Tucson South 10th Avenue

Existing Conditions Analysis

Tucson, Arizona
May 2023

OPTICOS

Contents

Location and Setting

Tucson At-a-Glance

Established in 1775, Tucson is the county seat of Pima County in Southern Arizona. The second largest city in Arizona, Tucson has a population of over 540,000 residents according to the 2020 census, while the population of the entire Tucson metropolitan statistical area (Tucson MSA) is over 1 million.

The city has a land area of 241.3 square miles and is 60 miles north of the US-Mexico border. Regional access is provided by highways I-10 and I-19. Rail access is provided by several Amtrak routes that run along the I-10 and 210 highways. Along with Phoenix, Arizona's largest city, Tucson anchors the Sun Corridor, one of the fastest growing metropolitan areas in the country.

Tucson's economic drivers include the University of Arizona, the Davis-Monthan Air Force Base, the US Army Intelligence Center, and high-tech industries in the Sun Corridor.

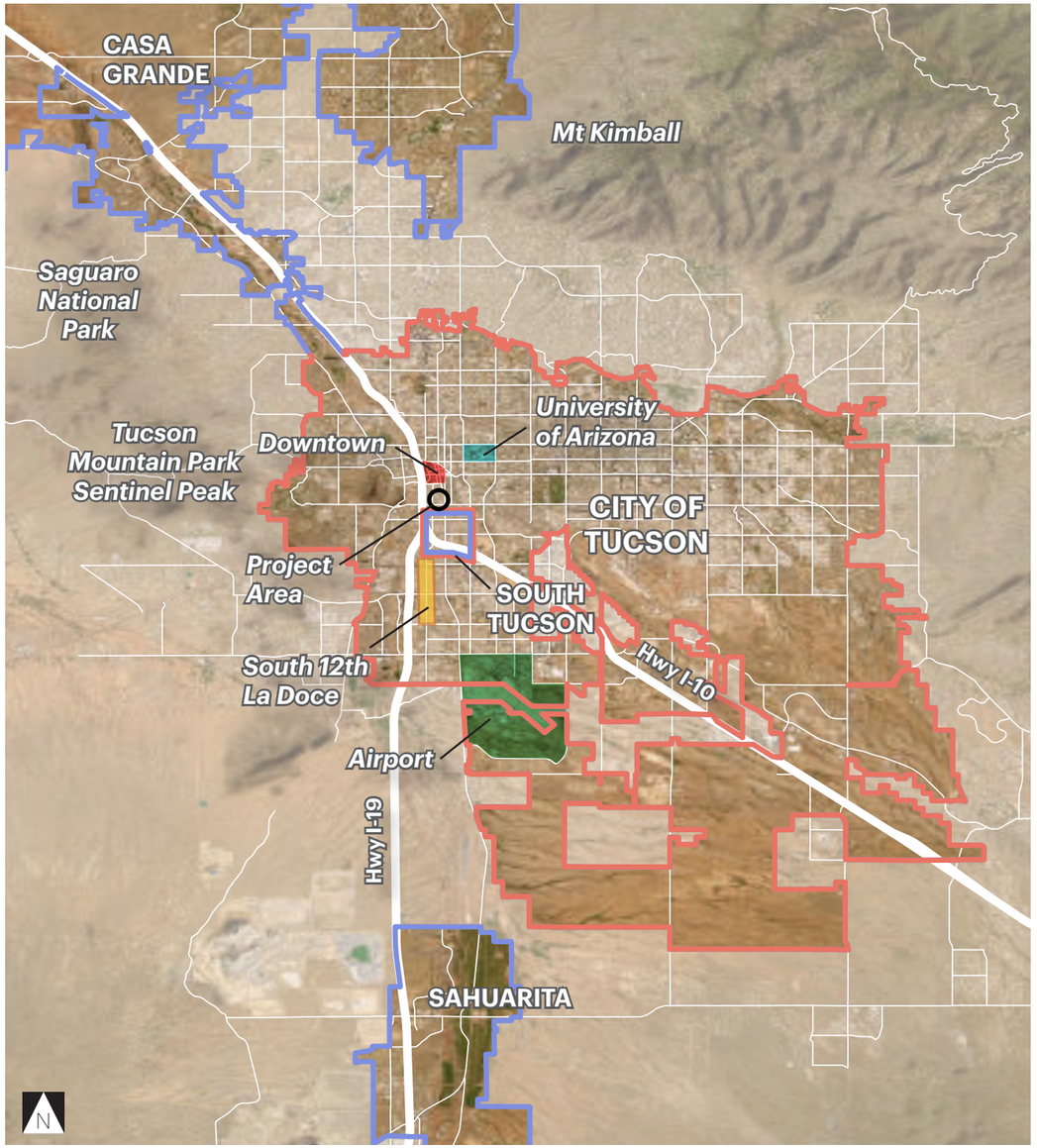
Tucson is divided into a number of distinct neighborhoods or "barrios", and into six wards. The project area is located in Barrio Ochoa and falls under Ward One. The project area is within a short distance of Downtown Tucson, the University of Arizona campus and the historic Barrio Viejo. Just south of the project area is the city of South Tucson, that is one square mile in area and has a population of 5,600.

Population
542,629 (city) | 1,000,000 (Tucson MSA)

Area
241 sq mi

Access
Highways I-10, I-19 | Tucson airport

Economic Drivers
University of Arizona
Davis-Monthan Air Force Base



Downtown - Pedestrian Street


La Doce, Source: thisisTucson.com


University of Arizona, source: usnews.com

Relationship to Downtown

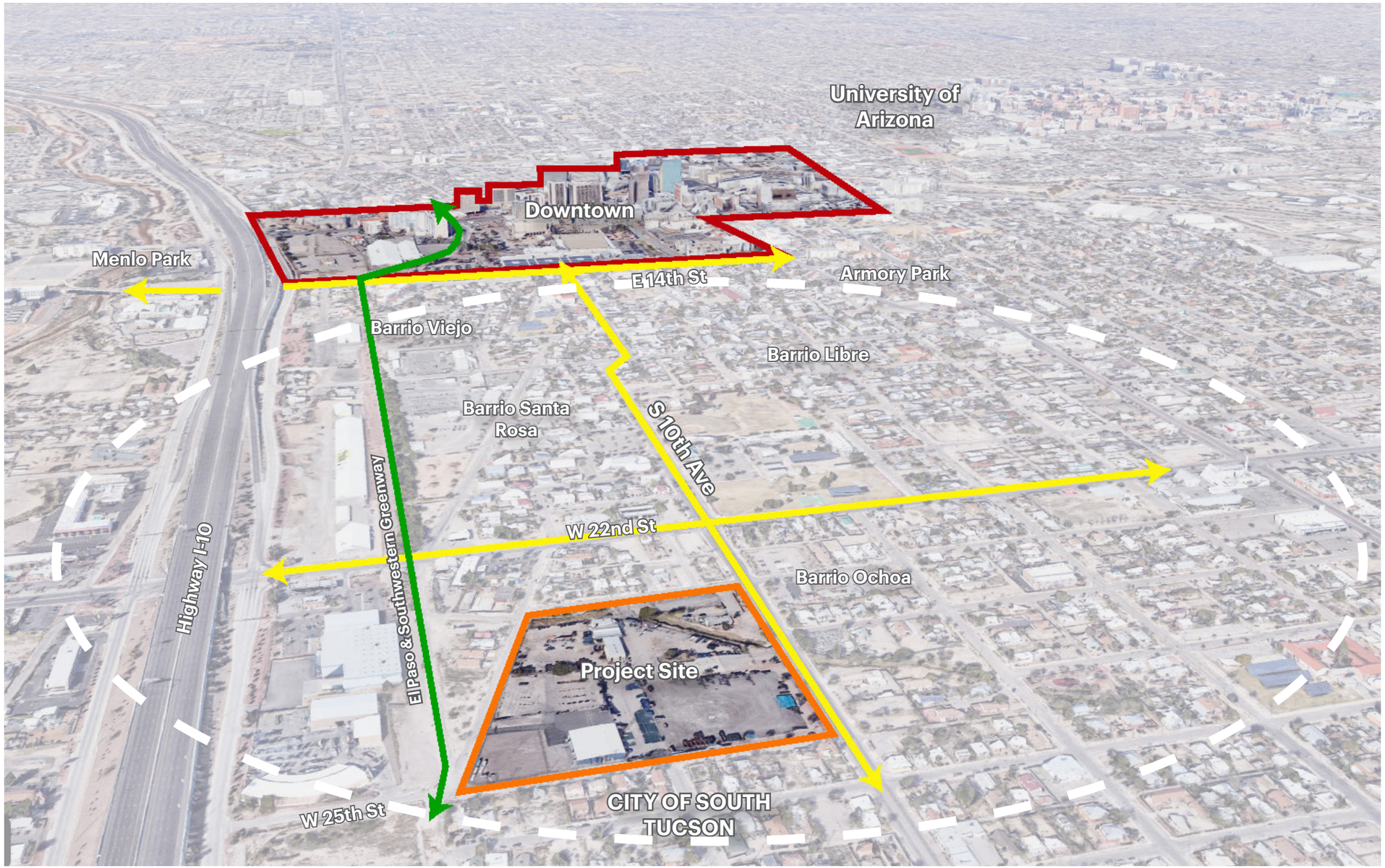
Proximity to Downtown

The project area's location is one of its key attributes, with Downtown and the University of Arizona accessible within 5-10 minutes by car, or 10-20 minutes by bike. There are several bike routes, with the El Paso Greenway as one of the primary routes. Transit options include several bus routes on South 10th Avenue.

