



SAN ANTONIO
RIVER AUTHORITY

Mitigating Land Development Impacts

For SA Tomorrow Phase III Planning Groups
August & September 2022



Committed to Safe, Clean, Enjoyable Creeks and Rivers.

Problem

Adding buildings, parking, and roads without stormwater mitigation will pollute rivers and increase flooding.

Opportunity

Green Infrastructure is an available set of tools to meet development needs, lessen pollution and flooding, and improve community health.



Cityofec.com



Neponset.org



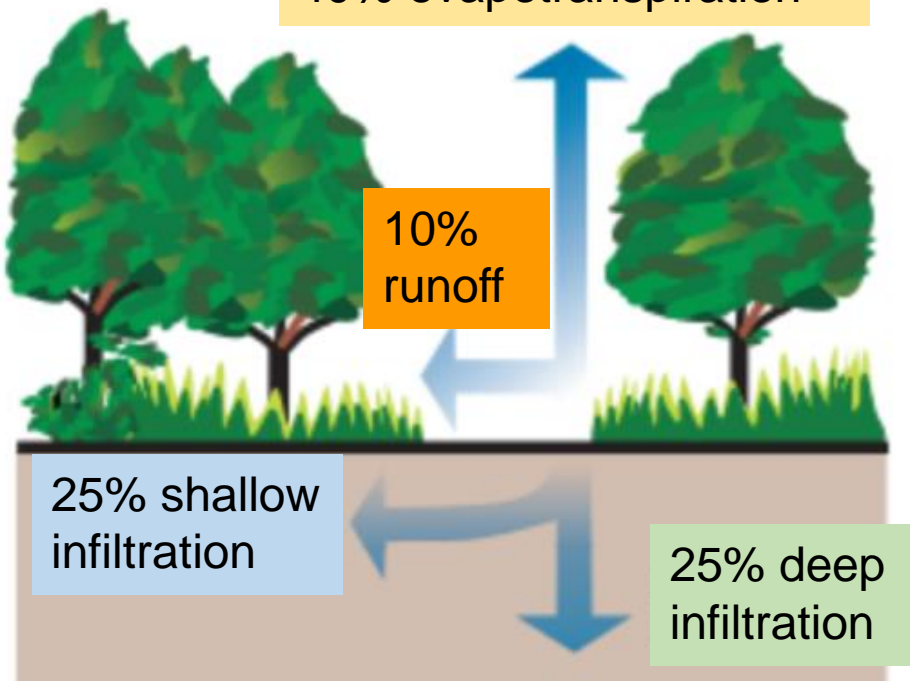
Goal

- Use multi-benefit green infrastructure site planning and development tools to lessen pollution and flooding
- Educate stakeholders
 - Inform land use and policy decisions
 - Inform infrastructure investments

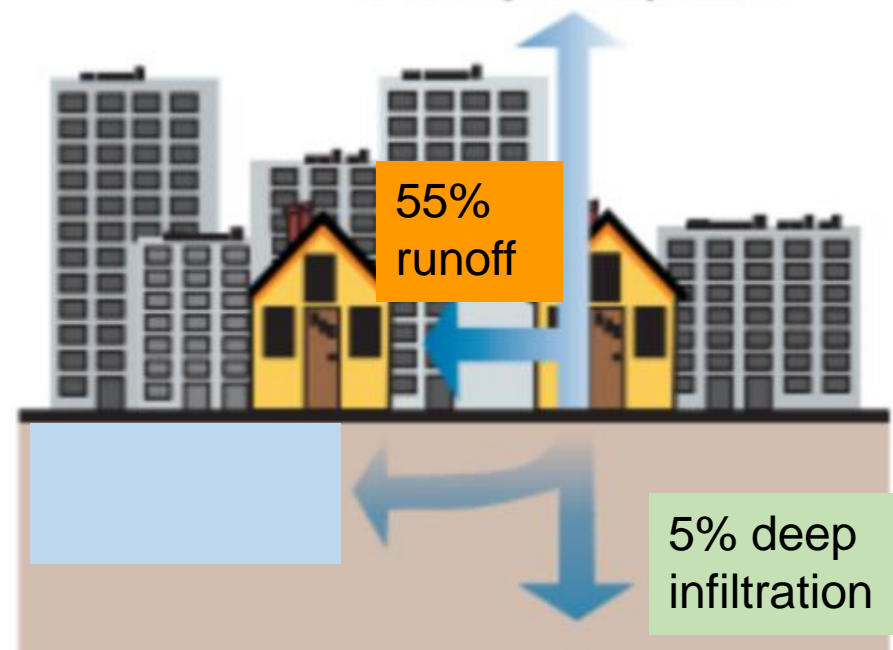


Rainfall / Stormwater

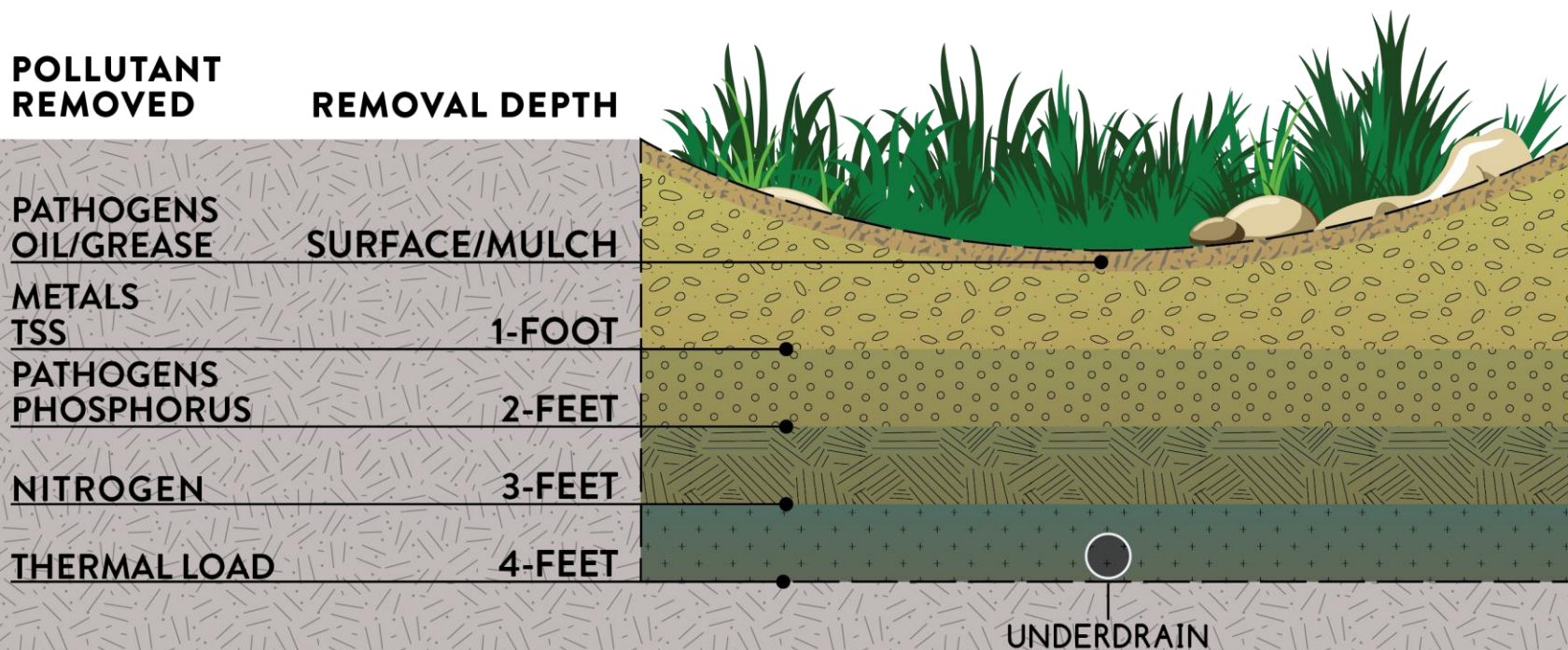
40% evapotranspiration



30% evapotranspiration



How does GI remove pollutants?



Traditional



GI



Source: *Low Impact Development Opportunities for the PLanET Region*; University of Tennessee Landscape Architecture Program, 2013



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Pollution

- Trash
- Bacteria
- Sediment
- Nutrients
- Metals
- Hydrocarbons



Flood Risk

- Human life and safety
- Infrastructure and property



Green Infrastructure

Bioswale

Imitates natural water flows

Uses soils, vegetation

Slows, spreads and soaks in rainwater where it falls

Treats rainwater as a resource

Complements traditional “gray” infrastructure (curbs, gutters, drains, pipes)



Green Infrastructure Examples

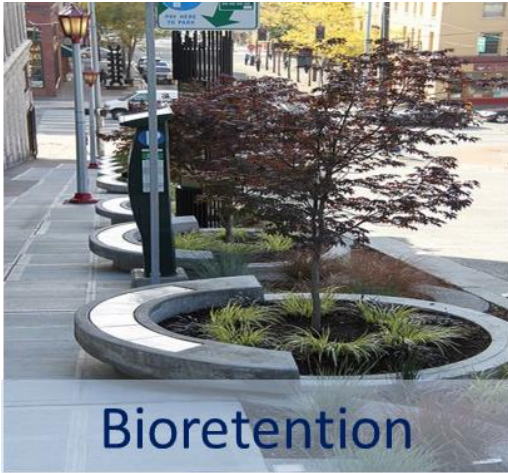


Photo: SVR Design Company



Photo: San Antonio Express News



Photo: <http://media-cache-ec0.pinimg.com>



GI Recommendations

- **Green streets**
- Stormwater parks
- Open space preservation
- GI in
 - Home retrofits
 - New development
- Floodplain preservation / stream buffers
- Cluster development with GI
- Policy and program changes
 - Reducing minimum parking requirements
 - Increase street sweep and pet waste programs



