adoption of the Framework for Advancing Sustainability in 2008, was the creation of the Climate Change Citizens' Advisory Committee to address the multiple dimensions of climate change in a strategic manner. The Committee is charged with the creation of a Climate Change Mitigation and Adaptation Plan (MAP) that will include recommendations and action steps to achieve the City's greenhouse

gas emissions reduction commitments under the Mayors' Climate Protection Agreement.

Climate change has significant implications for the Tucson community, including impacts on electric utilities, emergency management, public infrastructure, ecosystem health, human health, and the economy. The City of Tucson can contribute to a more sustainable future by reimagining its internal policies, practices, and operations and by promoting energy conservation and the use of renewable energy sources through land use and transportation policies, development standards, building codes, and public education.

The policies that follow, as well as other policies in this document, are intended to contribute to this effort.



**Trees help ameliorate the urban heat island.**

<sup>4</sup> [http://www.southwestclimatechange.org/impacts/people/urban\\_heat\\_island/statistics](http://www.southwestclimatechange.org/impacts/people/urban_heat_island/statistics). University of Arizona Institute for the Environment. Accessed August 30, 2012.



# POLICIES

## Energy & Climate Readiness (EC)

- EC1** Require new and existing City infrastructure, facilities, and operations to use best energy efficiency technologies and energy conservation practices and strive for net zero energy facilities.
- EC2** Require increased energy efficiency in new private building construction and facilitate the transition of new private construction toward net-zero buildings.
- EC3** Reduce the urban heat island effect by minimizing heat generation and retention from the built environment using a range of strategies.
- EC4** Increase the use of low carbon and renewable energy sources, high fuel efficiency vehicles, and non-motorized transportation.
- EC5** Develop community energy conservation education and energy efficiency retrofit programs and identify appropriate new financing opportunities for energy efficiency and solar energy installations.
- EC6** Increase the use of solar power and other renewable energy sources for City infrastructure, facilities, and operations.
- EC7** Facilitate community use of solar power and other renewable energy sources.
- EC8** Assess and prepare for the effects of climate change on City infrastructure, facilities, and operations.
- EC9** Assess and address the vulnerability of the community's health and safety, economy, and natural resources to climate change, and develop assurances that vulnerable and disadvantaged populations are not disproportionately impacted by climate change.

### Other Related Policies

ELEMENT	Policy #	PAGE #
Housing	H1, H3, H4	3.11
Economic Development	ED1, ED3–ED5, ED9	3.20
Public Safety	PS9	3.25
Parks & Recreation	PR8, PR9	3.30
Arts & Culture	AC3, AC9	3.37
Public Health	PH1, PH4, PH8	3.41
Urban Agriculture	AG1–AG4	3.45
Education	E3, E7	3.50
Governance & Participation	G1-G12	3.56
<b>Energy &amp; Climate Readiness</b>		<b>3.66</b>
Water Resources	WR2–WR4, WR6 -WR11	3.71
Green Infrastructure	GI1–GI6	3.77
Environmental Quality	EQ1–EQ3, EQ7	3.83
Historic Preservation	HP1, HP3	3.93
Public Infrastructure, Facilities & Cost of Development	PI2–PI4	3.101
Redevelopment & Revitalization	RR1, RR3, RR5, RR6	3.108
Land Use, Transportation & Urban Design	LT1, LT3, LT4, LT9–LT17, LT19, LT22	3.126



# Water Resources

Water is an essential resource to sustain human life, a healthy environment, and a strong economy. Since its early days, Tucson has relied on the same underground water source. In the mid-1940s, the city began to grow rapidly, which resulted in a significant lowering of the groundwater table with both economic and environmental consequences. Today there is competition for

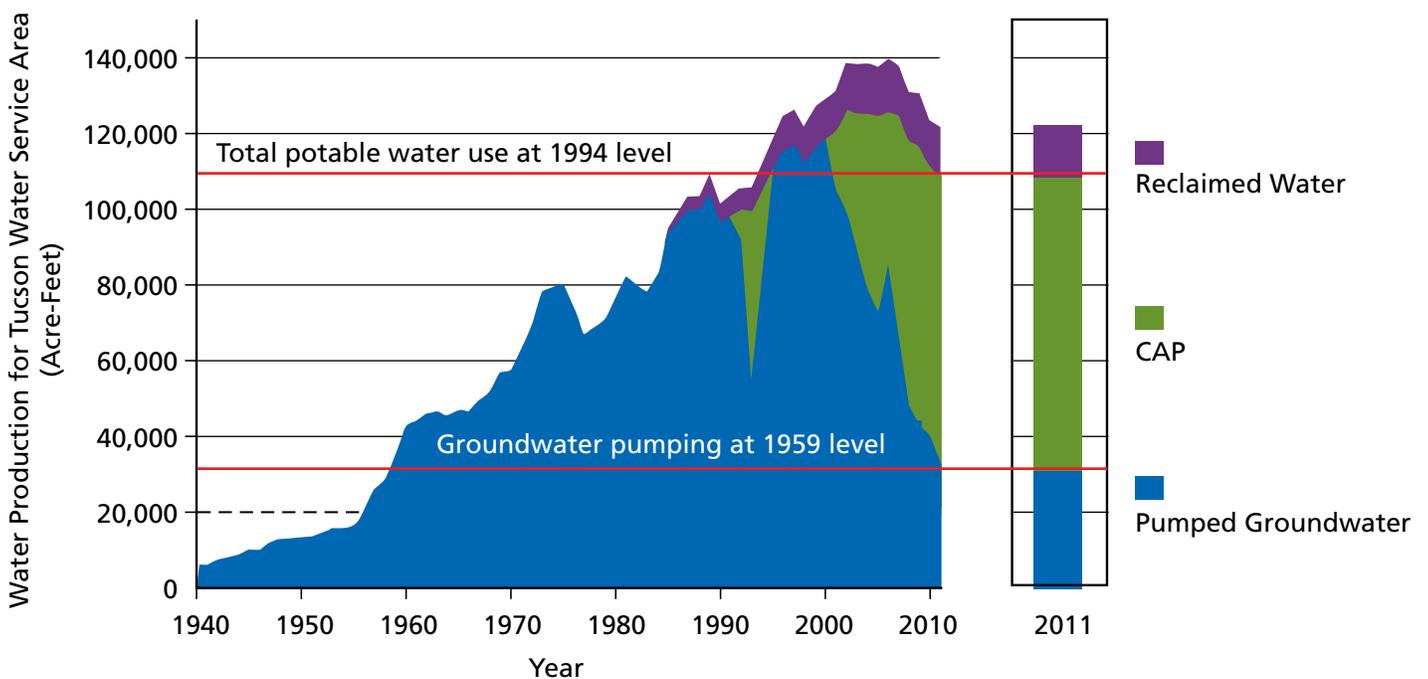
limited water resources—including potable water, reclaimed water, and rainwater—among commercial, industrial, and residential sectors, water companies, and private well owners.

One important long-term goal for water managers is the attainment of what is called “safe yield,” meaning that no more water is withdrawn from the groundwater aquifer than is replenished. Tucson has decreased its use of groundwater in recent years, and two-thirds of its current water supply now comes from recharged Colorado River water (*Exhibit WR-1*). As the largest municipal water provider in the region, Tucson Water, a department of

the City of Tucson, plays an important role in assuring a long-term, high quality, dependable supply of water. The City’s Environmental Services Department is responsible for monitoring and protecting groundwater and stormwater at 23 abandoned landfills within the City limits.

Defining a sustainable water future will require changes in how water is used and managed in Tucson and throughout the region. In 2009, the City of Tucson and Pima County released the results of a joint project called the Water & Wastewater Infrastructure, Supply & Planning Study. This study was the result of unprecedented regional cooperation to plan the area’s water future. The

**EXHIBIT WR-1 Transition to Renewable Supplies**



Source: City of Tucson Water Department



study defines a new paradigm for water resource planning and management that:

- recognizes scarcity and uncertainty
- includes the natural environment as a recipient of water
- balances water supply and demand
- builds upon the link between urban form and water use
- elevates public discussion of water resource planning to a central position in the future.

The three essential pillars of long-term water planning identified in the Water & Wastewater Study include aggressive demand management, the development of new water supplies, and guiding growth in terms of urban form, density, and location.

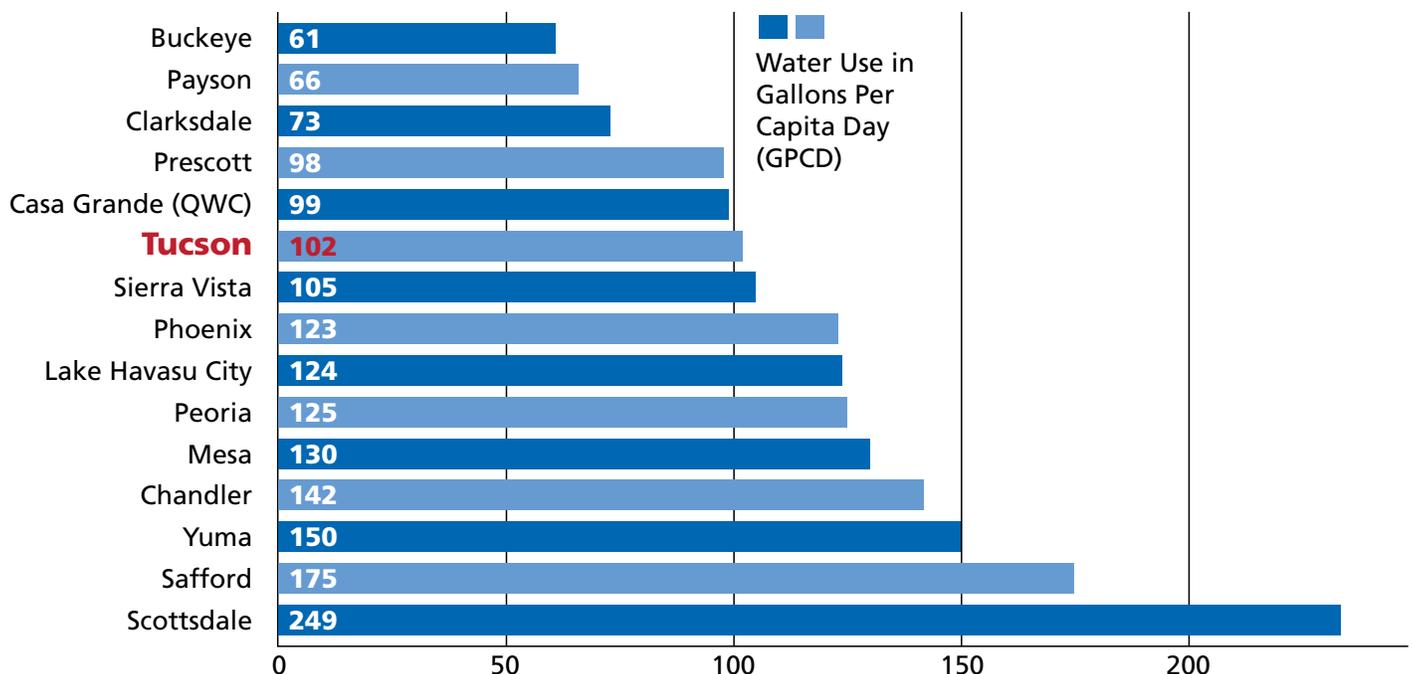
A historic disconnect between land use planning and water resource and infrastructure planning has had negative impacts on the region, including declines in the groundwater level and growth in places that lack

adequate water infrastructure and other public infrastructure and services. The region’s urban growth patterns have contributed to subsidence, habitat loss or degradation, groundwater contamination, and increased flooding. The cost of this growth has been born by local governments, other service providers, and taxpayers.<sup>5</sup>

An outcome of the Water & Wastewater Study was the adoption of a Water Service Area Policy by the Tucson Mayor and Council in 2010 (Resolution No. 21602). This policy establishes a water service boundary for Tucson Water as shown in *Exhibit WR-2* on the next page. Requests for water service outside this boundary will be carefully evaluated and the impact on existing and future obligated customers will be assessed following an established set of criteria.

Along with guiding growth to better manage water use, Tucson Water has actively and successfully sought ways to decrease water demand. Tucson has been

### EXHIBIT WR-3 Single-Family Residential Water Use (GPCD), 2008

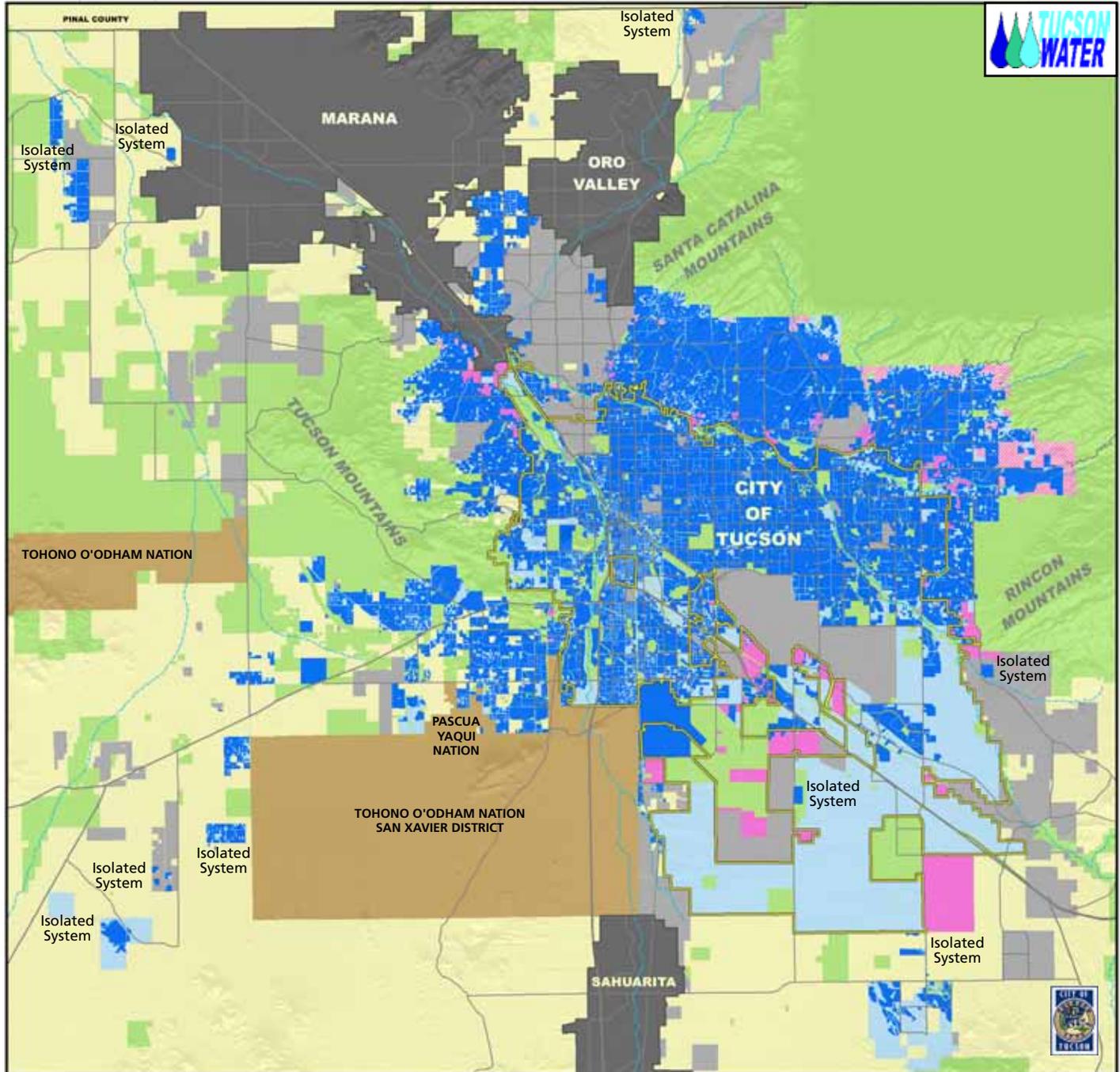


Source: Western Resource Advocates, *Arizona Water Meter: A Comparison of Water Conservation Programs in 15 Arizona Communities*. 2010.

<sup>5</sup>City of Tucson and Pima County. "Integrating Land Use Planning with Water Resources and Infrastructure." Technical Paper, July 2009.



**EXHIBIT WR-2 Tucson Water Service Area, Established 2010**



Source: City of Tucson Water Department



**Existing Obligated Service Area**

- Current Service Area
- Obligated Area (currently not served)

**Expansion Areas**

- Proposed Service Area—Annexation required
- Proposed Service Area—Annexation may be required

**Non-Expansion Areas**

- Unincorporated Pima County
- Other Water Provider
- Other Jurisdiction
- Reservation
- Parks and Government Uses



at the forefront of water conservation efforts in Arizona and in the country for three decades. Tucsonans use less water per person than many other communities in Arizona (*Exhibit WR-3*).

Public awareness of the importance of limited water resources and increases in water conservation behavior, greater water efficiency and conservation by public agencies and water utilities, and local regulations have all contributed to a decrease in the demand for water. The Commercial Rainwater Harvesting Ordinance (No. 10597) and the Residential Gray Water Ordinance (No. 10579) both encourage greater use of alternative supplies of water for non-potable uses. The City's reclaimed water system provides water for non-potable uses to many Tucson Water customers.

Rainwater that falls onto Tucson's streets and buildings has the potential to contaminate groundwater through

a process called "non-point source pollution." Rains wash oil, grease, animal waste, and other contaminants from the street into storm drains which then empty to washes and rivers. The Stormwater Quality Ordinance passed by the Mayor and Council in 2005 (No. 10209) gives jurisdiction over management of stormwater quality in the city to the Department of Transportation. Under the Ordinance, the City can inspect businesses, facilities, and construction sites to ensure that pollutants such as oil, grease, sediment, and trash do not get picked up by stormwater runoff and transported to the region's fragile washes.

The following policies support the continuation of water planning to achieve a long-term, high quality, dependable water supply.



A rain water cistern captures water for non-potable use.



Debris and contaminants from streets may be washed into washes during flooding.



# POLICIES

## Water Resources (WR)

- WR1** Continue to plan and manage the City's water supplies, quality, and infrastructure for long-term reliability and efficiency.
- WR2** Expand the use of alternative sources of water for potable and non-potable uses, including rainwater, gray water, reclaimed water, effluent, and stormwater.
- WR3** Expand effective water efficiency and conservation programs for City operations and for the residential, commercial, and industrial sectors.
- WR4** Ensure an adequate amount of water to meet the needs of riparian ecosystems.
- WR5** Protect groundwater, surface water and stormwater from contamination.
- WR6** Integrate land use and water resources planning.
- WR7** Collaborate on multi-jurisdictional and regional water planning and conservation efforts.
- WR8** Integrate the use of green infrastructure and low impact development for stormwater management in public and private development and redevelopment projects.
- WR9** Provide opportunities to supply alternative water sources for sewer system flush.
- WR10** Continue to manage the City's Water Service Area, considering service area expansion only when it furthers the long-term social, economic, and environmental interest of City residents.
- WR11** Conduct ongoing drought and climate variability planning.

### Other Related Policies

ELEMENT	Policy #	PAGE #
Housing	—	3.11
Economic Development	ED3, ED5, ED10	3.20
Public Safety	PS9	3.25
Parks & Recreation	PR2, PR8, PR9	3.30
Arts & Culture	AC9	3.37
Public Health	PH1- PH3, PH6, PH8	3.41
Urban Agriculture	AG1–AG4	3.45
Education	E7	3.50
Governance & Participation	G1-G12	3.56
Energy & Climate Readiness	EC3, EC7- EC9	3.66
<b>Water Resources</b>		<b>3.71</b>
Green Infrastructure	GI1–GI6	3.77
Environmental Quality	EQ1, EQ2, EQ6, EQ7	3.83
Historic Preservation	HP4, HP5	3.93
Public Infrastructure, Facilities & Cost of Development	PI1–PI6	3.101
Redevelopment & Revitalization	RR1–RR3, RR5	3.108
Land Use, Transportation & Urban Design	LT1, LT3, LT4, LT7, LT8, LT10, LT12, LT18–LT21, LT25	3.126



# Green Infrastructure

The City of Tucson plays a large role in the development and maintenance of green infrastructure. The Urban Landscape Framework, endorsed by the Mayor and City Council in 2008, identifies eleven departments with some level of responsibility for landscape issues. The City entities with the greatest role in providing and maintaining green infrastructure are the Parks and

Recreation Department, which plans, develops and maintains green infrastructure in parks, and along trails, and manages undeveloped open space; Tucson Water, which provides water for cultivating and maintaining green infrastructure and manages open space; the Planning and Development Services Department, which develops policy, regulations, and standards affecting green infrastructure; and the Office of Conservation and Sustainable Development, which develops habitat conservation plans, prepares environmental policy, assists with riparian habitat restoration, and administers the urban landscape program. The Landscape Advisory

Committee serves in an advisory capacity to the Mayor and Council on policies, planning, design, management, and public education related to the landscape and vegetation resources.

The term “green infrastructure” came into usage in the mid-1990s and refers to strategically planned and managed networks of natural lands, working landscapes, and other open spaces that conserve ecosystems and provide associated benefits to people. The term is expanded here to encompass the urban landscape comprised of street trees and associated vegetation sometimes referred to as the “urban forest.” Green infrastructure includes the “patches” of vegetation found in and around a city, as well as the “corridors,” often washes and trails, which connect these patches. Green infrastructure can also be small-scale agriculture and community gardens.

Low-impact development, closely associated with green infrastructure, treats stormwater as an important resource to support urban vegetation, and not as a waste product to be discarded quickly. A sustainable urban form includes green infrastructure throughout a community which helps mitigate the impacts of development and higher density.

Research has shown significant community benefits from green infrastructure, including improved air and water quality; decreased flooding; urban heat island reduction; wildlife habitat; greater resilience to climate change; increased exercise and

**Native trees provide shade helping to reduce heat and provide habitat and visual interest.**





### EXHIBIT GI-1 Value of Street Trees in Tucson

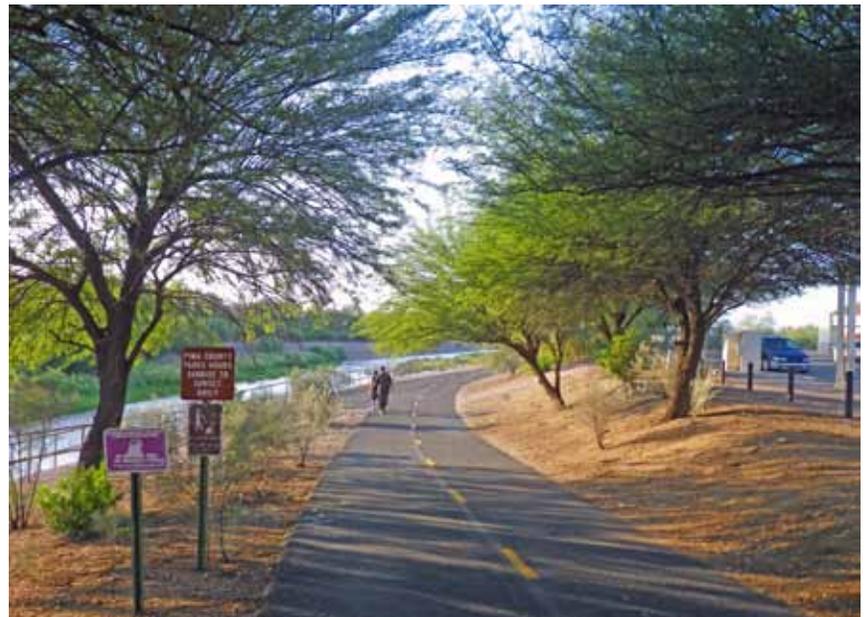
Value	Downtown Trees <sup>1</sup>	Major Streets & Routes Trees <sup>2</sup>
<b>Number of trees counted</b>	1199	18,840
<b>Reduction in energy usage</b>	115 megawatt hours/year (~ 9 households)	2,224 megawatt hours/year (~172 households)
<b>Reduction in ground-level ozone (O3)</b>	126 pounds per year	4,274 pounds per year
<b>Removal of nitrogen dioxide (NO2) per year</b>	224 pounds per year (~ emissions from 6 cars)	6,020 pounds per year (~emissions from 158 cars)
<b>Sequester and reduce carbon dioxide (CO2)</b>	161,780 pounds per year (~emissions from 14 cars)	20,057,544 pounds per year (~emissions from 2243 cars)
<b>Intercept stormwater</b>	600,391 gallons/year	15,112,900 gallons/year
<b>Total economic benefits</b>	\$52.29 per tree/year or \$62,696 total/year	\$72.31 per tree/year or \$1,362,320 total/year

recreational opportunities; community cohesion; economic investment; reduced crime; psychological and spiritual renewal; and more attractive and comfortable public spaces. Significant economic benefits can be realized from an extensive and healthy tree canopy cover. As shown in *Exhibit GI-1*, street trees in the downtown area and along major streets and routes in Tucson provide about \$1.5 million in ecosystem service benefits.

In Tucson, natural washes and riparian areas are major components in a green infrastructure network. Riparian areas provide a wide range of benefits including wildlife habitat and linkages; storm water conveyance; flood reduction; biological treatment of urban water runoff; groundwater recharge; recreational use; removal of carbon from the atmosphere; and aesthetic enhancement. Washes are often the only open space in some highly

urbanized areas of central Tucson, and these washes are a primary conduit for the urban trail system developed by the City's Parks and Recreation Department and the Department of Transportation in collaboration with Pima County. In addition to the 13 miles of trails

#### Trail along the Santa Cruz River.

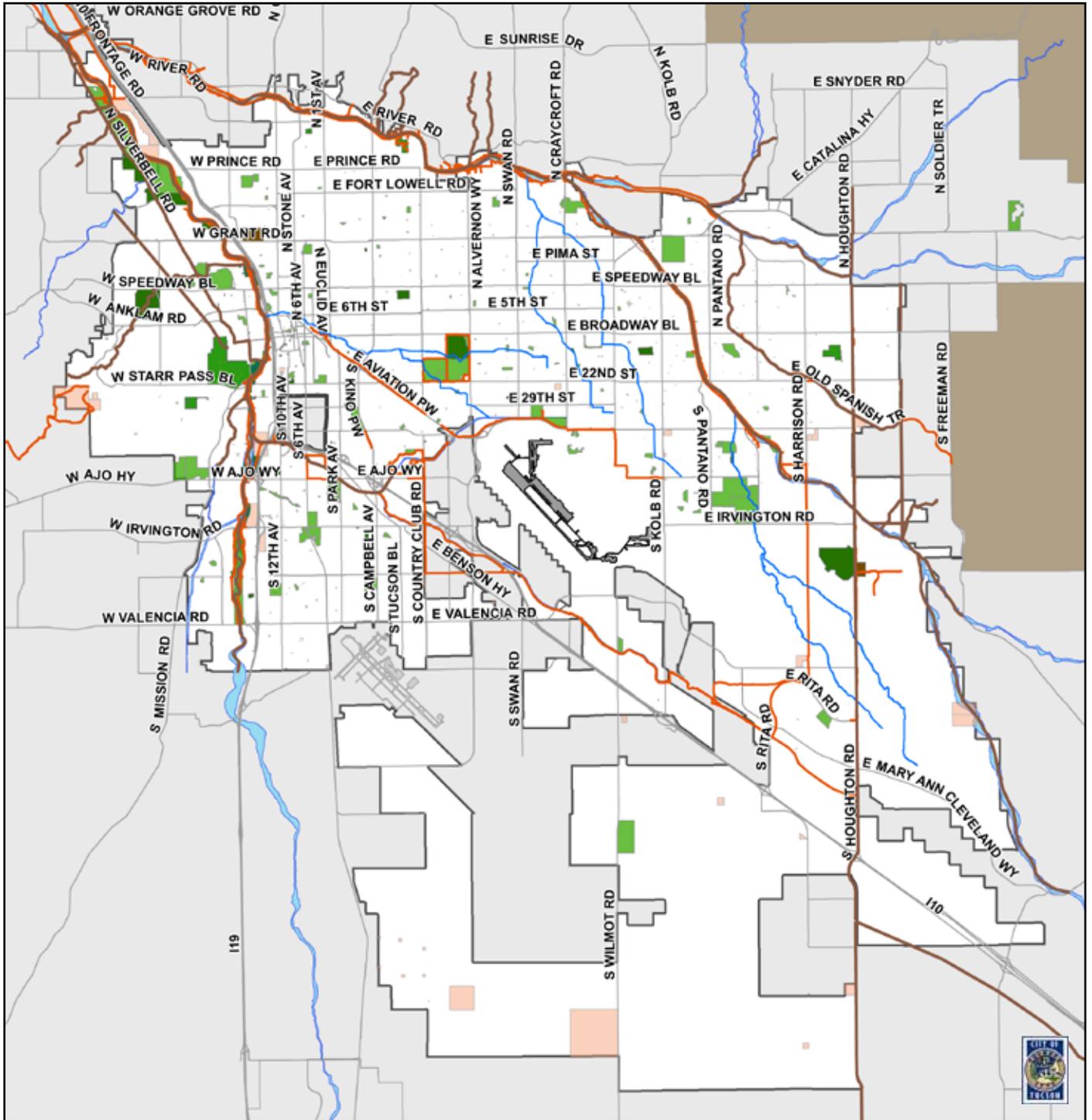


<sup>1</sup>Meadow, Alison M., Urban Forest Effects and Values: Downtown Comprehensive Street Tree Plan Area, iTree Streets Ecosystem Analysis, City of Tucson, Office of Conservation and Sustainable Development, May 2011

<sup>2</sup>Meadow, Alison M., Urban Forest Effects and Values: Major Streets and Routes, iTree Streets Ecosystem Analysis, City of Tucson, Office of Conservation and Sustainable Development, December 2010.



EXHIBIT GI-2 Parks, Washes, Trails & Open Space



Source: City of Tucson IT GIS Section



- Trails
- River Park System
- School Parks
- City Parks
- Tucson Water Property
- Major Washes
- Natural Resource Parks
- Undeveloped Park Property
- City of Tucson
- Federal Lands
- Other Jurisdictions



within Tucson, the Parks and Recreation Department manages 4,631 acres of recreational land and 552 acres of undeveloped open space. Many urban washes have been impacted by human activity and development, and require rehabilitation. Non-native, invasive species dominate many urban washes and wildlife habitat is isolated and degraded. *Exhibit GI-2* shows the range of open space in Tucson.

The City's Office of Conservation and Sustainable Development, in consultation with technical and stakeholder committees, has prepared two Habitat Conservation Plans to comply with the Endangered Species Act (*Exhibit GI-3*). These plans—one for the Avra Valley and the other for the Greater Southlands area—document the occurrence of endangered, threatened, and vulnerable species while also describing conservation strategies to mitigate possible future development impacts to those native species. The Office also participated with Pima County in the Lee Moore Watershed Basin Management Study to ensure that land use planning, development, water resources, public infrastructure, and

habitat preservation needs were identified before development occurs in the Lee Moore Watershed.

Green infrastructure is especially useful in the Southwest to reduce the impacts from high and increasing temperatures. One challenge is how best to provide water for riparian areas and landscape plants in public areas given limited water supplies and human needs. Green infrastructure, along with passive rainwater harvesting, is one way that rainfall can provide the water needed for native trees and plants along streets and in parks and other public spaces. Green infrastructure for stormwater management can also reduce flooding by slowing down the flow of water in high precipitation events and encouraging on-site rainwater infiltration. A second challenge is securing the financial resources to maintain the urban landscape and rehabilitate and preserve natural open space. The City is exploring ways to increase private-public partnerships and community support for the maintenance of urban green infrastructure.