Housing is envisioned for this site at a variety of income levels. Its proximity to Downtown and the University is an advantage, and the site could provide housing options for those who work in Downtown, as well as University faculty, staff and students.

5-minute drive (~1 mile) to Downtown

Within biking distance of Downtown and University of Arizona



Relationship to South and West Side

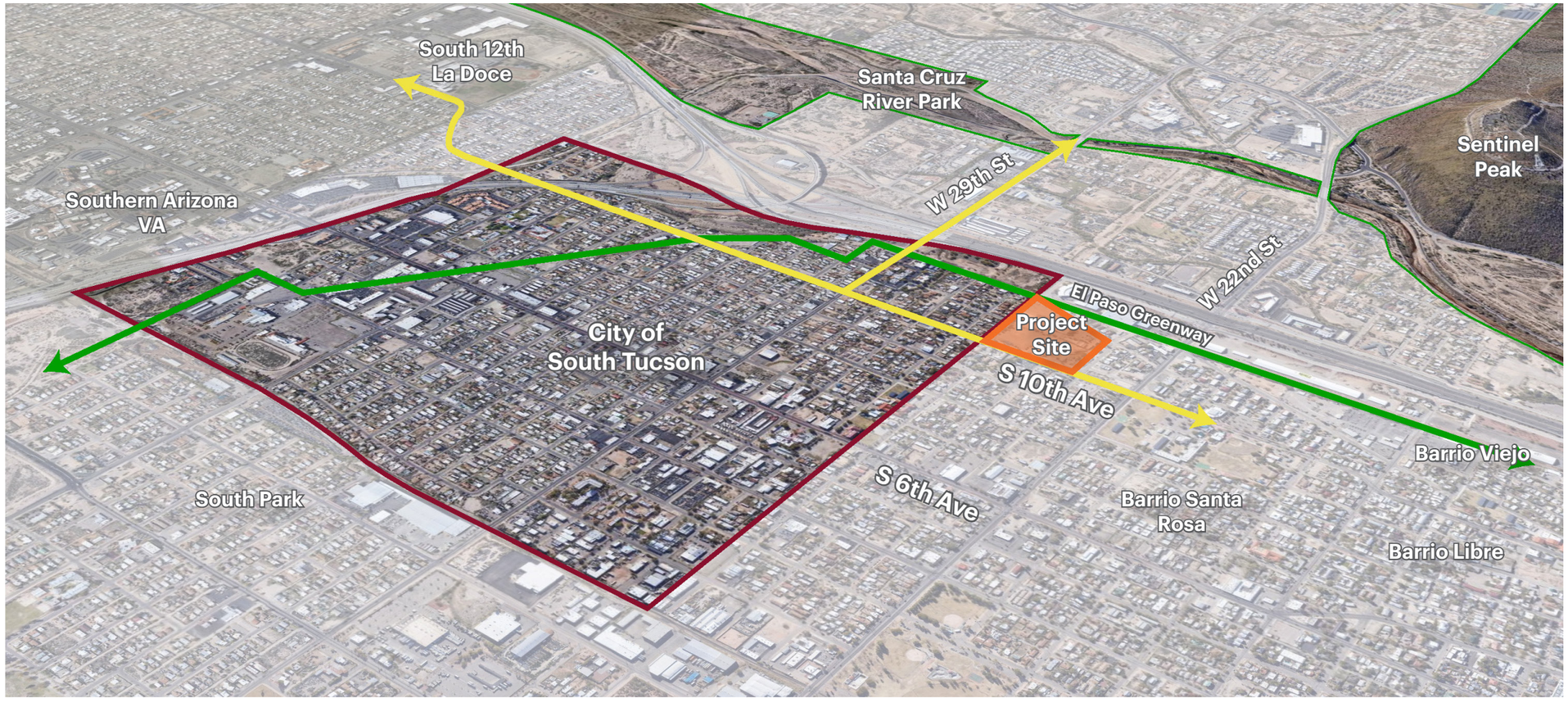
Cultural and Geographic Amenities

The city of South Tucson borders the project site to the south and has a population of 5,500 people. Known as the 'pueblo within a city', it is an enclave within the city of Tucson. The character of this city is represented through its cuisine and colorful outdoor tile murals. La Doce food corridor, also south of the site, is known for its delicious local cuisine and vibrant neighborhood character.

To the west of the project site are many natural amenities such as the Santa Cruz River Park, which runs along the banks of the Santa Cruz river, and Sentinel Peak. Also known as “A” Mountain, the 2,897-foot high Sentinel Peak is a prominent landmark, hiking trail park and sunset-watching destination in the Tucson Mountains.

5-minute drive (~1 mile)
to La Doce Food Corridor

Within biking distance
of Santa Cruz River Park



South 12th La Doce

Santa Cruz River Park


Sentinel Peak

Demographic Profile

Tucson: Key Demographics

Source: US Census (2021)

Population

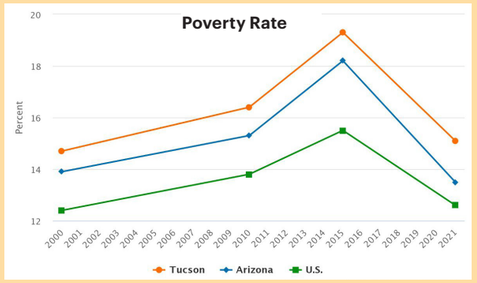
542,629 population (2021)
21% population below 18 years of age
45% population Hispanic/ Latino
218,790 households
2.35 average persons per household

Housing

242,525 total housing units
51% homeownership rate
$907 median gross rent
$178k median home sale price
6% vacancy rate

Employment + Income

$48,058 median household income
29% aged 25+ with bachelor's degree/higher
86% aged 25+ graduated high school
20% poverty rate (threshold of $31,000 for family of five)



Source: University of Arizona, MAP AZ Dashboard (2021)

Population Trends in Site Vicinity

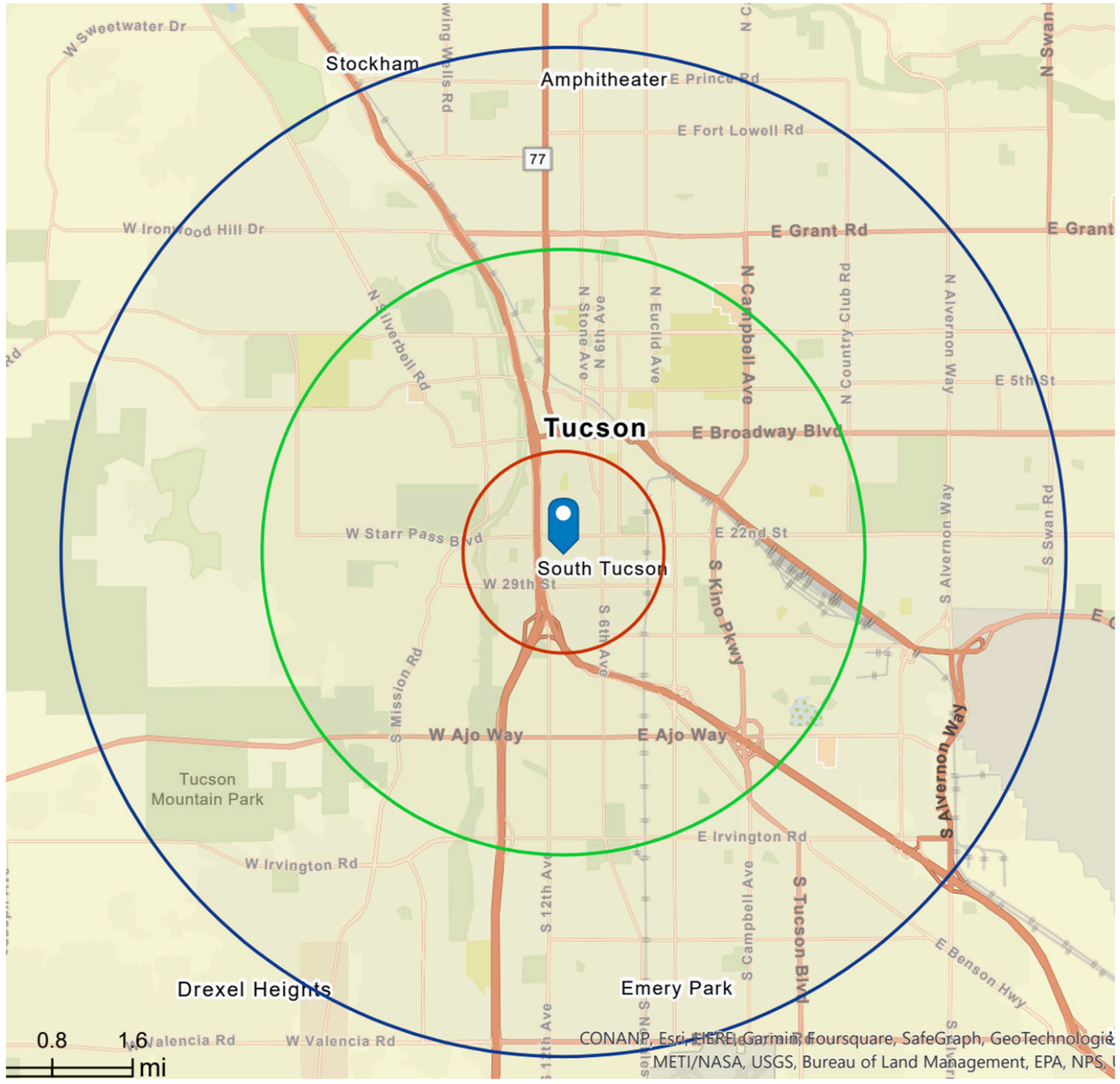
Within a radius of 5 miles from the site, the population was 267,622 in 2022 (a slight increase from 265,118 in 2020). The rate of change was 0.42 percent annually. The five-year projection for the population is 270,985, an increase of 0.25 percent annually. Currently, the population is 49.9 percent male and 50.1 percent female. The median age is 31.4, compared to the U.S. median age of 38.9.