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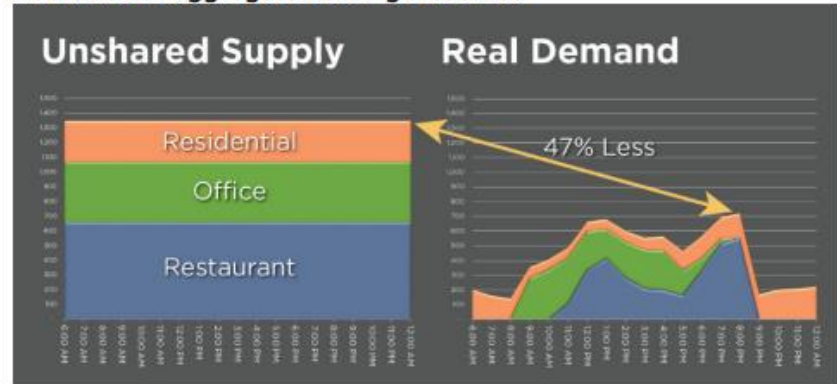
<https://www.chescoplanning.org/MuniCorner/eTools/26-ClusterDev.cfm>



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 - Home retrofits
 - New development
- Floodplain preservation / stream buffers
- Cluster development with GI
- **Policy and program changes**
 - Shared or reduced minimum parking requirements
 - Increase street sweep and pet waste programs

Additive vs. Aggregate Parking Measures



https://www.nctcog.org/nctcog/media/Transportation/DocsMaps/Plan/Landuse/TOD/DART_RedBlue_Report_AppD.pdf



Multi-Benefits

- Improvement of stream and stormwater quality
- Flood reduction
- Trash reduction
- Habitat improvement
- Air pollution reduction
- Urban heat reduction
- Recreation opportunities



Questions?

Karen Bishop
San Antonio River Authority
(210) 302-3642



Committed to Safe, Clean, Enjoyable Creeks and Rivers.



**Greater Airport Area
Planning Team**
Meeting #4
Housing and Economic Development

Thursday, September 15, 2022
Zoom
2:00 – 4:00 PM



Cambridge Systematics, Inc.
Bowtie
Economic & Planning Systems, Inc.
Auxiliary Marketing Services
Mosaic Planning and Development Services
SJPA

Greater Airport Area Project Team

- **City of San Antonio, Planning Department**

- Jacob Howard, Project Manager

- **MIG**

- Krystin Ramirez, Project Manager

- Jonathan Tarr, Housing Subject Matter Expert

- **Economic & Planning Systems (EPS)**

- Matt Prosser, Executive Vice President



Timeline of Meetings



Meeting Objectives

- SARA Presentation
- Review Future Land Use Feedback
- Discuss Housing & Jobs Opportunities and Challenges
- Housing & Jobs Growth Allocation Activity
 - With projected population growth in the Community Area ...
 - How will we guide the addition of housing?
 - How will we guide the addition of job centers?

SA TOMORROW

Guest Presentation:
San Antonio River Authority (SARA)
Karen Bishop



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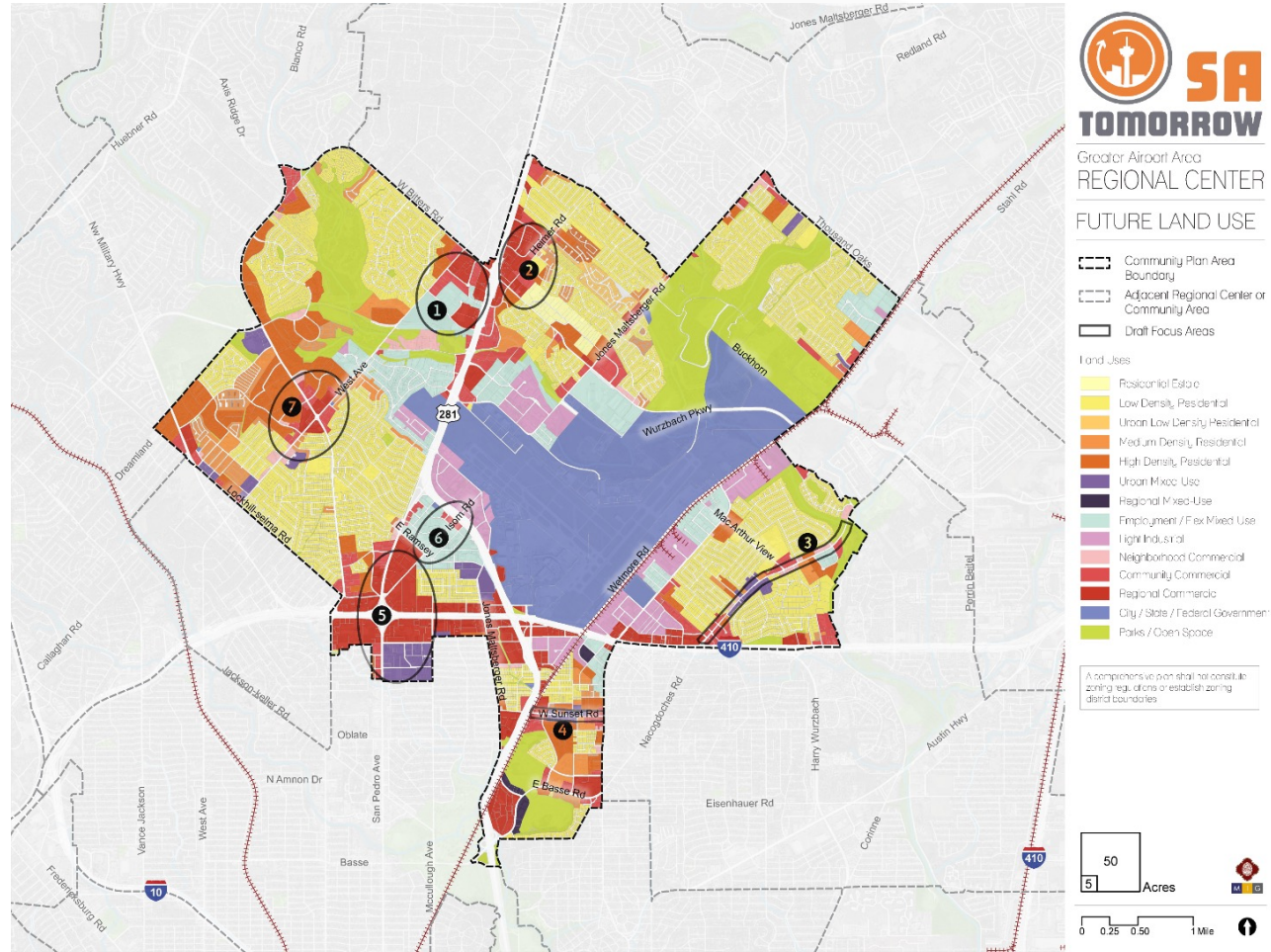
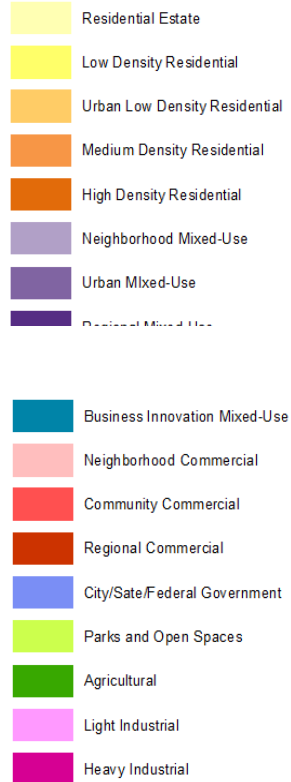
TOMORROW