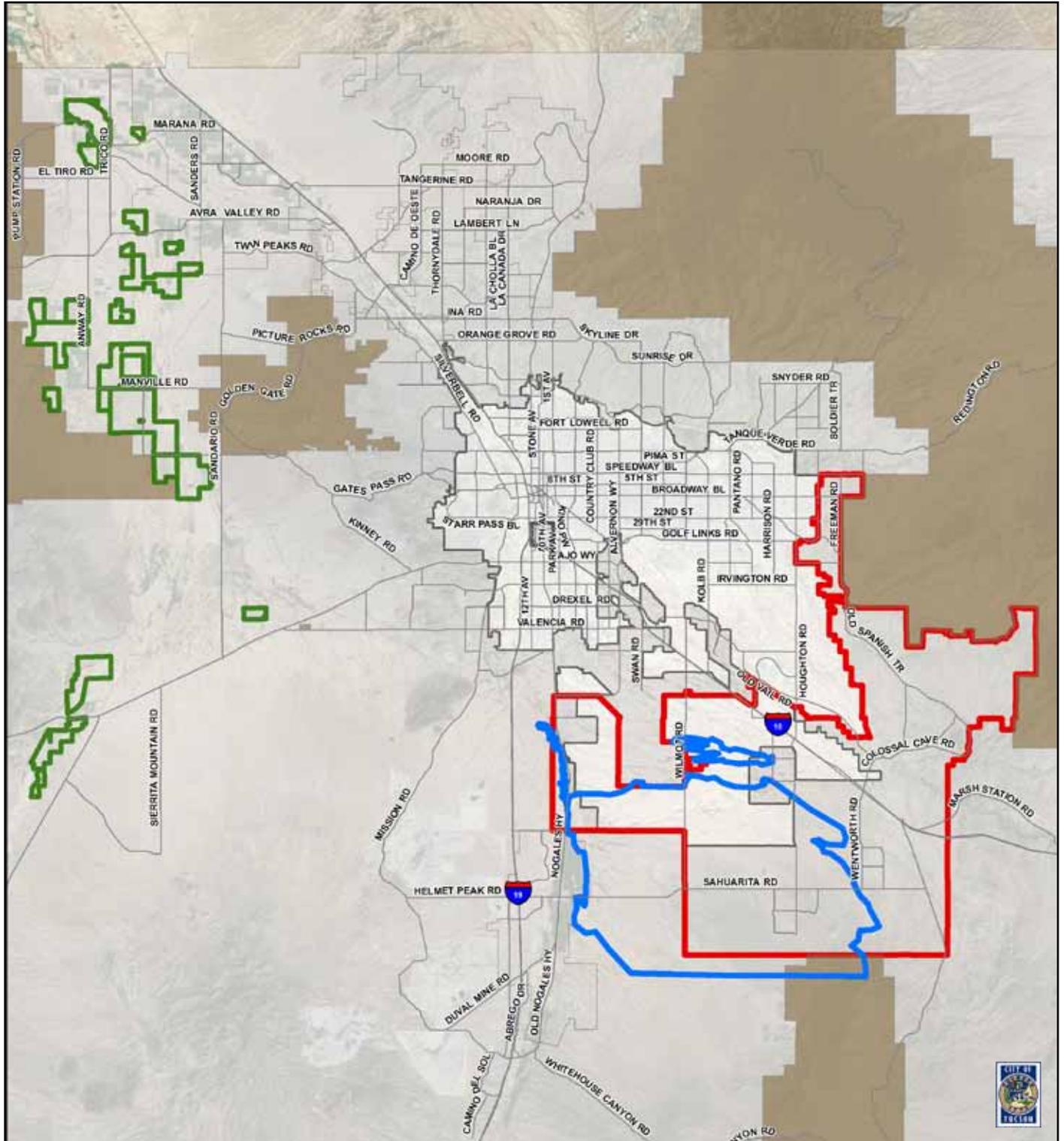
The policies that follow, as well as other policies in this document, are intended to enhance green infrastructure.



**Stormwater management through green infrastructure.**

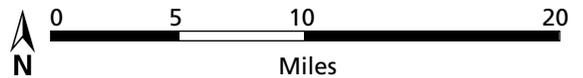


EXHIBIT GI-3 Habitat Conservation Plan Areas, 2012



Source: City of Tucson Office of Conservation and Sustainable Development and City of Tucson IT-GIS Section

- Avra Valley Planning Area
- Greater Southlands HCP Planning Area
- City of Tucson
- Federal Lands



- City of Tucson
- Other Jurisdictions



# POLICIES

## Green Infrastructure (GI)

- GI1** Require green infrastructure and low impact development techniques for stormwater management in public and private new development and redevelopment, and in roadway projects.
- GI2** Rehabilitate and enhance natural drainage systems, water detention and retention basins, and other infiltration areas for multiple benefits, such as recreation, wildlife habitat, and stormwater management.
- GI3** Create and maintain a connected urban greenway system for non-motorized mobility and to provide human and environmental health benefits.
- GI4** Expand and maintain a healthy, drought-tolerant, low-water use tree canopy and urban forest to provide ecosystem services, mitigate the urban heat island, and improve the attractiveness of neighborhoods and the city as a whole.
- GI5** Create, preserve, and manage biologically rich, connected open space; wildlife and plant habitat; and wildlife corridors, including natural washes and pockets of native vegetation, while working to eradicate invasive species.
- GI6** Protect, restore, enhance, and manage trees for their long-term health, including providing guidance on proper planting, care, and maintenance.

## Other Related Policies

ELEMENT	Policy #	PAGE #
Housing	H1	3.11
Economic Development	ED1, ED3, ED5	3.20
Public Safety	PS10	3.25
Parks & Recreation	PR2, PR4, PR9, PR12	3.30
Arts & Culture	AC2–AC4, AC9	3.37
Public Health	PH1, PH2, PH5, PH8	3.41
Urban Agriculture	AG1–AG4	3.45
Education	E7	3.50
Governance & Participation	G1–G12	3.56
Energy & Climate Readiness	EC3, EC5, EC8, EC9	3.66
Water Resources	WR2–WR5, WR8, WR10, WR11	3.71
<b>Green Infrastructure</b>		<b>3.77</b>
Environmental Quality	EQ3	3.83
Historic Preservation	HP4, HP5	3.93
Public Infrastructure, Facilities & Cost of Development	PI4	3.101
Redevelopment & Revitalization	RR5	3.108
Land Use, Transportation & Urban Design	LT1, LT4–LT6, LT10, LT12–LT14, LT20, LT21	3.126



# Environmental Quality

Environmental Quality as used here focuses on solid and hazardous waste, potentially contaminated sites (brownfields), air quality, noise, and light pollution. Water quality issues are covered in the Water Resources section. The City of Tucson, along with private haulers and other regulatory authorities is responsible for waste management and environmental protection services within the City's boundaries.

The Environmental Services Department owns and manages the regional Los Reales Landfill, runs programs for recycling and waste reduction, provides oversight of groundwater cleanup and methane controls at abandoned city landfills and spills, and ensures City Departments' compliance with air quality and industrial waste discharge requirements. Environmental Services leads the citywide Environmental Management Program that provides a set of management processes and procedures for use by City departments to analyze, control, and reduce the environmental impact of its activities, services, and programs. The Planning and Development Services Department ensures that outdoor lighting design complies with the dark skies ordinance

and that land use and development plans consider designated high noise areas in the vicinity of Davis-Monthan Air Force Base and Tucson International Airport. The Housing and Community Development Department enforces noise violations through its Code Enforcement Unit.

An efficient and effective waste collection system is a critical part of the City's infrastructure. Waste collection and disposal contributes to the general public health by establishing a clean, attractive community. The City's Environmental Services Department provides weekly residential trash and recycling collection for 137,000 customers within the city limits. Trash collected by the Department is taken to the Los Reales Landfill which is a lined waste disposal facility accepting more than 1,500 tons of trash daily. Methane gas generated by garbage decomposition within the landfill is collected and sold to Tucson Electric Power Company through a contract with a third party. Commercial establishments, multi-family dwellings, and industrial facilities are not required to use the City's trash collection services.

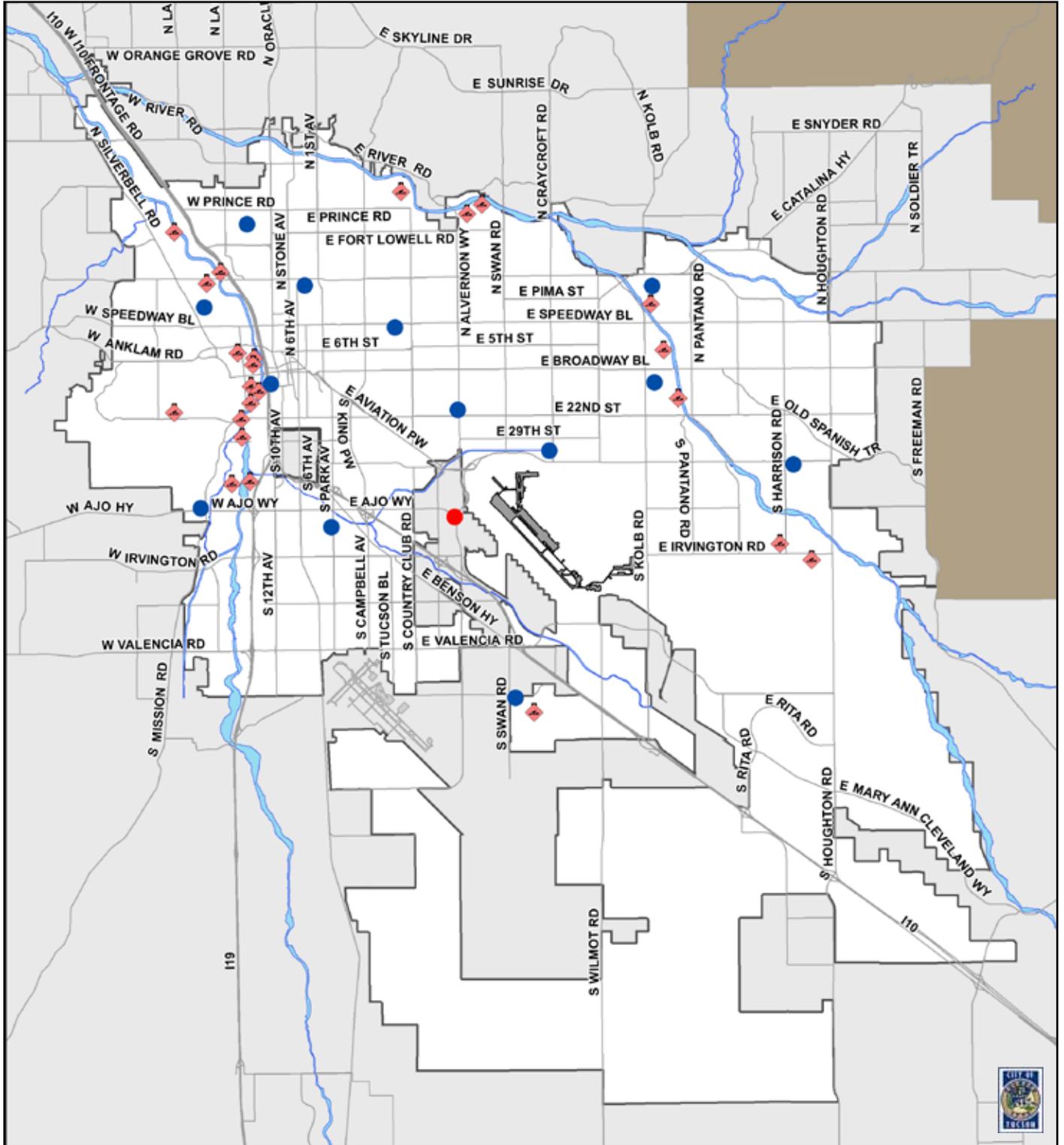
The City promotes recycling through its Blue Barrel program and provides 13 neighborhood recycling centers where individuals or small businesses may take their recyclables. Once collected, recyclables are taken to a Materials Recovery Facility. Proceeds from the sale of recycled materials are shared with the

**Brichta Elementary School children help sort items for recycling.**





### EXHIBIT EQ-1 Landfills & Recycling Centers



Source: City of Tucson IT GIS Section

- Neighborhood Recycling Centers
- Materials Recovery Facility (Non-Public)
- ◆ Landfills
- Streets





Old paint is dropped off at a household hazardous waste collection site.

operator of the Facility. The City has received as much as a million dollars per year, depending on market conditions. *Exhibit EQ-1* shows the location of landfills and recycling centers.

The City also has established locations for the disposal of household hazardous waste, including florescent light bulbs, pesticides, and motor oil. Ninety-eight percent of household hazardous waste collected through this program is recycled. Twice a year, the City offers a popular, bi-annual brush and bulky pickup for its customers.

Many communities are moving toward a policy called “zero waste,” which focuses on “upstream” solutions to stop waste before it is created. Zero waste programs maximize recycling, minimize waste, reduce consumption, and endeavor to see that products are made to be reused, repaired, or recycled back into nature or the marketplace. Zero waste changes the focus from “waste management” to “resource recovery,” with the goal that any waste that is created can and should be recovered as a potential material to be recycled or reused. This approach requires a fundamental shift in how products are manufactured and the criteria consumers use in making purchasing decisions.

### Contaminated Sites

Brownfields are abandoned, idled, or underused properties for which redevelopment is complicated by real or perceived contamination. The properties may be contaminated by hazardous waste, but can be reused once they meet standards for safe use. The Brownfields

Program, managed by the Environmental Services Department, seeks to reclaim brownfields so they can be redeveloped for productive public or private use. Remediating and reusing brownfield sites promotes economic growth, improves and protects the environment and public health, and preserves undeveloped land. As of 2011, the City of Tucson had received \$2.5 million in grants from the U.S. Environmental Protection Agency for work on a number of sites, primarily in the downtown area.

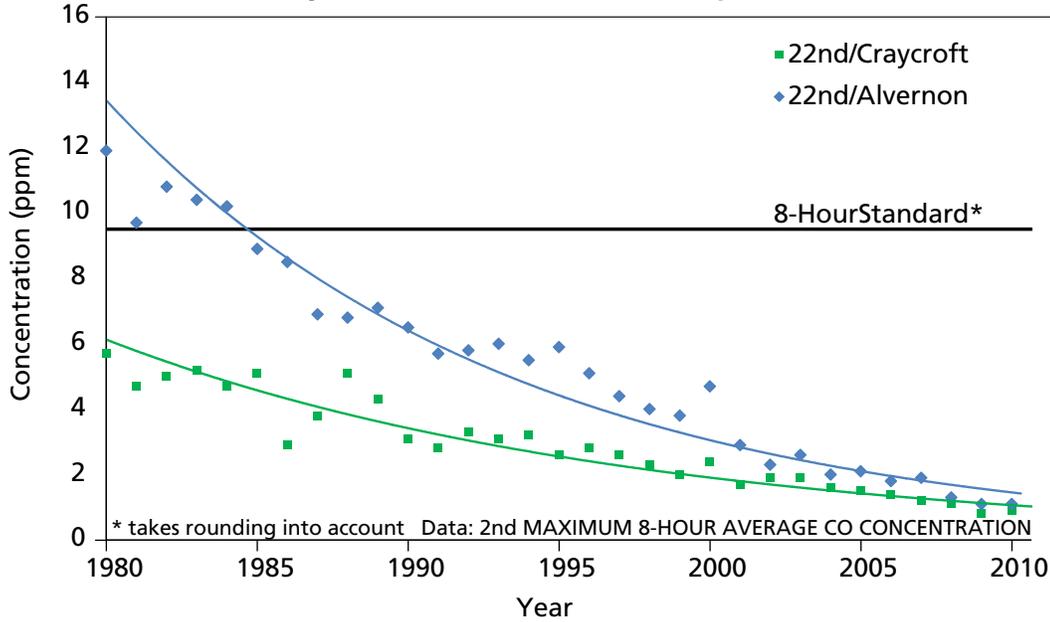
### Air Quality

The Pima Association of Governments (PAG), which is funded through contributions from all jurisdictions in Pima County, is the designated air quality planning agency for eastern Pima County. PAG’s Air Quality Planning Program develops regional air quality plans, analyzes air quality conformity of transportation plans, and ensures that air quality programs comply with federal, state, and local requirements. The City’s Environmental Services Department assists other City departments with regulatory compliance on their air quality permits, and manages a Title V permit, a requirement of the federal Clean Air Act, for the Los Reales landfill which is a large stationary source of air pollution.

The Tucson region has made significant improvements in air quality over the past 30 years. Carbon monoxide levels have declined consistently since 1980 (*Exhibit EQ-2*). Ozone, however continues to be a concern. Currently, Pima County’s ozone levels are at 90 percent of the federal standard (*Exhibit EQ-3*). An anticipated change to the ozone standard by the U.S. Environmental Protection Agency in 2013 may lower the allowable ozone limit and could place Pima County in violation. The result would be environmental and monetary sanctions. The level of



**EXHIBIT EQ-2 Carbon Monoxide Levels, 1980-2011**



Source: Pima County Department of Environmental Quality, 2012

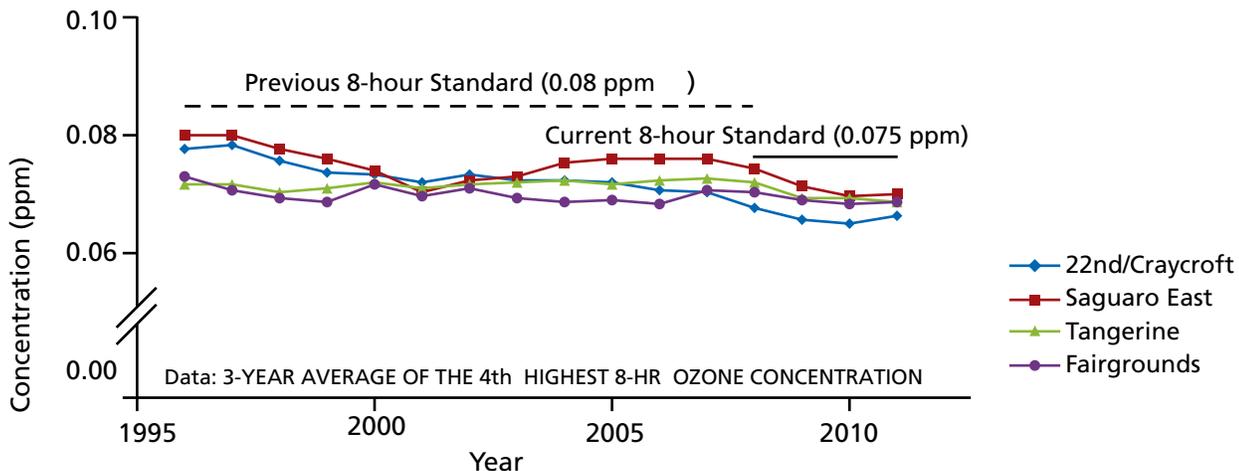
particulate matter in the air can also be a health concern when there are high winds and large earth moving activities. The City of Tucson can help the region meet air quality standards through the design and operation of its transportation system, support for alternative modes of transportation, and internal procurement and administrative policies.

**Noise**

Noise at excessive levels can affect the quality of life and natural environment in Tucson. Localized noise, such as

the sound of a leaf blower or loud motorcycle, can be a nuisance. The City’s Neighborhood Preservation Ordinance establishes maximum permissible sound levels and standards for residential, commercial, and industrial use areas, as well as enforcement actions and penalties associated with violation of the ordinance. Enforcement is the responsibility of the Code Enforcement Division of the City’s Housing and Community Development Department. Roadway noise is addressed by the City’s Department of Transportation

**EXHIBIT EQ-3 Ozone Levels in Pima County, 1996-2011**



Source: Pima County Department of Environmental Quality, 2012



in its design guidelines for roadways, which include methods to reduce and abate traffic noise when constructing a new roadway or widening an existing roadway.

To address noise, land use compatibility, and safety issues related to airports, the Arizona Department of Commerce and United States Department of Defense commissioned the Joint Land Use Study (JLUS) for Davis-Monthan Air Force Base (DMAFB). Preparation of the JLUS, which included representatives of property and business owners, DMAFB, Tucson International Airport, Pima County, and the City of Tucson, was completed in 2004. Subsequently, the Tucson Mayor and Council adopted the Airport Environs Overlay Zone (AEZ). The AEZ establishes a boundary around Davis-Monthan Air Force Base and Tucson International Airport within which only compatible land uses are allowed. (*Exhibit LT- 5, pg. 3.117*). Within the Zone, acoustical treatment of buildings is required to reduce exposure to high levels of airport noise.

Additional information about land use in the AEZ can be found in the Land Use, Transportation, and Urban Design section of this Plan.

### Light Pollution

The City of Tucson and Pima County have been on the forefront of preventing light pollution through a jointly developed Outdoor Lighting Code passed in 1994 and updated in 2012 to ensure the continuation of Tucson's reputation as a dark skies destination. Amateur astronomers, local residents, and visitors enjoy the unique desert environment where stars and constellations are visible at night. When lighting is poorly planned and designed, it can obliterate the ability to view the night skies. This is particularly important for the retention of the astronomy industry in Southern Arizona, which supports about four thousand jobs and brings about a quarter of a billion dollars per year into the local economy.<sup>1</sup> The policies that follow are intended to strengthen efforts to improve the community's overall environmental quality.

The night sky as seen from Kitt Peak Observatory.



<sup>1</sup> Christopher Francis. Pima County approves updated Dark Skies Ordinance. KOLD Tucson News Now, Posted: Mar 13, 2012 11:12 AM



# POLICIES

## Environmental Quality (EQ)

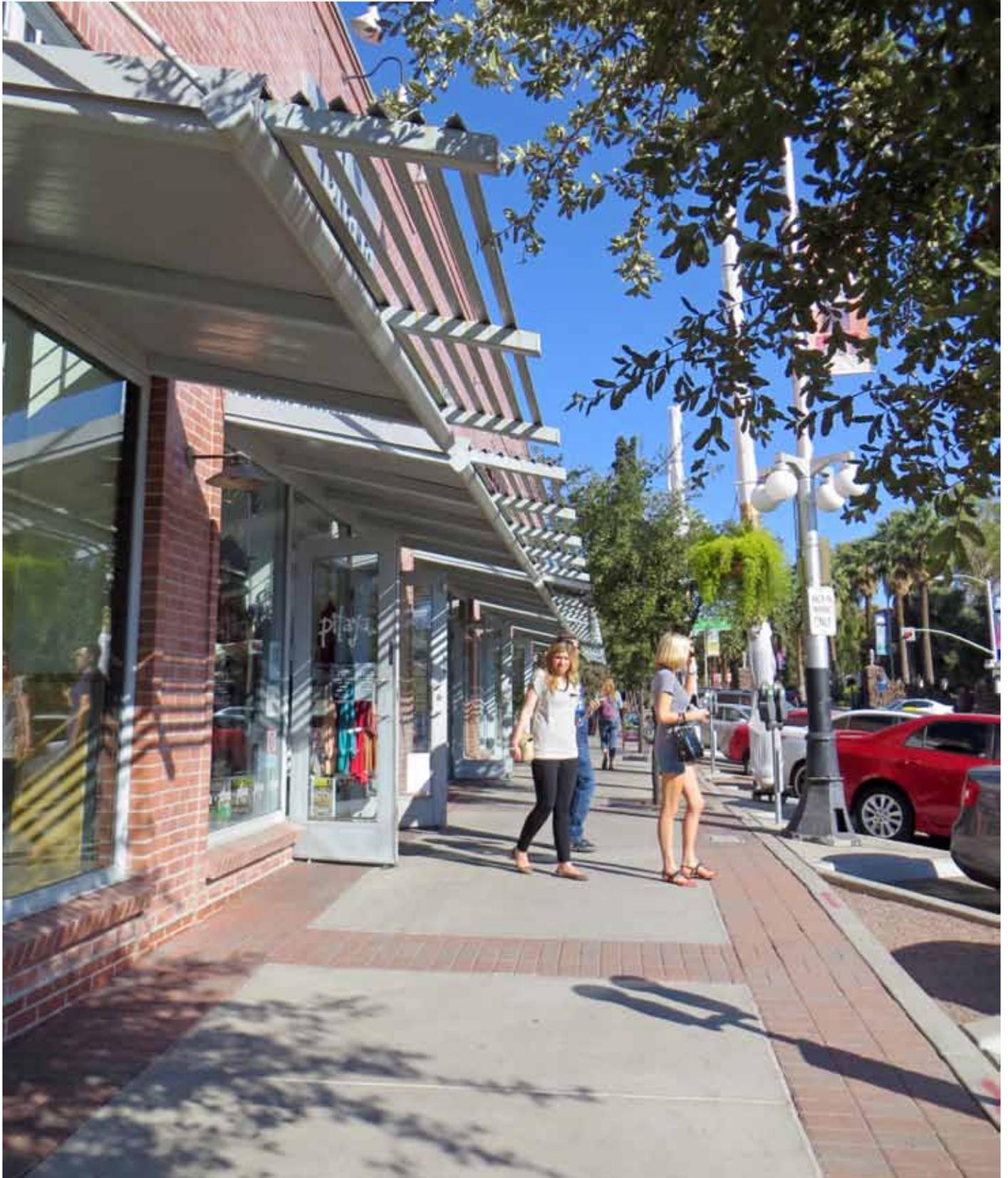
- EQ1** Strive for a “zero waste” model for solid and hazardous waste through integrated waste management and waste reduction.
- EQ2** Implement a comprehensive strategy and program for brownfield assessment, mitigation, and redevelopment.
- EQ3** Assess and address the impact of governmental operations and actions on air quality.
- EQ4** Reduce and mitigate noise in neighborhoods, along roadways, and near industrial and airport zones through enforcement of existing codes, use of noise reducing and mitigating materials and designs, and deliberative decisions regarding compatible land uses and related zoning.
- EQ5** Protect night skies from light pollution through building codes and design standards.
- EQ6** Promote recycling as well as the responsible disposal of electronics and hazardous waste, and reduce other environmentally-damaging forms of waste.
- EQ7** Develop practices to reduce utility, fuel, and procurement costs and to improve environmental performance through process, technological, and behavioral changes to demonstrate City leadership in sustainable practices and improve operational efficiencies.

### Other Related Policies

ELEMENT	Policy #	PAGE #
Housing	—	3.11
Economic Development	ED3, ED10	3.20
Public Safety	PS3	3.25
Parks & Recreation	PR9	3.30
Arts & Culture	—	3.37
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Land Use, Transportation & Urban Design	LT1, LT2, LT3, LT4, LT7, LT10, LT11, LT12, LT16, LT18	3.126



Main Gate Square, a shopping and dining destination with outdoor plazas in the University of Arizona area, near downtown and historic neighborhoods.



# THE BUILT ENVIRONMENT



- **Historic Preservation**
- **Public Infrastructure, Facilities & Cost of Development**
- **Redevelopment & Revitalization**
- **Land Use, Transportation & Urban Design**

## Introduction

The Built Environment Focus Area is presented as the conclusion to this chapter to emphasize that a successful and sustainable approach to Tucson's ongoing development should result in the realization of the goals and the fulfillment of policies in the preceding Focus Areas.

The city is not a blank canvas; it is a busy metropolitan area that has evolved over many years providing a diverse and dynamic population with places to live, work, and play. These places, which evoke the history, the culture, and the spirit of Tucson, together define the community's character. With care and deliberation, the community need not sacrifice form for function when continuing the development of the built environment.

The community's built form is characterized by an older core of housing, businesses, institutions, and infrastructure from which newer, largely single family lots spread out to the edges. The shape of the city and how it functions in the future will be dependent on where and how additional development is accommodated.

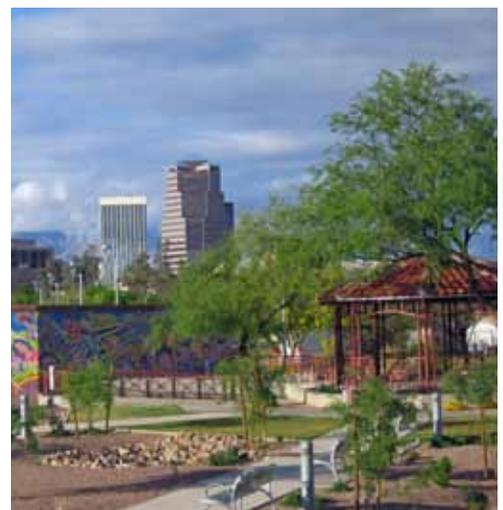
Development decisions are increasingly influenced by a desire to take a more sustainable approach to our human-made environment. Such an approach includes more efficient and effective use of existing infrastructure and facilities; preservation of older buildings and landscapes that can be rehabilitated; redevelopment and revitalization of underutilized areas to strengthen

struggling neighborhoods and boost economic vitality; and more integrative planning for the use, connection, and design of properties to support neighborhoods and centers in meeting a variety of needs.

This section presents goals and policies that address the four topics shown above, each of which is important to the future of Tucson's built environment and the smart growth of the community as a whole. The goals of this Focus Area are presented together on the next page, followed by background text and policies for each of the referenced topics.

The Arizona Revised Statute requirements for general plans addressed in this Focus Area include cost of development; public services and facilities; water resources; public buildings; conservation, rehabilitation, and redevelopment; land use; neighborhood preservation and revitalization; circulation; bicycling; and growth areas.

**Parque de San Cosme near downtown.**





# GOALS

## The City strives for:

- 18** Well-maintained public facilities and infrastructure that support coordinated cost-effective service delivery for current and future residents.
- 19** A community that respects and integrates historic resources into the built environment and uses them for the advancement of multiple community goals.
- 20** Strategic public and private investments for long-term economic, social, and environmental sustainability.
- 21** An urban form that conserves natural resources, improves and builds on existing public infrastructure and facilities, and provides an interconnected multi-modal transportation system to enhance the mobility of people and goods.

Bus stop near the Tucson House, a public housing development, was upgraded to better accommodate the high number of transit users in the area, including those with physical challenges.





# Historic Preservation

While the act of formally conserving historic places in the United States dates back to the late nineteenth century, historic preservation became a popular component of planning in the 1960s when urban renewal threatened to destroy historic places in major cities across the United States.

Since then the multiple benefits of historic preservation have become better understood, including its positive effect on property values and its contribution to economic development, to sustainability through resource conservation, and to a diverse rather than homogenized built environment.

Historic preservation as practiced by federal, state, and local governmental agencies focuses on retaining buildings, districts, landscapes, objects, archaeological sites, and other resources that have been determined eligible for formal designation as historic resources. The designation of historic resources dates back to 1949 when the National Trust for Historic Preservation developed a specific set of goals for preservation.

The City of Tucson's role in historic preservation, which is overseen by its Historic Preservation Office, includes the assessment, documentation, and treatment of archaeological sites and historic buildings. The Office provides information and training on historic preservation laws and tools and conducts educational outreach to strengthen community appreciation of Tucson's historic legacy. This legacy extends from archaic Indian sites to pre-Columbian Hohokam Indian villages to more recent

Native American communities, and has been vastly influenced by the Spanish, Mexican, and Territorial periods.

The Historic Preservation Office regularly coordinates on matters of historic preservation with City departments that are involved in permitting, property acquisition, and construction for projects that could impact historical and/or archaeological resources. Departments and their roles related to preservation include:

**Sonoran style residences characterized by adobe block one-story row houses are found in Barrio Viejo. Tucson's oldest surviving homes date from the 1840s, when southern Arizona was still part of Mexico.**



*“More than 65 percent of cultural heritage travelers seek experiences where the destination, its buildings, and natural surroundings have retained their historical character.”*

—Metropolitan Tucson Convention and Visitors Bureau. Report to City Council, 2011.



The B. Heidel Hotel/ MacArthur Building, built in 1907 in downtown, served passengers of the Southern Pacific Railroad. Now offices occupy the building, following extensive reconstruction and restoration in 2010.



- Department of Transportation—manages roadway projects and permits excavations in public rights-of-way both of which require cultural resource clearances. Transportation also purchases and sells real estate properties, including historic properties, through its Real Estate Division
- Housing and Community Development Department—oversees housing projects and code enforcement, both of which may involve historic structures
- Planning and Development Services Department—oversees construction and demolition permitting processes, as well as providing support to the Tucson-Pima County Historical Commission, Historic Zone Advisory Boards, and the Planning Commission, all of which participate in reviewing projects with components related to historic preservation
- Parks and Recreation Department—manages historic and archaeological resources in parks and trails
- Water and Environmental Services Departments—manage public projects for which they must obtain cultural resource clearances for public infrastructure projects
- General Services Department—manages and maintains City-owned buildings, including those with historic designations

In Tucson, the economic contribution of historic preservation was shown through a 2004<sup>1</sup> analysis which found that the assessed value of properties within such a district increased an average of 5.9%. Additionally the values of properties within a City Historic Preservation Zone increased an additional 6.9% in comparison to properties in similar neighborhoods without historic designations. A 2007 paper that presented the results of 15 studies done in cities throughout the United States, including Tucson, showed a clear correlation between historic designation of neighborhoods and increased property values over time (*Exhibit HP-1*).

*“Throughout the U.S., historic district designation typically increases residential property values by 5-35% per decade over the values in similar, undesignated neighborhoods.”*

—City of Tucson Historic Preservation Office, 2011.

<sup>1</sup> “A Cost/Benefit Analysis of Historic Districting in Tucson, Arizona, Andy Krause; Master of Science in Planning Report, 2004, unpublished.



In addition to contributing to increased property values, historic preservation has been found to have other positive effects on properties and activities beyond a specific preservation site. As identified by the federal Advisory Council on Historic Preservation, these include new businesses formed, private investment stimulated, tourism boosted, quality of life enhanced, new jobs

created, and pockets of deterioration diluted. The stimulation of tourism in the Tucson area has been documented through research undertaken by the Metropolitan Tucson Convention & Visitors Bureau, which identifies “Heritage and Culture” as one of seven key factors that influence travelers to choose Southern Arizona as a destination.