Population	1 Mile	3 Miles	5 Miles
2010	12,362	101,373	270,969
2020	10,767	98,370	265,118
2022	10,743	98,914	267,622
2027 (Estimation)	10,777	99,795	270,985
2022 Male Population	56.1%	50.5%	49.9%
2022 Female Population	43.9%	49.5%	50.1%
2022 Median Age	34.9	29.2	31.4

Average Household Income Trends in Site Vicinity

The average household income in 2022 was $61,623, compared to $105,029 for all U.S. households. Average household income is projected to be $75,818 by 2027, compared to $84,445 for all U.S. households.

Average Household Income	1 Mile	3 Miles	5 Miles
2022 Average Household Income	$61,110	$58,081	$61,623
2027 Average Household Income	$76,335	$72,384	$75,818
2022 – 2027 Annual Rate	4.55%	4.50%	4.23%



Map of 1-mile, 3-mile, 5-mile Radius of the Project Site

Economic Outlook

Main Takeaways

Growth in the education, health services, and leisure and hospitality sectors accelerated in the first half of 2022. This job growth dropped unemployment to a 20-year low of 3.2 percent in June 2022. A strong talent pipeline and an established tech firm presence in Tucson will fuel the renter demand. Job growth plus an average monthly rent at least $300 below any Southwestern market continue to lead in-migration to Tucson from surrounding areas.

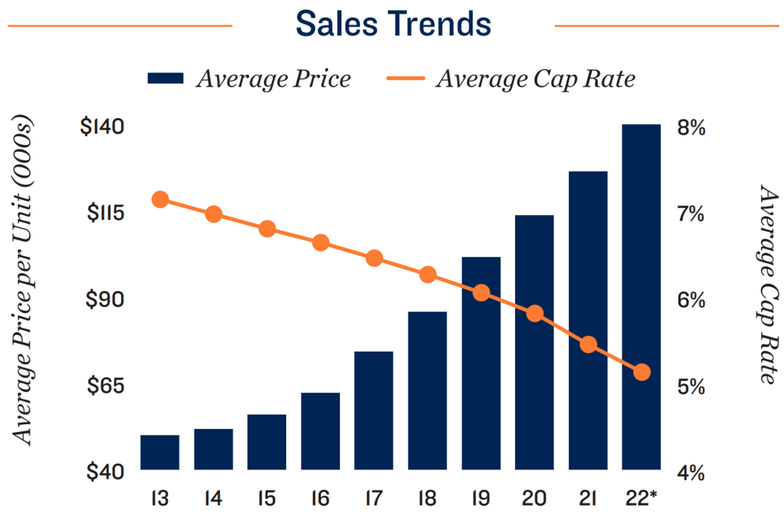
2023 Market forecast

- **Employment up 0.3%**
- **Construction of 2,100 units**
- **Vacancy up by 1.00%**
- **Rent up by 3.3%**
- **Investment: Buyers might begin to look at assets near University of Arizona as a less risky option that can provide stable long-term cash flows**

Data sources:
Marcus & Millichap's 3Q/2022 Multifamily Market report for Tucson Metro Area and 2023 Multifamily National Investment Forecast; and CoStar Group, Inc; Real Capital Analytics; RealPage, Inc.

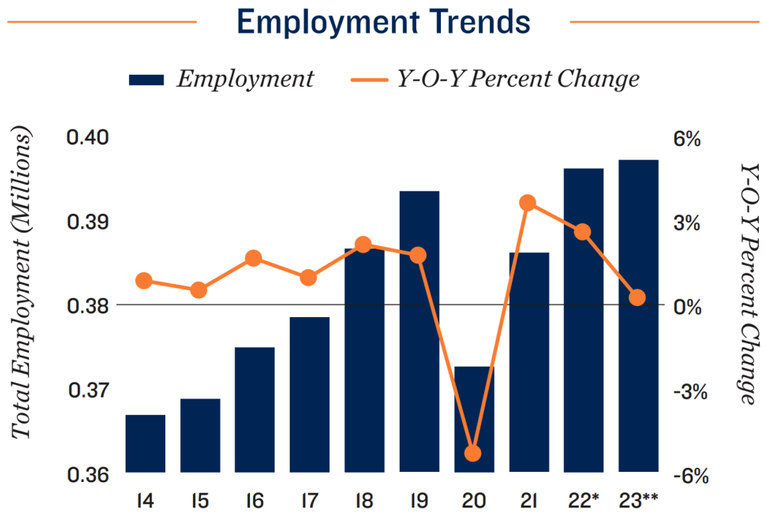
Sales Trends

The value of multifamily buildings are increasing, evidenced by the decreasing average cap rate. Drawn by the annual rent growth, investors are increasing their pursuit of listings. Central Tucson accounted for more than half of the acquisitions, but sizable activity also occurred in East Central and South Tucson. Each of these areas have relatively low barriers to entry – with average prices ranging from $105,000 to $141,000 per unit – translating to a buyer pool largely comprised of private investors.



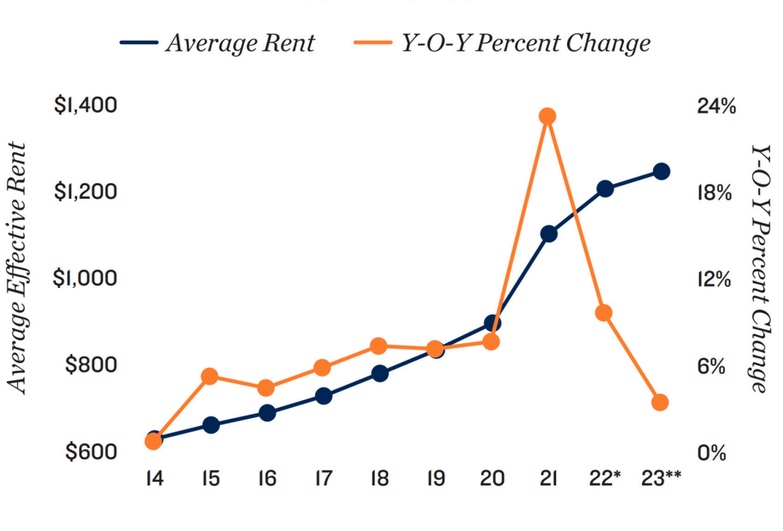
Employment Trends

Employment has grown in Tucson since 2014, and Tucson has recovered from the employment loss due to Covid-19.



Rent Trends

Rent has continued to grow at a robust pace. The average rental rate has increased dramatically in 2021. One factor may be due to the in-migration of remote workers during Covid-19.