Draft Future Land Use Plan



Draft Future Land Use Map

General Land Use Categories



Greater Airport Area
 REGIONAL CENTER
 FUTURE LAND USE

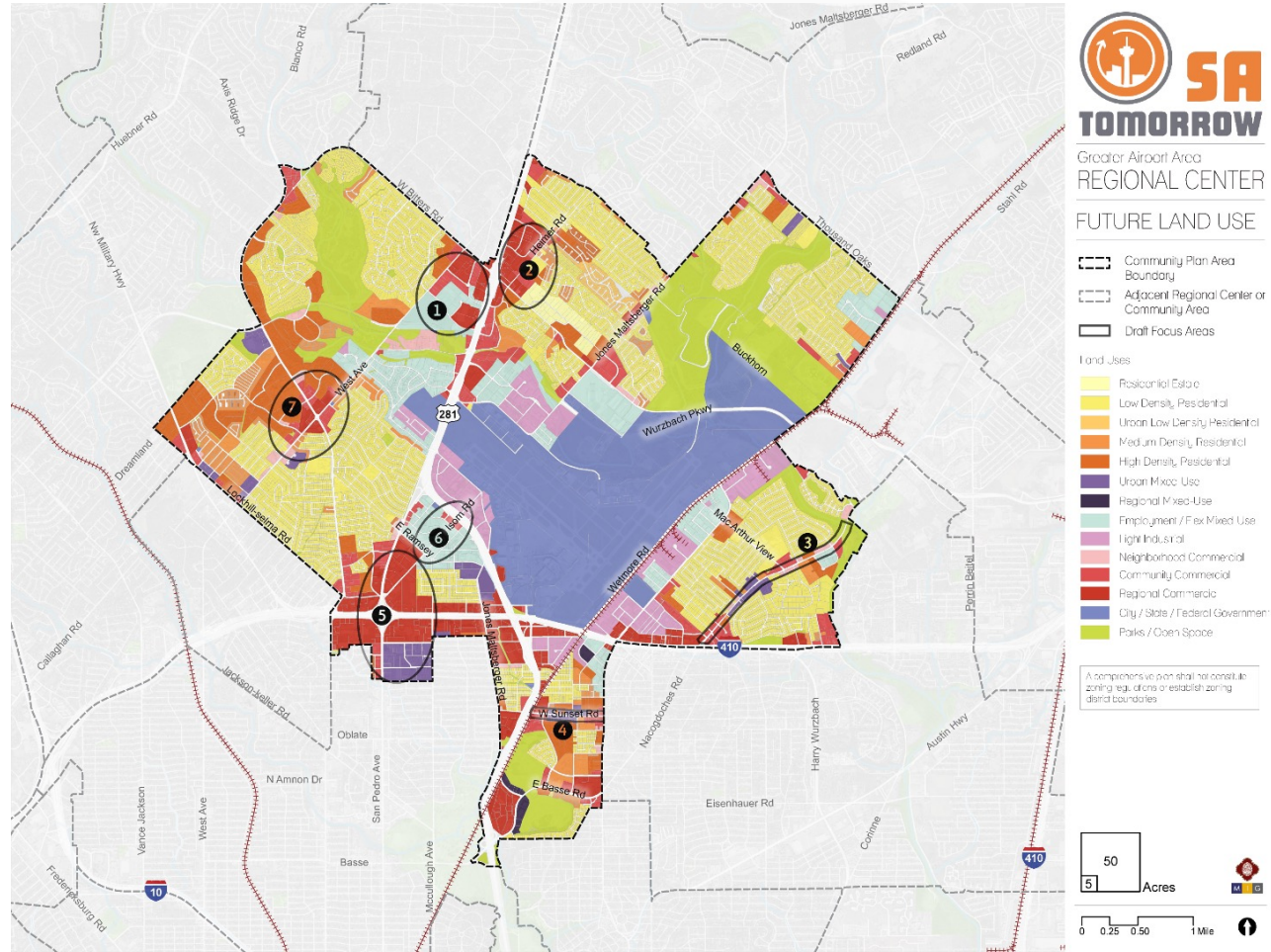
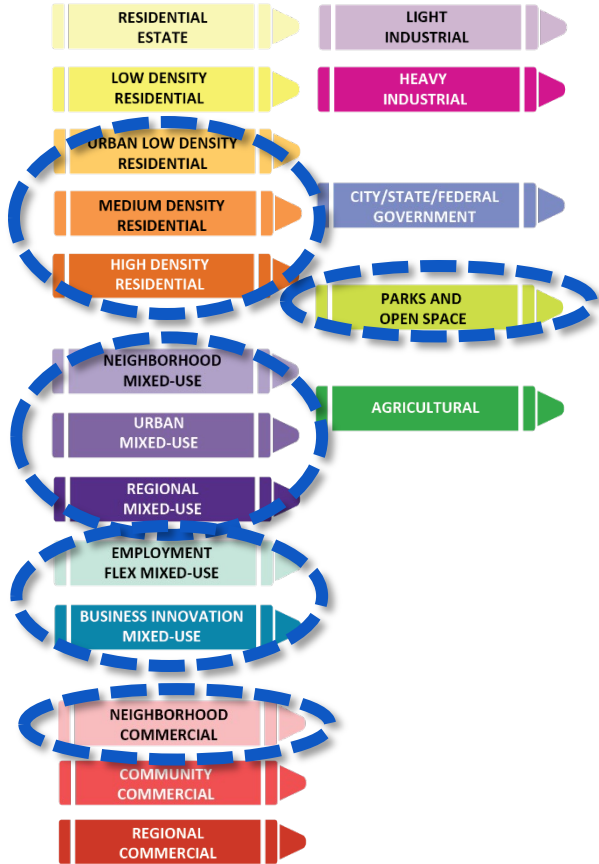
- Community Plan Area Boundary
- Adjacent Regional Center or Community Area
- Draft Focus Areas

- Land Uses
- Residential Estate
 - Low Density Residential
 - Urban Low Density Residential
 - Medium Density Residential
 - High Density Residential
 - Urban Mixed-Use
 - Regional Mixed-Use
 - Employment / Flex Mixed-Use
 - Light Industrial
 - Neighborhood Commercial
 - Community Commercial
 - Regional Commercial
 - City / State / Federal Government
 - Parks / Open Space

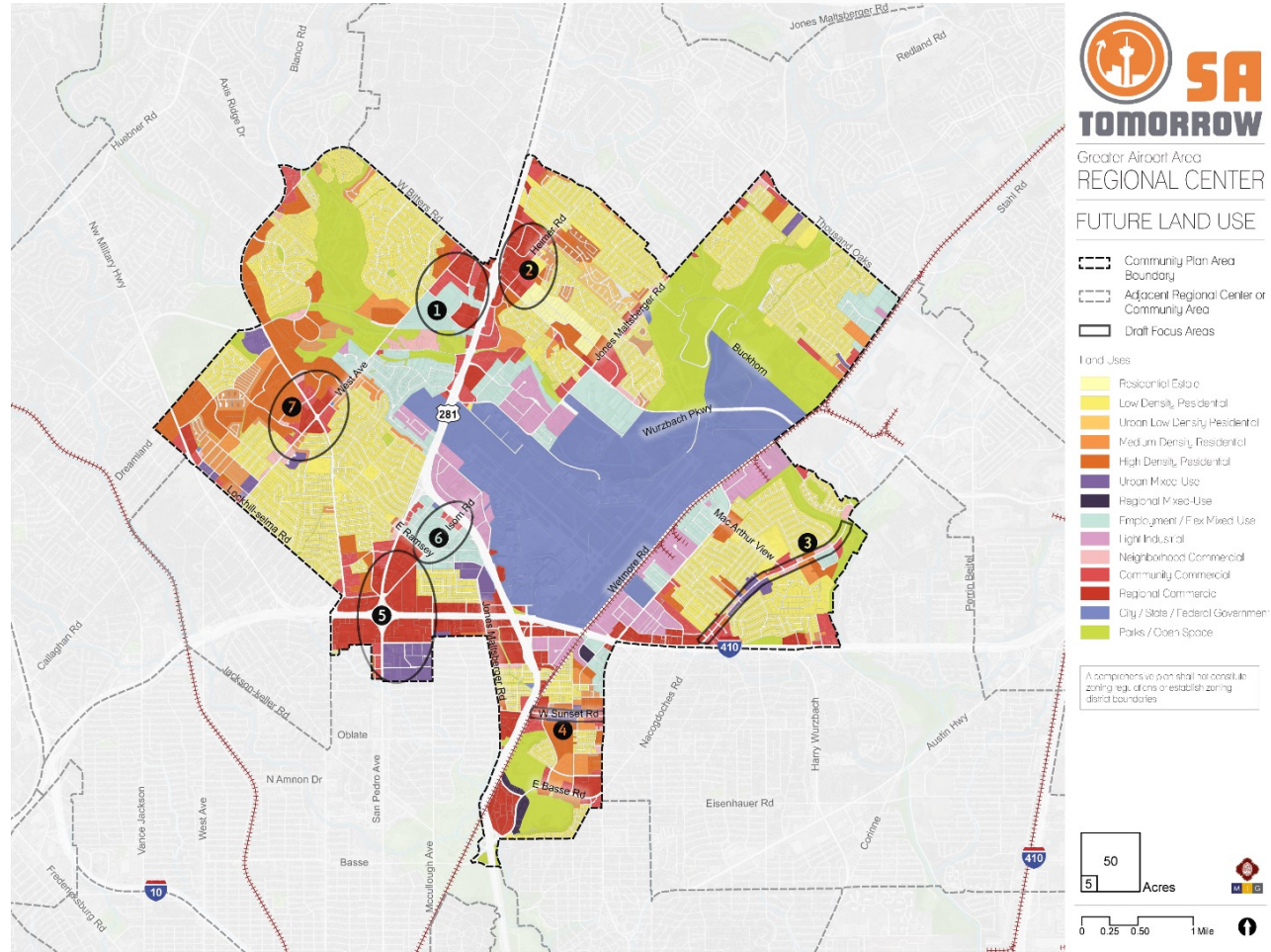
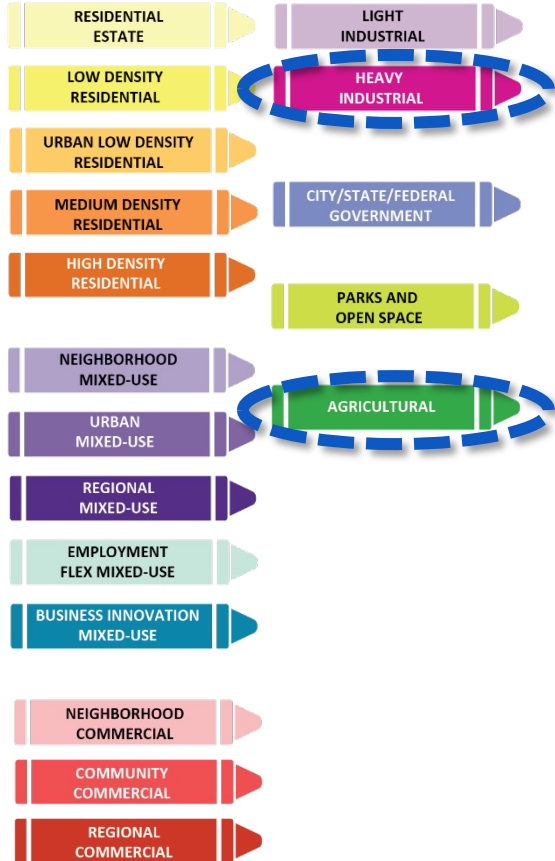
A comprehensive plan shall not constitute zoning regulations or establish zoning district boundaries.