### EXHIBIT HP-1 Comparison of Property Values in Historic Districts

Study Area	Data Interval	Average Value Difference (%)	Annual Rate (%)	Reference
Athens, GA	1976-1996	+ 14	+ 0.7	Laithe and Tigue 1999
Denver, CO	1993-2000	+ 3-6	+ 0.4-1.2	Clarion Assoc. of CO 2002
Durango, CO	1993-2000	+ 0.7	+ 0.1	Clarion Assoc. of CO 2002
Galveston, TX	1975-1991	+ 85-360	+ 5.3-22.5	Govt. Fin. Res. Center 1991
Memphis, TN	1998-2002	+ 14-23	+ 3.5-5.7	Coulson and Lahr 2005
Mesa, AZ*	1997-2004	+ 26	+ 3.7	Bellavia 2007
New Jersey	?	+ 5	—	New Jersey Hist. Trust 1997
New York, NY	1975-2002	+ 13	+ 0.5	NYC Ind. Budget Office 2003
Phoenix, AZ*	2005	+ 31	—	Poppen 2007
Rome, GA	1980-1996	+ 10	+ 0.6	Laithe and Tigue 1999
San Diego, CA	2000-2005	+ 16	+ 3.2	Narworld 2006
Savannah, GA	1974-1997	+ 264-588	+ 11.5-25.6	Laithe and Tigue 1999
Texas (9 cities)	(variable)	+ 5-20	—	Leichenko et al. 2001
Tifton, GA	1983-1996	+ 2	+ 0.2	Laithe and Tigue 1999
<b>Tucson, AZ</b>	1987-2007	+ 15	+ 0.7	L'Orange 2007

\*Mesa and Phoenix studies used sales values; all other studies used assessed values.

Source: *Benefits of Residential Historic District Designation for Property Owners*, Jonathan Mabry, Ph.D., Historic Preservation Office, City of Tucson, June 7, 2007, unpublished.



As concerns about finite resources and degradation to the natural environment have grown, the value of historic preservation to conservation has increased. Compared to new development, conservation of existing buildings, including historic buildings, reduces energy use, construction materials needed, landfill waste generated, new infrastructure costs, and sprawl.

In Tucson, there is a strong and well-rooted commitment to preserving archaeological and historic assets. Some examples of key initiatives over the years include:

- Designation of thirty one National Register Historic Districts, six locally-designated Historic Preservation Zones, and two Neighborhood Preservation Zones between 1976 and August 2012 (*Exhibit HP-2*). As of 2013, these historic districts combined included about 8,045 contributing residential and non-residential properties.
- Adoption of the Historic Landmark Signs Ordinance by Mayor and Council on June 28, 2011, which amended the City Sign Code to encourage the maintenance, restoration, and reuse of historic signs.

- Establishment of the Façade Improvement Program, which is a matching grant funded by private and public sources and administered by the Downtown Tucson Partnership. The Program provides financial assistance to private, not-for-profit, and/or City or County organizations for downtown properties that are on, or eligible for, the National Register of Historic Places. As of 2012, seven properties had been awarded a grant.
- Rehabilitation and adaptive reuse of a variety of historic properties. There are about 93 individually listed properties in Tucson outside a designated historic district.

Along with the successes in securing Tucson's legacy and experiencing the multiple benefits of preservation, there are ongoing challenges, several of which have become increasingly prominent in recent years. One particular challenge is how to develop infill compatibly with nearby historic resources to create a distinctive "sense of place" that weaves together the past and the present while allowing room for the future.

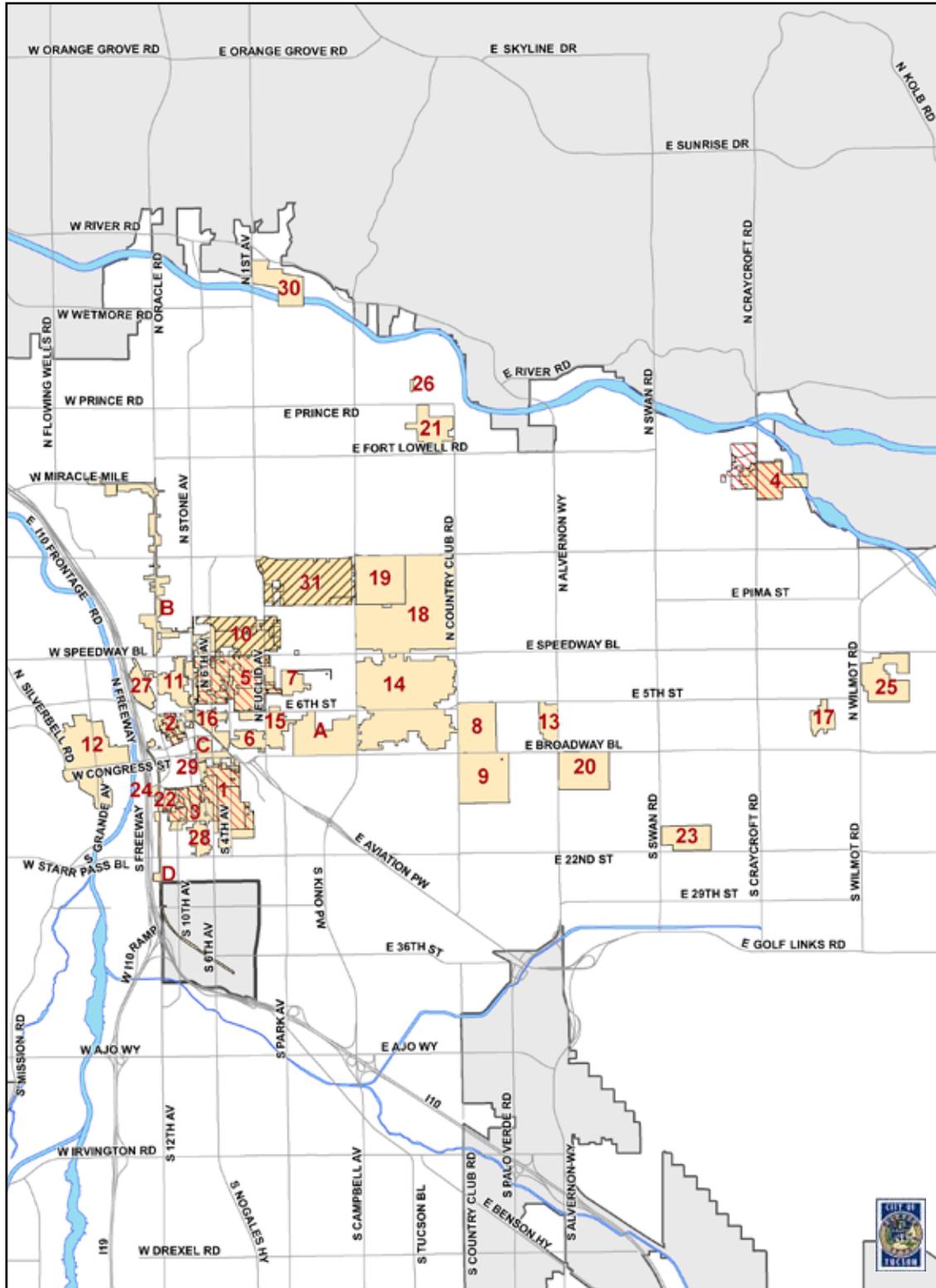
A second challenge is how to address the deterioration of historic structures

**Improvements to three blocks of Scott Avenue in 2009 achieved more pedestrian-friendly access to nearby historic landmarks, including the Temple of Music and Art, Scottish Rite Mason's Cathedral, and the Children's Museum.**





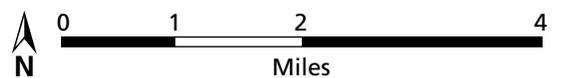
**EXHIBIT HP-2 Historic Districts & Preservation Zones**



- 1 Armory Park
- 2 El Presidio
- 3 Barrio Libre
- 4 Fort Lowell Multiple Resource Area
- 5 West University
- 6 Iron Horse Expansion
- 7 University of Arizona
- 8 El Encanto Estates
- 9 Colonia Solana
- 10 Feldmans
- 11 John Spring Neighborhood
- 12 Menlo Park
- 13 El Montevideo
- 14 Sam Hughes
- 15 Pie Allen
- 16 Warehouse
- 17 Indian House
- 18 Blenman-Elm
- 19 Catalina-Vista
- 20 San Clemente
- 21 Winterhaven
- 22 Barrio el Hoyo
- 23 Aldea Linda
- 24 Barrio el Membrillo
- 25 Harold Bell Wright Estates
- 26 Valley of the Moon
- 27 Barrio Anita
- 28 Barrio Santa Rosa
- 29 Marist College
- 30 Rillito Racetrack
- 31 Jefferson Park
- 32 Tucson Veterans Administration Hospital
  
- A Rincon Heights (Pending)
- B Miracle Mile (Pending)
- C Downtown Tucson (Pending)
- D EP & SW (Pending)
- E 4th Avenue

Source: City of Tucson IT-GIS Section

	Neighborhood Preservation Zones		Federal Lands
	Historic Preservation Zones		City of Tucson
	Historic Districts		Other Jurisdictions
	Major washes		





Since 2008, the annual *Historic Miracle Mile Open House and Tour* shares with the larger community the area’s rich history and special resources.

that may add social and economic value to Tucson’s future built environment. Tucson has an increasing number of structures that are turning fifty years of age and, therefore, could potentially qualify for historic designation. (See *Exhibit HP-3* in this section and *Exhibit H-2* in the Housing section). Some of these buildings are cared for, while others are worthy of receiving basic maintenance while appropriate uses and funding are sought for their rehabilitation. Not only would the reuse

of these buildings contribute to Tucson’s distinctiveness and property values, but it would conserve energy and resources.

An effective way to make sure that historic buildings are maintained is to provide incentives that will encourage owners to invest in the buildings’ upkeep. Some incentives are available through historic designation; however, the historic designation process itself requires technical assistance, which is often beyond moderate-and-low income neighborhoods to obtain. Another challenge, therefore, is how to provide the technical assistance necessary to make the case for these neighborhoods to receive historic designation and the associated tax break incentives.

Ultimately central to successfully balancing the old and the new in Tucson’s built environment is a proactive planning process that acknowledges and responds to historic resources with an understanding that they can contribute to a project’s overall value and to the project’s place in the future.

The following policies are intended to provide guidance as actions are identified and decisions are made about future disposition and treatment of Tucson’s historic resources.

### EXHIBIT HP-3 Building Stock Age in Tucson

Stock Type	Total Properties	# Built Prior to 1961	% of Total Properties
Residential (as of 2006)	233,561	83,805	36% of residential stock
Commercial (as of 2010)	25,471	6,342	25% of commercial stock
<b>Subtotal</b>	<b>259,032</b>	<b>90,147</b>	<b>35%</b>

Source: City of Tucson IT-GIS Section and Pima County Assessor and Historic Preservation Office



# POLICIES

## Historic Preservation (HP)

- HP1** Implement incentives for private property owners to maintain, retrofit, rehabilitate, and adaptively reuse historic buildings.
- HP2** Provide technical assistance to commercial districts and low- to moderate-income neighborhoods to obtain historic designation.
- HP3** Maintain, retrofit, rehabilitate, and adaptively reuse City-owned historic buildings.
- HP4** Identify historic streetscapes and preserve their most significant character-defining features.
- HP5** Follow national and local historic preservation standards when rehabilitating or adding facilities and landscaping in historic urban parks.
- HP6** Mitigate impacts on historic, cultural, and archaeological resources caused by construction or excavation in City rights-of-way.
- HP7** Evaluate the benefits of new development relative to historic preservation in land use decisions.
- HP8** Integrate historic, archaeological, and cultural resources in project planning, and design when development occurs in historic districts.

## Other Related Policies

ELEMENT	Policy #	PAGE #
Housing	H1, H3, H4, H5, H9	3.11
Economic Development	ED1, ED3, ED5, ED10	3.20
Public Safety	PS3, PS4, PS10	3.25
Parks & Recreation	PR1–PR5, PR8, PR9, PR11, PR12	3.30
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Water Resources	WR2, WR3, WR6, WR7, WR8	3.71
Green Infrastructure	GI1–GI6	3.77
Environmental Quality	EQ2–EQ5	3.83
<b>Historic Preservation</b>		<b>3.93</b>
Public Infrastructure, Facilities & Cost of Development	PI1, PI2, PI3, PI5	3.101
Redevelopment & Revitalization	RR1, RR2, RR3, RR4, RR5, RR6, RR7	3.108
Land Use, Transportation & Urban Design	LT1–LT16, LT21–LT26	3.126



# Public Infrastructure, Facilities & Cost of Development

Construction, management, and maintenance of public infrastructure and facilities are primary responsibilities of government, contributing not only to basic public health and safety, but also to economic and social development. The City of Tucson plays an active role in the provision of many infrastructure systems and facilities, including water, roadways, lighting, parks, telecommunications, police, and fire.

The City of Tucson, like many communities that have grown rapidly, has significant infrastructure and service needs that are not met by current revenues. These needs are evident in both newly developing areas of the City as well as aging and redeveloping areas. The City relies on a variety of revenues and funding mechanisms to pay for public infrastructure and facilities including development impact fees, in-lieu fees, developer exactions and contributions, Community Facilities Districts, Tax Increment Financing, Improvement Districts, General Obligation Bonds, Certificates of Participation, Highway

User Revenue Funds and other federal transportation funds, Regional Transportation Authority funds, and sales tax and state shared revenue.

The concept of fiscal sustainability considers the life cycle cost and benefits of development. Future growth should be evaluated from both the capital (initial construction of infrastructure) and operating (ongoing public services and maintenance of infrastructure) perspectives to ensure that growth is self-sustaining and not subsidized over the long term by current residents and businesses. Identifying affordable and equitable funding strategies to pay for the existing unmet needs our City faces in public infrastructure and facilities is another important component of fiscal sustainability. One way to address both issues is to direct new growth to areas of the City with existing infrastructure thereby generating revenue from new development that can help improve existing infrastructure and enhance existing services rather than to build completely new infrastructure and establish new services.

Additionally, the City's infrastructure and facilities are often interconnected with infrastructure and facilities provided by other governmental agencies. For

City Hall, built in 1967.





example, the State oversees the provision of school facilities, but the roadways, sidewalks, and bike paths that connect the schools to students' residences are provided by the City. Likewise, the Tucson International Airport, owned and operated by the Tucson Airport Authority, is served by Tucson water, public roads, and buses.

Since 1996, the United States has had a wide-reaching Critical Infrastructure Protection Program in place that addresses preparedness and response to serious incidents that involve critical infrastructure. The Patriot Act of 2001 defined critical infrastructure as those "systems and assets, whether physical or virtual, so vital to the United States that the incapacity or destruction of such systems and assets would have a debilitating impact on security, national economic security, national public health or safety, or any combination of those matters."

Nationwide, infrastructure is in need of significant capital—extending from rail, air, and seaways to water supply, sewage, and irrigation systems, to energy pipelines and the electric grid. In 2009, the American Society of Civil Engineers determined it would take an investment of \$2.2 trillion just to bring the nation's infrastructure to acceptable levels, excluding innovative projects such as high-speed railways and broadband expansion.<sup>1</sup>

Public infrastructure and facilities represent a significant investment for national, state, and local governments, not just to build them, but also to operate and maintain them. The City of Tucson has the responsibility to fund the provision and maintenance of public infrastructure and facilities taking into account tight budgets, changes in federal and state policies toward local

government funding, and changes in economic conditions.

The primary vehicle for the City's fiscal planning is the preparation and monitoring of the City's annual budget, which is prepared by the Budget and Internal Audit Office in consultation with the City Manager and other City departments. City Departments and offices most actively involved with public infrastructure and facilities include City Court, Emergency Management, Environmental Services, Fire, General Services, Information Technology, Parks and Recreation, Police, Real Estate, Reid Park Zoo, Transportation, Tucson Convention Center, and Tucson Water.

The City has been involved in a variety of initiatives to address public infrastructure and facility needs since adoption of the existing General Plan in 2001. Following is a sampling of these initiatives:

- **Regional Transportation Authority (RTA) Plan, approved in May 2006 by Pima County voters:** A \$2.1 billion plan funded by a half-cent excise tax along with other regional

Tucson Water working on transmission mains.



<sup>1</sup>2009 Report Card, American Society of Civil Engineers, [www.infrastructurereportcard.org](http://www.infrastructurereportcard.org)



and local dollars, such as developer impact fees. The multi-modal RTA Plan includes roadway, transit, safety, environmental, and economic vitality improvements. RTA projects are managed by the Pima Association of Governments' member jurisdictions, including the City of Tucson.



The 320-foot-long Luis G. Gutierrez Bridge, completed in 2012 as part of the 3.9-mile Modern Streetcar project, provides a shaded east-west connection for pedestrians, bicyclists, and future streetcar passengers.



The 62,377 square-foot Tucson Police Crime Laboratory, built in 2011, holds lab and office space for forensic analysts. Energy conservation and water harvesting were key elements of its design.

- **Tucson Parks and Recreation Ten-Year Strategic Service Plan, adopted in 2006 by Tucson Mayor and Council:** A strategic plan developed to identify Parks and Recreation service and facility needs for the twenty-first century, with implementation components within a ten-year period to build strong neighborhoods and improve the quality of life in Tucson.
- **Downtown Infrastructure Study, prepared in 2007 through a public-private collaboration coordinated by the Downtown Partnership:** A study providing infrastructure improvement recommendations developed by representatives of the City of Tucson, Pima County, utility agencies, and the private sector.
- **Water and Wastewater Infrastructure, Supply and Planning Study, approved in 2008 by Tucson Mayor and Council and Pima County Board of Supervisors:** A multi-year study of water and wastewater infrastructure, supply, and planning issues “to assure a sustainable community water source given continuing pressure on water supplies caused by population growth and the environment.” The Action Plan for 2010-2015 was approved in 2010.
- **2040 Regional Transportation Plan (RTP), originally adopted in July 2010 and updated in 2012 by the Pima Association of Governments' Regional Council:** A long-range transportation plan for the Tucson metropolitan area and eastern Pima County. The RTP provides a framework for transportation investments in the region by identifying projects that could be developed with federal, state and local funding over the next thirty years.



- **Comprehensive financial policies, adopted in 2011 by Tucson Mayor and Council:** Policies that establish guidelines for the City's overall fiscal planning and management to sustain municipal services, including public infrastructure and facilities.
- **100-Million Dollar Bond for City Streets Improvements (2013-2017):** In November, 2012, voters approved Proposition 409, which will allocate \$20 million per year to repair and resurface 130 miles of major streets and 114 miles of neighborhood streets over a five-year period. The bond package will help provide safer travel, maintain existing infrastructure, and diversify revenue sources for road maintenance during a time of shrinking state and federal funding for roads.

The range and quantity of City infrastructure and facilities are shown in *Exhibit PI-1*. *Exhibit PI-2* shows the location of City-owned and managed facilities, as well as the location of the public schools and libraries located within City limits. The public schools are under the auspices of the State of Arizona and the libraries under Pima County.

In recent years, important public infrastructure and facility goals have been achieved, such as the refinement of the obligated Water Service Area in 2010, the construction of the Westside Police Service Center in 2008 and the new Crime Laboratory in 2011, improvements to the Tucson Convention Center's main entrance in 2011, establishment of bike boulevards, and electrical upgrades at athletic facilities. At the same time, the City has identified unmet capital projects with no currently identified funding sources. As of August 2012, the City's unmet capital projects totaled approximately \$1.3 billion.



**A 100-million dollar bond was approved by voters in 2012 to resurface 130 miles of major streets and 114 miles of neighborhood streets over a five-year period.**

## Funding of Public Infrastructure & Facilities

The City of Tucson prepares and maintains an annual Capital Improvement Program (CIP) that covers a five-year planning horizon and identifies infrastructure and facility projects that the City will undertake and the funding sources that will be used. The CIP for Fiscal Years 2013-17 totals \$826 million and includes projects in the areas of roadways; transit; drainage; street lighting; traffic signals; parks and zoo improvements; water system improvements; public safety facility expansions; public building upgrades, including energy efficiency improvements; convention center and parking investments; and landfill investments. Primary funding sources for the CIP include Regional Transportation Authority funding, Highway User Revenue Funds, Federal grants, Water and Environmental Services Revenue Bonds, Pima County Bonds, City General Obligation Bonds, Development Impact Fees, and Certificates of Participation.

**EXHIBIT PI-1 City of Tucson Infrastructure & Facility Quantities****Parks and Recreation/Golf Resources**

Parks (District, Neighborhood, School, Regional, and Open Space): 177

Recreation Centers: 16

Senior Centers: 3

Out of School Program Sites: 27

Senior Citizen Program Sites: 13

Municipal Swimming Pools: 26

Municipal Golf Courses: 5

Tennis Court Sites: 17

Ballfields/Multipurpose Fields: 202

**Public Safety**

Number of Police Stations: 5

Number of Fire Stations: 21

**Transportation**

Number of Street Miles Maintained: 2,100

Miles of Bikeways: 575

Miles of Drainageway: 1,449

Number of Street Lights: 19,664

Annual Miles of Fixed-Route Bus Service: 9,685,000

Annual Miles of Paratransit Service: 3,581,100

Number of Traffic Signals: 579

**Tucson Water**

Miles of Water Lines: 4,507

Miles of Reclaimed Water Lines: 193

Number of Active Water Connections: 225,250

Millions of Gallons of Potable Water Storage Capacity: 307

Billions of Gallons of Potable Water Delivered Annually: 36

**Environmental Services**

Annual Tons of Waste Received at Los Reales Landfill: 524,899

Annual Tons of Waste Collected by City of Tucson Refuse Services: 241,974

Annual Tons of Material Recycled: 39,000

The City has faced and continues to face declining revenues to fund the CIP due to changes in State and Federal funding allocations, the expiration of previous City and County bonds, limits on City bonding capacity, and the economic downturn. The City faces a growing unmet capital needs list currently estimated at close to \$1 billion. The majority of this unmet need is for maintaining and improving existing City facilities and infrastructure, and are a result of the inadequate funding for this purpose over many years. In addition to considering the upfront investment required to build public facilities and infrastructure, it is important to consider the life cycle cost of these facilities, including how ongoing maintenance and provision of public services are to be paid. Options for addressing these unmet needs include growing the tax base through economic development and annexation, supporting the extension and expansion of existing funding sources such as Regional Transportation Authority funding and City and County bonds, and looking for opportunities to diversify and expand revenue sources.

**Cost of Development**

Growth and new development should not adversely impact current residents, and new development should be sited in a manner that is most beneficial to the environment, economy, and conservation of resources. The pattern of development that has evolved over time in Tucson has not been fiscally sustainable, as evidenced by the infrastructure deficits throughout the community and the challenge in adequately funding basic public services such as streets, parks, and public safety. To address the issue of fiscal sustainability, the Plan Tucson Opportunity Areas Map and many supporting policies throughout the

Source: City of Tucson Adopted Budget, Fiscal Year 2013



Plan are aimed at encouraging new development as much as possible in areas in which infrastructure already exists. By encouraging infill rather than edge development, the cost of new development is reduced, and the additional revenue from new development can be directed into investment in existing infrastructure and services.

In addition to locating new development appropriately and with sensitivity to the existing built environment, new development should pay its fair share toward the cost of additional public facilities required to serve that development. There are two primary methods the City uses to achieve this: developer contributions and development impact fees. The first method of participation involves direct developer construction of necessary infrastructure, both within the project and for off-site facilities necessary for the project. For example, if a new subdivision were proposed, the developer would be responsible for all interior infrastructure, including but not limited to transportation facilities, water and sewer services, and stormwater control. In addition, the developer would be responsible for upgrading or installing connecting infrastructure to access the project. This includes arterial and collector roads and water transmission or distribution lines or sanitary sewer collection lines.

The second funding method is development impact fees. These are one-time payments used to construct system improvements needed to accommodate new development. A development fee represents new growth's fair share of capital facility needs. By law, development fees can only be used for capital improvements, not for operating or maintenance costs. Development fees are subject to rigorous legal

standards that require fulfillment of three key elements, namely, demand, benefit and proportionality. First, to justify a fee for public facilities, it needs to be demonstrated that new development will create a demand for capital improvements. Second, new development must derive a benefit from the payment of the fees (i.e., in the form of public facilities constructed within a reasonable timeframe). Third, the fee paid by a particular type of development must not exceed its proportional share of the capital cost for system improvements.

The City began assessing impact fees on new development in 2005. Impact fee revenue has been used to pay for infrastructure improvements in the areas of roads, parks, police, fire, and public facilities. In addition, Tucson Water recovers costs associated with new development through a system equity fee and a new water resource fee. Recent changes in State law governing development impact fees will limit the City's ability to use this funding source going forward. It will be necessary, therefore, to explore additional funding options such as Community Facilities Districts, in-lieu fees, Improvement Districts, and other options.

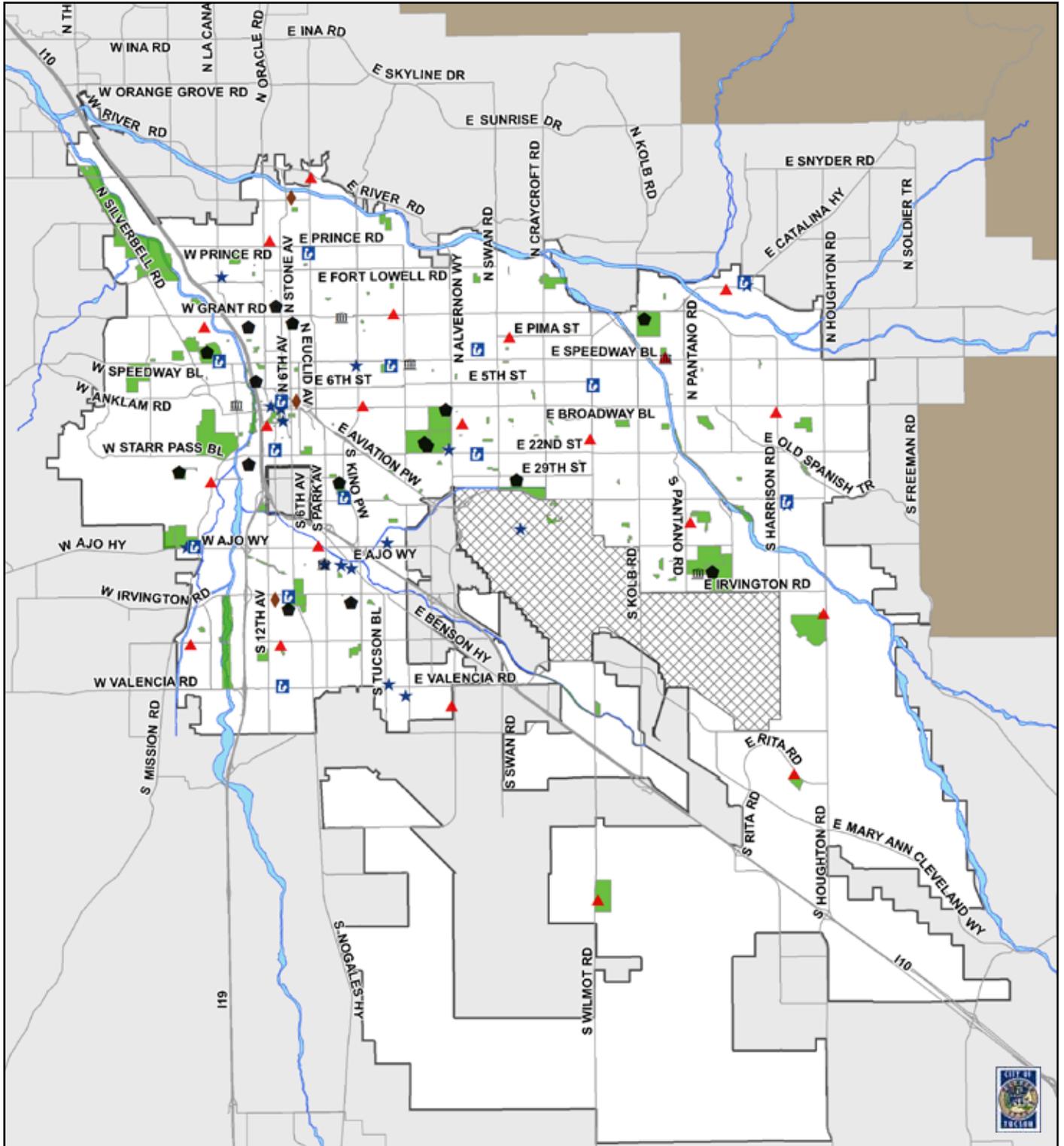
The policies that follow focus on existing public infrastructure and facilities maintenance and improvement, cost effectiveness, and technological innovations.



**Construction of the Modern Streetcar in Downtown Tucson.**



EXHIBIT PI-2 Public Facilities in Tucson



Source: City of Tucson IT-GIS Section

- ◆ Transit Center
- ★ Police Station
- 🏠 City Community Center
- 🏢 City Ward Office
- ▲ Fire Station
- 📖 Pima County Public Library
- 🌳 City Parks
- 🌊 Major Washes
- 🏜️ Federal Lands
- 🏢 Davis-Monthan AFB
- 🗺️ City of Tucson
- 🏠 Other Jurisdictions



# POLICIES

## Public Infrastructure & Facilities (PI)

- PI1** Invest in highest priority needs to manage and maintain public infrastructure and facilities that are fundamental to economic development and to sustaining and enhancing living conditions in the community.
- PI2** Prioritize major public infrastructure investments in developed areas and for improvements of the existing infrastructure.
- PI3** Expand the use of state-of-the-art, cost-effective technologies and services for public infrastructure and facilities.
- PI4** Identify potential reclaimed water users, such as schools, golf courses, and sports facilities, that will support the expansion of the reclaimed water system.
- PI5** Continue to expand and diversify funding mechanisms for the repair, upgrade, maintenance, and service expansion of public infrastructure and facilities.
- PI6** Pursue all feasible and allowable funding mechanisms to ensure new development pays its fair share of the cost of growth, and that this funding results in a beneficial use to the development.

### Other Related Policies

ELEMENT	Policy #	PAGE #
Housing	H1, H2, H9, H10	3.11
Economic Development	ED1–ED3, ED5, ED10, ED11	3.20
Public Safety	PS1, PS2, PS4, PS5, PS7, PS9, PS10	3.25
Parks & Recreation	PR1–PR6, PR8–PR10,	3.30
Arts & Culture	AC1–AC7	3.37
Public Health	PH1, PH2, PH4, PH8	3.41
Urban Agriculture	AG1-AG4	3.45
Education	E1, E3, E6, E7	3.50
Governance & Participation	G1–G12	3.56
Energy & Climate Readiness	EC1, EC3, EC4, EC6, EC8, EC9	3.66
Water Resources	WR1, WR2, WR4–WR11	3.71
Green Infrastructure	GI1–GI6	3.77
Environmental Quality	EQ1–EQ7	3.83
Historic Preservation	HP1, HP3, HP5–HP8	3.93
<b>Public Infrastructure, Facilities &amp; Cost of Development</b>		<b>3.101</b>
Redevelopment & Revitalization	RR1–RR7	3.108
Land Use, Transportation & Urban Design	LT1– LT10, LT12, LT13–LT16, LT18–LT26	3.126



# Redevelopment & Revitalization

Redeveloping and revitalizing underused and blighted areas, which was a focus of many cities in the 1970s and 1980s as part of urban renewal, is once again getting attention, but this time with the emphasis on sustaining a community over the long term. As used in the Arizona Revised Statutes, the term “redevelopment” refers to a project undertaken to acquire land and/or

demolish existing structures to alleviate or prevent the spread of slum conditions or conditions of blight in the area. Such public action may be necessary when the private market is not providing sufficient capital and economic activity to achieve the desired level of improvement.

“Revitalization” is often paired with “redevelopment” to suggest the desire to bring new life and activity into an area.

In Tucson redevelopment generally goes beyond addressing blighted lands or properties to involve the improvement of developed areas that presently suffer from physical deficiencies or include uses that

have become obsolete or inappropriate as a result of changing social or market conditions. Revitalization has been associated with efforts to enhance community life and economic activities in an existing neighborhood, area, or business district with sensitivity to its residents, businesses, and historic and cultural resources.

Redevelopment and revitalization efforts are initiated at all levels of government, with many being community driven. In the City of Tucson, departments beyond the Planning and Development Services

**Built in 2006, the Sunquest Information Systems at Williams Centre is part of the 160-acre mixed-use planned area development in central Tucson.**





The Community Resources Campus is part of the Rio Nuevo North Redevelopment Project. This former landfill site is now occupied by a mix of commercial uses and a river park.

Department may be involved in redevelopment and revitalization efforts depending on the activities associated with a particular project. Some examples include the Environmental Services Department, which may play a role through its Brownfields Program, or the Housing and Community Development Department, which may become involved through the construction of public housing as part of a redevelopment or revitalization project.