Housing Access in Tucson

Source: University of Arizona, MAP AZ Dashboard (2021)

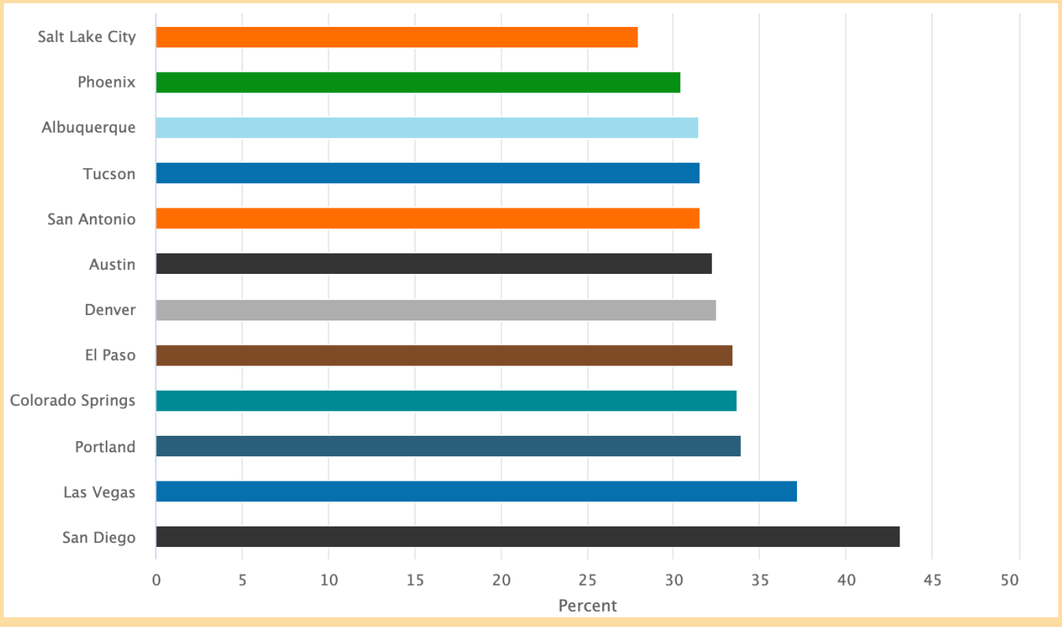
Housing Attainability

When planning for new housing, it is helpful to also understand the status of housing access in Tucson. A household is said to be housing cost-burdened when spending more than 30 percent of its total household income on housing. If this is more than 50 percent, then the household is said to be severely house-burdened. The graphs on this page, from the University of Arizona mapping dashboard, identify some key data points related to housing access and attainability in the city. The source for the information below is US Census (2021) data, presented on the MAP AZ dashboard of the University of Arizona.

Housing Cost-Burdened Households

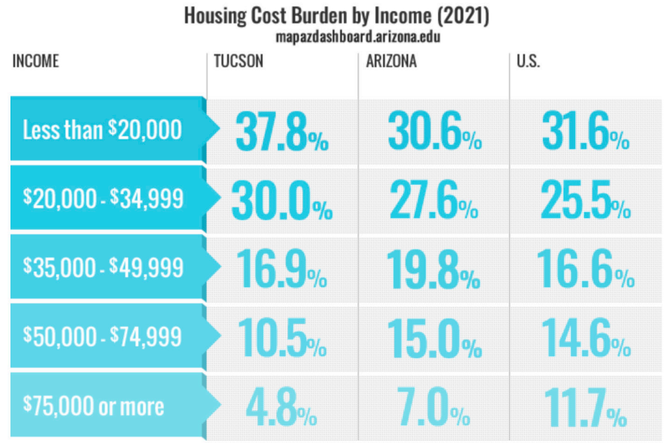
The percentage of households that were housing cost-burdened across the 12 peer Metropolitan Statistical Areas (MSAs) studied in 2021 varied widely. Tucson and San Antonio tied for fourth lowest among peer metropolitan areas in the percent of households that were cost-burdened. Housing cost burden ranged from 43 percent of households in San Diego to 28 percent in Salt Lake City. The Tucson MSA fared reasonably well, with 31.6 percent or 127,716 households paying more than 30 percent of their income in housing costs.

Renters pay substantially more of their income in housing costs than do homeowners in Tucson. However, housing cost burden rates among renters fell slightly in 2021.



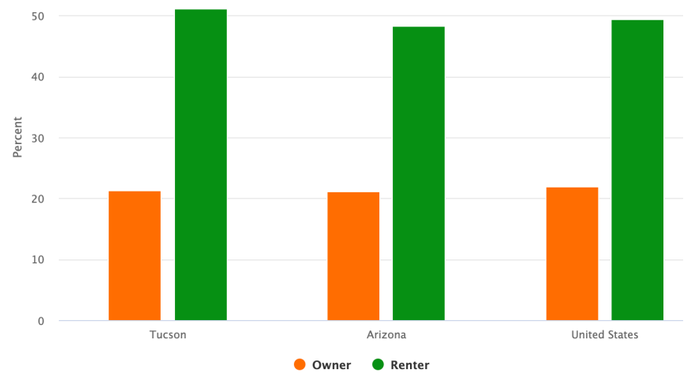
Housing Cost Burden by Income

Income levels play a significant role in determining the percentage of households that are housing cost-burdened, with lower-income households more likely to suffer its impacts. In Tucson, nearly 38 percent of the households earning less than $20,000 were house-burdened in 2021. This was significantly higher than comparative rates for the state of Arizona (30 percent) and the nation (31 percent). At the other end of the spectrum, of those that earned $75,000 or more, only 4.8 percent were housing cost-burdened in Tucson, while the rate increased to 7.0 percent for the state and 11.7 percent for the nation.



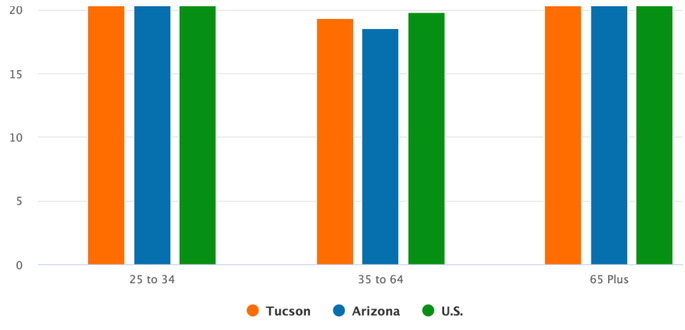
Housing Cost Burden by Tenure

When comparing household tenure, renters are more likely than owners to be cost-burdened. In the Tucson MSA during 2021, 21.3 percent of owners and 51.2 percent of renters were housing cost-burdened, and this was consistent with the state and the nation.

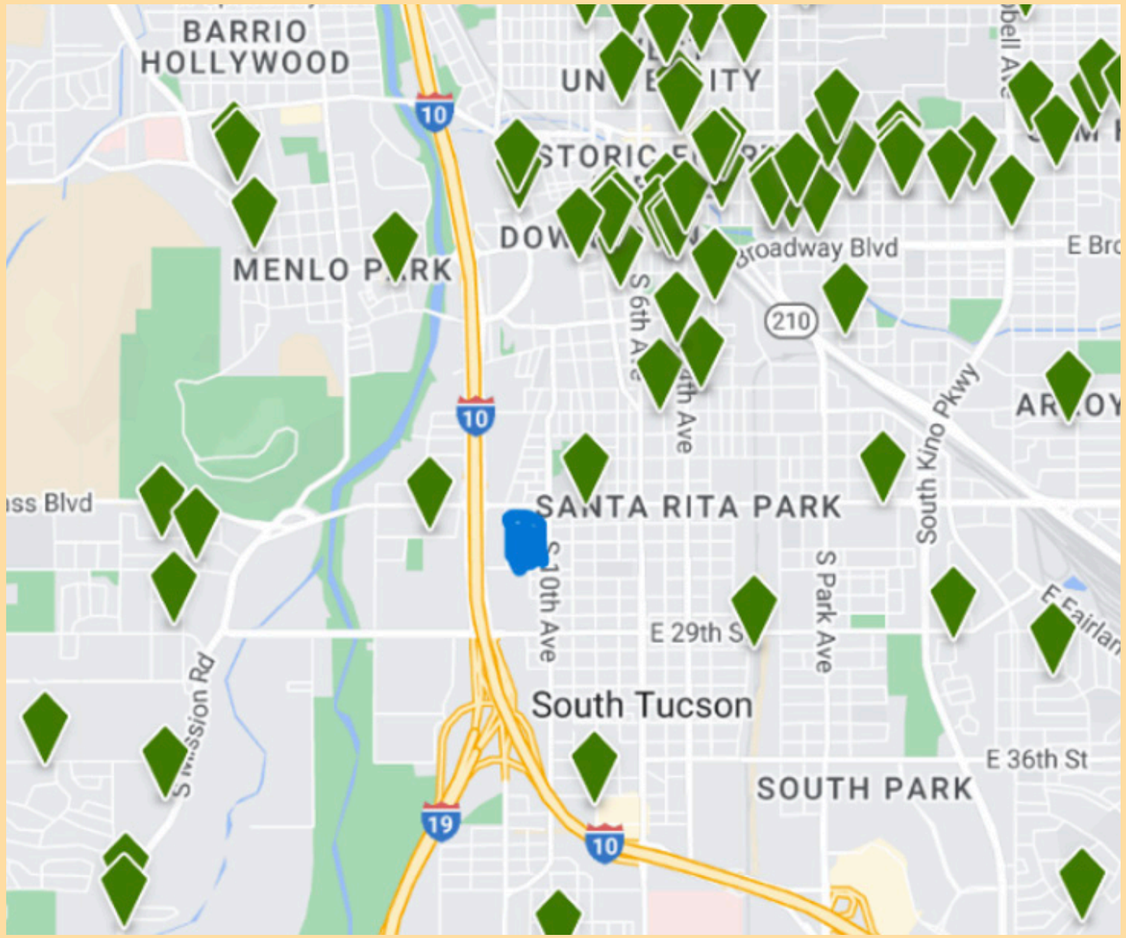


Housing Cost Burden by Age

Those aged 25 to 34 reported the highest percentage of housing cost-burdened households in Tucson at 22.8%, and those aged 65 and older had a slightly lower rate at 22.6%. For the U.S., the 35 to 64 and 65 and over age group had a higher rate of households that were housing cost burdened than did Tucson. However, those aged 25 to 34 had higher rates in Tucson when compared to their peers around the state and nation.