Future Land Uses Priority for the Area

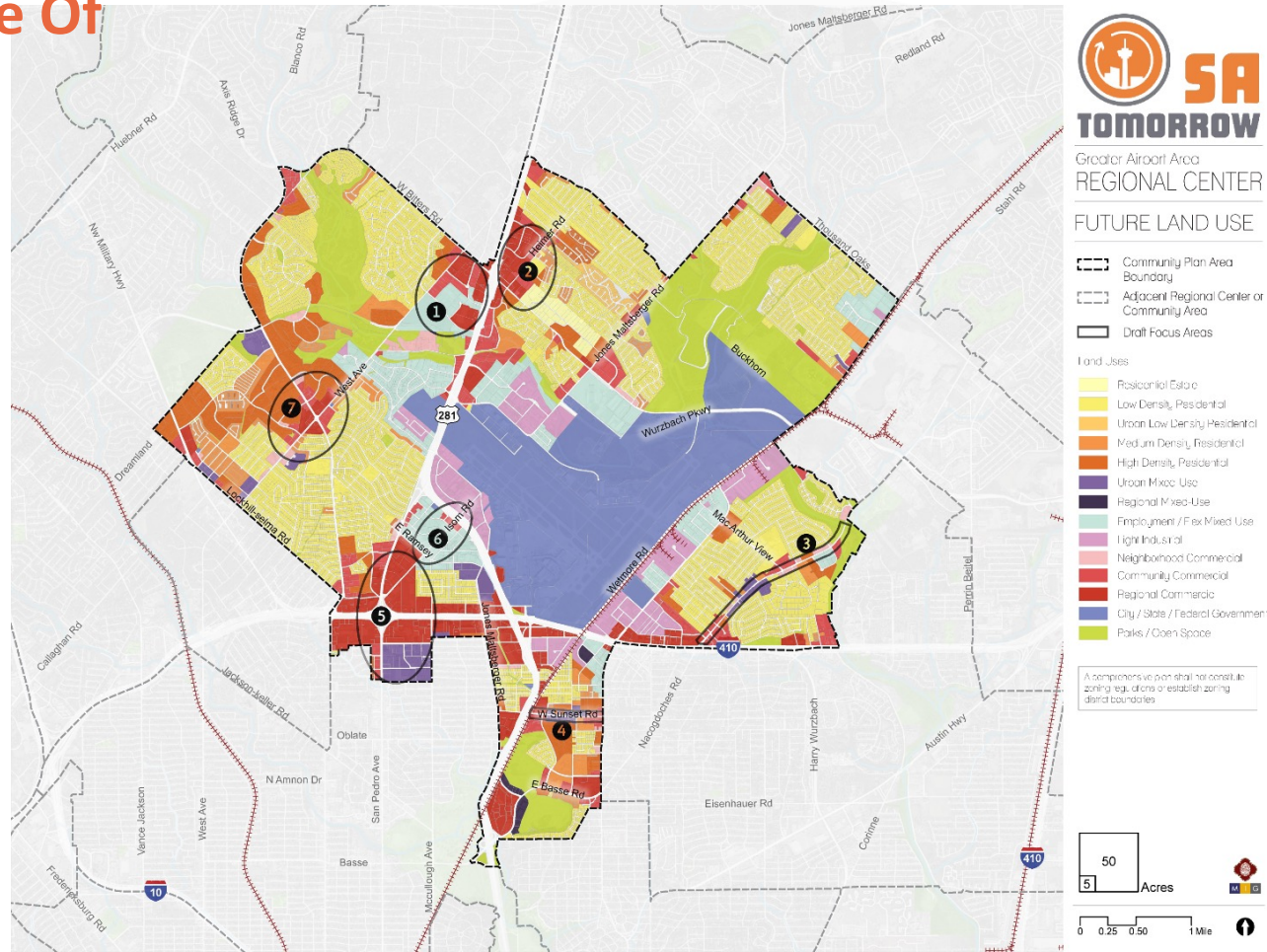
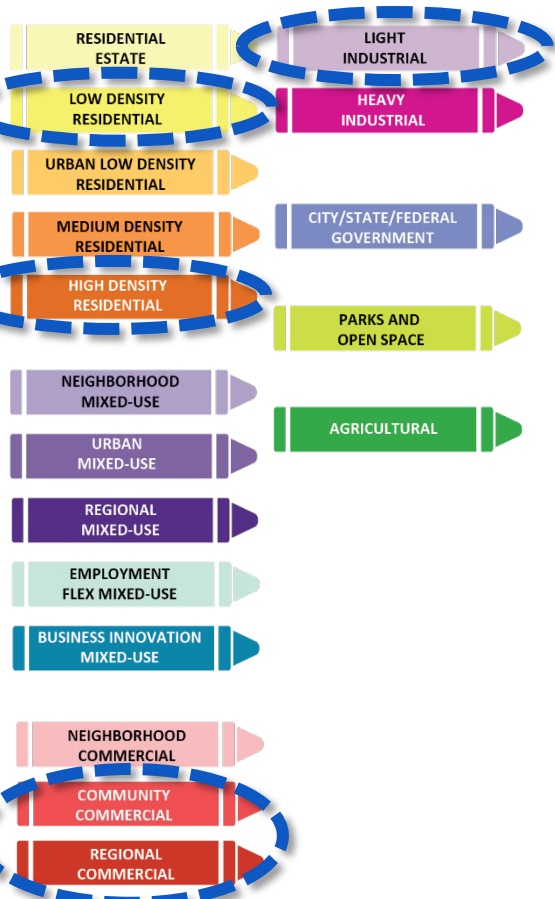


Future Land Uses Not Appropriate



Future Land Uses

We Don't Need More Of



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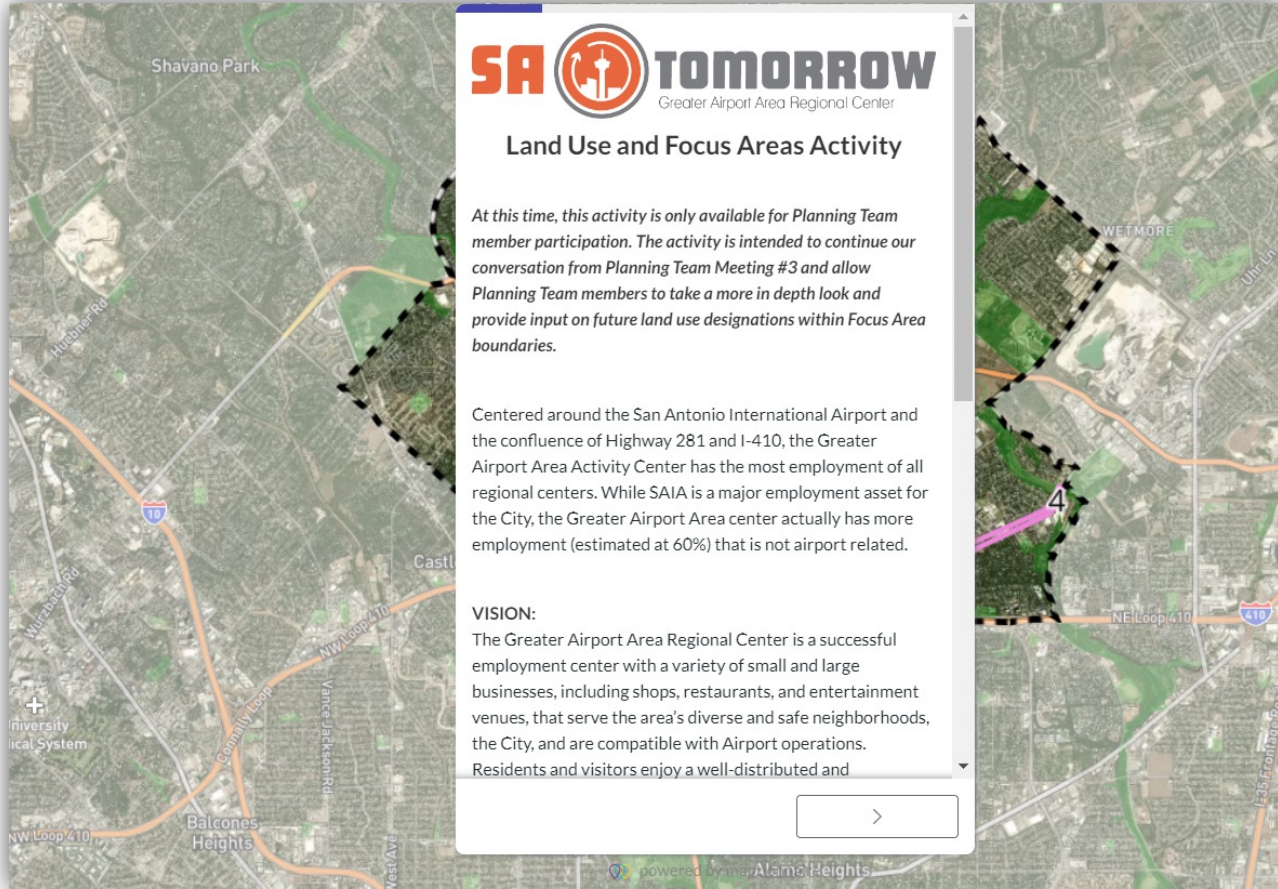


TOMORROW

Planning Team Land Use Activity



Land Use Activity



SA TOMORROW
Greater Airport Area Regional Center

Land Use and Focus Areas Activity

At this time, this activity is only available for Planning Team member participation. The activity is intended to continue our conversation from Planning Team Meeting #3 and allow Planning Team members to take a more in depth look and provide input on future land use designations within Focus Area boundaries.

Centered around the San Antonio International Airport and the confluence of Highway 281 and I-410, the Greater Airport Area Activity Center has the most employment of all regional centers. While SAIA is a major employment asset for the City, the Greater Airport Area center actually has more employment (estimated at 60%) that is not airport related.