There are a variety of measures used to stimulate redevelopment and revitalization. Some common measures include direct public investment, capital improvements, enhanced public services, improved housing opportunities, technical assistance, promotion, and tax benefits. The City of Tucson has used many of these measures to stimulate redevelopment and revitalization. The City of Tucson Brownfields Program, funded by the U.S. Environmental Protection Agency, provides assistance to get redevelopment underway on lands that have been impacted by previous uses involving

hazardous materials. The City of Tucson HOPE VI Program, funded by the U.S. Housing and Urban Development Department, successfully contributed to the revitalization of Barrio Santa Rosa in 1996, the South Park Neighborhood in 2000, and the redevelopment of the Martin Luther King public housing located downtown in 2005.

Investment in public infrastructure is one important measure the City can take to spur redevelopment and revitalization of older areas. Some of the major transportation projects approved by voters in May 2006 as part of the Regional Transportation Authority Plan were intended not only to enhance mobility, but also to create more options for redevelopment in the vicinity of the projects. As of 2012, the planning phases of two of these projects were well underway and a third project was under construction. Downtown Links, which will connect Barraza-Aviation Parkway to I-10, is being planned to provide alternate access to the downtown along with new and underpasses, railroad



crossings, and sidewalks. The Grant Road Improvement Project, which will widen a five-mile section of Grant Road between Oracle Road and Swan Road, has integrated land use planning with the more traditional transportation planning. Tucson's Modern Streetcar, has been a key impetus for the construction of redevelopment projects along the transit route.

In addition to the measures referenced above, the City has used a variety of planning tools as a catalyst for redevelopment. Between 1971 and 1984, the City adopted six Redevelopment Plans, five for the downtown area and one for an area near the University of Arizona (*Exhibit RR-1*). These plans, which are required by State law in the designation of a redevelopment area, were adopted by Mayor and Council for the acquisition, clearance, reconstruction, rehabilitation, or future use of specific redevelopment project sites, such as the Tucson Convention Center. All six of these plans are outdated. As of 2012 efforts were underway to create a new Redevelopment Plan in the downtown area.

In more recent years, the City has developed and implemented other planning tools intended to assist in redeveloping and revitalizing areas. Some of these tools are the:

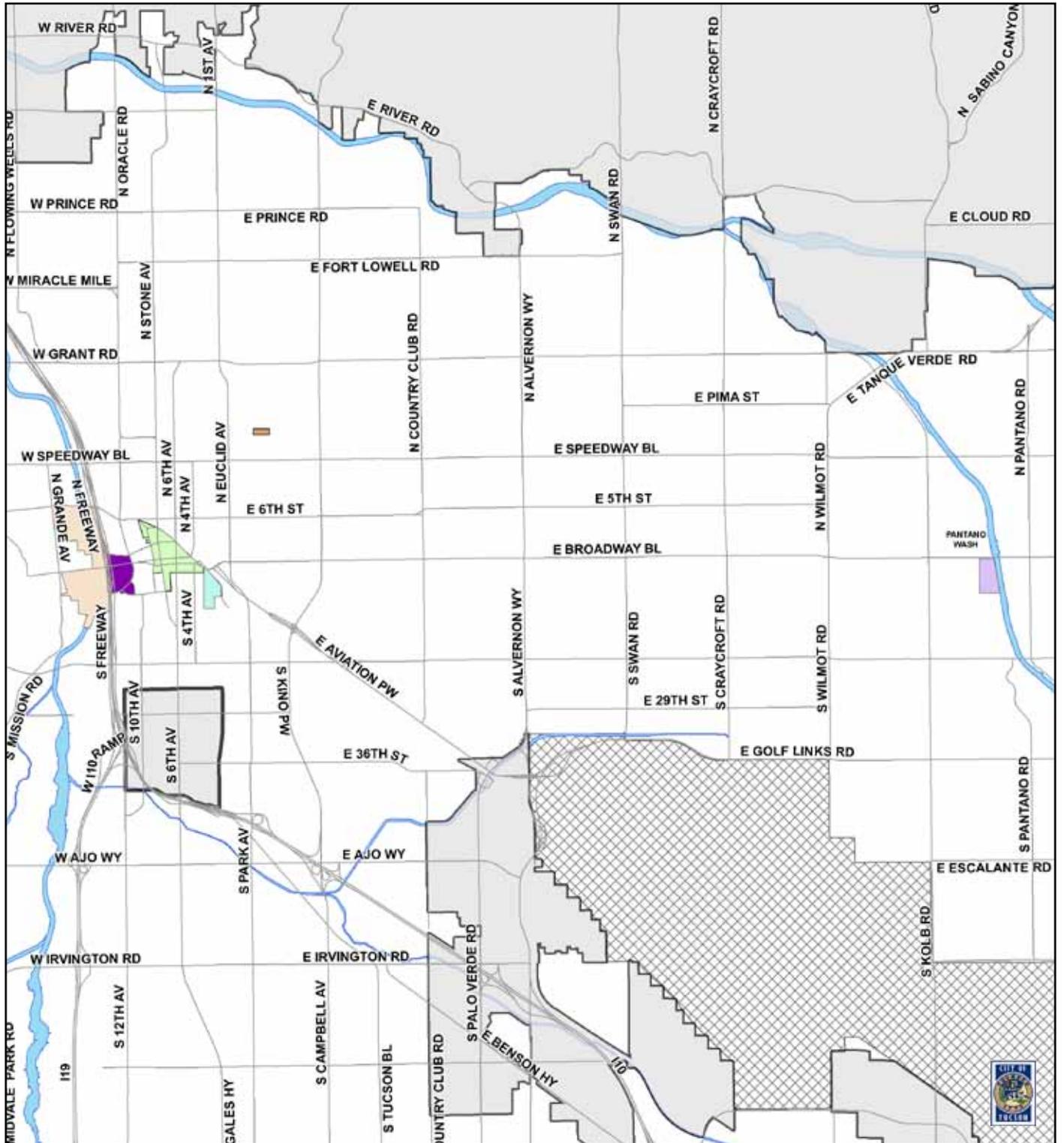
- **Unified Development Code (formerly the Land Use Code) Planned Area Development (PAD):** Between 1981 and 2011, the City of Tucson approved 19 PADs throughout Tucson (*Exhibit RR-2*). PADs are approved through a rezoning process to enable the creation of zoning standards that allow more flexibility for redevelopment projects.
- **Unified Development Code Urban Overlay District and the Downtown Area Infill Incentive District:** Mayor and Council adopted these two overlay districts on August 4, 2010, and September 9, 2009, respectively, to provide landowners with flexible development options rather than mandatory requirements. This focus on options rather than requirements came about as a result of Arizona Revised Statute 12-1134 (approved in 2006 as Proposition 207, "Private

The 14-acre Mercado District of Menlo Park began construction in September 2006. The master plan accommodates 106 single family residential lots and the potential for up to 120 multi-family residential units with approximately 80,000 square feet of commercial development.





EXHIBIT RR-1 **Redevelopment Plans in Tucson**



Source: City of Tucson IT-GIS Section

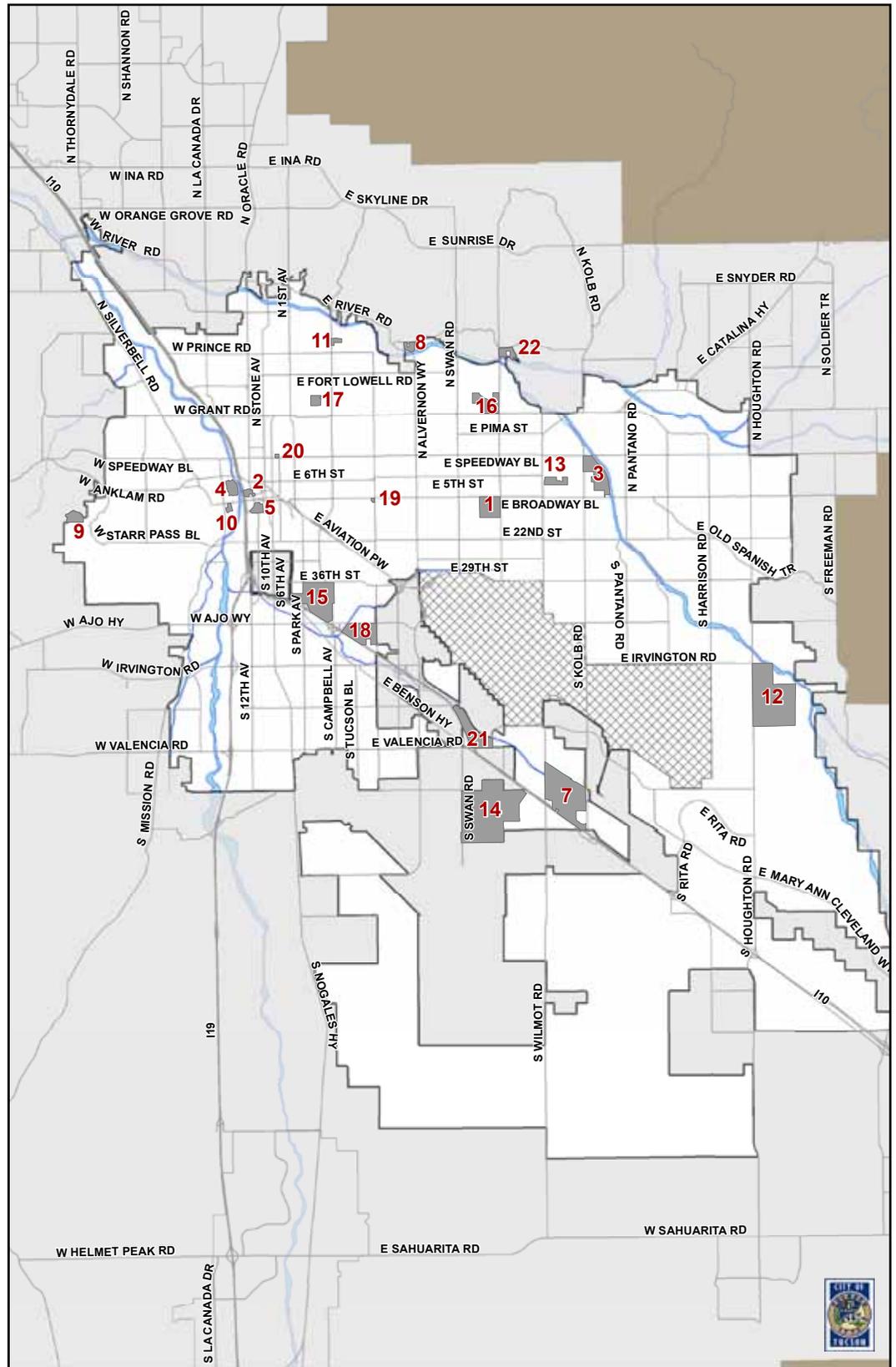




### EXHIBIT RR-2 Planned Area Developments in Tucson

**PAD Name**

- 1 Williams Addition
- 2 La Entrada
- 3 Gateway Centre
- 4 Rio Nuevo
- 5 Tucson Community Center
- 7 La Estancia
- 8 Jewish Community Campus
- 9 Starr Pass Resort Hotel
- 10 Menlo Park Mercado District
- 11 UMC North
- 12 Civano
- 13 St. Joseph's Hospital
- 14 Los Reales Landfill
- 15 The Bridges
- 16 Tucson Medical Center
- 17 Salpointe
- 18 Kino Health Campus
- 19 Broadway Village
- 20 Casa de los Ninos
- 21 Valencia Crossing
- 22 Rio Verde Village



Source: City of Tucson IT-GIS Section

City of Tucson





Property Rights Protection Act”).

This statute requires the government to reimburse landowners when regulations result in a decrease in their property values.

- **Unified Development Code Parking Requirements:** Mayor and Council adopted amendments to motor-vehicle parking regulations in March 22, 2011, to reduce excessive parking requirements, provide more flexibility for redevelopment sites, and offer alternative methods of compliance, such as individual parking plans.
- **Oracle Area Revitalization Project (OARP):** In 2011 the Mayor and Council adopted the OARP report, which provides recommendations for the area bounded by Miracle Mile, Speedway Boulevard, Stone Avenue, and Fairview Avenue, which has been struggling to regain its role as a prominent gateway in Tucson’s urban core. The project was initiated by surrounding neighborhoods.

Ultimately, successful redevelopment and revitalization require an overall coordinated and comprehensive strategy to help foster a level of certainty that will lead to action. A combination of public and private sector investment, empowered by catalytic measures, planning tools, and a transparent public participation process, are essential.

The following policies emphasize consideration of redevelopment and revitalization in areas that can best sustain the development over time and benefit the City as a whole, that have not had the resources to pursue revitalization strategies in the past, or that could serve interim uses well until more sustainable uses can be accommodated.



In 2010, the former Ghost Ranch Lodge on Miracle Mile was rehabilitated and adaptively reused for housing for the elderly, maintaining its historic character and contributing to the revitalization of the surrounding area.



# POLICIES

## Redevelopment & Revitalization Policies (RR)

- RR1** Redevelop and revitalize in areas with the greatest potential for long-term economic development by focusing public resources, tools and incentives to catalyze private investment.
- RR2** Focus private and public investments in Plan Tucson Opportunity Areas (see Exhibits LT-7, pag. 3.122 and LT-8, pg. 3.123).
- RR3** Evaluate brownfield sites, closed public facilities, and underutilized land as opportunities for redevelopment and revitalization, using a multidisciplinary approach to attract new assets and strengthen existing surrounding assets, including neighborhoods, businesses, and historic and cultural resources.
- RR4** Build from existing assets of areas identified for redevelopment and revitalization.
- RR5** Pursue interim uses and/or green infrastructure on vacant and financially distressed properties.
- RR6** Prioritize neighborhood revitalization efforts to focus on those geographic areas with the greatest need.
- RR7** Undertake an inclusive community participation process in redevelopment and revitalization efforts.

## Other Related Policies

ELEMENT	Policy #	PAGE #
Housing	H1–H7, H9	3.11
Economic Development	ED1–ED3, ED5, ED10, ED11	3.20
Public Safety	PS1–PS3, PS4, PS9, PS10	3.25
Parks & Recreation	PR1–PR6, PR8–PR10, PR12	3.30
Arts & Culture	AC1–AC3, AC5, AC6	3.37
Public Health	PH1, PH2, PH4, PH8	3.41
Urban Agriculture	AG1–AG4	3.45
Education	E3, E6, E7	3.50
Governance & Participation	G1–G12	3.56
Energy & Climate Readiness	EC1–EC8	3.66
Water Resources	WR1, WR2, WR4 -WR8, WR10, WR11	3.71
Green Infrastructure	GI1–GI6	3.77
Environmental Quality	EQ2–EQ5	3.83
Historic Preservation	HP1, HP3–HP8	3.93
Public Infrastructure, Facilities & Cost of Development	PI1, PI2, PI3, PI4, PI5, PI6	3.101
<b>Redevelopment &amp; Revitalization</b>		<b>3.108</b>
Land Use, Transportation & Urban Design	LT1–LT16, LT21–LT26	3.126



# Land Use, Transportation, & Urban Design

Although inextricably linked, land use planning and transportation planning have traditionally been addressed separately. In recent years there has been increasing conversation about the need to plan for these two elements together to provide more livable, healthy, and sustainable communities. While plans are relatively “two-dimensional,” they become “three dimensional”

with the application of design. In an urban setting, how buildings relate and how the public realm (e.g., roadways and streetscapes) interfaces with the private realm (e.g., houses, shops, and businesses) is key in creating a community’s “sense of place.”

## The Three Elements

**Land Use:** Land use—that is, for what and how the land is used—really became a focus during the 1800s with the recognition that the placement of land uses had public health consequences. This led to more separation of land uses, particularly industrial and housing uses, and eventually to the development by government agencies of zones for the location of different uses—i.e., zoning. Zoning has and continues to play an important role in addressing the issue of land use compatibility. In recent years, however, there has been an increased understanding that a community and its public health, resource conservation, vitality, and aesthetics can be served by rethinking some of the traditional approaches to locating land uses. This

is possible in part because of advances in technology, building practices, environmental regulations, and other areas that have made the possibility of mixing some land uses not only acceptable but desired. Such mixes of uses done thoughtfully can result in benefits to fitness and public health, public safety, service delivery, personal finances and, resource conservation. These benefits are dependent not only on mixing uses, but also on connecting uses.

**Ronstadt Transit Center in downtown Tucson, with the Martin Luther King and One North Fifth apartments in the distance.**



*“An issue that often gets neglected in discussions about transportation is the high personal cost to residents of driving, which includes insurance, repairs, gas, and parking.”*

—Sustainable Land Use Code Integration Project Report, City of Tucson, 2010



Family walks along road in Sahuaro-Miraflores Neighborhood, which lacks pedestrian infrastructure—a challenge faced by other neighborhoods in Tucson.

#### Transportation/Circulation:

Transportation is about the mobility of people and goods and the circulation system formed by the network of roadways, bicycle routes, pedestrian routes, and rail and air

Despite land uses being separated, they must be accessible and connected for a city to function. People go from their houses (residential land use), to work (generally a commercial or industrial land use), to stores (commercial land use), to school (institutional land use), to the park for recreation (open space land use). People's ability to move between land uses is critical to the function of those uses. Similarly circulation within a land use—for example a residential neighborhood or mixed use complex—is an important determinant in how well that land use functions internally.

While increased focus has been given to the movement of people within cities, the transport of goods in and out of the community, whether by truck, train, or

plane, is also vital to a high functioning city. This regional circulation requires coordination with other jurisdictions, including consideration of surrounding land uses and the traffic generated into and out of the city. Building new transportation facilities often goes beyond serving existing land uses or even approved future development, to influencing the location of as-yet-to-be planned projects. Again, how our city is shaped and experienced is dependent on thinking carefully about decisions made regarding land use and transportation and both their immediate and long-term affects on each other.

**Urban Design:** Put simply, urban design addresses how the land uses and the circulation systems come together. Traditionally, design has been associated with the architecture of an individual building. However, how those buildings relate to each other, to the street, and to public spaces determines the efficiency of a community's operations, its long-term sustainability, and ultimately its character. A person's overall impression of a city is often in part an unconscious reaction to its urban design.

A particular focus of urban design is public space with consideration of how that public space is experienced and used and how that public space transitions to adjacent private spaces. In the United States, governments have long overseen the locations of land uses and the locations of transportation systems. However, thinking in terms of how those components come together—that is the design of the urban area—is a relatively new concept introduced in the 1960s. This is not to say that there

*“Neighborhoods should be multimodal and offer transportation choices to all families.”*

—Tucson Sustainable Design Team Report, American Institute of Architects, 2007



are not many good examples of urban design from around the world and across the centuries, but only that the discipline of “urban design” is relatively new. In fact many contemporary examples of good urban design derive from historic precedents.

## Integrating the Elements

Putting these elements—land use, transportation, and urban design—together in one section of Plan Tucson was a conscious decision to emphasize the importance of deliberately considering the interaction of these three elements as planning for Tucson goes forward. This more holistic approach mirrors concepts being taught in architecture, planning, and engineering college classes, as well as being practiced in planning, architecture, and engineering firms. Similar integrative thinking can also be seen in public health, public safety, and other disciplines.

Advancing this integrated approach in the planning of the built environment is dependent on ongoing public dialogue. A person often thinks about the interrelationship of community elements intuitively. For instance this happens when a person has a thought such as, “I am gaining weight; I need some exercise; I’ll put on my shoes and walk around the neighborhood, and maybe even stop at the grocery store.” This person has recognized a potential health issue (overweight), has recognized a potential intervention (physical exercise), has identified a place within the community to get that physical exercise (within the neighborhood, presumably along sidewalks or streets). The design of that physical space in which the person is going to walk will influence the experience of walking and may play a large part in whether the person



**Children and their dog on a walk in downtown Tucson stop for a drink at a fountain designed for both humans and dogs.**

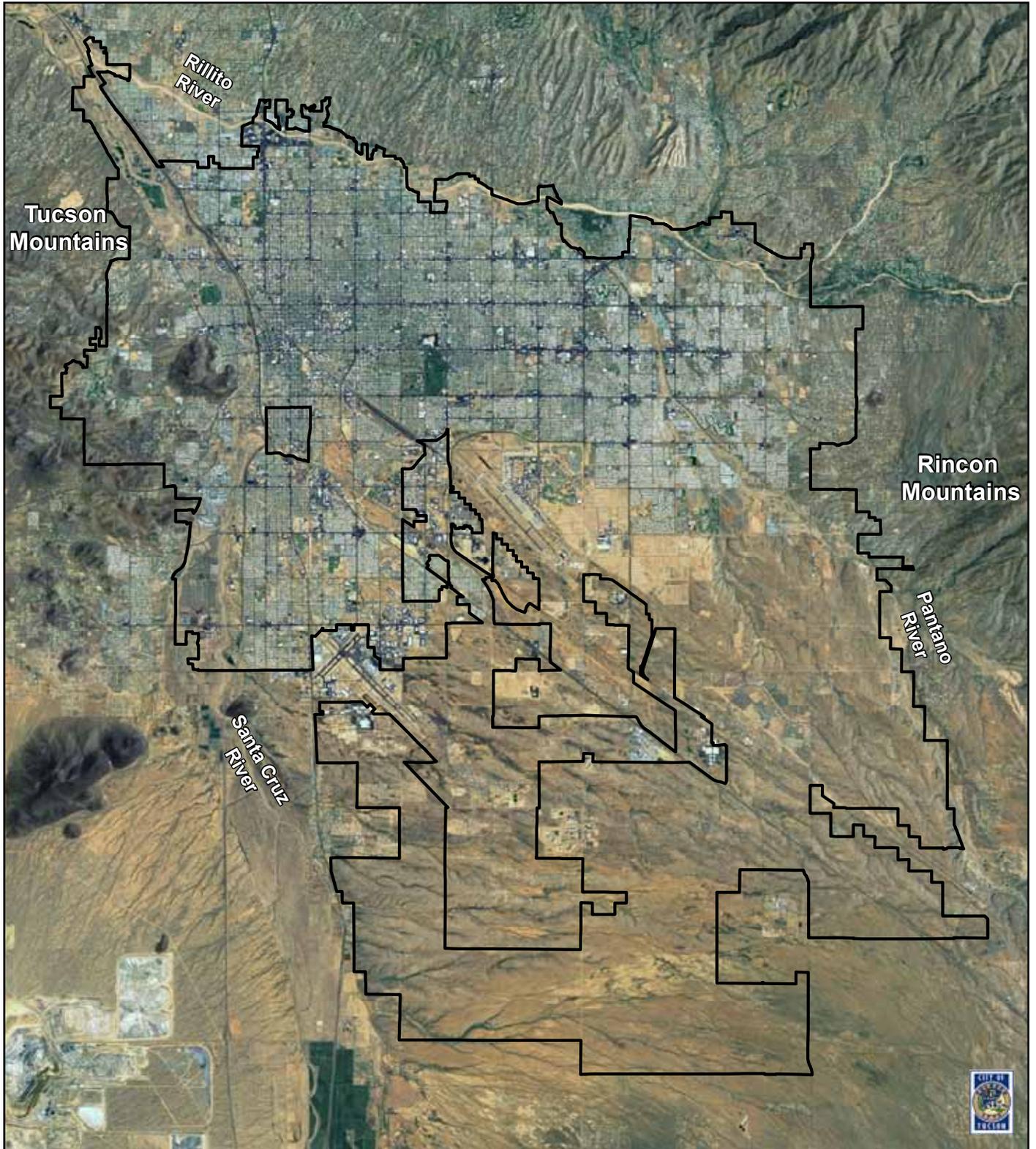
chooses this activity again. Some of that experience will be defined by whether there was a sidewalk or pathway upon which to walk, whether there was enough space to circulate comfortably, whether there was shade to mitigate the heat, whether there were aesthetic features to make the “journey” interesting in its own right, whether there were useful destinations in walking distance, and whether there were other people in the public realm to provide a sense of community and safety.

## Tucson’s Growth Over Time

Tucson did not begin with a formal plan, rather it evolved in a physical setting consisting of prominent natural features, including mountain ranges, rivers, and washes (*Exhibit LT-1*). Beyond the physical setting, the city has been shaped to a large degree by economic circumstances, transportation choices, land use policy and regulations, and development practices (*Exhibits LT-2 and LT-3*). For many years, Tucson followed a fairly traditional growth model in which City government would approve



EXHIBIT LT-1 Tucson Satellite Image



Source: Esri, i-cubed, USDA, USGS, AEX, GeoEye, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

 City of Tucson





### EXHIBIT LT-2 Land Use & Transportation Influential Events

Date	National/International Events	Tucson Events
1877		City of Tucson is incorporated.
1880		The Southern Pacific railroad arrived.
1883		Electric Light and Power Company is established
1891		Arizona Territorial University opens.
1906		Mule-drawn streetcar makes last run. Electric streetcar makes first run
1919		Tucson Municipal Flying Field opens—first municipally owned airport in nation.
1920s	Mass production of automobile enables people to live further out.	City of Tucson aggressively promotes its assets.
1930	Shift in public transit modes from electric streetcars to buses	Electric streetcar operation ends, replaced with buses. Tucson adopts its first zoning ordinance.
1937		Miracle Mile becomes first safety-plus thoroughfare in the West, with center median and traffic circle at each end
1940		Army Air Base is established in Tucson
1941		City Planning and Zoning Commission is created
1943		Tucson Regional Plan released by non-profit group Tucson Regional Plan Inc.
1945	World War II ends	Joint City and County planning staffs established; separated in 1965.
1956–1958	Federal Aid Highway Act creates interstate highway system. New highways bypass cities exacerbating urban core deterioration.	Interstate 10 is constructed, replacing Highway 80 as the major route through Tucson and bypassing urban core.
1959–1960		General Land Use Plan for Tucson region, consisting of an urban and a regional plan, adopted by City Mayor and Council in 1959, and by County Board of Supervisors in 1960.
1960s	Urban renewal movement begun to address traffic congestion, pollution, insufficient housing, higher crime rates, and overcrowded schools in urban cores across the nation	Tucson residents increasingly move out of urban core.
1968		Congress authorizes Central Arizona Project to bring Colorado River water to Phoenix and Tucson.



EXHIBIT LT-2 (continued) Land Use & Transportation Influential Events

Date	National/International Events	Tucson Events
1969		City of Tucson assumes ownership of bus service, names system Sun Tran. City urban renewal demolishes Tucson’s oldest barrios to build Tucson Convention Center.
1970s-1980s		During this period, Tucson adopts 75% of the current Area and Neighborhood Plans.
1975		General Land Use Plan for Tucson region revised as Tucson/Pima County Comprehensive Plan. Plan never adopted.
1979		Tucson General Plan adopted. Ten amendments approved between 1981 and 1998.
Late 1980s–Early 1990s	“Smart Growth” movement escalates, focuses on greater integration of land use and transportation	Laos, Ronstadt and Tohono Transit Stations are opened.
1998-2000		Governor signs Arizona Growing Smarter Legislation.
2001		Voters ratify General Plan update in response to 1998/2000 Arizona Growing Smarter Legislation.
2006		Voters approve Regional Transportation Authority 20-year regional transportation plan and half-cent sales tax to fund plan. Among projects within City of Tucson are Modern Streetcar and several road widening projects utilizing a context sensitive design approach.
2012		Mayor & Council adopt Uniform Development Code to replace Land Use Code adopted in 1995.

new development projects under the assumption that the necessary new or expanded public infrastructure and facilities would be provided to service that growth. This approach led to an over-reliance on expensive roadway networks that facilitated sprawl, neglecting areas with existing infrastructure and the provision of alternative modes of transportation. In the last several decades, the City of Tucson has been rethinking this model to put more emphasis on the utilization of existing infrastructure for growth and less car-dependent development, both at the city and regional levels, in addition to regular

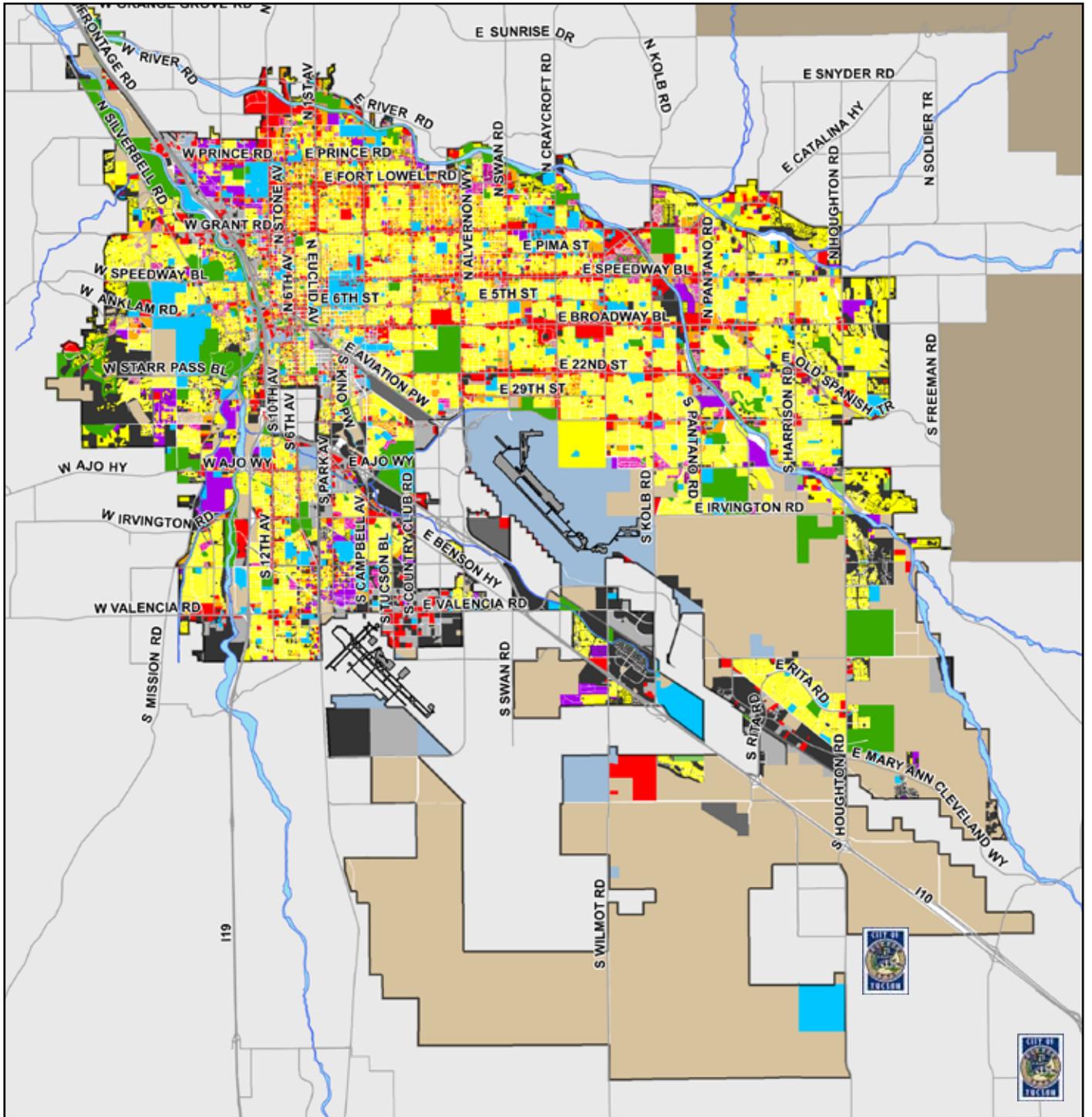
interdepartmental coordination to ensure that land use, transportation, and urban design are being considered holistically.

### Primary Planning Tools

Fifty years after Tucson was incorporated, the City adopted its first zoning code. Today, Tucson has a hierarchy of plans and initiatives. Developed at different times and in response to varying urban conditions, these tools inform and regulate contemporary land use and transportation decisions. The most frequently used tools follow; all are referenced in other sections of



EXHIBIT LT-3 Existing Land Uses, 2013



Source: City of Tucson IT-GIS Section



- |                       |                      |                             |                     |
|-----------------------|----------------------|-----------------------------|---------------------|
| Vacant                | Commercial           | Open Space/Common Area      | City of Tucson      |
| Single Family Housing | Institutional        | Public/Tax Exempt; Military | Other Jurisdictions |
| Townhomes             | Industrial           | Agriculture                 |                     |
| Multi-family          | Utilities            | Major Washes                |                     |
| Mobile Homes          | Parks and Recreation | Federal Lands               |                     |



## Plan Tucson.

- Unified Development Code (UDC, formerly known as the Land Use Code, LUC): Adopted by Mayor and Council in 2012, the UDC was the result of a project conducted over several years to simplify Tucson's 1995 Land Use Code. A stated purpose of the UDC is to implement the General Plan. The UDC contains the zoning regulations for Tucson, including overlay zones. Most overlay zones are more restrictive than the underlying zoning and add another layer of regulations to the underlying zoning requirements. The City adopted the Infill Incentive District to spur urban and transit-oriented development within the overlay's boundaries. Further, the City developed the Urban Overlay District which property owners may use for a transit-oriented development proposal in exchange for following improved urban design standards, or alternatively may use the underlying zoning. Making the overlay an option removed possible Proposition 207-market-value challenges from affected property owners. Proposition 207 is the Private Property Rights

Protection Act (Arizona Revised Statute Section 12-1134). *Exhibit LT-4* lists the overlay zones active as of 2012, while *Exhibit LT-5* illustrates the Airport Environs Zone as one example of an overlay zone.