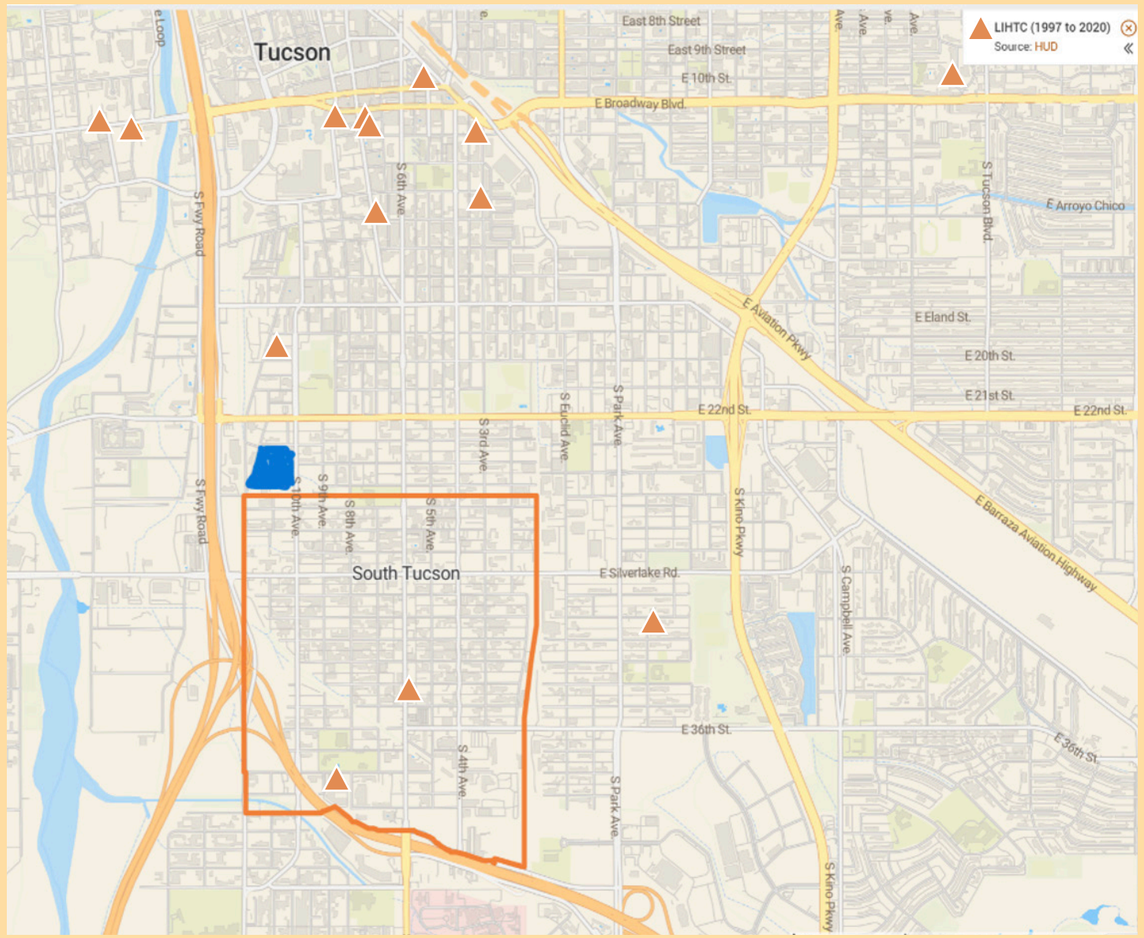


Location of Comparable Housing Projects



Market Rate Housing

Most market-rate and affordable housing projects are located near Downtown Tucson.



Affordable Housing

The map above shows the location of affordable housing developments in the vicinity of the site that used Low Income Housing Tax Credits (LIHTC). Most affordable housing projects are located near Downtown Tucson.

Site Location and Access

Project Area

The project area, shown on the map to the right, is located to the west of South 10th Avenue between West 23rd Street and West 25th Street. Located in Barrio Ochoa, the site abuts the boundary of the City of South Tucson to its south.

The project site is approximately 14 acres in area. East and south of the site are established neighborhoods with a mix of residential and some commercial uses.

Roughly a block to its west runs the I-10 highway, with the exit at West 22nd Street serving as one of the primary access points to the site. South 10th Avenue is also a major street, with planned bike infrastructure and bus transit lines. The El Paso Greenway parallel to Highway I-10 provides convenient bike acces to Downtown, approximately one and a half a miles away.

Location
South 10th Ave + W 23rd St

Site Area
14 ac | 12.3 ac excl. Airport Wash

Access
Highways I-10
Bus transit on S 10th Ave
El Paso Greenway

Scale 1" = 600'

0 *600'* *1200'*

Site Context: Surrounding Uses, Amenities + Access

Neighborhood Amenities

Within a 5-10 minute walk of the site are a number of community amenities, shown on the map to the right. These include schools, a couple of libraries and a number of churches and civic facilities. Along South 6th Avenue to the east are a number of neighborhood-serving retail stores and services. West of the site are other highway-oriented uses.

The site is well-served by bus transit and bike facilities, including the El Paso Greenway, as well as on-street bike lanes (both existing and planned).

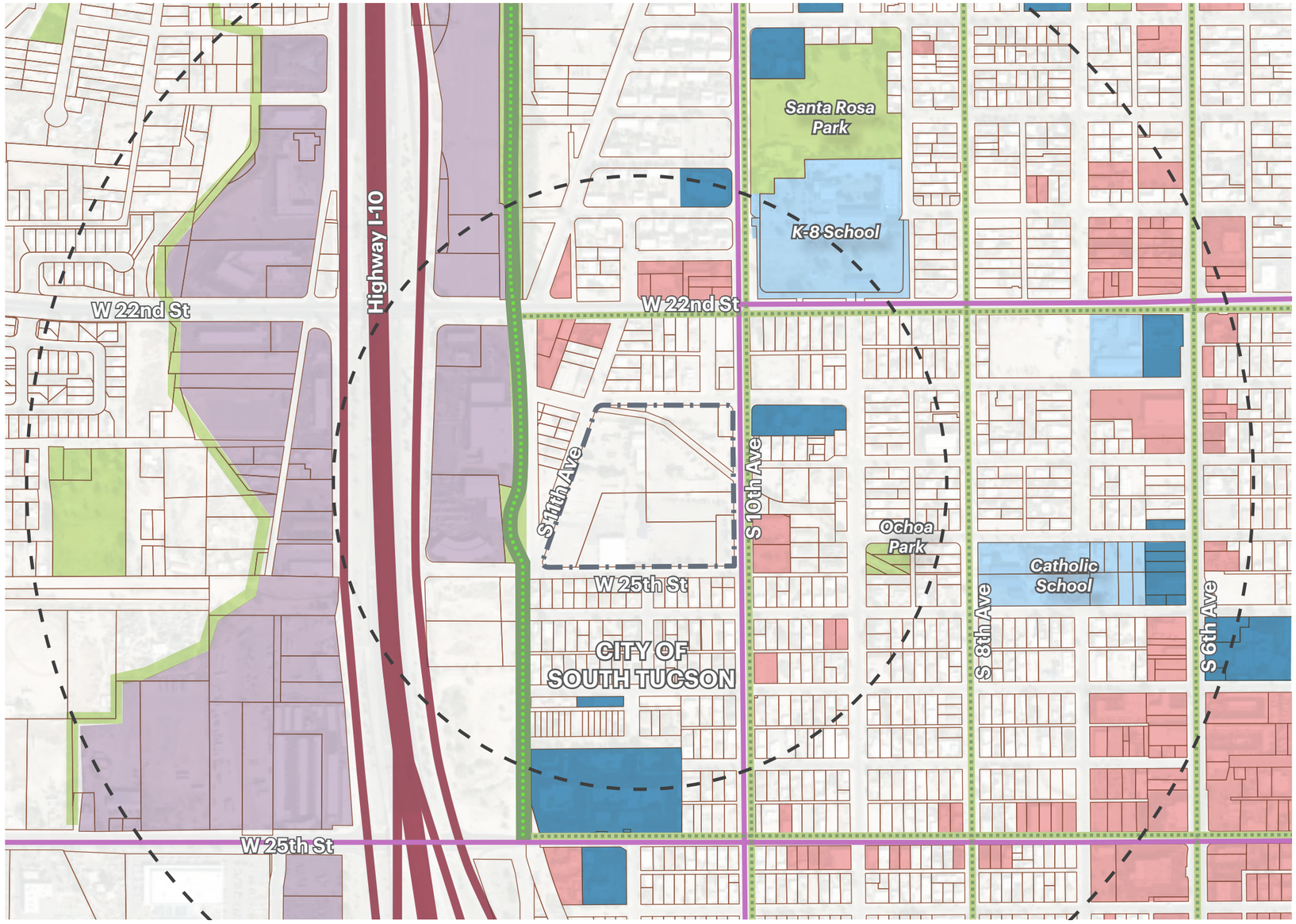
Legend

- Project area
- Parcels
- 5 and 10 minute walk distance
- Highway I-10
- Bus routes
- Bike infrastructure (on-street bike lanes)
- El Paso Greenway (bike path)
- Schools
- Parks and greens
- Civic, community and religious uses
- Retail and office uses
- Highway-oriented uses

Scale 1" = 600'

0 *600'* *1200'*

N



Site Context: Topography, Natural Features and Views

Main Topography + Natural Features

The site has a gradual slope of approximately 2 percent from south-east to north-west. Specifically, there is an elevation difference of 20 feet across the site. A prominent system of watersheds defines the area, draining towards the Santa Cruz river on the west. One of these, the Airport Wash, traverses the northern portion of the site. This is an important part of the stormwater drainage system for the surrounding area.