VISION:
The Greater Airport Area Regional Center is a successful employment center with a variety of small and large businesses, including shops, restaurants, and entertainment venues, that serve the area's diverse and safe neighborhoods, the City, and are compatible with Airport operations. Residents and visitors enjoy a well-distributed and

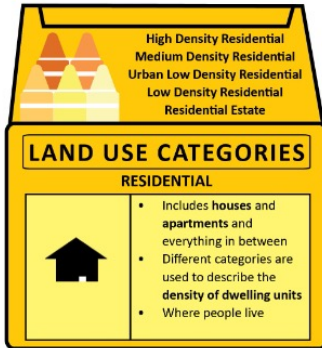
powered by **metAlamo** Heights

Land Use Activity

SA Tomorrow Land Use Categories

Before you dive into providing Future Land Use recommendations, let's revisit the land use categories. Feel free to come back and reference this page any time during the activity.


Note that the information you enter on the following pages will not be erased if you come back to visit this page.



High Density Residential
Medium Density Residential
Urban Low Density Residential
Low Density Residential
Residential Estate

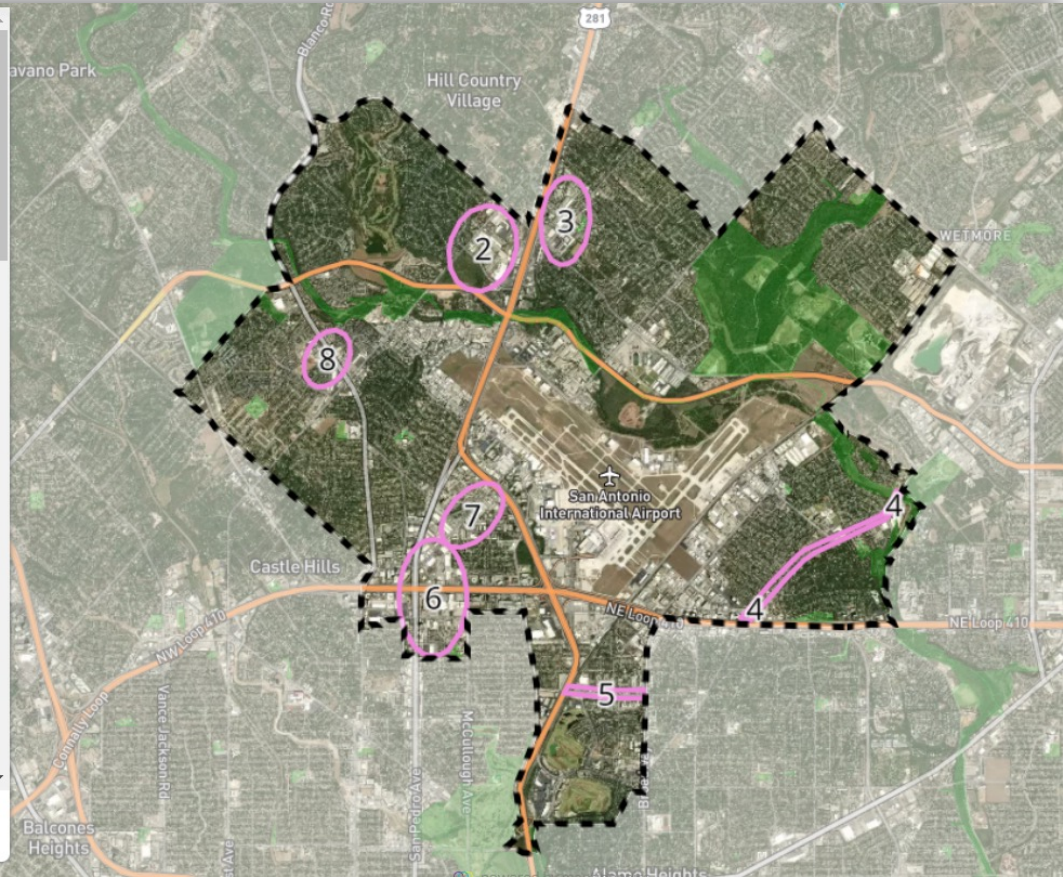
LAND USE CATEGORIES

RESIDENTIAL



- Includes houses and apartments and everything in between
- Different categories are used to describe the **density of dwelling units**
- Where people live

[CLICK HERE FOR RESIDENTIAL LAND USE CATEGORIES](#)

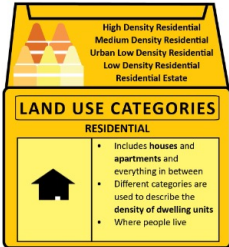


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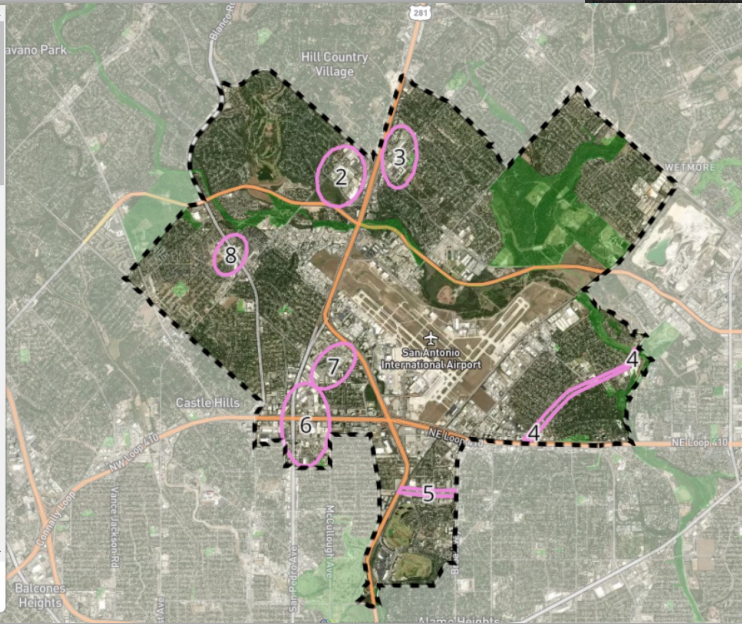
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LAND USE RESIDENTIAL ESTATE

This category includes large lot single-family detached houses and should be located away from major arterials. Residential Estate can include certain nonresidential uses such as schools, places of worship, and parks that are centrally located for convenient neighborhood access.

Examples of Development Types:

- Large Lot Single-Family Detached Houses
- Conservation Subdivisions
- Individual Estate-Sized Lots



LAND USE LOW DENSITY RESIDENTIAL

This category includes single-family detached houses on individual lots and should not typically be located adjacent to major arterials. This land use category can include certain nonresidential uses such as schools, places of worship, and parks that are centrally located for convenient neighborhood access.

Examples of Development Types:

- Single-Family Detached Houses
- Manufactured Houses
- Modular Houses



Done

Land Use Activity

Future Land Use Activity: Focus Areas

Now here is the fun part! The map on the side shows all of the focus areas we discussed in Planning Team Meeting #3. Use the Land Use Designation pins below to identify where appropriate, desired, and needed future land use designations should go within the focus areas.

Instructions:

You can zoom in and out of the map using the +/- buttons on the right and move around the map using your mouse or buttons on the map.

To view the future land use map, choose it from the layer menu at the top right of the map screen.

Note: In later exercises we will explore the appropriate, desired, and needed future land use designations outside of these focus area boundaries.