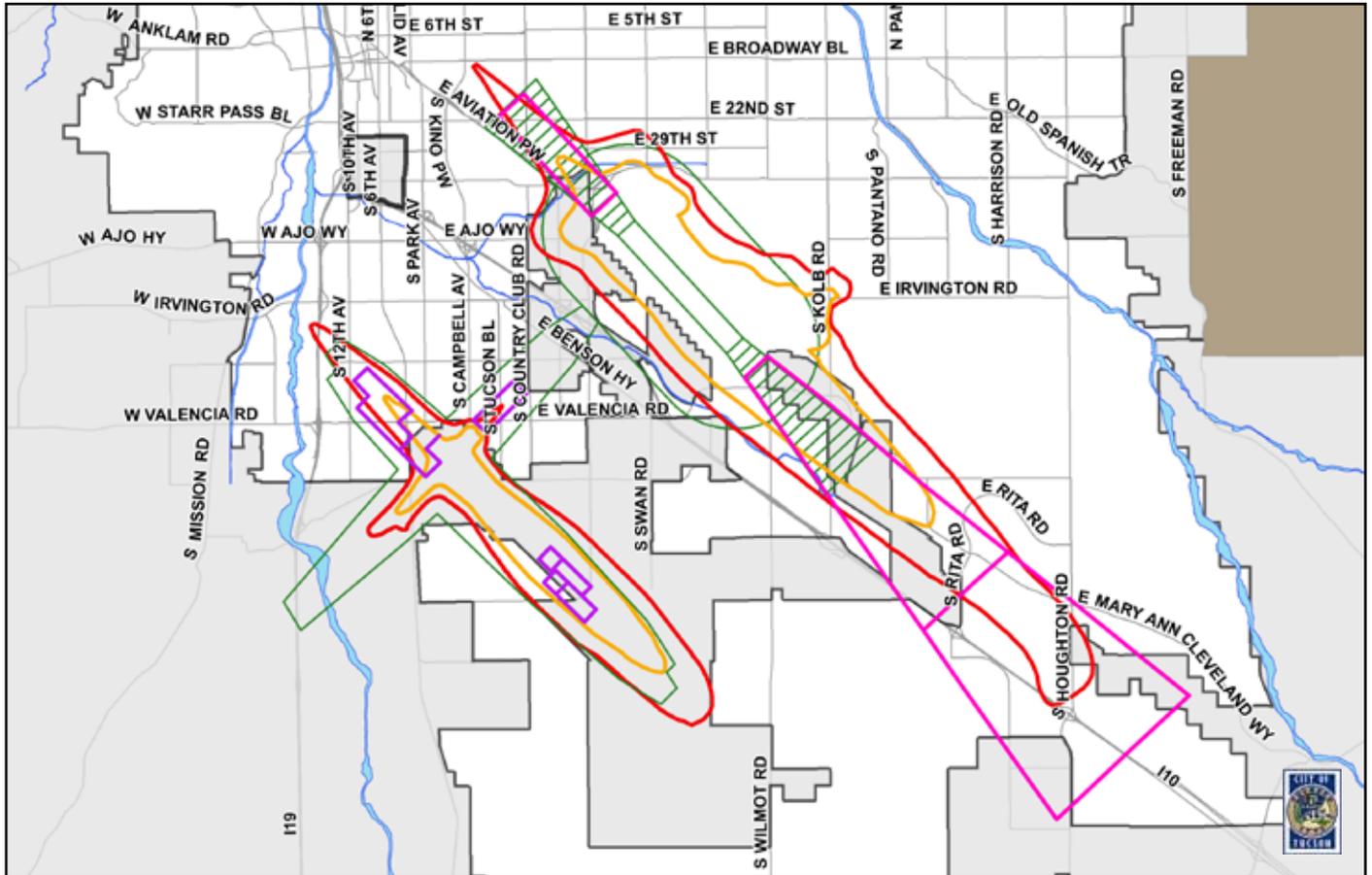
- Specific Plans (Subregional, Redevelopment, Area and Neighborhood Plans): As of 2012, the City had adopted a total of 77 specific plans, with three-quarters of those twenty or more years old. Specific plans are intended to advance the systematic implementation of the General Plan through the use of detailed policy direction, often at the parcel level, for specific areas of Tucson. In addition to recommending locations for different types of land use, specific plans guide the locations of buildings and other improvements with respect to rights-of-way, floodway and floodplain treatments, and public facilities. Policies established by specific plans are used by City staff in reviewing rezoning, variance, and other development and permitting applications.
- Functional Plans: Functional plans relate to a particular topic, such as financial sustainability or economic development, or to a service or facility, such as public safety, water, parks and recreation, transit, or roadways.
- The Major Streets and Routes (MS&R) Plan is a functional plan that was adopted by the Mayor and Council in 1982 to implement the General Plan. The MS&R, which has been revised 26 times, identifies the general location and size of existing and proposed freeways, arterial and collector streets, future rights-of-way, setback requirements, typical intersections, and gateway and scenic routes.
- Design Guidelines Manual: The manual was prepared in 1999 and has been used officially by the City of

**EXHIBIT LT-4 City of Tucson Overlay Zones**

Historic Preservation Zone (HPZ)—April 3, 1972
Hillside Development Zone (HDZ)—September 15, 1980
Gateway Corridor Zone (GCZ)—June 27, 1983
Major Streets and Routes Setback Zone (MS&R)—October 11, 1983
Scenic Corridor Zone (SCZ)—May 28, 1985
Airport Environs Zone (AEZ)—April 16, 1990
Environmental Resource Zone (ERZ)—July 3, 1990
Drachman School Overlay Zone—June 25, 2001
Rio Nuevo District (RND)—October 14, 2002
Neighborhood Preservation Zone (NPZ)—June 25 2008
Downtown Area Infill Incentive District (IID)—September 9, 2009
Urban Overlay District (UOD)—August 4, 2010



EXHIBIT LT-5 Airport Environs Overlay Zone



Source: Unified Development Code

- Airport Hazard District (Height Zones)
- Approach Departure Corridors
- Compatibility Use Zones (CUZ)
- 65 Ldn\* Noise Contour
- 70 Ldn\* Noise Contour

N

0      2.5      5      10

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Miles

- Major Washes
- Federal Lands
- City of Tucson
- Other Jurisdictions

\* Ldn = Day-Night Average Sound Level

The Airport Environs Overlay Zone is comprised of the following zones and districts:

**Airport Hazard District:** A specifically designated area of land where uses that constitute hazards to airport operations are prohibited and heights are limited.

**Approach Departure Corridors:** Specifically designated areas located from 12,000 to 50,200 feet from the southeastern end of runways at Davis-Monthan Air Force Base, where land uses must be compatible with flight operations.

**Compatible Use Zones:** Specifically designated areas near the ends of Tucson International Airport runways where land uses must be compatible with flight operations.

**Noise Control Districts:** Specifically designated noise exposure areas at the Davis-Monthan Air Force Base and the Tucson International Airport where the existing and predicted average noise levels are 65 to 70 Ldn, and 70 Ldn or higher, triggering requirements for noise attenuation for certain land uses to improve the compatibility of occupied buildings with flight operations. Ldn, the day-night average sound level, are values expressed in decibels and represent the average noise level over a 24 hour period for an average day of the year. For Tucson International Airport, the Ldn values are calculated based on an FAA integrated noise model, which averages noise over a 365 day year. For Davis-Monthan Air Force Base, Ldn values are calculated based on the Department of Defense Noise Map model that averages noise over the total flying days of the year.



*“The 2040 RTP envisions a premier, energy-efficient, and environmentally responsible regional transportation system that is interconnected, multi-modal, technologically advanced and integrated with sustainable land use patterns.”*

—2040 Regional Transportation Plan, Pima Association of Governments, 2010

Tucson Planning and Development Services Department since it was referenced in the voter-ratified 2001 Tucson General Plan. The Manual offers insight into and clarification of desired urban design outcomes. The Manual’s non-regulatory guidelines are used during the review of rezonings, variances, and other land use decisions. The Manual is also available as a resource to neighborhoods for thinking through preliminary design concepts for proposed projects.

In addition to the preceding tools created to address actions to be taken within City of Tucson limits, there are several regionally focused plans that the City of Tucson participated in developing and that are applicable to decision-making related to the future of the City. The three plans noted below were adopted between 2000 and 2010. All are infrastructure-related plans with a direct impact on land use.

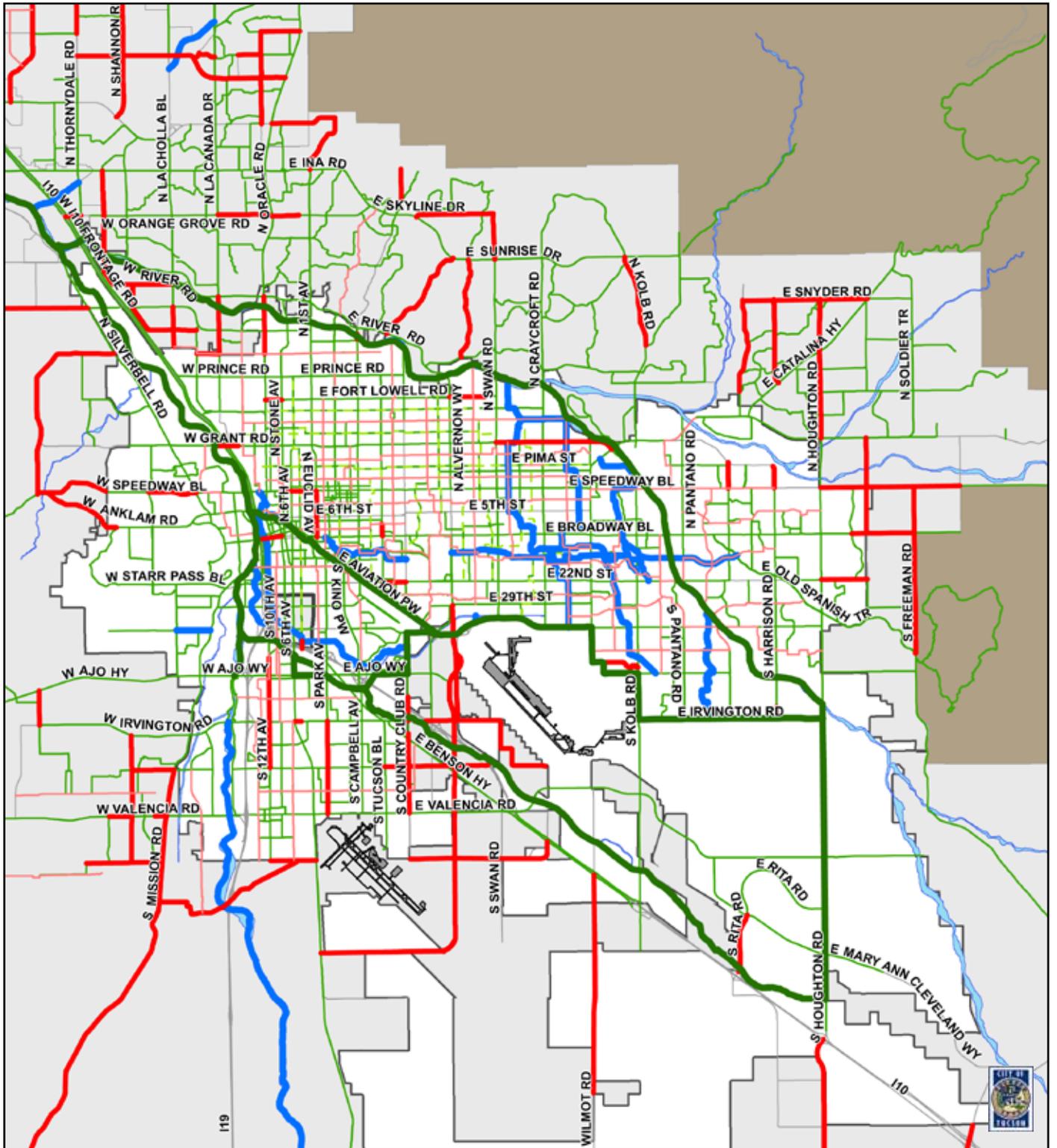
- **Water and Wastewater Infrastructure, Supply and Planning Study:** In 2010, the City of Tucson and Pima County approved this multi-year study that addresses water and wastewater infrastructure, supply, and planning issues, to assure a sustainable community water source. The 2010-2015 Action Plan accompanying the Study calls for the formal adoption of the Water Service Area Policy, which establishes a water service boundary for Tucson Water based on

economic, social, and environmental considerations. The Water Service Area Policy was adopted by Mayor and Council in 2010, and is used in determining land for potential annexation.

- **Regional Transportation Authority (RTA) Plan:** This 2.1 billion dollar plan, overseen by the Regional Transportation Authority (RTA), was approved by Pima County voters in 2006. The RTA Plan is funded by a 1/2-cent excise tax along with other regional and local dollars, such as developer impact fees. While the primary purpose of the RTA Plan is focused on accommodating vehicles, it also includes funding for alternative transportation modes, including pedestrian ways, bicycle facilities (*Exhibit LT-6*), bus facilities, and a modern streetcar. For several of the major corridor projects within City limits, there has been increased effort to consider the area beyond the roadway as part of the study area for planning purposes—this approach is referred to as “context sensitive design.”
- **2040 Regional Transportation Plan (RTP):** The RTP was adopted in 2010 and updated in 2012 by the Regional Council of the Pima Association of Governments (PAG), which includes representation from the City of Tucson. The 2040 RTP is a long-range transportation plan for eastern Pima County and the Tucson metropolitan area that supports operational and infrastructure improvements to increase the efficiency of transporting people and goods within and to destinations outside of the region. The Plan also provides a framework for transportation investments in the region by identifying projects that could potentially be developed with federal, state, and local funding.



EXHIBIT LT-6 Existing & Planned Bicycle Routes



Source: City of Tucson IT-GIS Section



- Existing Bike Routes
  - - - 2040 RTP Roadway Bicycle
  - Bike Blvd Improvement (Illustrative)
- Add Bike Lanes
  - Shared-Use Path
  - UrbanLoop
- Major Washes
  - Federal Lands
  - City of Tucson
- Other Jurisdictions



- **Pima Regional Trail Master Plan:** This Master Plan, which was adopted in 1989 and revised in 2012, was a collaboration of the City of Tucson Parks and Recreation Department and the Pima County Department of Natural Resources. The goal of this planning effort was to expand the trail system within urban areas and to explore new opportunities for trail expansion in the outlying areas. The Master Plan consists of 853 miles of existing and proposed trails, paths, greenways, river parks, bicycle boulevards, and enhanced corridors that connect regional destinations, parks, schools, and preserve areas.
- **2004 City of Tucson Plan for Annexation:** On June 28, 2004, the Mayor and Council endorsed the Plan for Annexation, which includes policy to pursue annexation of both vacant/underdeveloped land and developed land within an adopted Municipal Planning Area (MPA). The decision to recommend pursuing an area for annexation is based on a comprehensive analysis of the

following factors: (1) development/growth potential, (2) projected revenues to be received and projected costs to serve, (3) ability/capacity to serve, (4) strategic importance of the location, (5) the staff resources necessary to complete the annexation versus the benefits when compared to other potential annexation areas, and (6) any other factors that are relevant to the analysis. Subsequently, the Mayor and Council directed staff also to consider the Water Service Area and the Conservation Land System and associated guidelines in the analysis of land for potential annexations.

## Departmental Responsibilities

In Tucson, as in many communities, land use and transportation are overseen by separate City departments. Planning and Development Services enforces zoning regulations, manages the specific plans and oversees the permitting processes. The department also manages the Design Guidelines Manual, which includes consideration of urban design factors. The Department of Transportation has responsibility for the design, construction, and management of roadway projects and related facilities, such as bicycle routes and pedestrian ways, and for the design and construction of the Modern Streetcar. Functional plans are managed by various departments; for instance the Department of Transportation enforces the Major Streets and Routes Plan. Long-term planning, such as that represented by this General Plan, is undertaken through the Housing and Community Development Department, which also oversees historic preservation. Other City departments are involved in aspects of land use and transportation planning. The Tucson

**Father and son cycling from school along the Santa Cruz River Trail. In background, Armory Park low-income senior apartments, completed in 2012.**





Police Department reviews development plans taking into account public safety concerns such as sightlines. The Parks and Recreation Department plans and constructs pedestrian bicycle facilities and multi-use paths.

## Opportunity Areas for Future Development

To move toward a more connected, integrated pattern of land use, areas that provide opportunities for enhanced development over the next several decades have been identified as building blocks of urban growth. Existing neighborhoods, which are considered stable, are included in the building blocks in recognition of the role of neighborhoods as the foundational unit of the city. While the existing neighborhoods are not places identified for more intensive growth, to maintain their stability these neighborhoods will require ongoing investment in the maintenance and enhancement of existing properties as well as in neighborhood infrastructure and facilities. *Exhibit LT-7* maps the locations of these Opportunity Area Building Blocks, while *Exhibit LT-8* defines each building block.

The following list summarizes what the Opportunity Areas Map does, what purposes it serves, and what it is not intended to be.

- incorporates both existing and desired future development that may occur within the next several decades based on the Pima Association of Governments 2040 projections.
- reflects the collective desires expressed by Tucsonans, business owners and civic organizations through the Plan Tucson public participation process
- arranges housing and employment opportunities in ways that could

contribute to the more effective use of public infrastructure and facilities, increase the use of public transit, bicycles, and walking, and decrease the overall amount of land developed

- is a reference for applying Plan Tucson's goals and policies intended to enhance Tucsonans' social, economic, natural, and built environments
- can inform discussions of urban form, redevelopment, new development, general distribution of land uses, transportation, and public infrastructure and facilities, along with other more site specific and area specific issues
- includes a variety of land uses and densities within each building block. The color coding is representative of a range of land uses and densities over a large area and not specific to any one site within an Opportunity Area
- is NOT a current or future zoning map
- is NOT replacing adopted specific plans (Subregional, Redevelopment, Area, or Neighborhood Plans)

## Guidelines for Development Review

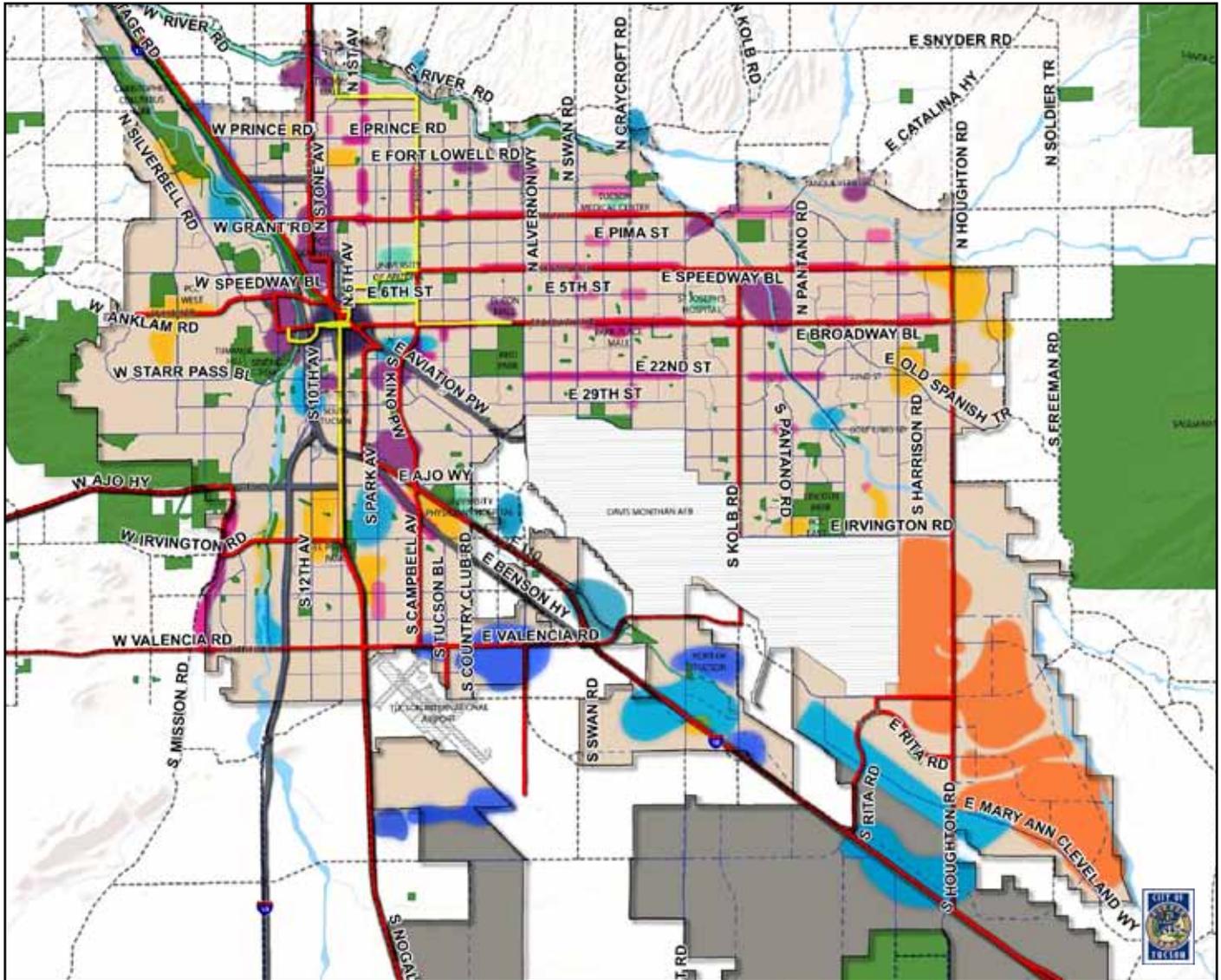
The Guidelines for Development Review, which are referenced in Policy LT-26 as *Exhibit LT-11*, are intended to provide more specificity for use of Plan Tucson in rezoning and other discretionary land use decisions in which a property is not under the umbrella of an adopted specific plan (Subregional, Area or Neighborhood Plan) or for which a specific plan does not provide sufficient information.

## Opportunity Areas Map Assemblage

The Opportunity Areas Map was



### EXHIBIT LT-7 Plan Tucson Opportunity Areas



Source: City of Tucson IT-GIS Section



#### Opportunity Areas

- Existing Neighborhoods
- Neighborhoods of Greater Infill Potential
- Neighborhood Centers
- Downtown
- Business Centers
- Mixed-Use Centers
- Mixed-Use Corridors
- Campus Areas
- Industrial Areas
- Houghton Corridor Area
- Southlands

- Potential Annexation Areas
- Existing Parks/Open Space
- City of Tucson Boundary
- From Major Streets and Routes Plan**
- Future Roads
- County Major Routes
- Major Highways
- Major Roads
- From 2040 Regional Transportation Plan**
- Planned Bus Routes (BRT, Express and Circulator)
- Planned Commuter/Intercity Rail
- Planned Streetcar

This Concept Map is for illustrative purposes only and identifies areas of opportunity. It does not constitute zoning regulations, establish zoning district boundaries, or indicate official city policy relating to specific sites. The categories and colors must be interpreted based on the policies contained in Plan Tucson. Map available on-line at [www.tucsonaz.gov/plantucson](http://www.tucsonaz.gov/plantucson)

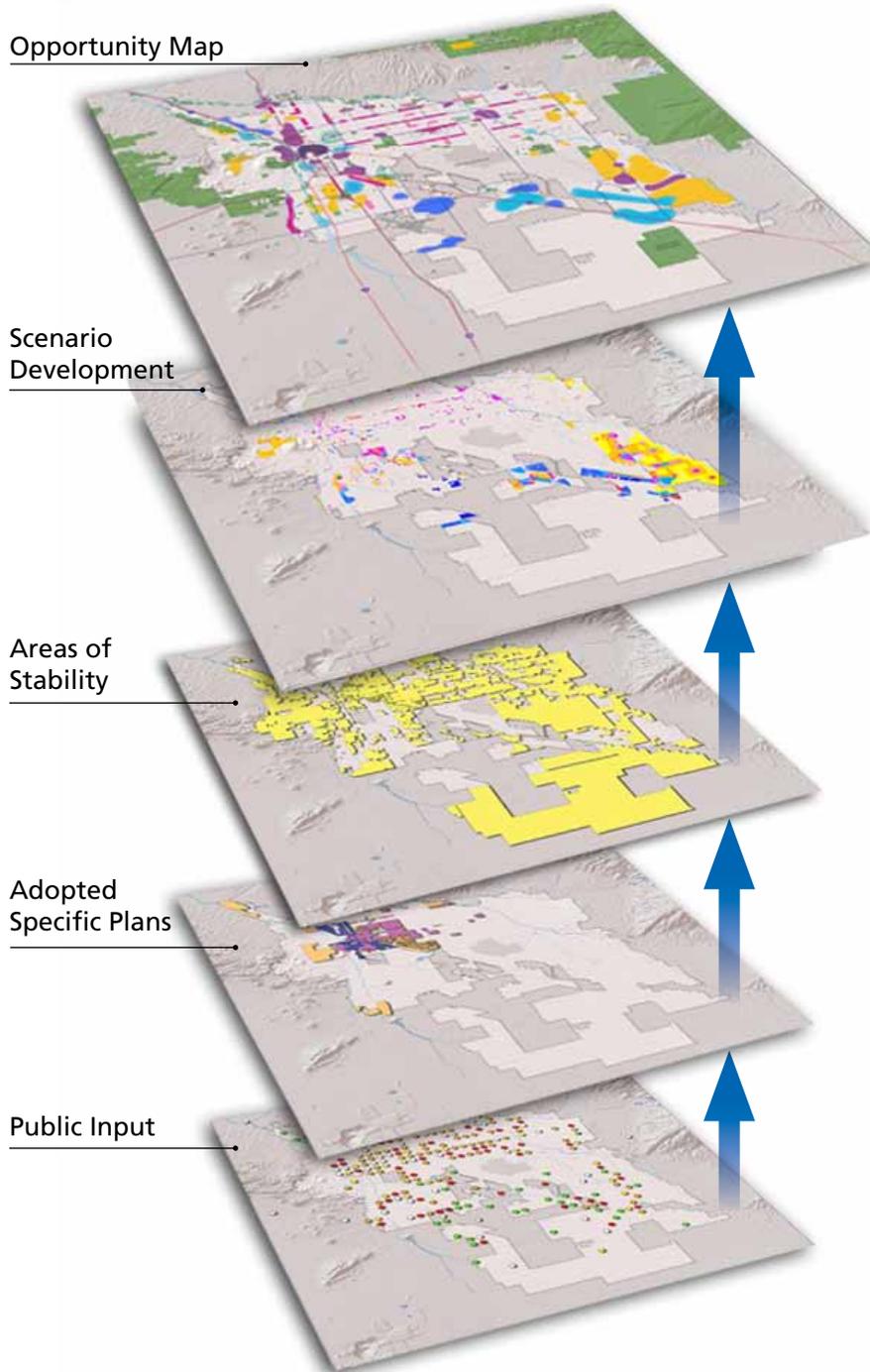


## EXHIBIT LT-8 General Descriptions of the Opportunity Area Building Blocks

<b>Existing Neighborhoods</b>	Existing neighborhoods are primarily developed and largely built-out residential neighborhoods and commercial districts in which minimal new development and redevelopment is expected in the next several decades. The goal is to maintain the character of these neighborhoods, while accommodating some new development and redevelopment and encouraging reinvestment and new services and amenities that contribute further to neighborhood stability.
<b>Neighborhoods with Greater Infill Potential</b>	Neighborhoods with greater infill potential are residential neighborhoods and commercial districts for which there is potential for new development and redevelopment in the next several decades. In some areas, entire new neighborhoods may be built. These neighborhoods are characterized by an urban scale that allows for more personal interaction, while providing safe and convenient access for all ages and abilities to goods and services needed in daily life. These neighborhoods include a mix of such uses as a variety of housing types, grocery stores and other retail and services, public schools, parks and recreational facilities, and multi-modal transportation choices.
<b>Neighborhood Centers</b>	Neighborhood centers feature a mix of small businesses surrounded by housing and accessed internally and from nearby neighborhoods by pedestrian and bike friendly streets and by transit.
<b>Downtown</b>	Downtown Tucson acts not only as a regional employment and administrative center, but also as a major hub for public transit services and connections (light and commuter rail, regional buses, streetcar). It is a vital pedestrian-oriented urban area that provides higher-density housing, retail, art and culture, and entertainment for its residents and those of greater Tucson.
<b>Business Centers</b>	Business centers are major commercial or employment districts that act as major drivers of Tucson's economy. These centers generally contain corporate or multiple-use office, industrial, or retail uses. Existing examples in Tucson include the University of Arizona Science and Technology Park, Tucson Mall, and the Tucson International Airport area.
<b>Mixed-Use Centers</b>	Mixed-use centers combine a variety of housing options, retail, services, office, and public gathering places, located close to each other, providing occupants of the center and the residents and workers in the surrounding neighborhoods with local access to goods and services. Public transit, bicycles, and walking will get priority in these areas although cars will still play an important role. Existing examples in Tucson include Williams Centre, Gateway Centre, and the Bridges.
<b>Mixed Use Corridors</b>	Mixed-use corridors provide a higher-intensity mix of jobs, services, and housing along major streets. The businesses and residences within these corridors will be served by a mix of high-frequency transit options, as well as pedestrian and bicycle facilities.
<b>Campus Areas</b>	Campus areas include and surround large master-planned educational, medical, or business facilities. A fully-realized campus area serves the local workforce and student population and includes a range of housing, a variety of retail opportunities, and convenient transit options. Campus areas often accommodate businesses that are the spin-off of economic development opportunities generated by the primary employers. Existing examples include the University of Arizona, Pima Community College, Tucson Medical Center, Saint Joseph's Hospital, Saint Mary's Hospital, University Physicians Hospital, and the Veterans Affairs Medical Center.
<b>Industrial Areas</b>	Industrial areas are strategically located for efficient handling of intermodal freight movements. These areas support national and international freight movement through Tucson by connecting existing major regional commercial transportation routes, including railway, major highways, and the airports
<b>Houghton Corridor Area</b>	Development in the Houghton Corridor Area is to be master planned with a cohesive system of mixed use centers and neighborhoods, providing a variety of housing types and densities, a compact development pattern, a transportation and circulation system that offers alternatives for mobility, and a regional open space system. A phased approach to development will provide for increased efficiency of infrastructure and services for residents.
<b>Southlands</b>	Southlands is a long-term growth area, formed predominantly by large tracts of undeveloped land located at the southeastern and southern perimeters of the city. A large portion of this area is administered by the State Land Department. Prior to releasing these lands for development, the State will initiate planning efforts to promote orderly phased development that reflects sustainable and innovative community design.
<b>Potential Annexation Areas</b>	Potential Annexation Areas are areas that the City of Tucson may be pursuing for annexation within the next decade, working with other local jurisdictions with the ultimate goal of having urban commercial and residential areas located within incorporated cities and towns.



### EXHIBIT LT-9 Considerations in Assembling Opportunity Areas Map (Exhibit LT-7)



assembled based on the items below.

*Exhibit LT-9* illustrates components considered in creating the map:

- Plan Tucson's draft goals and policies
- Population and employment projections to the year 2040 prepared by the Pima Association of Governments
- Results of Plan Tucson's Community Workshops, at which participants expressed preferred locations for future growth.
- Land use direction provided by adopted specific plans to help guide where development might take place
- Zoning overlay districts
- Single-family residential zoning
- Environmental constraints
- Vacant and underutilized land
- Existing parks and open space
- Planned transportation projects indicated in the 2040 Regional Transportation Plan and future planned major roadways identified in the Major Streets and Routes Plan
- Clusters of development with significant impact on Tucson's economy
- Balanced Housing Model, which considers shifts in housing preferences and demographics that suggest that Tucsonans will demand a broader range of housing choices in the future, providing a clearer picture of future demand for single family homes, townhomes, and apartments (*Exhibit LT-10*)
- Best practices nationwide

### Ongoing Specific Planning

While the Opportunity Map depicts general locations and types of future development, more detailed planning



within specific geographic areas will need to be done to refine the Opportunity Areas Map and translate Plan Tucson goals and policies into actions that make sense in specific areas. To provide the City, other agencies, neighborhoods, businesses, institutions, and other stakeholders with a comprehensive understanding of the challenges and opportunities for development and redevelopment, and the improvement, maintenance, provision and financing of public infrastructure and facilities, a more in-depth, integrative analysis of the different components of the built environment will be needed.