The site has excellent views of the Tucson Mountain ranges to the west and Santa Catalina mountains to the north. These include views to "A" mountain and Sentinel Peak to the north-west, as shown below.

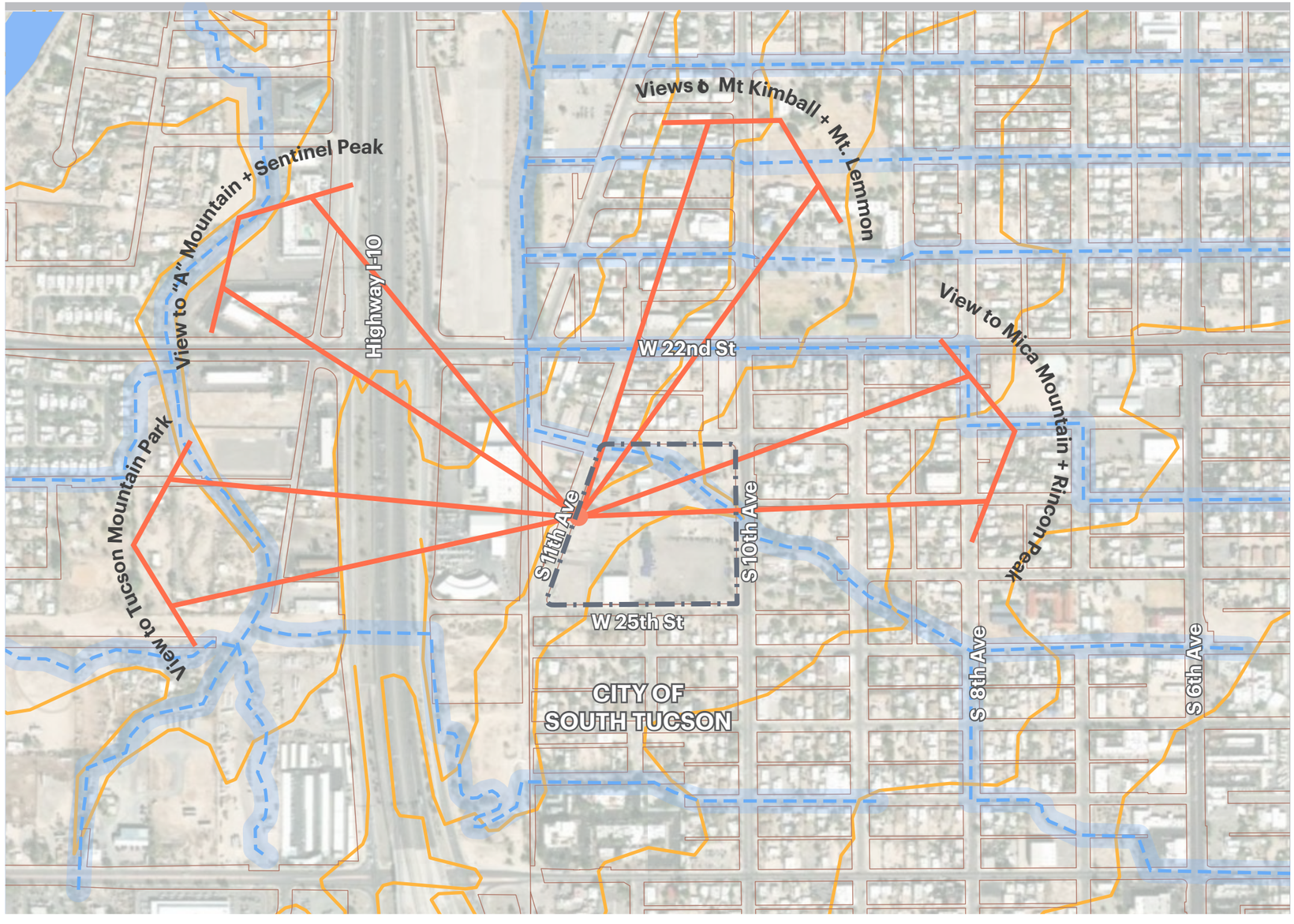
Legend

- Project area
- Viewsheds
- Watersheds
- Major contours
- Blocks

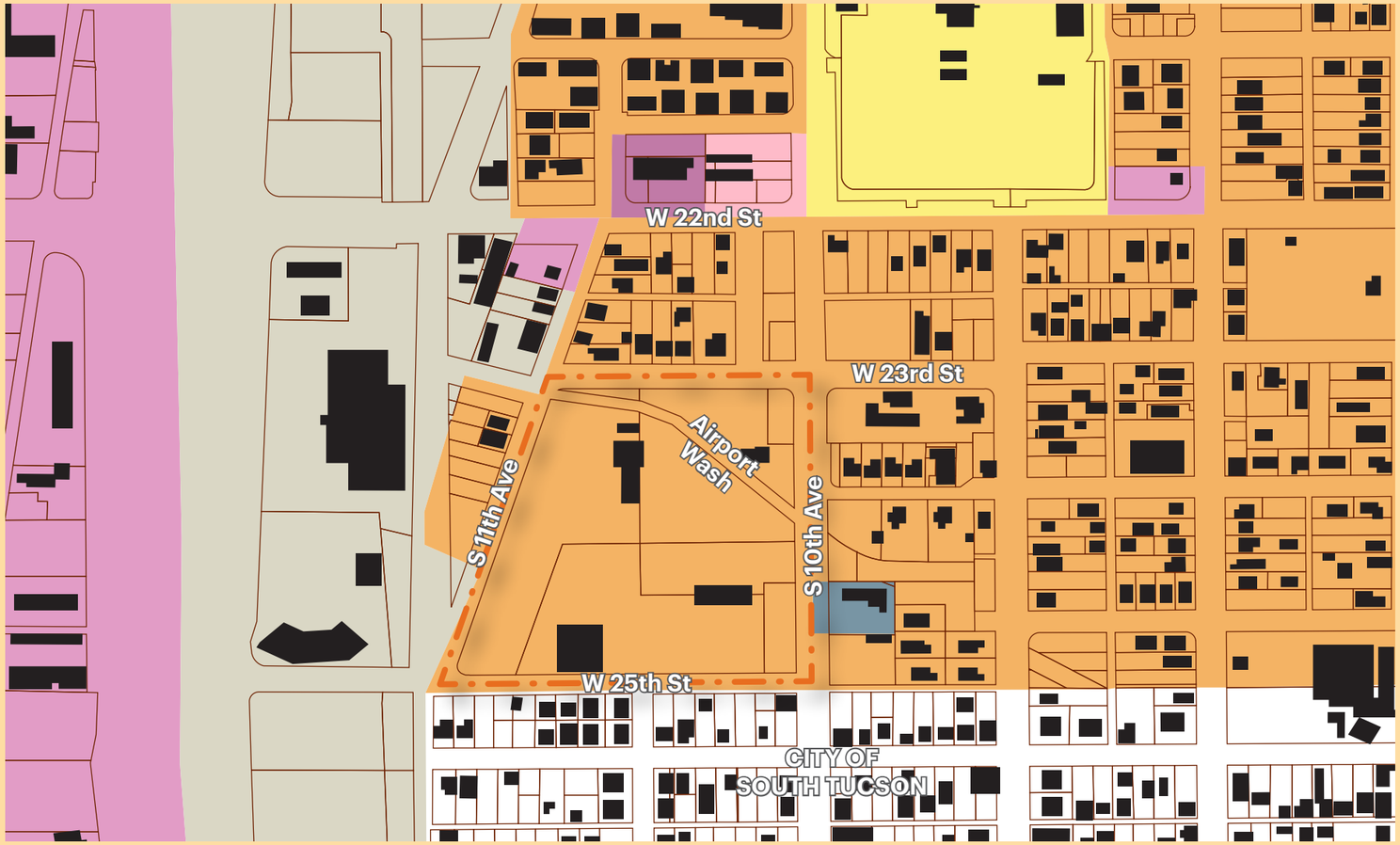
Scale 1" = 600'

0 600' 1200'

N



Site Analysis: Regulatory Structure



Legend

- Project area boundary
- Parcel lines
- Existing building footprints
- City of South Tucson

Zoning

- R-3
- R-2
- I-1
- P-1
- C-1
- C-2
- C-3

Scale 1" = 400'

0 400' 800'

N

Zoning: R-3
36 du/ac | 70% lot coverage
25'-40' height limits

Infill Incentive District
60' height limit
25% reduction in parking

Zoning

Within the project boundary, there is one zoning district - the R-3 zone. The R-3 zone is intended to provide for urban, high-density residential development. Other uses, such as schools, parks, and other public services, are also permitted. Surrounding areas are also zoned R-3 or R-2, with some commercial parcels and industrial uses along the highway.