Indicate the changes you would like to see by using the colored pins below

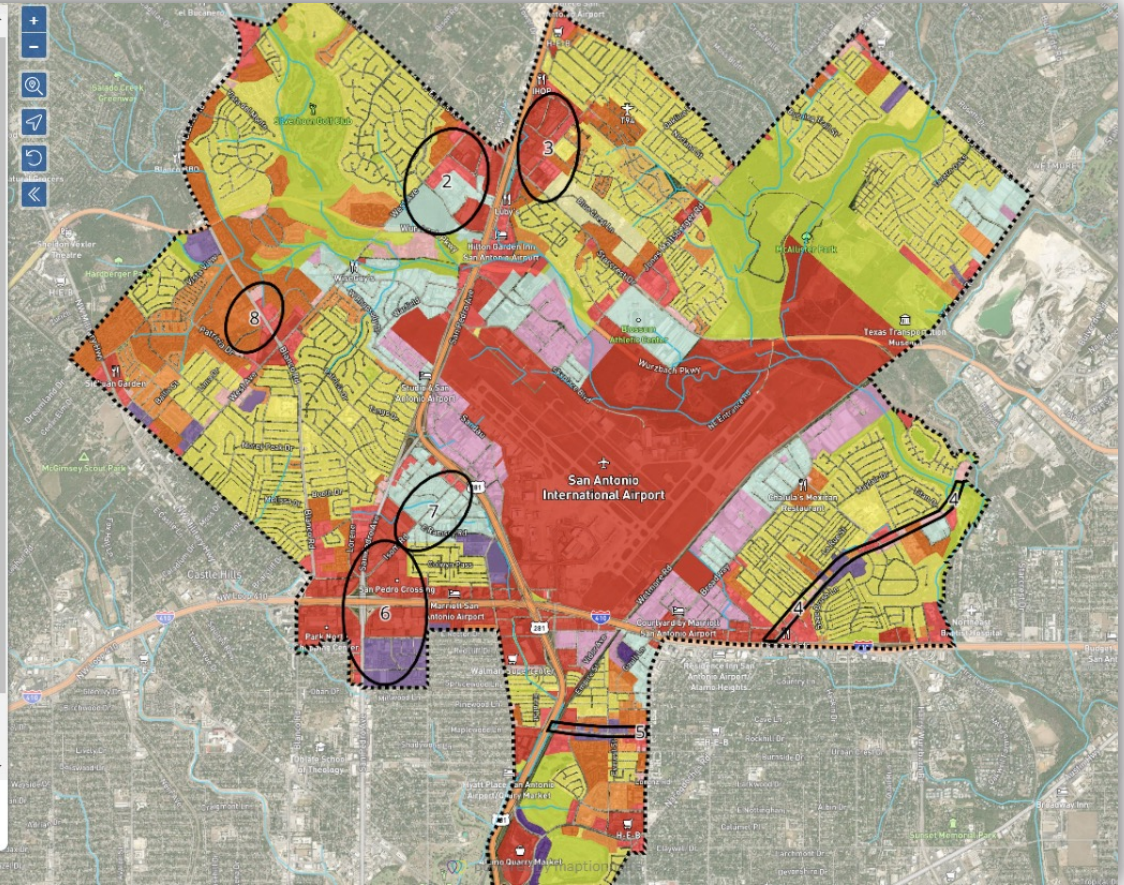
Residential 🏠

Commercial 🏢

Mixed-Use 🏡

Industrial 🏭

< >



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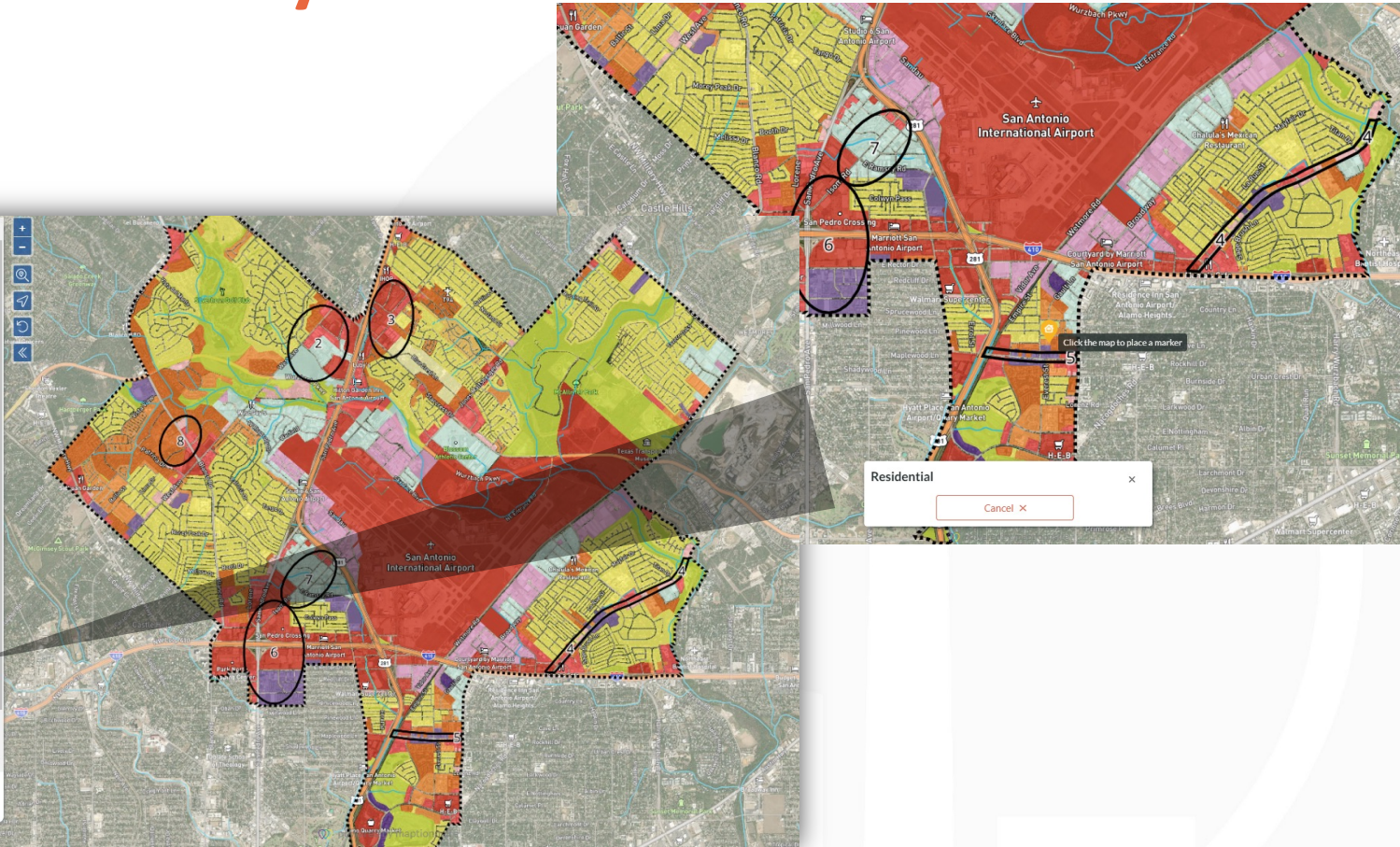
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- Commercial 🏢
- Mixed-Use 🏡
- Industrial 🏭

Residential

Select the Residential Land Use Category you want at this location:


Residential Estate

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Low Density Residential

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Land Use Activity

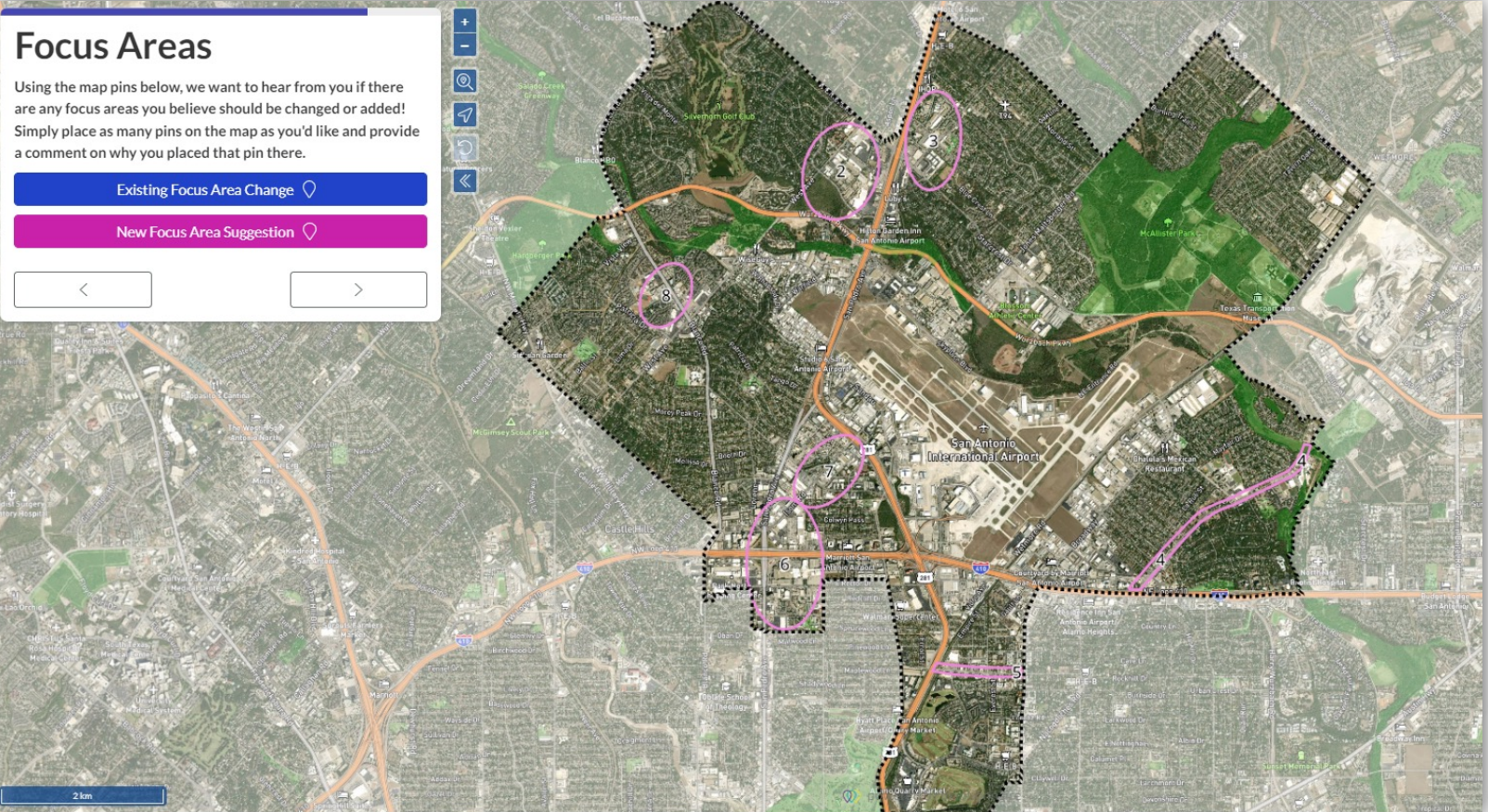
Focus Areas

Using the map pins below, we want to hear from you if there are any focus areas you believe should be changed or added! Simply place as many pins on the map as you'd like and provide a comment on why you placed that pin there.

Existing Focus Area Change

New Focus Area Suggestion

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The map displays the San Antonio area, including the San Antonio International Airport and surrounding urban and green spaces. Eight specific focus areas are highlighted with pink circles and lines, numbered 1 through 8. Area 1 is a small residential block near the airport. Area 2 is a larger residential area. Area 3 is a residential area near the airport. Area 4 is a residential area near the airport. Area 5 is a residential area near the airport. Area 6 is a residential area near the airport. Area 7 is a residential area near the airport. Area 8 is a residential area near the airport. The map also shows major roads, parks, and other landmarks. A scale bar at the bottom left indicates 2 km. Navigation controls are visible on the left side of the map.