Chapter 4, which addresses the implementation and administration of Plan Tucson, describes, among other things, an approach to the preparation of future specific plans for geographic areas

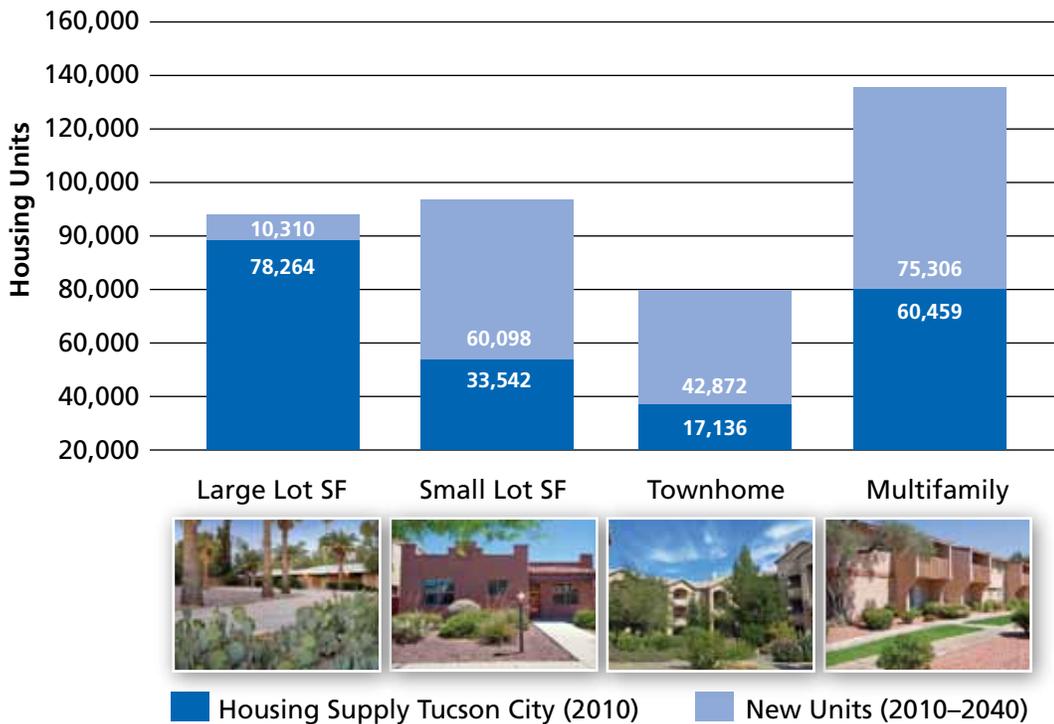
of the city that would meet a number of current planning challenges. This idea, put forth in policy LT-25 at the end of this section, would complement the Opportunity Areas Map with more detailed land use guidance for specific geographic areas, fill gaps in the City not covered by specific plans, and integrate land use, infrastructure, and urban design in a manner that responds to the Plan Tucson overall goals and policies across the elements.

The following land use, transportation, and urban design related policies provide direction for subsequent actions to take advantage of the identified opportunities for development.

## POLICIES

### Land Use, Transportation, and Urban Design Policies

**Exhibit LT-10 Future Housing Need by Housing Type**



Source: American Community Survey and Balanced Housing Model 2012-Fregonese Associates

**(LT)**

- LT1** Integrate land use, transportation, and urban design to achieve an urban form that supports more effective use of resources, mobility options, more aesthetically-pleasing and active public spaces, and sensitivity to historic and natural resources and neighborhood character.
- LT2** Develop City departmental resources and facilitate regular interdepartmental communication for the integration of land use, transportation, and urban design related planning and decisions.
- LT3** Support development opportunities where:
  - a. residential, commercial, employment, and recreational uses are located or could be located and integrated
  - b. there is close proximity to transit
  - c. multi-modal transportation choices exist or can be accommodated
  - d. there is potential to develop moderate to higher density development
  - e. existing or upgraded public facilities and infrastructure provide required levels of service
  - f. parking management and pricing can encourage the use of transit, bicycling, and walking
- LT4** Ensure urban design that:
  - a. is sensitive to the surrounding scale and intensities of existing development
  - b. integrates alternative transportation choices, creates safe gathering places, and fosters social interaction
  - c. provides multi-modal connections between and within opportunity areas
  - d. includes ample, usable public space and green infrastructure
- LT5** Undertake a comprehensive review of current City urban design guidance
- LT6** Promote the development of dog friendly facilities within the urban environment.
- LT7** Use the Plan Tucson Opportunity Areas Map:
  - a. as a general guide for determining the general location of development opportunities, development patterns, land use and transportation concepts, while also considering area and site-specific issues
  - b. in conjunction with the Guidelines for Development Review for discretionary rezonings, variances, special exceptions, and other land use decisions.
- LT8** Undertake more detailed planning and related community participation for the Opportunity Areas Map building blocks, including boundaries for specific development areas, types and mixes of uses,



needed public infrastructure and facilities, and design features.

- LT9** Locate housing, employment, retail, and services in proximity to each other to allow easy access between uses and reduce dependence on the car.
- LT10** Support urban agriculture and green infrastructure opportunities in new development or redevelopment when appropriate.
- LT11** Adjust future right-of-way widths of major roadways considering their expected function for all modes of transportation and foreseen improvements.
- LT12** Design and retrofit streets and other rights-of-way to include green infrastructure and water harvesting, complement the surrounding context, and offer multi-modal transportation choices that are convenient, attractive, safe, and healthy.
- LT13** Continue to explore and monitor opportunities to increase the use of transit, walking, and bicycles as choices for transportation on a regular basis.
- LT14** Create pedestrian and bicycle networks that are continuous and provide safe and convenient alternatives within neighborhoods and for getting to school, work, parks, shopping, services, and other destinations on a regular basis.
- LT15** Support the provision of secure storage and of showers and lockers for bicyclists and pedestrians.
- LT16** Reduce required motor-vehicle parking areas with increased bike facilities for development providing direct access to shared use paths for pedestrians and bicycles.
- LT17** Implement transportation demand management strategies, such as flexible work hours, vanpools, and other strategies.
- LT18** Consider new development or the extension of major infrastructure in the Houghton Area only after additional, more refined planning efforts are completed.
- LT19** Pursue annexation of vacant, underdeveloped, and developed land that is within both the adopted Water Service Area and the Municipal Planning Area, taking into consideration the development/growth potential, projected revenues to be received, and projected costs and capability to serve the area, and the strategic importance of the location.
- LT20** Apply Pima County Conservation Land System map and associated guidelines to future annexations.
- LT21** Consider the application of the Conservation Land System designation and requirements in rezoning reviews.



- LT22** Participate in efforts to develop a coordinated regional, multi-modal transportation system that improves the efficiency, safety, and reliability of transporting people and goods within the region and to destinations outside of the region.
- LT23** Ensure that proposed land uses are compatible with adjacent military operations, coordinating with stakeholders in planning for such uses by amending the Airport Environs Zone regulations in the event of future significant changes in mission and/or flight operations.
- LT24** Ensure that proposed land uses within the city are compatible with sources of currently identified aggregates as mapped by State of Arizona agencies when such maps are made available and that any identified aggregates within City limits are considered for future development needs.
- LT25** Coordinate land use, infrastructure, and public service planning for “planning and service areas,” considering social, economic, and environmental needs; particular geographic attributes; existing specific plans; and the Plan Tucson Opportunity Areas Map.
- LT26** Apply Guidelines for Development Review (*Exhibit LT-11*) to the appropriate Building Blocks within the Opportunity Areas to evaluate and provide direction for annexations, plan amendments, rezoning requests and special exception applications, Board of Adjustment appeals and variance requests, and other development review applications that require plan compliance. The Guidelines referenced in this policy and presented in *Exhibit LT-11* are integral to this policy and are the tools used to meet policy objectives. Apply specific plan and functional plan policies to these types of development applications. Refer to the Design Guidelines Manual for additional guidance.

Storefront improvements along South 6th Avenue followed public infrastructure improvements, including sidewalks and lighting.





## EXHIBIT LT-11 Guidelines for Development Review

(referenced in Plan Tucson Policy LT-26)

The Unified Development Code (UDC) contains regulations relating to the administration of the general plan and its use in the review of applications for changes of zoning, variances, and other special development applications. City staff will use policies in Plan Tucson, in addition to specific plans, functional plans (such as the Major Streets and Routes Plan), and the Design Guidelines Manual to evaluate rezoning applications, variance requests to the Board of Adjustment, and other development and permitting applications. Compliance with the spirit of the policies is essential for the City to support a proposed development project.

### Development Review Protocol

The policies of a specific plan covering an area and the Guidelines for Development Review are consulted for primary guidance for changes in zoning and other discretionary land use applications. Should an interpretation question arise, the policies of specific plan will take precedence.

Guidelines will provide primary development guidance in the case where there is no specific plan covering an area, or where a specific plan does not contain sufficient policy guidance. In these cases, the Plan Tucson Opportunity Areas Map should be referenced for determination of the appropriate Building Block that a particular development falls within. Set 1 of the Guidelines applies to all

locations and types of development, while the subsequent sets (Sets 2—10) apply to specific Opportunity Areas Map Building Blocks.

Terminology and action words used in the Guidelines reflect varying levels of policy commitment, such as very strong (assure, require, preserve, protect, promote); situational and/or conditional (consider); and basic commitment (encourage, foster). Verbs are intended to convey this varying level of commitment. For example, the word support is generally used in policy statements to designate desired land use applications or actions. The verb consider suggests conditional support, while the verbs encourage or foster describe a recommended action or condition that City staff is not in a position to require. The verb promote is used in a more general way to express a strong City or agency commitment to a proposed concept, program, or activity that may not directly relate to land use and development procedures. Examples include promoting improved air quality, environmental legislation, and revisions to property assessment formulas.

At such time as the City is entirely covered by updated specific plans through the “planning and service area” process referenced in Plan Tucson, the Guidelines for Development Review will be reconsidered to determine their appropriateness.

**Guidelines begin on page 3.129**

**Review Guidelines that Apply to All Locations & Types of Development (Set 1)**

LT26.1.1	Utilize solutions and strategies included in the Design Guidelines Manual to provide an improved level of community design.
LT26.1.2	Require telecommunications facilities be located, installed, and maintained to minimize visual impact and preserve views. Cabling and fiber optics should be installed underground where possible, and the visual impact of cellular towers should be a prime consideration in the City's acceptance and approval.
LT26.1.3	Improve the appearance of above-ground utilities and structures and extend access to high-tech wireless communications facilities throughout the city.
LT26.1.4	Consider incentives and other programs that remove or bring nonconforming signs into conformance, particularly in conjunction with roadway and public works improvements.
LT26.1.5	Support the relocation of nonconforming signs removed due to roadway construction or other public works projects, when their new location or design meets current Sign Code requirements.
LT26.1.6	Require nonconforming signs to be removed or brought into conformance as a condition of rezoning or a special exception land use and upon development plan approval.
LT26.1.7	Preserve and strengthen the distinctive physical character and identity of individual neighborhoods and commercial districts in the community.
LT26.1.8	Support land use, transportation, and urban design improvements that will link the Downtown activity center, Fourth Avenue, the Warehouse District, and the University of Arizona and enhance the historic and cultural quality within the greater Downtown. Continue to work with the University of Arizona, private developers, and neighborhood groups to enhance these linkages and Downtown design character.
LT26.1.9	Support strategically located mixed-use activity centers and activity nodes in order to increase transit use, reduce air pollution, improve delivery of public and private services, and create inviting places to live, work, and play.
LT26.1.10	Consider special zoning districts, such as Planned Area Developments (PAD) or overlay districts, as a way to promote the reuse of historic structures, foster mixed-use activity nodes, pedestrian and transit-oriented development areas, and pedestrian-oriented districts in areas suitable for redevelopment or enhancement.
LT26.1.11	Support the retention and expansion of existing business.
LT26.1.12	Support conservation and efficient water use in an effort to minimize the need for new water sources.
LT26.1.13	Preserve Tucson's cultural heritage, including its archaeology, architecture, and its array of cultural traditions.
LT26.1.14	Support the continuation of original use or adaptive reuse of historic landmarks.
LT26.1.15	Protect historic and archaeological resources.
LT26.1.16	Preserve Tucson's historic architecture in keeping with applicable rehabilitation standards.
LT26.1.17	Support methods to conserve and enhance habitat when development occurs.
LT26.1.18	Support the development and management of healthy and attractive urban vegetation.
LT26.1.19	Protect and improve air quality by reducing sources of air pollution.
LT26.1.20	Support an accessible open space system that connects open space in the urbanized area to the surrounding public natural areas.
LT26.1.21	Support an interconnected open space system.
LT26.1.22	Support an interconnected urban trail system throughout the city to meet the recreational needs of pedestrians, bicyclists, and equestrians.



## Review Guidelines that Apply to Individual Opportunity Area Building Blocks (Sets 2 – 10)

### Guidelines for Review Set 2:

#### Existing Neighborhoods Building Block & Neighborhoods of Greater Infill Potential

LT26.2.1	Low-density (up to 6 units per acre) residential development is generally appropriate along local streets and in the interior of established single-family residential areas.
LT26.2.2	Medium-density (between 6 and 14 units per acre) residential, with greater densities possible in conformance with the FLD provision. Medium-density residential development is generally appropriate where primary vehicular access is provided to an arterial or collector street and is directed away from the interior of low-density residential areas. In areas already predominately zoned R-2 additional medium-density residential may be appropriate.
LT26.2.3	High-density (greater than 14 units per acre) residential development is generally appropriate where primary vehicular access is provided to an arterial street and is directed away from the interior of low-density residential areas.
LT26.2.4	Support community commercial and office uses located at the intersections of arterial streets, taking into consideration traffic safety and congestion issues.
LT26.2.5	Support neighborhood commercial uses located at the intersections of arterial streets, arterial and collector streets, or collector street intersections.
LT26.2.6	Support residentially-scaled neighborhood commercial and office uses along collector streets if the building is residentially scaled; the site design is pedestrian-oriented; the use will not generate significant auto traffic.
LT26.2.7	Support the redevelopment and/or expansion of existing strip commercial development that will improve traffic flow, pedestrian mobility and safety, and streetscape quality when: <ul style="list-style-type: none"> <li>a. The project stabilizes and enhances the transition edge when adjacent to existing and future residential uses;</li> <li>b. Primary access can be generally provided from a major street;</li> <li>c. Required parking, loading, and maneuvering can be accommodated on site;</li> <li>d. Screening and buffering of adjacent residential properties can be provided on site;</li> <li>e. Adjacent uses can consolidate design elements, where feasible, such as access points, parking, landscaping, and screening;</li> <li>f. Current or future cross access between parcels and uses can be feasibly accommodated; and,</li> <li>g. Buildings and their associated activities, such as, but not limited to, loading zones and dumpsters, can be oriented away from adjacent residential uses, toward the interior of the site or toward boundaries adjacent to similar uses.</li> </ul>
LT26.2.8	Consider the expansion of commercial areas into adjoining residential areas when logical boundaries, such as existing streets or drainageways, can be established and adjacent residential property can be appropriately screened and buffered. Commercial expansions or consolidations, especially in conjunction with street widening, may be an appropriate means to preserve the vitality of the street frontage and the adjacent neighborhood.
LT26.2.9	Consider public-private partnerships and shared investments in connection with future street projects. When right-of-way acquisition diminishes market viability for affected businesses, expansion to additional parcels to provide consolidated access and improved parking, including shared parking and other site amenities, may be considered.

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<b>LT26.2.10</b>	Support the location of residentially-scaled office uses as a possible alternative to residential uses along major streets when: <ul style="list-style-type: none"> <li>a. existing and future residential uses;</li> <li>b. Safe and appropriate access generally can be provided from a major street;</li> <li>c. Required parking, loading, and maneuvering can be accommodated on site;</li> <li>d. Screening and buffering of adjacent residential properties can be provided on site;</li> <li>e. Consideration is given to the consolidation of design elements, such as access points, parking, landscaping, and screening; and,</li> <li>f. Consideration is given to accommodating current or future cross access between adjacent parcels and uses.</li> </ul>
<b>LT26.2.11</b>	Consider the conversion of residential structures to nonresidential uses or higher density residential uses where: <ul style="list-style-type: none"> <li>a. The project stabilizes and enhances the transition edge when adjacent to existing and future residential uses;</li> <li>b. Safe and appropriate access generally can be provided from a major street;</li> <li>c. Required parking, loading, and maneuvering can be accommodated on site;</li> <li>d. Screening and buffering of adjacent residential properties can be provided on site;</li> <li>e. Consideration is given to the consolidation of design elements, such as access points, parking, landscaping, and screening; and,</li> <li>f. Consideration is given to accommodating current or future cross access between adjacent parcels and uses.</li> </ul>
<b>LT26.2.12</b>	Support environmentally sensitive design that protects the integrity of existing neighborhoods, complements adjacent land uses, and enhances the overall function and visual quality of the street, adjacent properties, and the community.
<b>LT26.2.13</b>	Support infill and redevelopment projects that reflect sensitivity to site and neighborhood conditions and adhere to relevant site and architectural design guidelines.
<b>LT26.2.14</b>	Protect established residential neighborhoods by supporting compatible development, which may include other residential, mixed-use infill and appropriate nonresidential uses.
<b>LT26.2.15</b>	Consider residential development with densities that complement the size and intensity of the center or node, while providing transitions to lower density residential uses. For example, high-and medium-density development can support and reinvigorate regional activity centers, while appropriate medium-and low-density infill can complement the scale and character of neighborhood activity nodes.
<b>Guidelines for Review Set 3: Neighborhood Centers Building Block</b>	
<b>LT26.3.1</b>	Medium-density (between 6 and 14 units per acre) residential, with greater densities possible in conformance with the FLD provision. Medium-density residential development is generally appropriate where primary vehicular access is provided to an arterial or collector street and is directed away from the interior of low-density residential areas. In areas already predominately zoned R-2 additional medium-density residential may be appropriate.
<b>LT26.3.2</b>	High-density (greater than 14 units per acre) residential development is generally appropriate where primary vehicular access is provided to an arterial street and is directed away from the interior of low-density residential areas.
<b>LT26.3.3</b>	Support community commercial and office uses located at the intersections of arterial streets, taking into consideration traffic safety and congestion issues.
<b>LT26.3.4</b>	Support neighborhood commercial uses located at the intersections of arterial streets, arterial and collector streets, or collector street intersections.
<b>LT26.3.5</b>	Support residentially-scaled neighborhood commercial and office uses along collector streets if the building is residentially scaled; the site design is pedestrian-oriented; the use will not generate significant auto traffic.

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<b>LT26.3.6</b>	<p>Support the redevelopment and/or expansion of existing strip commercial development that will improve traffic flow, pedestrian mobility and safety, and streetscape quality when:</p> <ul style="list-style-type: none"> <li>a. The project stabilizes and enhances the transition edge when adjacent to existing and future residential uses;</li> <li>b. Primary access can be generally provided from a major street;</li> <li>c. Required parking, loading, and maneuvering can be accommodated on site;</li> <li>d. Screening and buffering of adjacent residential properties can be provided on site;</li> <li>e. Adjacent uses can consolidate design elements, where feasible, such as access points, parking, landscaping, and screening;</li> <li>f. Current or future cross access between parcels and uses can be feasibly accommodated; and,</li> <li>g. Buildings and their associated activities, such as, but not limited to, loading zones and dumpsters, can be oriented away from adjacent residential uses, toward the interior of the site or toward boundaries adjacent to similar uses.</li> </ul>
<b>LT26.3.7</b>	<p>Consider the expansion of commercial areas into adjoining residential areas when logical boundaries, such as existing streets or drainageways, can be established and adjacent residential property can be appropriately screened and buffered. Commercial expansions or consolidations, especially in conjunction with street widening, may be an appropriate means to preserve the vitality of the street frontage and the adjacent neighborhood.</p>
<b>LT26.3.8</b>	<p>Consider public-private partnerships and shared investments in connection with future street projects. When right-of-way acquisition diminishes market viability for affected businesses, expansion to additional parcels to provide consolidated access and improved parking, including shared parking and other site amenities, may be considered.</p>
<b>LT26.3.9</b>	<p>Support the location of residentially-scaled office uses as a possible alternative to residential uses along major streets when:</p> <ul style="list-style-type: none"> <li>a. The project stabilizes and enhances the transition edge when adjacent to existing and future residential uses;</li> <li>b. Safe and appropriate access generally can be provided from a major street;</li> <li>c. Required parking, loading, and maneuvering can be accommodated on site;</li> <li>d. Screening and buffering of adjacent residential properties can be provided on site;</li> <li>e. Consideration is given to the consolidation of design elements, such as access points, parking, landscaping, and screening; and,</li> <li>f. Consideration is given to accommodating current or future cross access between adjacent parcels and uses.</li> </ul>
<b>LT26.3.10</b>	<p>Consider the conversion of residential structures to nonresidential uses or higher density residential uses where:</p> <ul style="list-style-type: none"> <li>a. The project stabilizes and enhances the transition edge when adjacent to existing and future residential uses;</li> <li>b. Safe and appropriate access generally can be provided from a major street;</li> <li>c. Required parking, loading, and maneuvering can be accommodated on site;</li> <li>d. Screening and buffering of adjacent residential properties can be provided on site;</li> <li>e. Consideration is given to the consolidation of design elements, such as access points, parking, landscaping, and screening; and,</li> <li>f. Consideration is given to accommodating current or future cross access between adjacent parcels and uses.</li> </ul>
<b>LT26.3.11</b>	<p>Support environmentally sensitive design that protects the integrity of existing neighborhoods, complements adjacent land uses, and enhances the overall function and visual quality of the street, adjacent properties, and the community.</p>
<b>LT26.3.12</b>	<p>Support infill and redevelopment projects that reflect sensitivity to site and neighborhood conditions and adhere to relevant site and architectural design guidelines.</p>

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LT26.3.13	Protect established residential neighborhoods by supporting compatible development, which may include other residential, mixed-use infill and appropriate nonresidential uses.
LT26.3.14	Consider residential development with densities that complement the size and intensity of the center or node, while providing transitions to lower density residential uses. For example, high-and medium-density development can support and reinvigorate regional activity centers, while appropriate medium-and low-density infill can complement the scale and character of neighborhood activity nodes.
<b>Guidelines for Review Set 4: Downtown Building Block</b>	
LT26.4.1	Support the Downtown core as the primary regional activity center for finance, culture, and government, complemented by a mixture of land uses to support Downtown housing that is compatible with the adjacent Downtown historic residential neighborhoods.
LT26.4.2	Support new residential opportunities in the Downtown.
LT26.4.3	Support upgrades to neighborhood infrastructure, including sidewalks and street lighting, which are compatible with the historic character.
LT26.4.4	Support retail and other private sector development that will complement and support the existing Downtown fabric.
LT26.4.5	Locate new major governmental, cultural, and educational facilities in the Downtown area.
LT26.4.6	Support historic neighborhoods, historically significant structures and sites, and the development and retention of residential uses in the greater Downtown.
LT26.4.7	Support appropriately located and scaled high-density residential uses in and near the Downtown to support Downtown services and retail and provide incentives to attract new commercial and other support services to the Downtown.
LT26.4.8	Support Downtown development and redevelopment of street level retail or other pedestrian-oriented land uses, such as galleries, restaurants, and cinemas.
LT26.4.9	Support revitalization of the Warehouse District for the development of a diversity of arts-related land uses and special cultural events.
LT26.4.10	Support City participation in the construction of multiuse parking structures that support intermodal opportunities and ground level retail.
LT26.4.11	Support public-private partnerships to enhance building facades and streetscapes.
LT26.4.12	Support land use, transportation, and urban design improvements that will link the Downtown activity center, Fourth Avenue, the Warehouse District, and the University of Arizona and that will enhance the historic and cultural quality within the greater Downtown. Continue to work with the University of Arizona, private developers, and neighborhood groups to enhance these linkages and Downtown design character.
LT26.4.13	Support the limitation of drive-through facilities and auto-related uses, such as the sale, rental, service, or repair of vehicles, in Downtown pedestrian-oriented districts. Banks, restaurants, and pharmacies that provide in-car service should assure that the drive-through design will not conflict with pedestrian circulation.
LT26.4.14	Support environmentally sensitive design that protects the integrity of existing neighborhoods, complements adjacent land uses, and enhances the overall function and visual quality of the street, adjacent properties, and the community.
LT26.4.15	Support infill and redevelopment projects that reflect sensitivity to site and neighborhood conditions and adhere to relevant site and architectural design guidelines.
LT26.4.16	Protect established residential neighborhoods by supporting compatible development, which may include other residential, mixed-use infill and appropriate nonresidential uses.
LT26.4.17	Consider residential development with densities that complement the size and intensity of the center or node, while providing transitions to lower density residential uses. For example, high-and medium-density development can support and reinvigorate regional activity centers, while appropriate medium-and low-density infill can complement the scale and character of neighborhood activity nodes.



### Guidelines for Review Set 5: Business Centers Building Block

<p><b>LT26.5.1</b></p>	<p>Support development in or adjacent to existing regional and community-level activity centers that will:</p> <ul style="list-style-type: none"> <li>a. Integrate residential and nonresidential land uses and the mix of private and public land uses, including entertainment, recreation, retail, restaurants, offices, libraries, hotels, public meeting facilities, child care, transit facilities, and other services into mixed-use activity centers;</li> <li>b. Reestablish pedestrian connections in the street network, where they have been lost, adjacent to existing regional and community-level activity centers and neighborhood-scaled activity nodes;</li> <li>c. Support alternate modes of transportation;</li> <li>d. Encourage infilling vacant or underutilized parcels adjacent to existing regional and community-level activity centers;</li> <li>e. Provide convenient, comfortable, illuminated, and accessible bus shelters and an attractive pedestrian environment; and</li> <li>f. Support pedestrian and bicycle use by providing clearly marked pathways from adjacent bike routes, public sidewalks, and walkways and separating them from auto traffic access.</li> </ul>
<p><b>LT26.5.2</b></p>	<p>Consider redevelopment, including the demolition of substandard structures, which encourages the assemblage of larger parcels for activity center or node development.</p>
<p><b>LT26.5.3</b></p>	<p>Support neighborhood-scaled activity nodes that are designed to provide direct pedestrian and bicycle connections to the neighborhoods they serve.</p>
<p><b>LT26.5.4</b></p>	<p>Support a mix of commercial, residential, office, governmental, and other service activities at all major employment centers.</p>
<p><b>LT26.5.5</b></p>	<p>Support residential development with densities that complement the size and intensity of the center or node, while providing transitions to lower density residential uses. For example, high-and medium-density development can support and reinvigorate regional activity centers, while appropriate medium-and lower-density infill can complement the scale and character of neighborhood activity nodes.</p>
<p><b>LT26.5.6</b></p>	<p>Consider incentives to encourage the conversion of existing large, underutilized parking areas to other uses conducive to the promotion of activity centers and nodes.</p>
<p><b>LT26.5.7</b></p>	<p>Support environmentally sensitive design that protects the integrity of existing neighborhoods, complements adjacent land uses, and enhances the overall function and visual quality of the street, adjacent properties, and the community.</p>
<p><b>LT26.5.8</b></p>	<p>Support infill and redevelopment projects that reflect sensitivity to site and neighborhood conditions and adhere to relevant site and architectural design guidelines.</p>
<p><b>LT26.5.9</b></p>	<p>Protect established residential neighborhoods by supporting compatible development, which may include other residential, mixed-use infill and appropriate nonresidential uses.</p>
<p><b>LT26.5.10</b></p>	<p>Consider residential development with densities that complement the size and intensity of the center or node, while providing transitions to lower density residential uses. For example, high-and medium-density development can support and reinvigorate regional activity centers, while appropriate medium-and low-density infill can complement the scale and character of neighborhood activity nodes.</p>
<p><b>LT26.5.11</b></p>	<p>Require telecommunications facilities be located, installed, and maintained to minimize visual impact and preserve views. Cabling and fiber optics should be installed underground where possible, and the visual impact of cellular towers should be a prime consideration in the City's acceptance and approval.</p>
<p><b>LT26.5.12</b></p>	<p>Improve the appearance of above-ground utilities and structures and extend access to high-tech wireless communications facilities throughout the city.</p>
<p><b>LT26.5.13</b></p>	<p>Consider incentives and other programs that remove or bring into conformance nonconforming signs, particularly in conjunction with roadway and public works improvements.</p>

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<b>LT26.5.14</b>	Prohibit the relocation of nonconforming signs that have been removed due to construction of roadway and other public works projects.
<b>LT26.5.15</b>	Require nonconforming signs to be removed or brought into conformance as a condition of rezoning, development plan approval, or change in land use.
<b>LT26.5.16</b>	Preserve and strengthen the distinctive physical character and identity of individual neighborhoods and commercial districts in the community.
<b>LT26.5.17</b>	Support land use, transportation, and urban design improvements that will link the Downtown activity center, Fourth Avenue, the Warehouse District, and the University of Arizona and enhance the historic and cultural quality within the greater Downtown. Continue to work with the University of Arizona, private developers, and neighborhood groups to enhance these linkages and Downtown design character.
<b>LT26.5.18</b>	Support strategically located mixed-use activity centers and activity nodes in order to increase transit use, reduce air pollution, improve delivery of public and private services, and create inviting places to live, work, and play.

**Guidelines for Review Set 6: Mixed-use Centers Building Block**

<b>LT26.6.1</b>	<p>Support development in or adjacent to existing regional and community-level activity centers that will:</p> <ul style="list-style-type: none"> <li>a. Integrate residential and nonresidential land uses and the mix of private and public land uses, including entertainment, recreation, retail, restaurants, offices, libraries, hotels, public meeting facilities, child care, transit facilities, and other services into mixed-use activity centers;</li> <li>b. Reestablish pedestrian connections in the street network, where they have been lost, adjacent to existing regional and community-level activity centers and neighborhood-scaled activity nodes;</li> <li>c. Support alternate modes of transportation;</li> <li>d. Encourage infilling vacant or underutilized parcels adjacent to existing regional and community-level activity centers;</li> <li>e. Provide convenient, comfortable, illuminated, and accessible bus shelters and an attractive pedestrian environment; and,</li> <li>f. Support pedestrian and bicycle use by providing clearly marked</li> </ul>
<b>LT26.6.2</b>	Consider redevelopment, including the demolition of substandard structures, which encourages the assemblage of larger parcels for activity center or node development.
<b>LT26.6.3</b>	Support neighborhood-scaled activity nodes that are designed to provide direct pedestrian and bicycle connections to the neighborhoods they serve.
<b>LT26.6.4</b>	Support a mix of commercial, residential, office, governmental, and other service activities at all major employment centers.
<b>LT26.6.5</b>	Support residential development with densities that complement the size and intensity of the center or node, while providing transitions to lower density residential uses. For example, high-and medium-density development can support and reinvigorate regional activity centers, while appropriate medium-and lower-density infill can complement the scale and character of neighborhood activity nodes.
<b>LT26.6.6</b>	Consider incentives to encourage the conversion of existing large, underutilized parking areas to other uses conducive to the promotion of activity centers and nodes
<b>LT26.6.7</b>	Support environmentally sensitive design that protects the integrity of existing neighborhoods, complements adjacent land uses, and enhances the overall function and visual quality of the street, adjacent properties, and the community.
<b>LT26.6.8</b>	Support infill and redevelopment projects that reflect sensitivity to site and neighborhood conditions and adhere to relevant site and architectural design guidelines.

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<b>LT26.6.9</b>	Protect established residential neighborhoods by supporting compatible development, which may include other residential, mixed-use infill and appropriate nonresidential uses.
<b>LT26.6.10</b>	Consider residential development with densities that complement the size and intensity of the center or node, while providing transitions to lower density residential uses. For example, high-and medium-density development can support and reinvigorate regional activity centers, while appropriate medium-and low-density infill can complement the scale and character of neighborhood activity nodes.
<b>Guidelines for Review Set 7: Mixed-use Corridors Building Block</b>	
<b>LT26.7.1</b>	Medium-density (between 6 and 14 units per acre) residential, with greater densities possible in conformance with the FLD provision. Residential development is generally appropriate where primary vehicular access is provided to an arterial or collector street and is directed away from the interior of low-density residential areas. In areas already predominately zoned R-2 additional medium-density residential may be appropriate.
<b>LT26.7.2</b>	High-density (greater than 14 units per acre) residential development is generally appropriate where primary vehicular access is provided to an arterial street and is directed away from the interior of low-density residential areas.
<b>LT26.7.3</b>	Support community commercial and office uses located at the intersections of arterial streets, taking into consideration traffic safety and congestion issues.
<b>LT26.7.4</b>	Support neighborhood commercial uses located at the intersections of arterial streets, arterial and collector streets, or collector street intersections.
<b>LT26.7.5</b>	Support residentially-scaled neighborhood commercial and office uses along collector streets if the building is residentially scaled; the site design is pedestrian-oriented; the use will not generate significant auto traffic.
<b>LT26.7.6</b>	Support the redevelopment and/or expansion of existing strip commercial development that will improve traffic flow, pedestrian mobility and safety, and streetscape quality when: <ul style="list-style-type: none"> <li>a. The project stabilizes and enhances the transition edge when adjacent to existing and future residential uses;</li> <li>b. Primary access can be generally provided from a major street;</li> <li>c. Required parking, loading, and maneuvering can be accommodated on site;</li> <li>d. Screening and buffering of adjacent residential properties can be provided on site;</li> <li>e. Adjacent uses can consolidate design elements, where feasible, such as access points, parking, landscaping, and screening;</li> <li>f. Current or future cross access between parcels and uses can be feasibly accommodated; and,</li> <li>g. Buildings and their associated activities, such as, but not limited to, loading zones and dumpsters, can be oriented away from adjacent residential uses, toward the interior of the site or toward boundaries adjacent to similar uses.</li> </ul>
<b>LT26.7.7</b>	Consider the expansion of commercial areas into adjoining residential areas when logical boundaries, such as existing streets or drainageways, can be established and adjacent residential property can be appropriately screened and buffered. Commercial expansions or consolidations, especially in conjunction with street widening, may be an appropriate means to preserve the vitality of the street frontage and the adjacent neighborhood.
<b>LT26.7.8</b>	Consider public-private partnerships and shared investments in connection with future street projects. When right-of-way acquisition diminishes market viability for affected businesses, expansion to additional parcels to provide consolidated access and improved parking, including shared parking and other site amenities, may be considered.