Density, lot coverage, and height limits. By allowing up to 36 dwelling units per acre with up to 70 percent lot coverage, this zoning district provides for more intense housing types within this site. The zone allows maximum heights of 40 feet for multi-family housing and 25 feet for single-family housing, civic uses, and offices.

Setbacks. The perimeter yard setback is based on the zoning classification of the adjacent parcels along each lot line. Most of this site is adjacent to a residential zone so the perimeter yard setback is 6 feet or 2/3 the height of the proposed building. However, the west portion of the site is adjacent to an industrial zone so the setback along this edge is greater, 10 feet or 3/4 the height of the proposed building. Also, the street perimeter yard setback is dependent on whether the proposed site is considered to be part of an established area or a developing area. For this parcel, which is considered part of an established area, the front street perimeter yard setback is 20 feet or 1.5 times the height of the proposed wall, measured from the street property line.

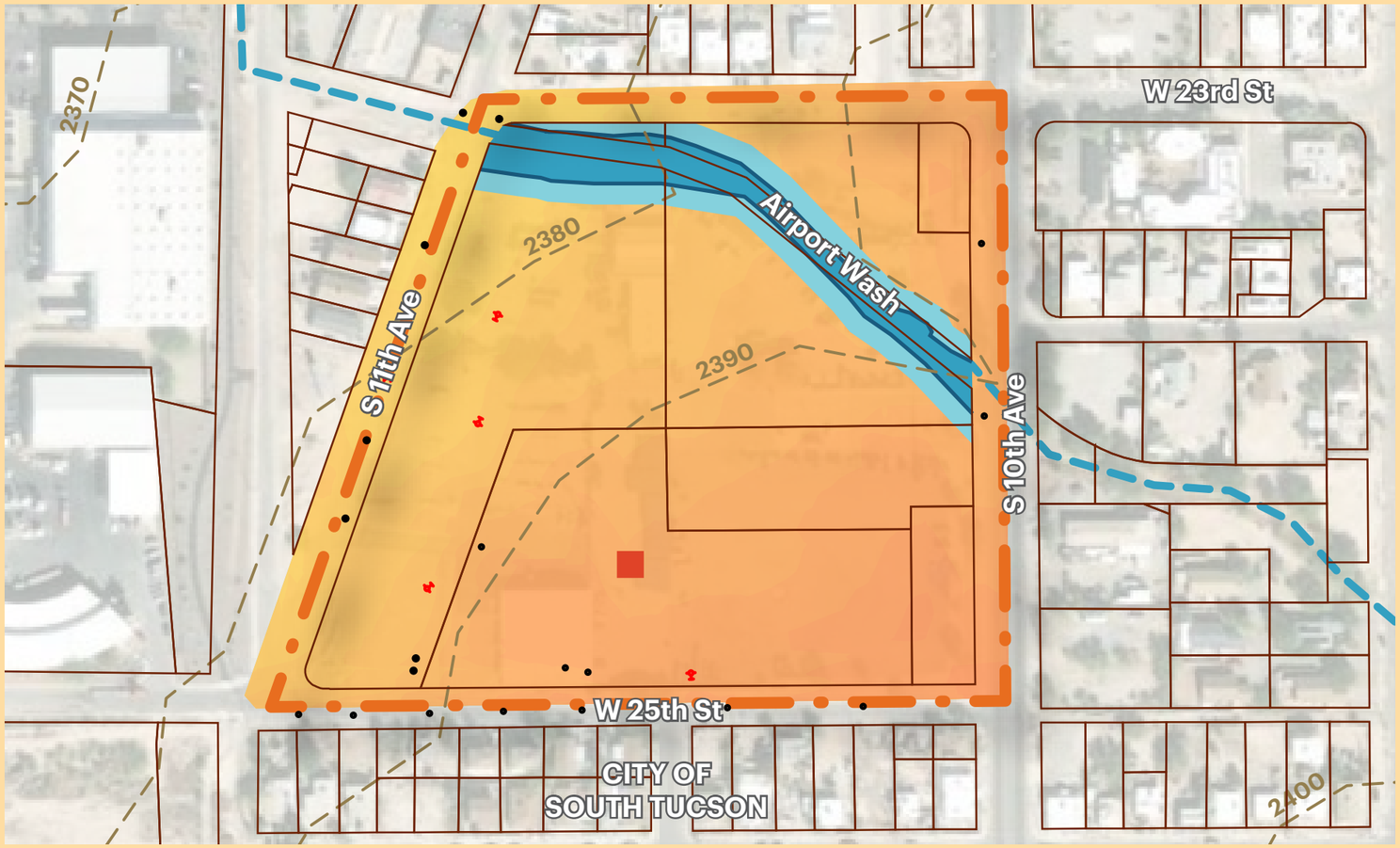
Parking. Parking standards apply based on project type and bedroom count. For a multifamily residential project with a density under 70 units per acre, the parking requirements include:

- Studio/ One-bedroom unit: 1.5 parking spaces per unit.
- Two-bedroom unit: 2 spaces per unit.
- Three-bedroom unit: 2.25 spaces per dwelling unit.

Infill Incentive District

This site is located within an Infill Incentive District (IID) that encourages redevelopment by addressing potential barriers and incompatible development standards. Within the IID, the site is located in the Greater Infill Incentive Subdistrict (GIIS). Because this site is within the GIIS district, building heights on the site may be increased to 60 feet and the street perimeter yard setbacks may be reduced or waived. Also, the required parking can be reduced by up to 25 percent. The Infill Incentive District also offers density relief and increases in maximum building height in exchange for the incorporation of affordable housing units into the project. In order for a project to be eligible for these incentives, a least 15 percent of the total number of dwelling units shall be affordable housing units for households earning less than 80 percentage of AMI. These units shall not be distinguishable in any way from the market-rate units.

Site Analysis: Slopes, Easements and Utilities



Legend

- Project area boundary
- Topography (countour line)
- Drainage wash
- Drainage wash top of bank
- 30' drainage wash easement
- Utility transmission tower
- Utility poles
- Fire hydrants
- Parcel lines

Note
Refer 2023 Property Survey for detailed information

Scale 1" = 200'

0 *200'* *400'*

N

Topography and Drainage Easements

The highest point on the site is the southeastern corner at the intersection of S 10th Avenue and W 25th Street. The land slopes towards the northwest corner of the site. The Airport Wash is a drainage channel cutting through the top half of the site. As the streets surrounding the site have inadequate stormwater infrastructure, this channel is important for conveying storm runoff. It is currently unchanelled, and offers opportunities for green infrastructure. Development regulations require a 30-foot setback from the top of bank, as shown in the map to the left.

Utilities

There are no major utility easements traversing the site. A utility transmission tower is located within the site, which may be relocated only in the long term. The map to the left shows the approximate location of utility poles and fire hydrants on the site periphery. A property survey conducted for this project in 2023 has more detailed information.

The Airport Wash and (top left) a transmission tower on the site

Site Analysis: Built Character and Existing Uses

Existing Uses

The site is being currently used by City of Tucson authorities for storage/ staging and other maintenance activities. The current uses are anticipated to end by 2023, freeing up the site for redevelopment. There are a few buildings on the site that are in process of getting demolished and the site is expected to be fully vacant soon. The transmission tower may need to be retained in the near term. The site has several points of access to surrounding streets and the primary access is from South 10th Avenue. A few uses in the immediate vicinity of the site are noted below.

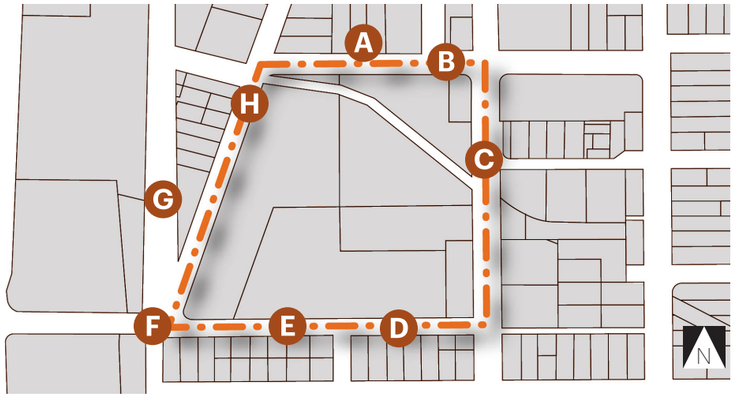
Ownership

The site is owned by the City of Tucson. The simple ownership structure is beneficial when considering redevelopment, as it also simplified the process of platting.