SA

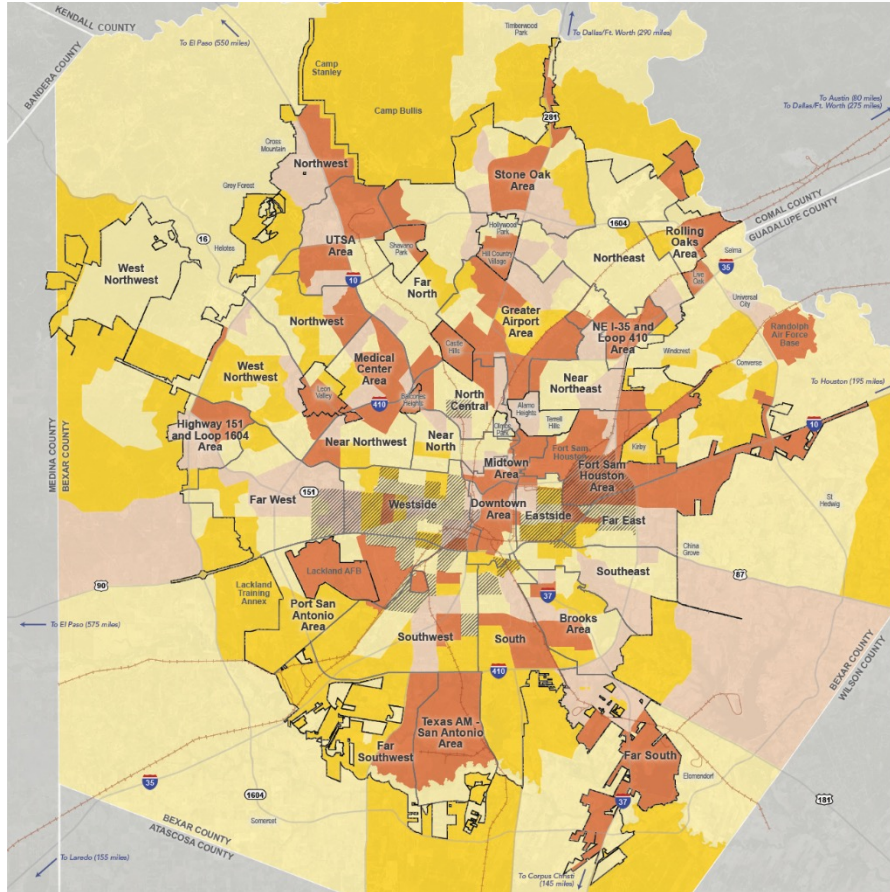


TOMORROW

Equity Atlas: Employment Access



Equity Atlas: Employment Access Map



LEGEND

- City Boundary
- Planning Sub-Area Boundary
- Major Highway
- Rail Line

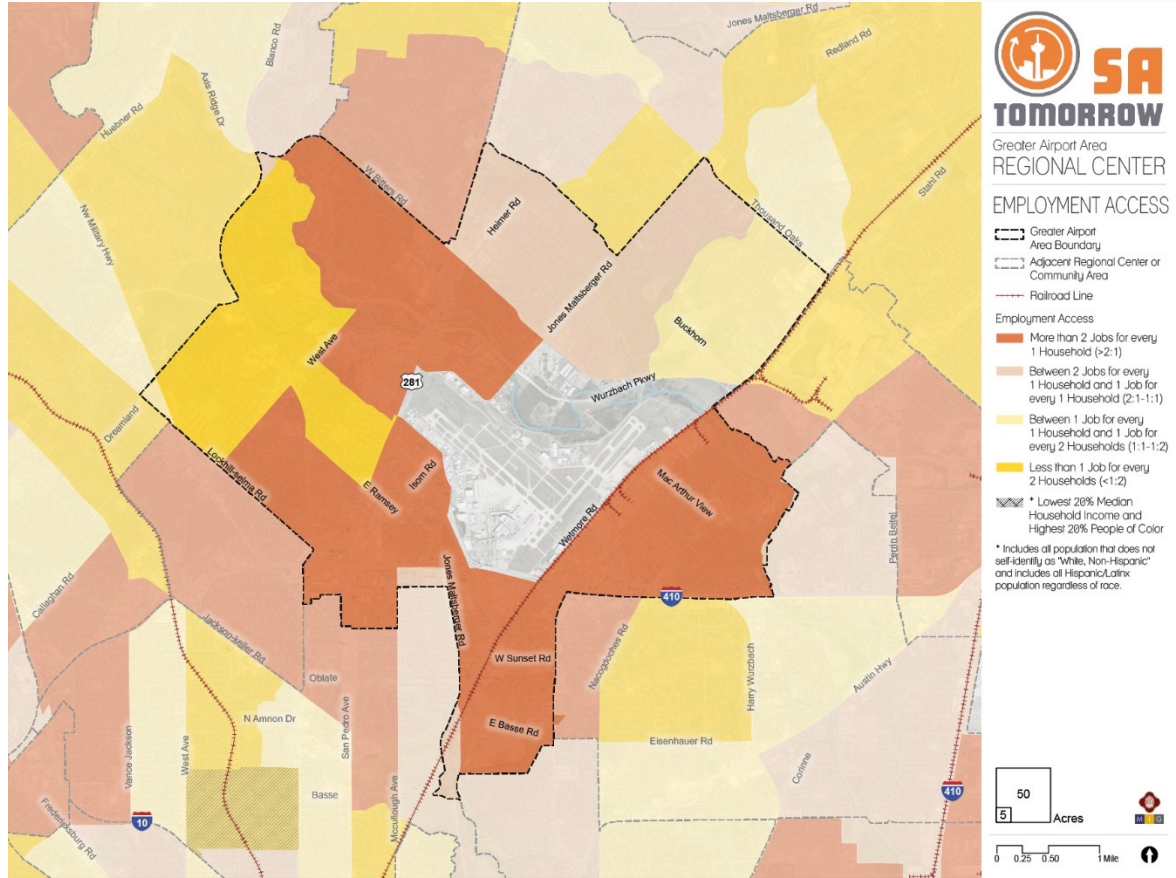
Employment Access

- More than 2 Jobs for every 1 Household (>2:1)
- Between 2 Jobs for every 1 Household and 1 Job for every 1 Household (2:1-1:1)
- Between 1 Job for every 1 Household and 1 Job for every 2 Households (1:1-1:2)
- Less than 1 Job for every 2 Households (<1:2)
- * Lowest 20% Median Household Income and Highest 20% People of Color

*Includes all population that does not self-identify as "White, Non-Hispanic" and includes all Hispanic/Latinx population regardless of race.



Equity Atlas: Employment Access Map



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TOMORROW

Housing and Economic Development



Population and Housing

Total Population (2021) | **72,160**
Total Households (2021) | **29,700**



Average Household Size

2.19 persons

2.69 - City of San Antonio Average



Median Age

37.1 years

34.5 years - City of San Antonio Average



Average Household Income

\$74,104

5% higher than City of San Antonio

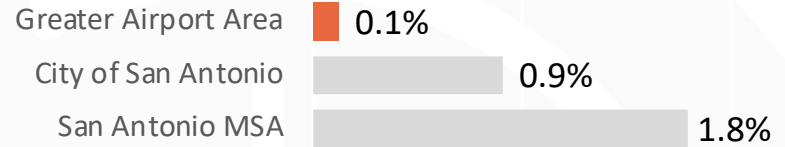


Race and Ethnicity

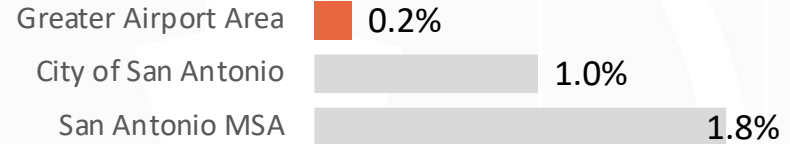
52% Hispanic-origin



Annual Population Growth | 2010-2021



Annual Household Growth | 2010-2021

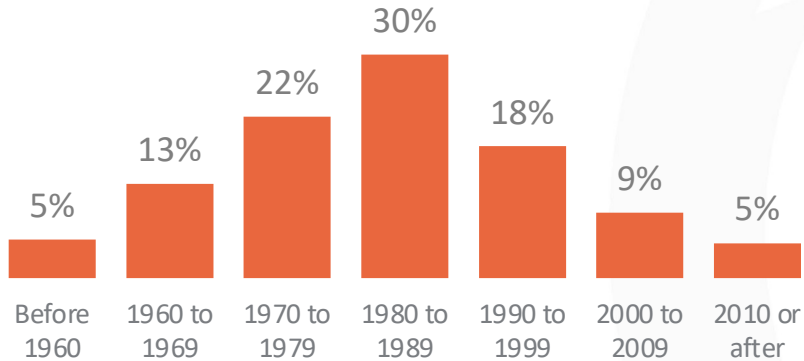


The Greater Airport Area Regional Center has smaller than average household sizes than the City, and households have higher household incomes than the City overall.