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<b>LT26.7.9</b>	Support the location of residentially-scaled office uses as a possible alternative to residential uses along major streets when: <ul style="list-style-type: none"> <li>a. The project stabilizes and enhances the transition edge when adjacent to existing and future residential uses;</li> <li>b. Safe and appropriate access generally can be provided from a major street;</li> <li>c. Required parking, loading, and maneuvering can be accommodated on site;</li> <li>d. Screening and buffering of adjacent residential properties can be provided on site;</li> <li>e. Consideration is given to the consolidation of design elements, such as access points, parking, landscaping, and screening; and,</li> <li>f. Consideration is given to accommodating current or future cross access between adjacent parcels and uses.</li> </ul>
<b>LT26.7.10</b>	Consider the conversion of residential structures to nonresidential uses or higher density residential uses where: <ul style="list-style-type: none"> <li>a. The project stabilizes and enhances the transition edge when adjacent to existing and future residential uses;</li> <li>b. Safe and appropriate access generally can be provided from a major street;</li> <li>c. Required parking, loading, and maneuvering can be accommodated on site;</li> <li>d. Screening and buffering of adjacent residential properties can be provided on site;</li> <li>e. Consideration is given to the consolidation of design elements, such as access points, parking, landscaping, and screening; and</li> <li>f. Consideration is given to accommodating current or future cross-access between adjacent parcels and uses.</li> </ul>
<b>LT26.7.11</b>	Support environmentally sensitive design that protects the integrity of existing neighborhoods, complements adjacent land uses, and enhances the overall function and visual quality of the street, adjacent properties, and the community.
<b>LT26.7.12</b>	Support infill and redevelopment projects that reflect sensitivity to site and neighborhood conditions and adhere to relevant site and architectural design guidelines.
<b>LT26.7.13</b>	Protect established residential neighborhoods by supporting compatible development, which may include other residential, mixed-use infill and appropriate nonresidential uses.
<b>LT26.7.14</b>	Consider residential development with densities that complement the size and intensity of the center or node, while providing transitions to lower density residential uses. For example, high-and medium-density development can support and reinvigorate regional activity centers, while appropriate medium-and low-density infill can complement the scale and character of neighborhood activity nodes.

#### Guidelines for Review Set 8: Campus Areas Building Block

<b>LT26.8.1</b>	Support development in or adjacent to existing regional and community-level activity centers that will: <ul style="list-style-type: none"> <li>a. Integrate residential and nonresidential land uses and the mix of private and public land uses, including entertainment, recreation, retail, restaurants, offices, libraries, hotels, public meeting facilities, child care, transit facilities, and other services into mixed-use activity centers;</li> <li>b. Reestablish pedestrian connections in the street network, where they have been lost, adjacent to existing regional and community-level activity centers and neighborhood-scaled activity nodes;</li> <li>c. Support alternate modes of transportation;</li> <li>d. Encourage infilling vacant or underutilized parcels adjacent to existing regional and community-level activity centers;</li> <li>e. Provide convenient, comfortable, illuminated, and accessible bus shelters and an attractive pedestrian environment; and</li> <li>f. Support pedestrian and bicycle use by providing clearly marked pathways from adjacent bike routes, public sidewalks, and walkways and separating them from auto traffic access.</li> </ul>
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<b>LT26.8.2</b>	Consider redevelopment, including the demolition of substandard structures, which encourages the assemblage of larger parcels for activity center or node development.
<b>LT26.8.3</b>	Support neighborhood-scaled activity nodes that are designed to provide direct pedestrian and bicycle connections to the neighborhoods they serve.
<b>LT26.8.4</b>	Support a mix of commercial, residential, office, governmental, and other service activities at all major employment centers.
<b>LT26.8.5</b>	Support residential development with densities that complement the size and intensity of the center or node, while providing transitions to lower density residential uses. For example, high-and medium-density development can support and reinvigorate regional activity centers, while appropriate medium-and lower-density infill can complement the scale and character of neighborhood activity nodes.
<b>LT26.8.6</b>	Consider incentives to encourage the conversion of existing large, underutilized parking areas to other uses conducive to the promotion of activity centers and nodes.
<b>LT26.8.7</b>	Support environmentally sensitive design that protects the integrity of existing neighborhoods, complements adjacent land uses, and enhances the overall function and visual quality of the street, adjacent properties, and the community.
<b>LT26.8.8</b>	Support infill and redevelopment projects that reflect sensitivity to site and neighborhood conditions and adhere to relevant site and architectural design guidelines.
<b>LT26.8.9</b>	Protect established residential neighborhoods by supporting compatible development, which may include other residential, mixed-use infill and appropriate nonresidential uses.
<b>LT26.8.10</b>	Consider residential development with densities that complement the size and intensity of the center or node, while providing transitions to lower density residential uses. For example, high-and medium-density development can support and reinvigorate regional activity centers, while appropriate medium-and low-density infill can complement the scale and character of neighborhood activity nodes.

#### Guidelines for Review Set 9: Industrial Areas Building Block

<b>LT26.9.1</b>	Evaluated new industrial proposals on a case-by-case basis according to the following criteria: <ul style="list-style-type: none"> <li>a. Convenient access to highway, rail, or air services and routes;</li> <li>b. Nearby public transit to serve employees, especially for proposed large industrial facilities with high numbers of employees;</li> <li>c. Pedestrian access and facilities between bus stops and employment centers;</li> <li>d. Parking, loading, and maneuvering requirements are met on-site; and,</li> <li>e. Architectural detailing provided on all sides of structures and the landscaped setbacks from the front and the rear property lines.</li> </ul>
<b>LT26.9.2</b>	Support the rehabilitation and adaptive reuse of former industrial buildings, such as those in the Warehouse District, and the reclamation and redevelopment of abandoned industrial and/or contaminated sites. Warehouse District land uses and intensities should be compatible with the existing industrial character, historic resources, and current and proposed arts uses.
<b>LT26.9.3</b>	Support environmentally sensitive design that protects the integrity of existing neighborhoods, complements adjacent land uses, and enhances the overall function and visual quality of the street, adjacent properties, and the community.
<b>LT26.9.4</b>	Support infill and redevelopment projects that reflect sensitivity to site and neighborhood conditions and adhere to relevant site and architectural design guidelines.
<b>LT26.9.5</b>	Protect established residential neighborhoods by supporting compatible development, which may include other residential, mixed-use infill and appropriate nonresidential uses.
<b>LT26.9.6</b>	Consider residential development with densities that complement the size and intensity of the center or node, while providing transitions to lower density residential uses. For example, high-and medium-density development can support and reinvigorate regional activity centers, while appropriate medium-and low-density infill can complement the scale and character of neighborhood activity nodes.

**Guidelines for Review Set 10: Houghton Corridor Area and the Southlands Building Blocks**

<b>LT26.10.1</b>	Both the Southlands Area and the Houghton Corridor, as identified on the Opportunities Map are to be master planned for development. The Houghton Road Corridor is anticipated should develop before the Southlands Area due to the Houghton Road improvement project, the proximity of infrastructure along Houghton Road, and the master planning effort already completed for the area.
<b>LT26.10.2</b>	<p>In areas that are not currently developed, support master planned areas that reflect sensitivity to environmental resources and existing residential uses and that is phased or financed to meet infrastructure requirements.</p> <ul style="list-style-type: none"><li>a. Have a minimum overall residential density that can sustain regular transit usage;</li><li>b. Consist of a series of Neighborhoods focused on a neighborhood center, integrated through open space and recreation areas and pedestrian, bike, transit, and the roadway system;</li><li>c. Maximize connectivity of all transportation modes to enhance internal movement within and between individual neighborhoods within the master planning area, including appropriate connections to the regional circulation system;</li><li>d. Provide neighborhoods with clearly defined edges and a center that provides a social focus for the residents, giving them an identity and a sense of place;</li><li>f. Optimize the size of a neighborhood at a quarter mile from the center to the edge;</li><li>g. Provide Neighborhood entry roads that are designed and landscaped as entry statements, terminating at the neighborhood center or taking advantage of existing vistas;</li><li>h. Base the neighborhood circulation system on a hierarchical network of streets, such as a spine road that provides primary access through the neighborhood, and secondary roads, decreasing in size/capacity, which provide multiple routes to diffuse traffic congestion and encourage pedestrian circulation; and,</li><li>i. Provide neighborhoods with a variety of housing types; and include in Neighborhoods, a public space, such as a square or plaza/park area, and incorporate a transit stop as part of its design.</li></ul>
<b>LT26.10.3</b>	Support conservation and efficient water use in an effort to minimize the need for new water sources.
<b>LT26.10.4</b>	Protect historic and archaeological resources.
<b>LT26.10.5</b>	Support methods to conserve and enhance habitat when development occurs.
<b>LT26.10.6</b>	Support the development and management of healthy and attractive urban vegetation.
<b>LT26.10.7</b>	Protect and improve air quality by reducing sources of air pollution.
<b>LT26.10.8</b>	Support an accessible open space system that connects open space in the urbanized area to the surrounding public natural areas.
<b>LT26.10.9</b>	Support an interconnected open space system.
<b>LT26.10.10</b>	Support an interconnected urban trail system throughout the city to meet the recreational needs of pedestrians, bicyclists, and equestrians.



### Other Related Policies

ELEMENT	Policy #	PAGE #
Housing	H1, H2, H7, H9	3.11
Economic Development	ED1–ED4, ED9–ED11	3.20
Public Safety	PS1–PS3, PS9, PS10	3.25
Parks & Recreation	PR1, PR3, PR4, PR6, PR8–PR11	3.30
Arts & Culture	AC1, AC3–AC7	3.37
Public Health	PH1–PH4, PH8	3.41
Urban Agriculture	AG1–AG4	3.45
Education	E2, E3, E6, E7	3.50
Governance & Participation	G1–G12	3.56
Energy & Climate Readiness	EC1–EC4, EC6 -EC9	3.66
Water Resources	WR1, WR2, WR4 -WR8, WR10, WR11	3.71
Green Infrastructure	GI1–GI6	3.77
Environmental Quality	EQ2–EQ5	3.83
Historic Preservation	HP1–HP8	3.93
Public Infrastructure, Facilities & Cost of Development	PI1, PI2, PI4–PI6	3.101
Redevelopment & Revitalization	RR1–RR7	3.108
<b>Land Use, Transportation &amp; Urban Design</b>		<b>3.126</b>

# CHAPTER 4

## PLAN IMPLEMENTATION & ADMINISTRATION

- Plan Implementation ..... 4.2
- Functional & Specific Planning..... 4.3
- Annual Work Program ..... 4.5
- Resources, Partnerships and Innovation ..... 4.6
- Public Participation..... 4.7
- Progress Assessment & Sustainability Indicators..... 4.7
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# PLAN IMPLEMENTATION & ADMINISTRATION

It is the City's intent that Plan Tucson be utilized to its full potential as the overarching long-range planning and sustainability policy document for the City of Tucson. The implementation of Plan Tucson will be overseen by the City Manager's Office to ensure a strong connection between policy making and the daily operations of City departments.

Plan Tucson will provide a framework and impetus for greater interdepartmental communication integrated with regular community engagement in the pursuit of an even more sustainable community with strong, healthy neighborhoods as the foundational unit.

This chapter references and builds on the requirements of Arizona Revised Statutes (A.R.S.) for general plan implementation, setting out a process that will link the general to the specific, the long-term to the short-term, and planning with sustainability. A.R.S. Sections 9-461.06 and 9-461.07 include requirements for the implementation and

administration of a general plan. Specific implementation actions called out in the Statutes include identifying and making recommendations to the Mayor and Council on how to implement the General Plan; providing an annual report on progress made; continuing to educate the public about and promote interest in the Plan; and consulting with the broad range of governmental and nongovernmental stakeholders about the implementation of the Plan. The City also must ensure that the preparation of a consolidated program of proposed public works and disposition of public real property are in conformance with the Plan. The Statutes lay out the

process to adopt and amend a general plan and require that cities define what constitutes a major amendment. More detail regarding the implementation and administration of Plan Tucson is provided in the remainder of this chapter.

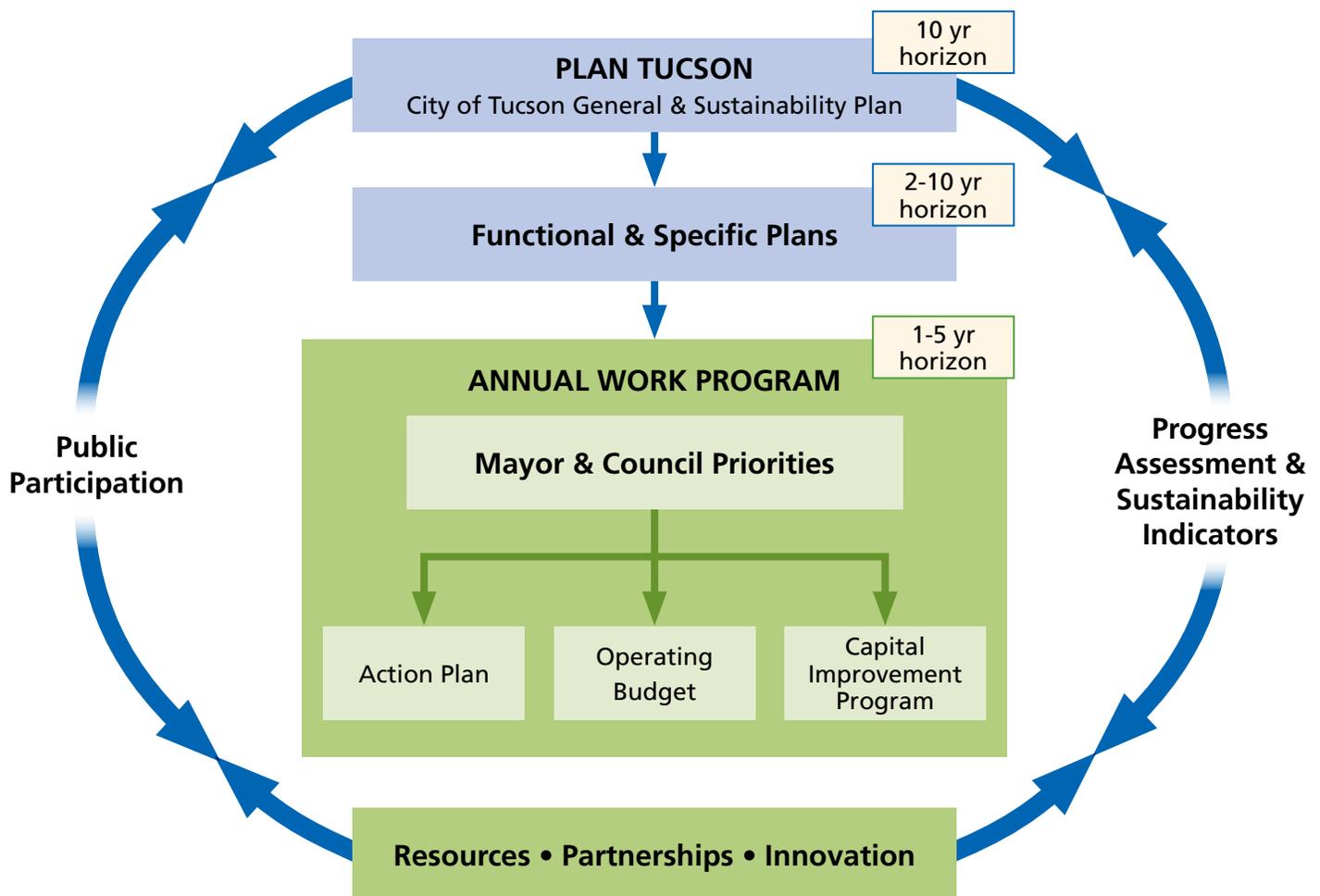
### Plan Implementation

As described in Chapter 2, the sustainability of the community is interwoven with the sustainability of its neighborhoods. Neighborhoods are the smaller systems that together make up the larger system that is Tucson. Successfully implementing Plan Tucson requires the translation of broad policy

direction to specific initiatives, services, and investments that make sense in smaller geographic areas. The framework for the implementation of Plan Tucson is depicted in *Exhibit IA-1*. While the framework is depicted linearly in the graphic, in practice it will be undertaken in an iterative manner within a dynamic and evolving environment.

The primary means of translating Plan Tucson into specific actions are by undertaking functional and specific planning and by preparing an annual work program. These activities must be complemented by regularly assessing progress in implementation of Plan policies and communicating that

EXHIBIT IA-1 Plan Tucson Implementation Framework





progress to the community; tracking the community's progress based on longer term sustainability indicators to determine how Tucson is doing in comparison with other cities; providing regular inclusive public participation opportunities and feedback; leveraging and allocating sufficient resources; developing strong partnerships, and pursuing smart, innovative approaches to achieve desired results.

## Functional & Specific Planning

Plan Tucson provides overarching guidance in the form of goals and policies. The implementation of these goals and policies will be undertaken through more detailed planning. The resulting detailed plans may relate to particular topics, such as financial sustainability or economic development, or to a service or facility, such as public safety, water, roadways, transit, or parks and recreation. These are referred to as “functional plans.” Other detailed plans relate to particular geographic areas of the City such as the downtown, a

neighborhood, an area, or a corridor. These are referred to as “specific plans.” The overarching goal for updating functional and specific plans is to ensure that these more detailed plans are rooted in the more general Plan Tucson goals and policies and that the plans relate to each other with the connections between the plans being clear.

**Functional Plans** As referenced in Chapters 2 and 3, there are many existing functional plans that City elected officials and staff consult in making decisions about water, transportation, roadway design, sustainability measures, and other matters. For example, the Mayor and Council recently approved the Economic Development Strategic Priorities Plan, which helped inform the Plan Tucson Economic Development policies presented in Chapter 3. Additionally, there are Plan Tucson policies that are anticipated to be the catalyst for new and updated functional plans. The Parks and Recreation Department, for instance, intends to update its Strategic Plan after Plan

Tucson is finalized to ensure that Parks and Recreation strategies are consistent with Plan Tucson goals and policies.

**Specific Plans** The Opportunity Areas Map presented in Chapter 3 under Land Use, Transportation, and Urban Design, depicts general locations and types of future development. More detailed planning within specific geographic areas will complement the Opportunity Areas Map by translating Plan Tucson goals and policies into actions and land use guidance that relates to the needs, character, environmental conditions, and other factors of specific geographic areas of the community. Specific plans, which are addressed in A.R.S. Sections 9-461.08, 9-461.09, and 9-461.10, provide more detailed planning to allow systematic implementation of the General Plan through the use of detailed policy direction, in some cases at the parcel level, for smaller geographic areas of the City. In addition to recommending appropriate locations for different land use types, specific plans guide the location of buildings and other improvements with respect to existing rights-of-way; the treatment of floodplains, washes, and other amenities; the placement of public facilities; and other issues appropriate to the area covered by the specific plan. Specific plans may be adopted or amended by a majority of the Mayor and Council after public hearings by the Planning Commission and the Mayor and Council.

Currently 53 specific plans make up a quilt-like pattern across the city. These specific plans take the form of Neighborhood Plans, Area Plans, and Subregional Plans. The earliest plan was adopted in 1970 (Pullman Neighborhood Plan) and the most recent in 2009 (Miles Neighborhood Plan) with the majority adopted in the mid-

1980s. Many of these plans have served neighborhoods well as they have guided rezoning cases; provided direction for Neighborhood Associations; and been used in seeking funding for neighborhood improvements, capacity building, and other activities. This current specific plan structure also presents challenges. For example, some portions of the City have no specific plan coverage; density definitions vary in some plans; and changes in the physical make-up of the City are not reflected in some of the more dated plans. Because updating and managing the current number of specific plans is a resource intensive process, most plans will need to remain in an as-is state unless a more efficient and simplified method of undertaking specific planning is pursued.

Currently the City's specific plans are largely focused on land use. Most do not address infrastructure and service issues in a substantive way. For example, the current practices of preparing functional plans by City departments (such as corridor plans or parks and open space plans) do not have a formal connection to the preparation of specific plans. This results in an inefficient and disjointed patchwork of plans in which community and neighborhood needs are not fully understood or addressed. A key theme throughout Plan Tucson is the interrelationship of the elements addressed in the Plan. That is, that while elements are addressed separately, the community benefits from recognition of their interrelatedness, not just rhetorically but in practice. To translate this concept of element interrelatedness into meaningful outcomes for neighborhoods will require the development of updated specific plans that address the range of elements in Plan Tucson and provide a mechanism for ongoing oversight and updating.

### Updating Specific Plans Through

**“Planning and Service Areas”** Plan Tucson Policy LT-25, included in Chapter 3 under Land Use, Transportation, and Urban Design, calls for “coordinated land use, infrastructure, and public service planning for ‘planning and service areas’, taking into account social, economic, and environmental needs; particular geographic attributes; existing specific plans; and the Plan Tucson Opportunity Areas Map.” Taking action to pursue this policy provides an opportunity to update the City’s specific plans while addressing the shortcomings of the current specific plan structure.

The “planning and service area” approach to updating specific plans will require research and inclusive, interactive public participation to define the process for preparing and implementing these plans before substantive work on specific plans would begin. The starting point for the creation of “planning and service area” plans will be the existing specific plans within an area (Neighborhood, Area, Subregional Plans), as well as applicable functional and policy-guidance plans. The goals, policies, and land use designations in these existing plans that are still relevant and supported will be transferred to the “planning and service area” specific plans.

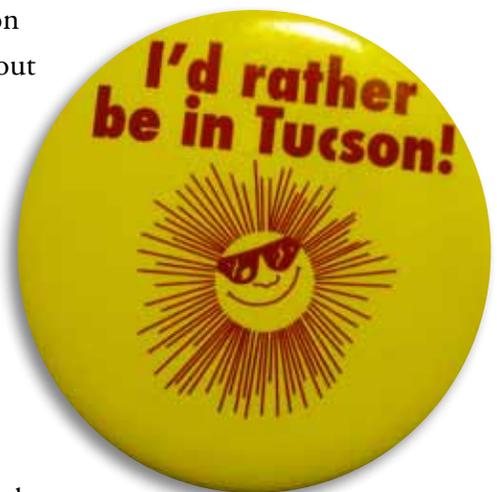
Goals for the “planning and service area” approach include:

- Translating the general policies in Plan Tucson to specific guidance and strategies within smaller geographic areas of the city
- Ensuring all of the city is covered by an updated specific plan
- Integrating sustainability principles into the planning process
- Expanding the scope of specific plans to be more integrative and holistic, addressing services and infrastructure in addition to land use

- Establishing a manageable number of specific plans to allow for more regular updates and more weight in outcomes for specific geographic areas
- Providing more consistency in specific plan content, format, and terminology
- Ensuring regular inclusive public involvement by stakeholders, including residents, businesses, and public institutions, within a “planning and service area” in the development of a specific plan for that area
- Establishing a structure for ongoing public guidance and oversight of specific plan implementation
- Providing greater clarity about the type and location of development
- Ensuring greater understanding of the varying needs in different parts of the city and tailoring responses to meet those needs
- Aligning City staff and resources to support the implementation of specific plans

### Annual Work Program

In addition to translating Plan Tucson into more detailed functional and specific plans, development of the Annual Work Program will connect Plan Tucson’s long-term vision with priorities and the deployment of City resources on a yearly basis. The first step in the development of the Annual Work Program is the establishment of Mayor and Council priorities for intermediate (1-3 years) objectives on which City government will focus. Once established, these priorities will inform the development of the Operating and Capital Budgets and the allocation of resources on an annual basis. An Action Plan will be developed that will highlight the specific strategies,



investments, programs, and services being implemented to achieve Plan Tucson goals and policies and Mayor and Council priorities. These components of implementation are described further below.

**Mayor and Council Priorities** While Plan Tucson provides the long-range vision for the City, the Mayor and Council will need to set shorter term priorities for the Plan's implementation, taking into consideration the current environment, pressing issues, and resource levels. This direction by the governing body will guide the development of the Action Plan and the Operating Budget/Capital Improvement Program.

**Action Plan** The Action Plan is proposed as a new document that will serve as a companion document to the Operating Budget and Capital

Improvement Program highlighting the significant initiatives, programs, and projects City staff will implement in the short term to achieve the Mayor and Council's priorities and Plan Tucson goals and policies. The Action Plan will include different types of actions, ranging from physical improvement projects to preparation of detailed plans to service delivery to development of regulations and ordinances. While the Action Plan will be updated annually, in some cases actions will take more than a year to complete and will appear in consecutive Action Plans until they have been accomplished.

### **Operating Budget & Capital**

**Improvement Program** Mayor and Council priorities and Plan Tucson goals and policies are operationalized through the annual budget process in which resources are allocated to specific services, programs, and projects. The Action Plan will create a linkage between these budget documents, the Mayor and Council priorities, and the Plan Tucson goals and policies. The Operating Budget is the City's annual financial plan detailing how project revenues will be expended for operations within departments, divisions, and program and service areas. The Capital Improvement Program (CIP) is a 5-year plan that identifies the capital projects and significant equipment and infrastructure investments that will be made by the City, along with the projected costs and funding sources for each project.

### **Resources, Partnerships and Innovation**

The City's ability to implement Plan Tucson through the mechanisms described in this chapter is highly dependent on having the right foundational elements in place. The level of resources available to dedicate



to the implementation of Plan Tucson is an obvious factor that will impact how quickly and to what degree actions and investments can be pursued. The recent economic downturn and slow economic recovery have diminished City resources, and the current priority for resources is the incremental restoration of basic municipal services such as street paving, park maintenance, and public safety staffing. Clearly, the City cannot implement Plan Tucson entirely on its own. Effective partnerships between the City and other governmental agencies, non-profit organizations, neighborhoods, and businesses are critical to the success of this endeavor and can help leverage the resources and expertise that will be needed to achieve Plan Tucson goals.

Plan Tucson implementation must be done smartly and innovatively to ensure that resources are used as efficiently as possible and best known practices and technologies are being employed to produce desired results. “Smart Cities” is a growing movement that encourages a broad, integrated approach to improving the efficiency of city operations, the quality of life for citizens, and growing the local economy. Greater service demands and infrastructure needs coupled with tightened budgets mean solutions have to be smarter, and address the city as a whole. Some of the elements of Smarter Cities include having the tools to analyze data for better decisions, anticipating problems to resolve them proactively, and coordinating resources to operate effectively. As an example, Tucson Water was recently selected for an IBM Smarter Cities Challenge Grant that will use data and automation to increase water reliability and let customers monitor their water use in real-time to promote conservation. When information can be automated, analyzed and presented more effectively,

the result is better decision making, reporting, and insight. New Smart Cities collaboration tools, technologies, and strategies will provide valuable guidance for Plan Tucson implementation.

## Public Participation

The Governance and Participation policies, presented in Chapter 3, will provide guidance for public involvement in Plan Tucson implementation.

Translating Plan Tucson goals and policies into meaningful actions and investments appropriate to meet the distinct needs in various parts of the city will require an extensive public involvement process, including residents, businesses, institutions, not-for-profit governmental organizations, and other governmental agencies. There will be many avenues for public participation in Plan Tucson implementation, ranging from engagement in the “planning and service area” process described earlier in this chapter, to public hearings that are held before the Planning Commission and Mayor and Council, to websites and listservs for sharing of information and providing avenues for input.

## Progress Assessment & Sustainability Indicators

Measuring progress toward fulfilling Plan Tucson goals and policies is a critical component of successful implementation. Weekly Mayor and Council agenda materials will be reformatted to include a section on the linkage of the item to Plan Tucson goals and policies. Monthly reporting by City departments will also describe efforts being made to implement Plan Tucson. This information will be assembled into an Annual Progress Report on Plan Tucson implementation.

Another important element in the assessment of and reporting on progress

in achieving the goals and policies of Plan Tucson is the identification and monitoring of key indicators. These indicators, which will be part of the Annual Progress Report, can provide a measure of how successfully policies have been implemented and what level of outcome has been reached. Locally-derived indicators are important for effectively communicating to the public how implementation of Plan Tucson is improving conditions for residents. The long-term prosperity of Tucson also requires that the community's quality of life rates competitively with other communities. Emerging national sustainability rating systems, such as STAR, provide a mechanism for communicating more clearly to existing and prospective residents and businesses the benefits of living in Tucson, and a basis for understanding how well the community is growing and improving relative to other cities.

The STAR sustainability rating system, which was introduced in Chapter 2, comprehensively rates a community's sustainability across 44 specific objectives. These objectives call for clear outcomes that move a community toward the

larger goals of social, economic, and environmental sustainability. *Exhibit IA-2*, presented at the conclusion of this chapter, provides a sustainability matrix that blends local values and vision with the STAR objectives to create a series of sustainability outcomes for the community. These outcomes are intended to describe the way Tucsonans think the community should work, the basic assumptions Tucsonans want to be able to make about life in Tucson, and an expression of the high ethical standards to which Tucsonans wish to hold themselves in this community. Together the outcomes define an ambitious future for Tucson that contemplates the achievement of far-reaching economic prosperity, social equity, and environmental integrity.

In practice, the sustainability of day-to-day actions is difficult to measure. Individual decisions must balance concerns relating to all elements of sustainability, and in practice, regardless of how well intended, individual actions will promote some areas of sustainability and ignore or even hinder other areas. It is the accumulation of outcomes over time that determines the success of a community's efforts to become more



sustainable. As a result, the second aspect of this sustainability framework is a set of indicators by which progress can be assessed.

*Exhibit IA-2* also shows how the Plan Tucson goals and policies support progress in community sustainability. The strong alignment of these goals and policies with the Sustainable Community Outcomes demonstrates that Plan Tucson serves not only as a framework for improving the community's quality of life, but also as a platform for advancing Tucson's sustainability relative to other communities. Refining the indicators and undertaking annual monitoring of how the community is performing relative to the indicators will provide a meaningful gauge of the degree to which progress toward community sustainability is being made.

## Plan Adoption & Amendment

The adoption or readoption of a general plan or major amendment to an adopted plan is subject to public participation procedures adopted by Mayor and Council as required under A.R.S. Section 9-461.06.C, and shall be approved by an affirmative vote of at least two thirds of the members of the City of Tucson Mayor and Council as specified in A.R.S. Section 9-461.06.H. Prior to approval by the Mayor and Council, the Planning Commission shall hold at least two public hearings in two different locations before forwarding a recommendation to the Mayor and Council. Additionally, the Mayor and Council shall hold at least one public hearing to consider the matter. Public and jurisdictional notice of the public hearings shall comply with all applicable State and City regulations.

Following Mayor and Council's approval, the adoption, the readoption,

or major amendment of the General Plan must be ratified by Tucson's registered voters at least once every ten years as required under A.R.S. Section 9-461.06.K. This provides the opportunity for the City to assess progress that has been made toward meeting goals and policies of the existing General Plan and to respond to a changing community.

### Major Amendments A.R.S.

Section 9-461.06.L defines a major amendment as a "substantial alteration of the municipality's land use mixture or balance as established in the municipality's general plan land use element." A major amendment to Plan Tucson is necessary when:

1. The site of a development proposal is not covered by an adopted specific plan;
2. The Opportunity Areas Map Building Block designation for the site as depicted on the Opportunity Areas Map must be changed to maintain consistency with the development proposal; and
3. The proposed development site consists of 65 or more acres.

Major amendments are considered on an annual basis by the Mayor and Council and require a two-thirds-majority approval. State law prohibits major amendments to the General Plan from being enacted as emergency measures. Major amendments are subject to public referendum.

**Minor Amendments** All amendments to Plan Tucson that are not a new or readopted general plan or a major amendment are considered minor amendments and shall be processed in accordance with state and City of Tucson regulations concerning timing, notice, public hearing, and action.