Legend

- A Bus Stop
- B Southside Presbyterian Church
- C Offices
- D Retail Uses
- E Gas Station

Site Analysis: Built Character and Existing Uses




A W 23rd St, looking north


B W 23 St, looking west


C S 10th St, looking north


D W 25th St, looking east


E W 25th St, looking south


F W 25th St and 25 1/2 St, looking north


G El Paso & Southwestern Greenway, looking north


H S 11th St, looking west

Design Considerations: Mixed-Income, Mixed-Use Neighborhoods

Benefits of a mixed-income, mixed-use neighborhood

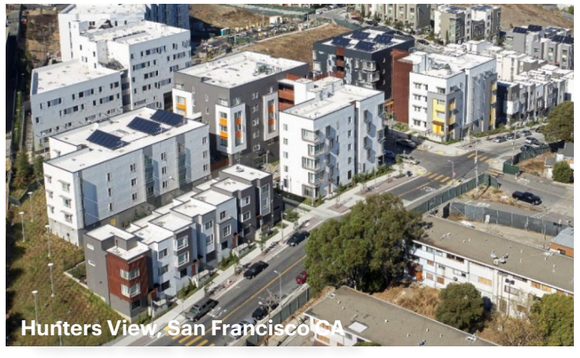
A mixed-income neighborhood blends market-rate and affordable housing within the same neighborhood, and often within the same building. Rather than segregating subsidized and non-subsidized units, integrating the two types of housing within the same neighborhood can promote safety, opportunities, and stability for all residents. This is particularly true when the subsidized housing is designed to not look visibly different from the market-rate housing.

Mixed-income neighborhoods have been shown to provide educational and health benefits to low-income households, especially children of low-income families. By integrating low-income and moderate-income households, mixed-Income developments aim to help break the cycle of poverty and allow more residents to live healthy and prosperous lives in safe neighborhoods.

To create a vibrant neighborhood, it is important to consider a mix of uses. Using a variety of building types enables spaces that can accommodate diverse uses from residential to offices, retail and civic amenities. A mixed-use neighborhood can deliver greater walkability, active spaces and community interaction.

Precedent examples:

- Church Hill North/Armstrong Neighborhood, Richmond VA
- Westlawn Gardens Revitalization, Milwaukee WI
- Westside Neighborhood, Chattanooga TN
- Edison Eastlake, Phoenix AZ
- Crawford Square, Pittsburgh PA
- Park DuValle, Louisville KY (image: below left)
- Hunters View, Hope SF, San Francisco CA
- Potrero Terrace and Annex, Hope SF, San Francisco CA


Hunters View, San Francisco CA


Park DuValle, Louisville KY

Example of a Mixed-Income, Mixed-Use Neighborhood: Church Hill North/ Armstrong, Richmond, VA

Key Facts

- 22-acre extension of a disinvested neighborhood in Richmond, VA.
- Mixed-income project with total 256 homes, including the redevelopment of Creighton Courts, a large mid-century low-rise public housing in the East End.
- “Build first” strategy (prior to demolition) to ensure no displacement.
- Total 220 multi-family and senior homes, 36 ownership units.
- 122 project-based vouchers.
- Mixed-use includes 3,700 square foot Neighborhood Center, created by adapting a historic high school.
- Open spaces include a pocket park, a green, and squares framed by a boulevard.

Design Considerations: Mixed-Income, Mixed-Use Neighborhoods (cont.)

Local Tucson Precedent for Mixed Income Neighborhood: Mercado District, Rio Nuevo

The Mercado District project in Tucson is a great example of how the city is working to revive the historic character of this city that was erased during urban renewal. One of the areas that was most greatly impacted was the area around the Convento and Presidio de San Augustin. The city of Tucson is working to repair this area and one of the first steps on this journey was the revitalization of the Mercado District.

Key Facts

- A 14-block neighborhood plan inspired by the local urban patterns of Tucson's barrios, emphasizes pedestrian movement while also accommodating cars. The public realm consists of narrow streets, plazas, "jardines", and paseos.
- Planned program includes 800 dwellings and 500,000 square feet of commercial space. Of this, 292 units have been built including a 70 unit afforable housing project called West End Station. West End Station has 25 units at 40% AMI, 32 units at 50% AMI, and 13 units at 60% AMI. 100 single family homes have been constructed along with the Monier Apartments which contains 122 units.
- The residential buildings were constructed using traditional building techniques such as adobe and rammed earth, and incorporate passive cooling techniques.
- The project received the 2006 Congress for New Urbanism Charter Award for Moule and Polyzoides.

Source: Moule and Polyzoides Architects

Benefits of Mixed-Use

Mixed-Use Neighborhoods

The site is envisioned as part of a vibrant, walkable neighborhood that will include a variety of amenities within proximity beside the existing places that serve as a destination. The corner of South 10th and West 23rd Street can be a good location for a small to medium-footprint commercial or retail space such as a local grocery/ convenience store/ cafe/ small restaurant serving the local community and also functioning as a gathering place for the neighborhood - encouraging people to meet, socialize, and engage with one another.

Mixed-use developments, in general, allow people to have easy access to a variety of services and amenities, such as shops, eateries, employment, and entertainment, in one location. This helps them save time and money on transportation costs and at the same time, it supports walkability and delivers a pedestrian-friendly environment, especially if the area also has wide sidewalks, bike lanes, and green spaces that encourage people to walk or bike.

Mixed-use development projects use land more efficiently since several uses can occupy the same space, and this also helps activate the ground floors of multi-story buildings. Mixed-use development has been shown to reduce commutes, and is considered a more sustainable form of development.

Further, mixed-use development can support local institutions and community-based organizations and non-profits by offering them office space at low or reduced rents within the mixed-use development. Typically, when ground floor mixed-use is integrated as part of a development, there can be opportunities for use agreements or reduced-fee leasing of some of the space to local NGOs as a community benefit. This can help include facilities such as daycare centers, local clinics or home-based businesses within close proximity to residences. It can also offer opportunities to volunteer with local non-profits, increasing social cohesion.

Design Considerations: Climate-Responsive Development

Building Materials and Thermal Mass

The durability and integrity of buildings impacts sustainability by maximizing the usable life of buildings, and reducing embedded carbon, emissions and waste related to construction and remodeling activities.

- Consider using appropriate building materials to maintain a comfortable indoor temperature in hot or cold periods.
- Employ “green building” strategies such as reflective roofs, radiant barriers, shade structures, and green roofs that save energy, counteract the heat island effect, and along with on-site solar energy generation help to reduce stress on the electric grid. These strategies can often extend benefits beyond the individual site.

Building Orientation and Layout

- Plan the orientation and layout of buildings to maximize the use of natural light, ventilation and reduce the effects of direct sunlight.
- Consider suitability of solar panels when designing roofs and orientation.

Shading and Weather Protection

The climate in Tucson calls for shelter from sun and rain as key components of a comfortable pedestrian environment—needs which are only projected to grow in the coming years.

- Design facades with overhangs, recessed openings, arcades and other strategies for shade.
- Include awnings, canopies, and pavilions to create a comfortable pedestrian realm.

Trees and Landscaping

Trees and other landscape elements provide many benefits, such as shade for pedestrians, intercepting stormwater and counteracting the urban heat island effect.

- Explore opportunities for green infrastructure wherever possible, incorporating swales, tree gardens, etc. for local stormwater management.
- Use native tree species and those well suited to the Tucson climate to provide resilient, easy-to-maintain landscaped (and hardscaped) open spaces.

Design Principles

Below are preliminary design principles to guide planning efforts for the project area

I. Create a mixed-income neighborhood to serve diverse housing needs.

- Design a neighborhood that integrates both market-rate and subsidized housing, to serve a variety of household needs at different income levels.
- Establish a development program for the project area that is feasible in Tucson's real estate market.
- Balance rental and for-sale housing to increase housing choices and homeownership opportunities.
- Explore mixed-use development to provide amenities and services to the project area residents as well as the larger neighborhood.

II. Establish a pedestrian-scaled street and block network, well-connected to neighboring destinations.

- Develop a pedestrian-scaled street and block layout that promotes walking, biking and universal access.
- Connect to the citywide bike network and design pedestrian and bike facilities to strengthen connections to neighboring destinations.
- Where streets are not viable, include pedestrian passages, alleys, and shared use paths for connectivity.
- Use streetscapes to explore green infrastructure opportunities for rainwater harvesting and treatment.

III. Include a variety of open spaces and integrate the Airport Wash as an amenity.

- Establish an open space network that encourages community interaction, and includes a variety of open spaces types.
- Improve the Airport Wash with access paths and landscaping to enable it to function as an open space in addition to a stormwater utility.
- Locate new community-serving uses near open spaces to encourage greater foot traffic and active use.
- Add trees for shade and greenery.
- Employ green infrastructure strategies wherever feasible to promote sustainability.

IV. Design the new built form to create a distinct identity and enhance the built character of the larger neighborhood.

- Include a variety of housing typologies to expand housing choices for current and future residents.
- Create a cohesive built environment through the careful allocation of uses and development intensity.
- Regulate built form and massing to ensure sensitive transitions between areas of different housing intensity and character.