**EXHIBIT IA-2 Sustainability Indicators Matrix**

**THE SOCIAL & ECONOMIC ENVIRONMENT**

Plan Tucson Goals	Plan Tucson Policies	STAR Sustainability Metrics	Long-term Community Sustainability Outcomes
<b>HOUSING</b>			
The City strives for a mix of well-maintained, energy-efficient housing options with multi-modal access to basic goods and services.	H1, H2, H3, H4, H5, H6, H7, H8, H9, E7	Percent of income spent on housing and transportation costs; creation of new affordable housing; preservation of existing affordable housing	An adequate and diverse supply of location-efficient and affordable housing options for all residents.
<b>ECONOMIC DEVELOPMENT</b>			
The City strives for a stabilized local economy with opportunities for diversified economic growth supported by high-level, high-quality public infrastructure, facilities, and services.	ED2, ED7	Number of businesses; annual sales from businesses; percentage of residents employed	Economic prosperity and stability through the retention, expansion, and support of existing businesses.
	ED7, ED9	Community economic self-reliance; amount of deposits at local banks	Community self-reliance and a robust localized economy through increased demand for locally-produced goods and services, creation of local supply chains, and development of local resources, such as water, for the benefit of residents.
	ED4, ED8	Number of new businesses, annual sales, and total employment in targeted industry sectors	Local competitiveness is maximized through the strengthening of existing industry clusters, and economic leakage is minimized through establishment and growth of new industry sectors that benefit from the region’s unique local resources.
	ED5, AC9	Number of new businesses, annual sales, and total employment in targeted industry sectors	The advanced training and higher education community catalyzes economic growth through technological research and development; technology transfer and sharing of cost and risk of investments in innovation; development of intellectual capital and entrepreneurial spirit; and preparation of local workers with the skills needed for innovation.
	ED6, E5	Workforce training outcomes; post-secondary educational attainment	Coordination between private and public sector partners provides opportunities to all residents for occupational mobility, improved workplace performance, and continued workforce participation throughout life and market transitions.
The City strives for a community that is healthy physically, mentally, economically, and environmentally.	ED11	Median household income; percentage of household incomes that meet or exceed the living wage standard	Every worker earns a living wage, receives affordable benefits, has access to programs that support families, and can gain upward economic mobility through improved productivity in a safe and non-discriminatory workplace environment.

Plan Tucson Goals	Plan Tucson Policies	STAR Sustainability Metrics	Long-term Community Sustainability Outcomes
The City strives for a reputation as a national leader in the development and use of locally renewable energy technologies, water conservation, waste diversion and recovery, and other emerging environmentally-sensitive industries.	ED3	Market demand for green products and services	Existing and new green industries take full advantage of the region's renewable energy assets; maximize investment in and use of the region's intellectual and human capital; and spur technological innovation, resulting in a sustained increase in green jobs.
<b>PUBLIC SAFETY</b>			
The City strives for a safe community and secure neighborhoods.	PS1, PS4, PS5, PS6, PS8, PS10, ED1, PR7, E7	Violent crime rates	Government and empowered residents collaborate to prevent and reduce crime and violence, foster pro-social behaviors such as non-violent conflict resolution, and promote a sense of increased personal safety.
The City strives for a safe community and secure neighborhoods.	PS2, PS3, PS7, PS9, PH6	Quality of fire protection; emergency response times; perceptions of safety; risk from hazard threats	Preventative and collaborative approaches are used to minimize emergency incidents; reduce the vulnerability of all community members to human and natural hazards; and respond to hazards and crises in a manner that is quick, effective, and expedites recovery.
<b>PARKS AND RECREATION</b>			
The City strives for a community that is healthy physically, mentally, economically, and environmentally.	PR1, PR2, PR3, PR4, PR5, PR6, PR9, PR10, PR11, PR12, ED1, GI3	Acres of parkland per 1,000 residents; percentage of households located within a ½-mile walk distance of a public space or park; percentage of households located within 3 miles of an off-road trail; percentage of residents that visit a park at least once a year; residents' perceptions regarding the quality of the community's public space and park system	An active network of equitably and conveniently accessible parks, trails, and public spaces provides multiple services and uses, and contributes to improved mental and physical well-being, and environmental quality.
<b>ARTS AND CULTURE</b>			
The City strives for a community whose economic stability and sense of place reflects its commitment to arts and culture and its care for the natural environment.	AC1, AC2, AC3, AC4, AC5, AC6, AC7, AC8, ED1, ED5, E2	Number of and annual sales in the creative industries; attendance and participation in arts and cultural events; access to free community venues	A broad range of arts, cultural, and heritage resources and activities reflect and promote the social, cultural, and economic diversity of the community and encourage participation, self-expression, and community cohesion.
<b>PUBLIC HEALTH</b>			
The City strives for a community that is healthy physically, mentally, economically, and environmentally.	PH3, PH4, PH5, PH6, E7	Health outcomes; health risk factors; access to health care	An accessible and equitable local health system maximizes personal and community health, and emphasizes preventative care by promoting healthy lifestyles and improving the environments in which people live and work.

Plan Tucson Goals	Plan Tucson Policies	STAR Sustainability Metrics	Long-term Community Sustainability Outcomes
The City strives for a community that is healthy physically, mentally, economically, and environmentally.	PH1, PH2, PH7, PH8, PR3, PR5, PR7, AG3, G13	Percentage of kids and adults that are physically active	Every resident has fundamental knowledge of, and physical and economic access to, healthy living opportunities that promote an active lifestyle, good nutrition, and physical wellness.
<b>URBAN AGRICULTURE</b>			
The City strives for a sustainable urban food system.	AG1, AG2, AG3, AG4, PH2, LT10	Fresh food produced locally; access to low-cost healthy food; nutrition	A collaborative network integrates sustainable food production, processing, distribution, consumption, and waste management in order to create a more locally based, self-reliant food economy where all people, at all times, have physical and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences.
<b>EDUCATION</b>			
The City strives for an educated citizenry.	E1, E3, E4, E5, E6, E7, ED1	Reading proficiency; high school graduation rates	Equitable and lifelong educational attainment exists for all residents through a strong public school system, quality educational facilities, and a wide range of learning opportunities that are accessible and appropriately serve all segments and all ages of the populations.
<b>GOVERNANCE AND PARTICIPATION</b>			
The City strives for timely, accessible, and inclusive processes to actively engage a diverse community in City policy, program, and project planning.	G4, G5, G6, E7	Percentage of registered voters; percentage of residents that volunteer; civil and human rights complaints are investigated and violations redressed; diverse composition of boards and commissions; social; cultural diversity events are held	Fair treatment and meaningful involvement is available for all people, regardless of any social or cultural distinction, by ensuring that all community members have: the skills, resources, and assurances needed to participate in decisions affecting individual and community well-being; equitable access to participation in the civil and political life of the community; and meaningful civic participation opportunities.
The City strives for a community where no one lives in poverty.	H8, H10, E7	Percentage of people in who need assistance obtaining human services; percentage of residents living below the poverty line	High quality human services programs are available and utilized to guarantee basic human needs are met so that all residents can lead dignified, economically stable and secure lives.
The City strives for timely, accessible, and inclusive processes to actively engage a diverse community in City policy, program, and project planning.	G1, G2, G3, G7, G8, G9, G10, G11, G12, E7, WR6, WR7, WR10, EQ7, PI2, PI3, PI6, RR7, LT2	Residents believe they are able to have a positive impact on their community	City decisions and actions are transparent to the community, collaborative, and supportive of regional goals; and the City is responsive to public values by openly communicating public policy, making all policy decisions in an open and accessible format, disclosing information in a timely and easy to understand manner, and demonstrating the responsible use of tax dollars to advance stated community goals and priorities.

### THE NATURAL ENVIRONMENT

Plan Tucson Goals	Plan Tucson Policies	STAR Sustainability Metrics	Long-term Community Sustainability Outcomes
<b>ENERGY AND CLIMATE READINESS</b>			
The City strives for a reduction in the community's carbon footprint and greater energy independence.	EC1, EC2, EC4, EC5, EC6, EC7, EQ7, LT9, LT13, LT14, LT17	Annual amount of greenhouse gas emissions reductions	Community carbon neutrality is reached by reducing, to the extent possible, the amount of greenhouse gases emitted, and addressing the remainder of those emissions through carbon offsets, while promoting economic vitality and protecting human health.
The City strives for a reduction in the community's carbon footprint and greater energy independence.	EC4, EC5, EC6, EC7, E7	Percentage of local energy supply from renewable energy sources; percent ownership of alternative fuel vehicles by residents	Community-wide energy use is reduced to the extent possible, and remaining energy needs are met using renewable and environmentally-benign energy sources.
The City strives for a reduction in the community's carbon footprint and greater energy independence.	EC4, LT9, LT13, LT14, LT17	Annual vehicle miles traveled	Usage of low-carbon and highly-efficient transportation, fleet, and fuel options is maximized and annual vehicle miles traveled is minimized.
The City strives for a reduction in the community's carbon footprint and greater energy independence.	EC1, EC2	Average energy use intensity and water use intensity of buildings; percentage of buildings with a green building certification; number of indoor air quality complaints	Local government and private buildings are constructed to a healthy, energy positive standard by reducing the use of resources, minimizing the negative impacts on the environment, and improving building performance and indoor environmental quality throughout a building's life cycle – from siting to design, construction, operation, maintenance, renovation, and demolition.
A community that is resilient and adaptive to climate change.	EC3, EC8, EC9, E7, WR11	Level of community vulnerability to climate change	This climate-resilient community responds to climate-related changes or stress in a positive and beneficial manner, and is able to maintain core functions and values despite those stresses.
Sound, efficient, ecological policies and practices in government and in the private sector.	EC1, EC6, E7, WR3, EQ7, PI2, PI3	Amount of energy and water use by public infrastructure	Water, energy, and other resource use are minimized in the development, operation and maintenance of local infrastructure.
<b>WATER RESOURCES</b>			
A secure, high quality, reliable, long-term supply of water for humans and the natural environment.	WR1, WR2, WR3, WR7, WR9, PI4	Compliance with EPA water quality standards; compliance with National Pollutant Discharge Elimination System permit	Significant and sustained reductions in community-wide potable water use are achieved, and the capture of rainwater and storm water and the reuse of gray water and reclaimed water, are maximized to offset potable water use.

Plan Tucson Goals	Plan Tucson Policies	STAR Sustainability Metrics	Long-term Community Sustainability Outcomes
A secure, high quality, reliable, long-term supply of water for humans and the natural environment.	WR4	Height of the water table	The hydrological integrity and availability of water in the natural environment is protected and restored in order to preserve and enhance riparian habitats.
<b>GREEN INFRASTRUCTURE</b>			
Abundant and appropriate use of native plants and trees. A network of healthy, natural open space managed for multiple benefits.	G11, G12, G13, G14, G16, WR8, EC3, E7, RR5, LT10, LT12	Percentage of land with protected vegetated surfaces; percentage of population living within a 1/2-mile walk from green infrastructure features	A strategically planned and managed green infrastructure network, emphasizing the protection and use of native plants and trees, that conserves ecosystem values and functions and provides associated benefits to human populations by providing urban heat island mitigation, storm water management, and air quality benefits.
A network of healthy, natural open space managed for multiple benefits.	G12, G15, WR4, ED5, LT1, LT20, LT21	Rate of spread of existing invasive species into priority natural systems areas; presence of new invasive species; use of best land management practices; acres of land conserved in priority areas; natural system connectivity; acreage of land restoration	Critical community natural resources are protected through acquisition, conservation, and management of important landscapes in perpetuity, and through restoration of habitat and natural ecosystems, to ensure their resilience and adaptability, and ability to continue to provide critical ecosystem services of clean water and air, food, shelter, and public safety.
<b>ENVIRONMENTAL QUALITY</b>			
A comfortable, attractive, and pollution-free environment.	EQ2, EQ3, WR5	Compliance with air quality standards; annual trends in the Air Quality Index	The health of all residents is supported and not degraded by environmental conditions, and human activities improve rather than degrade the quality of air, water, soil, and other elements of the natural system.
A comfortable, attractive, and pollution-free environment.	EQ1, EQ6, E7	Reduce and reuse material waste produced in the community.	The waste stream going to landfills is eliminated through reduced waste generation, increased recycling, and increased diversion of useful materials from the waste stream for reuse.

## THE BUILT ENVIRONMENT

Plan Tucson Goals	Plan Tucson Policies	STAR Sustainability Metrics	Long-term Community Sustainability Outcomes
<b>HISTORIC PRESERVATION</b>			
A community that respects and integrates historic resources into the built environment and uses them for the advancement of multiple community goals.	HP1, HP2, HP3, HP4, HP5, HP6, HP7, HP8, H4, H5, PR8, E7, LT1	Number of historic districts; annual number of eligible structures and sites designated, rehabilitated, or converted through adaptive reuse; annual number of historic structures retrofitted or with energy efficiency or clean energy technologies	Historic buildings, structures, sites, neighborhood districts and cultural landscapes are preserved and reused, enabling retention of local, regional, and national history and heritage, reinforcement of community character, and resource conservation.
<b>PUBLIC INFRASTRUCTURE AND FACILITIES</b>			
Well-maintained public facilities and infrastructure that support coordinated cost-effective service delivery for current and future residents.	PI1, PI5, PI6, EQ3, EQ7, PR8, WR10, RR5, RR6	Access of residents of diverse income levels and race/ethnicity to community facilities, services, and infrastructure; clean-up of contaminated sites	Public services, benefits, and infrastructure developments are provided fairly across the community, all residents are provided protection from environmental and health hazards, and past disinvestment and disproportionate exposures to hazards are redressed.
Strategic public and private investments for long-term economic, social, and environmental sustainability.			
<b>REDEVELOPMENT AND REVITALIZATION</b>			
An urban form that conserves natural resources, improves and builds on existing public infrastructure and facilities, and provides an interconnected multi-modal transportation system to enhance the mobility of people and goods.	RR1, RR2, RR3, RR4, RR5, RR6, PI2, ED10, LT19	Percentage of new development in locally-designated infill and redevelopment areas; percentage of new housing units that utilized existing water and sewer mains and did not require extending or widening public roadways	New growth is focused in infill and redevelopment areas that do not require the extension of water, sewer, and road infrastructure or facilitate sprawl; emphasizing land use patterns that improve community health and safety, increase equity, enhance environmental quality, and provide economic benefits.
<b>LAND USE, TRANSPORTATION, AND URBAN DESIGN</b>			
An urban form that conserves natural resources, improves and builds on existing public infrastructure and facilities, and provides an interconnected multi-modal transportation system to enhance the mobility of people and goods.	LT1, LT3, LT4, LT5, LT6, LT7, LT8, LT9, LT10, LT18, LT19, LT20, LT21, LT23, LT24, EQ4, EQ5, PH1, HP7	Percentage of housing within ¼-mile or ½-mile walk distance of transit stops; residential housing density in urban core; employment density; diversity of land uses; transit availability; walkability; urban design standards for density (e.g., setbacks); daytime ambient noise levels; amount of light glare and/or light trespass; visibility of stars	Development is concentrated in compact, human-scaled, walkable centers and neighborhoods that: connect to transit, offer diverse uses and services, provide housing options for families of all income levels, and minimize the indirect impacts of the built environment on the integrity of ecological systems, dark skies, water consumption, and public health.

Plan Tucson Goals	Plan Tucson Policies	STAR Sustainability Metrics	Long-term Community Sustainability Outcomes
<p>An urban form that conserves natural resources, improves and builds on existing public infrastructure and facilities, and provides an interconnected multi-modal transportation system to enhance the mobility of people and goods.</p>	<p>LT1, LT9, LT11, LT12, LT13, LT14, LT15, LT16, LT22, LT25, ED5, PR9, PH1, PH4, PH8</p>	<p>Mode split; percent of income spent on transportation costs; pedestrian and bicyclist fatalities; vehicle miles traveled</p>	<p>Safe, affordable, diverse, and efficient mobility options are accessible to all residents, with emphasis on walking, bicycling, and mass transit that reduce vehicle miles traveled.</p>
<p>An urban form that conserves natural resources, improves and builds on existing public infrastructure and facilities, and provides an interconnected multi-modal transportation system to enhance the mobility of people and goods.</p>	<p>ED1, ED10</p>	<p>Residential housing density in urban core; employment density; diversity of land uses; transit availability; walkability; urban design standards for density (e.g., setbacks).</p>	<p>This is a centered city with a vibrant downtown core that: is an appealing and valued community asset; embodies the City’s economic heart and cultural soul; represents a shared community vision; attracts residents and visitors alike; reflects genuine partnership and coordination between municipal, business, non-profit, and neighborhoods; and is supported by appealing gateways and corridors that connect with other major activity centers.</p>

# GLOSSARY

**ACTIVE RECREATION** Structured individual or team activity that requires the use of special facilities, courses, fields, or equipment.

**ADAPTIVE REUSE** The process of adapting old structures for new purposes.

**AEROALLERGEN-RELATED RESPIRATORY ILLNESS** Health impacts from smoke, particulate matter, and pollens.

**AMBIENT TEMPERATURE** Non-specific phrase used to describe the outside temperature.

**BEST ENERGY EFFICIENCY TECHNOLOGIES** Technologies and research and development activities that can reduce energy consumption and energy waste in commercial and residential buildings through the use of improved appliances; windows, walls, and roofs; space heating and cooling; lighting; and whole building design strategies.

**BLIGHTED AREA** An area where a majority of buildings are in a deteriorated condition.

**BLUE BARREL PROGRAM** City of Tucson residential and small business program for curbside recycling.

**BROKEN WINDOW SYNDROME** A term coined by James Wilson and George Kelling (Atlantic Monthly, 1982) to refer to the slow decline of a neighborhood if a lack of care or crime becomes the norm. "If a broken window is not fixed, then the damage or vandalism becomes the social norm in the neighborhood. Individuals look for other signals to determine what the social norms allow them to do and what the risk is of getting caught violating those norms."

**BROWNFIELDS** Abandoned or idled, industrial and commercial facilities/sites where expansion or redevelopment is complicated by real or perceived environmental contamination in urban, suburban, or rural areas.

**CAPITAL IMPROVEMENT PROGRAM (CIP)** Identifies infrastructure and facility projects including funding amounts and sources, to be undertaken by the City during a five-year planning horizon.

**CARBON-BASED ENERGY** Fossil fuels that have their origin in ancient carbon fixation and contain carbon that has been "out" of the carbon cycle for a very long time.

**CARBON FOOTPRINT** Describes the total amount of greenhouse gases that are emitted as a result of the actions of an individual, a city, or any other unit. A carbon footprint is a function of all the energy used by an individual, business, event, or community for heating and cooling, appliances, vehicles, and embedded energy in everything purchased and consumed. See definition of Greenhouse Gas Emissions for further explanation.

**CARBON NEUTRALITY** (or net-zero carbon footprint), refers to achieving net-zero greenhouse gas emissions by balancing the amount of greenhouse gases released by a community with an equivalent amount that is either sequestered or offset.

**CARBON OFFSETS** Created when renewable energy, energy efficiency, or sequestration projects result in reductions in greenhouse gas emissions. These reductions are quantified and a "credit" is generated that can then be purchased by other greenhouse gas emitters, such as cities, businesses, or individuals. One credit, which equates to a metric ton of greenhouse gas emissions, can be used to balance, or offset, a ton of greenhouse gases that are emitted by the purchaser.

**CARRYING CAPACITY** The number of individuals who can be supported in a given area within the limits of existing natural resources, and without degrading the natural, social, cultural and economic environment for present and future generations. Natural carrying capacity of an area can be increased through technology and the importation of resources from other areas. Carrying capacity can also be reduced as a result of degraded air or water quality, declining economic resources, or other changes.

**CERTIFICATES OF PARTICIPATION** An alternative to a government or municipal bond in which an investor buys a share in the improvements or infrastructure the government entity intends to fund.

**CITY OF TUCSON GENERAL OBLIGATION**

**BONDS** Bonds that are backed by the “full faith and credit” of the City with no specific revenue stream identified as the source of funds. The issuance of general obligation bonds must be approved by voters.

**CLIMATE CHANGE MITIGATION &**

**ADAPTATION PLAN** A document that details methods to reduce greenhouse gas concentrations in the atmosphere by avoiding further emissions from “sources” or by enhancing “sinks,” such as forests, that absorb and store carbon from CO<sub>2</sub>.

**COMMERCIAL RAINWATER HARVESTING**

Capturing and storing rainfall by commercial entities to irrigate landscape plants or provide other non-potable sources of water.

**CULTURAL RESOURCES**

Archaeological, traditional, and built environment resources, including but not necessarily limited to buildings, structures, objects, districts, and sites.

**DARK SKIES ORDINANCE** Outdoor lighting standards that reduce glare, light trespass, and skyglow to keep the night skies dark for astronomical pursuits.

**DEVELOPMENT IMPACT FEES** Fees charged to new development as a means of paying for the facilities and infrastructure needed to serve new development. Impact fees are typically issued for water, roads, parks, police, fire, and other public facilities.

**ECONOMIC LEAKAGE** A situation in which capital, or income, leaves an economy rather than remains within it. Leakage occurs when income is taken out through the purchase of imports, as opposed to those goods or services being produced and purchased locally. In retail, leakage also refers to consumers who spend money outside of the local market.

**ENERGY POSITIVE** Refers to a building that produces more energy than it consumes, resulting in a net reduction in the systems greenhouse gases accomplished through the sale of that “excess” renewable energy as credits or offsets to other greenhouse gas emitters.

**ENVIRONMENTAL LITERACY** Possessing the knowledge and understanding of a wide range of environmental concepts, problems, and issues.

**GREEN BUILDING PROGRAM** Incorporation of environmental considerations and resource efficiency into every step of the home building

and land development process to minimize environmental impact.

**GREEN INFRASTRUCTURE** Strategically planned and managed networks of natural lands, working landscapes, urban vegetation, and open space that conserve ecosystems, manage stormwater, reduce flood risks, improve water quality and provide recreational, aesthetic and health benefits to people.

**GREENHOUSE GAS EMISSIONS** Any gas that absorbs infrared radiation in the atmosphere. These include, but are not limited to, water vapor, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), ozone (O<sub>3</sub>), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>).

**HABITAT CONSERVATION PLAN (HCP)**

A planning document, required as part of an application to the U.S. Fish and Wildlife Service, that assesses the anticipated effects of proposed impacts on plant or animal species and shows how those impacts will be minimized, or mitigated, and how the HCP is to be funded.

**HABITAT LOSS OR DEGRADATION** An ecosystem that has been dramatically changed by human activities and no longer supports healthy wildlife or plant populations.

**HIGHWAY USER REVENUE FUNDS (HURF)**

A primary source of revenue available to states for highway improvements, new construction and related expenses assessed through fees and charges related to the registration and operation of motor vehicles, and various taxes including on gasoline and vehicle licenses.

**HISTORIC PRESERVATION** Field of practice or research which focuses on tangible heritage, or the legacy and culture inherited from past generations. Historic preservation treats historic buildings, districts, sites of important events, objects, other structures, and archaeological sites as heritage resources which may be eligible for formal designation as historic. Historic significance is defined at the local, state, and/or national level.

**HISTORIC PRESERVATION ZONES** City of Tucson zoning overlays created by a 1972 ordinance for certain designated National Register of Historic Places districts that require compliance with specific development

standards and design guidelines for exterior alterations to existing historic and non-historic buildings and for new construction, including work that does not require a building permit.

**HISTORIC STREETScape** A streetscape at least 50 years old which retains the majority of its historic-age, character-defining features, and conveys the period of development.

**HOUSEHOLD** Consists of all people who occupy a housing unit (house, apartment, group of rooms, or single room intended for occupancy) including related family members and all unrelated people. A person living alone in a housing unit, or a group of unrelated people sharing a housing unit such as partners or roomers, is also counted as a household.

**INDIGENOUS** Originating and living or occurring naturally in an area or environment.

**INTEGRATED WASTE MANAGEMENT** Comprehensive waste prevention, recycling, composting, and disposal program.

**INTERNATIONAL SUSTAINABLE ENERGY STANDARDS** Integrated resource planning, including all new renewable options, such as solar energy, co-generation, hybrid systems, bio energy, ambient temperature use by heat pumps, and the use of conventional finite and renewable energy sources.

**LDN** Day-Night average sound level value expressed in decibels that represent the average noise level over a 24 hour period for an average day of the year.

**LEED** Acronym for Leadership in Energy and Environmental Design, developed by the U.S. Green Building Council and used to rate the design, construction and operation of high performance buildings.

**LIFE SKILLS TRAINING** Hands-on education designed to facilitate the practice and reinforcement of psychosocial skills in a culturally and developmentally appropriate way. Such skills contribute to the promotion of personal and social development, the prevention of health and social problems, and the protection of human rights.

**MODE SPLIT** Also referred to as modal share or modal split, describes the percentage of travelers using a particular type of transportation, typically bus, biking, pedestrian, and car.

**MODERN STREETCAR** A fixed guideway electric rail system which runs on tracks along public

urban streets and operates in mixed traffic. Modern streetcars typically use electric power, are lighter and shorter than conventional and rapid transit trains, accommodate bicycles on-board, and have frequent passenger stops.

**NATIONAL CLIMATE ASSESSMENTS** Status reports about climate change science and impacts comparing observations made across the country to predictions from climate system models.

**NATIONAL TRUST FOR HISTORIC PRESERVATION** Privately-funded, nonprofit organization that works to save historic places throughout the United States.

**NATURAL HAZARD AREAS** All atmospheric, hydrologic, geologic (especially seismic and volcanic), and wildfire phenomena that, because of their location, severity, and frequency, have the potential to affect humans, their structures, or their activities adversely.

**NET ZERO BUILDING** A structure that generates 100 percent of its power from renewable sources on-site at all times; is completely grid-independent and does not use any fossil-fuel-generated energy from a power plant. A net-zero energy building, as defined here, is carbon neutral because no carbon dioxide emissions are released into the atmosphere.

**NON-FAMILY HOUSEHOLD** A household consisting of a householder living alone or where the householder shares the home exclusively with non-relatives only.

**NON-POINT SOURCE POLLUTION** A form of pollution that results from land runoff, precipitation, atmospheric deposition, drainage, seepage, or hydrologic modification.

**PASSIVE RAINWATER HARVESTING** Rain barrels, cisterns, or tanks that store water from rooftops and other impervious surfaces for later use.

**PASSIVE RECREATION** Recreational activities that do not require prepared facilities, such as sports fields or pavilions. Passive recreational activities place minimal stress on a site's resources.

**PEDESTRIAN ENVIRONMENT** A neighborhood, town, or city with features that encourage and influence walking through design, construction, and maintenance of the built environment.

- PHOTOVOLTAIC** Direct conversion of light into electricity at the atomic level.
- PIMA COUNTY BOND PROGRAM** Pima County issues general obligation bonds repaid through property taxes to fund capital projects in the region. The issuance of general obligation bonds must be approved by voters.
- POTABLE WATER** Water that has been treated, cleaned, or filtered and meets established drinking water standards or is assumed to be reasonably free of harmful bacteria and contaminants and considered safe to drink.
- POWER GRID** An interconnected system for the distribution of electricity or electromagnetic signals over a wide area, especially a network of high-tension cables and power stations.
- PRIMARY JOBS** These jobs export services and goods outside the region and import dollars to our community, therefore increasing the wealth of the community.
- PUBLIC INFRASTRUCTURE** The collection of roads, bridges, rail lines, and similar public works required for an industrial economy, or a portion of it, to function.
- RECLAIMED WATER** Recycled, treated effluent for beneficial uses. Regulations apply to wastewater treatment facilities supplying reclaimed water and to the sites where water is applied or used.
- REGIONAL TRANSPORTATION AUTHORITY FUNDING** Funding for the 20-year regional transportation plan is provided by a half-cent sales tax and other regional and local funding sources such as development impact fees.
- RENEWABLE ENERGY TECHNOLOGIES** Technologies that produce sustainable, clean energy from sources such as the sun, wind, plants, and water.
- RESIDENTIAL GRAY WATER** Diversion of some interior water from residential uses such as clothes washers, bathtubs, showers or bathroom sinks for use in outdoor irrigation.
- RESILIENT OR RESILIENCY** The capacity of a system, community, or society potentially exposed to hazards to adapt by resisting or changing in order to reach and maintain an acceptable level of functioning and structure. This is determined by the degree to which the social system is capable of organizing itself to increase its capacity for learning from past disasters for better future protection and to improve risk reduction measures.
- RESOURCE RECOVERY** Collecting and separating of certain waste materials for processing into new forms which are ultimately sold as raw materials for new products.
- REVENUE BONDS** Enterprise departments in the City, such as Tucson Water and Environmental Services, use revenue bonds to pay for critical infrastructure projects. Bonds are issued and repaid with interest over a 20 to 30 year time frame.
- RIPARIAN ECOSYSTEMS** A transition area between the aquatic ecosystem and the adjacent terrestrial ecosystems identified by soil characteristics or distinctive vegetation communities that require free or unbound water.
- SENSE OF PLACE** Components in a community that add up to a feeling that a community or space is a special place, distinct from anywhere else.
- SOLAR READY** A structure that has been built with the necessary piping and equipment that would be needed to install a rooftop solar power system.
- SOUTHWEST CLIMATE ASSESSMENT STUDY** Report that provides a snapshot of the current state of climate change information and knowledge related to the U.S. Southwest region.
- STREETSCAPE** Visual elements of a street, including the road, adjoining buildings, street furniture, trees, and open spaces that combine to form the street's character.
- SUBSIDENCE** The collapse of the earth when large amounts of groundwater have been withdrawn from certain types of rocks, such as fine-grained sediments.
- SUSTAINABILITY** Refers to a condition in which human activities enhance economic development and social equity while remaining within the carrying capacity of the natural environment.
- TITLE V PERMITS** A type of operating permit for a facility that is deemed by the federal government under the Clean Air Act to be a source of air pollution. Most Title V permits are issued by state and local permitting authorities.

**TUCSON REGIONAL ECONOMIC**

**OPPORTUNITIES (TREO)** The regional economic development agency that is focused on bringing new firms with primary jobs to the Tucson region, helping to retain companies that are in the region, and helping those firms expand.

**UNDERSERVED POPULATIONS** Populations, or communities, that lack adequate access to basic services, such as health care, public infrastructure, food, etc.

**UPSTREAM SOLUTIONS** Proactive solutions that address the source of the original problem as opposed to the effects of it.

**URBAN HEAT ISLAND (UHI) EFFECT** The rise in temperature of any man-made area, resulting in a well-defined, distinct “warm island” among the “cool sea” represented by the lower temperature of the area’s nearby natural landscape.

**URBAN RENEWAL** The rehabilitation of city areas by renovating or replacing dilapidated buildings with new housing, public buildings, parks, roadways, industrial areas, etc., often in accordance with comprehensive plans.

**U.S. GREEN BUILDING COUNCIL** A coalition of leaders from across the building industry working to promote buildings that are environmentally responsible, profitable, and healthy places to live and work.

**VEHICLE MILES TRAVELED** The number of miles traveled within a geographic region, i.e., nationally, regionally, or city-wide, by vehicles for a period of one year.

**WASTE DIVERSION & RECOVERY** The process by which materials are diverted from landfills through recycling or recovery operations thereby conserving and preserving resources and energy; reducing the production of greenhouse gases and the use of toxic chemicals; and conserving water, wildlife habitat, and air quality.

# APPENDICES

Appendix A: Mandated Elements Matrix

Appendix B: Public Participation Program

Appendix C: Mayor & Council Resolution

Appendix D: Public Ratification



## APPENDIX A

# MANDATED ELEMENTS MATRIX

# APPENDIX A

## Mandated Elements Matrix

### State Statute Required Elements

Plan Tucson Elements	State Statute Required Elements															
	Circulation	Conservation, Rehabilitation, & Redevelopment	Cost of Development	Environmental Planning and Conservation	Growth Areas	Housing	Land Use	Open Space	Public Buildings	Public Services & Facilities	Recreation	Safety	Water Resources	Energy	Bicycling	Neighborhood Preservation & Revitalization
Energy & Climate Change		✓				✓	✓									✓
Green Infrastructure																
Water												✓				
Environmental Quality										✓						
Arts & Culture																
Public Health																
Urban Agriculture																
Education																
Governance & Participation																
Energy & Climate Change				✓				✓						✓		
Water Resources												✓				
Green Infrastructure				✓				✓								
Environmental Quality				✓												
Historic Preservation		✓														✓
Public Infrastructure, Facilities, & Cost of Development			✓						✓	✓						
Redevelopment & Revitalization		✓														✓
Land Use, Transportation, & Urban Design	✓			✓	✓	✓	✓	✓	✓	✓	✓				✓	✓

## APPENDIX B

# PUBLIC PARTICIPATION PROGRAM

## APPENDIX C

# MAYOR & COUNCIL RESOLUTION

APPENDIX D

**PUBLIC  
RATIFICATION**