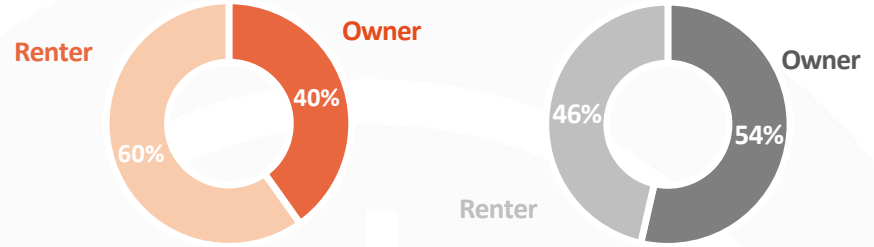
Housing Conditions

Total Housing Units (2021) | **36,396**

Age of Housing Stock



Housing Tenure



60% of occupied housing units are **rented**
46% City of San Antonio Average

Units in Structure

39% of all housing units are single-family detached homes
62% City of San Antonio average

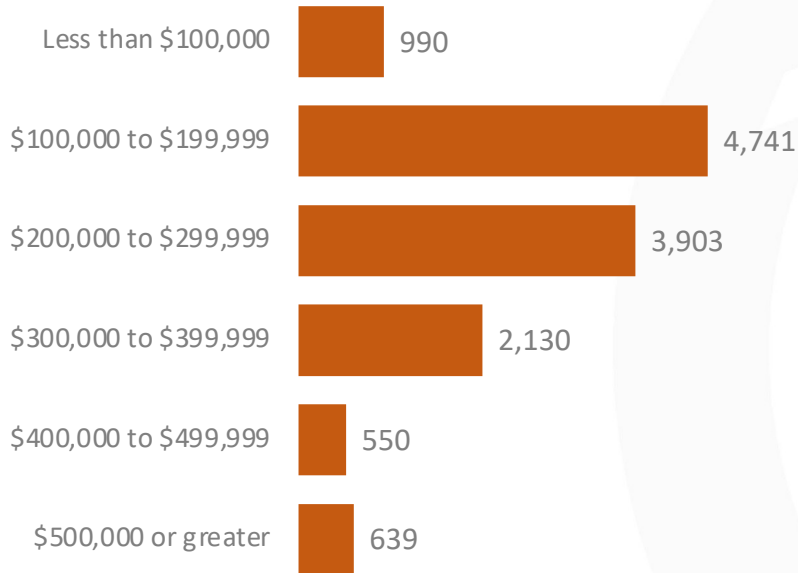
The majority of housing in the center is in higher density product types and built between 1970 and 2000.

Housing Accessibility and Affordability



Owner-Occupied

67% of homes are valued between \$100,000 and \$299,999



Average home listing price is around **\$326,000** (78216 ZIP code) and **\$534,000** (78209)
City of San Antonio average is around **\$301,000**

40% of Greater Airport Area homeowners do not have a mortgage

37% Bexar County average



Owners Cost Burden

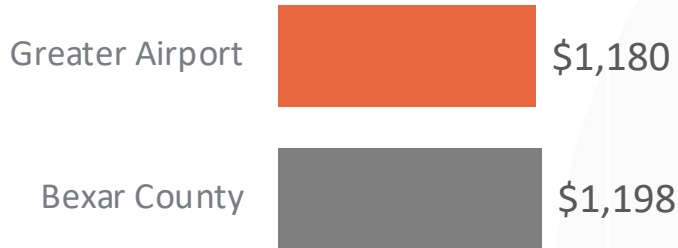
23% of homeowners are **cost burdened**, paying more than 30% of income towards housing

Housing Accessibility and Affordability



Renter-Occupied

Average rent for apartments in the Stone Oak Area is **2%** less than the County average (CoStar data)



Housing costs in the center generally match the city and county-wide averages.

75% of rentals are **affordable** to a household earning the Citywide median income of **\$52,361** (Census data)

Since 2010, average monthly rents have increased by **\$371, slightly less** than the County growth overall

Average rent for new apartment units is **\$1,800 per month**

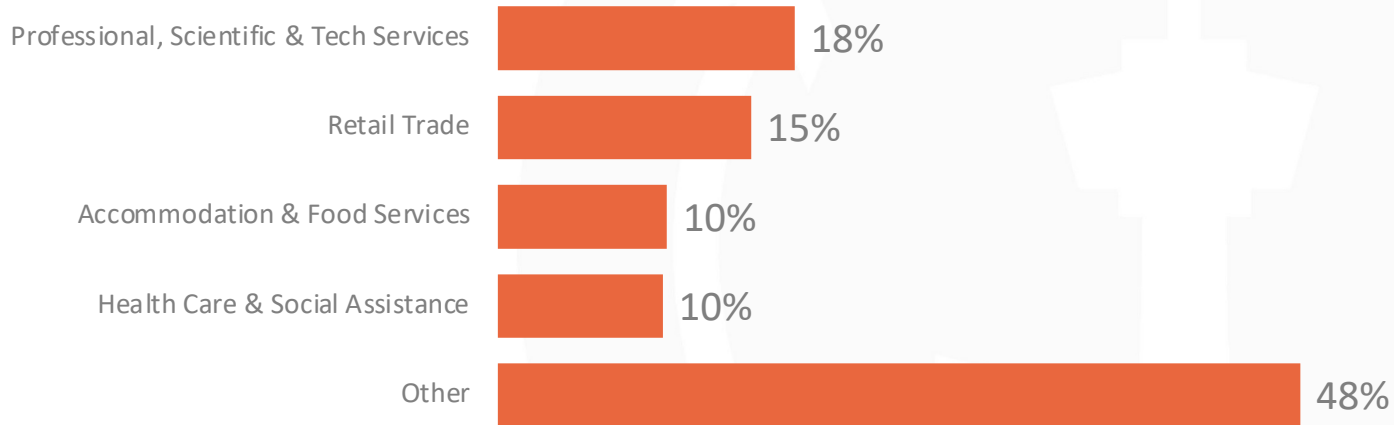
Employment

Total Employment (2021) | **87,600**



Largest Employment Sectors

Professional Services and Retail Trade

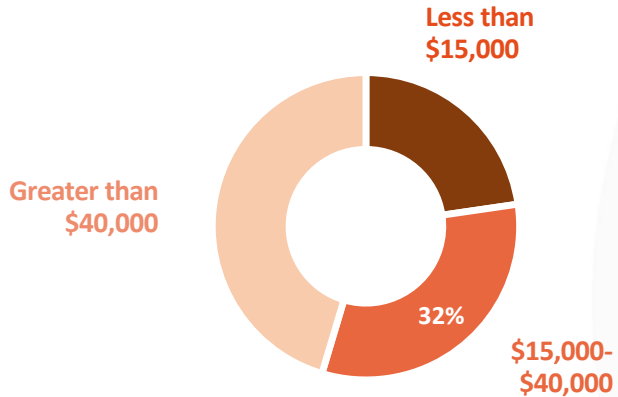


Workforce



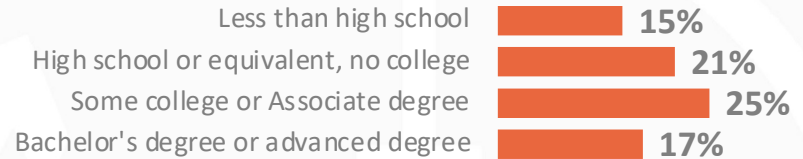
Wage Distribution

45% of workers earn more than \$3,333 per month (\$40,000 annually)



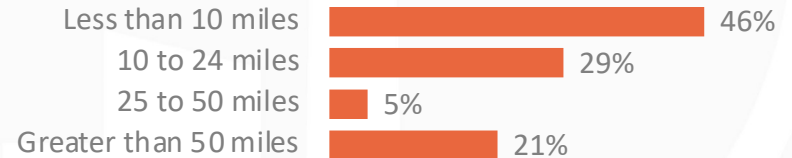
Education (2019)

42% of workers have some college or higher



Commuting Patterns (2019)

5.6% of workers live in the center



Real Estate Conditions

Commercial and Industrial Development



Office | Major Office Cluster

9.3 million sq. ft.

550,000 sf of new development since 2010

15.9%

vacancy rate
10.8% Bexar County average



Industrial | Logistics Hub

6.5 million sq. ft.

31,900 sf of new construction since 2010

4.0%

vacancy rate
4.8% Bexar County average



Retail | Retail Destination

8.9 million sq. ft.

256,000 sf of new development since 2010

3.4%

vacancy rate
4.1% Bexar County average



Hotel | Growing inventory

29 hotels, **4,523** rooms

390 rooms built since 2010

Housing Types and Affordability



Average Rental Rates for New Apartments =
\$1,800 per month



Average Home Price for New Home =
\$262,000 to \$345,000 (78216) to \$400,000
to \$500,000 (78209 partial)

Typical Jobs/Wages and Affordability

Occupation	Average Annual Wage	Est. HH Income	Affordable Rent (based on wages)	Affordable Home Price (based on wages)
Waiter/Server	\$21,860	\$30,803	\$547	\$74,324
Hotel, Motel, and Resort Desk Clerks	\$22,580	\$31,817	\$565	\$76,772
Retail Salesperson	\$27,970	\$39,412	\$699	\$95,098
Production Workers	\$36,283	\$51,126	\$907	\$123,361
Light Truck/Delivery Services Drivers	\$40,000	\$56,364	\$1,000	\$136,000
Transportation Security Screeners	\$39,740	\$55,997	\$994	\$135,116
Avionics Technicians	\$64,580	\$90,999	\$1,615	\$219,572
Healthcare Practitioners and Technical O	\$78,360	\$110,417	\$1,959	\$266,424
Civil Engineers	\$80,520	\$113,460	\$2,013	\$273,768
Lawyers	\$111,690	\$157,382	\$2,792	\$379,746
Average for Area		\$73,572	\$1,839	\$250,145

Source: US BLS; CoStar; MLS



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Growth Allocation Activity

Factors for Greater Airport Area

Regional Center Growth Goals:

- **60% of Jobs (forecast is 50%)**
- **20% of Housing Units**
- **50% of Multifamily Units**



New Housing Development

Approx. 1,100 total units since 2010 including 400 apartment units



Employment Growth | 2010-2040

39,400 new jobs
1,313 jobs per year



New Employment since 2010

16,028 new jobs (US Census LEHD 2010 to 2019)
Approx. 1,780 jobs per year



Household Growth | 2010-2040

3,500 new housing units
117 new units per year

Housing Allocation



Single Family Detached

- Est. of 600 units
- 1 piece = 300 units
- 100 acres per piece

Piece Color is **green**

- 2 pieces to allocate



Attached/Townhomes

- Est. of 600 units
- 1 piece = 300 units
- 42 acres per piece

Piece Color is **red**

- 2 pieces to allocate



Garden Multifamily

- Est. of 600 units
- 1 piece = 300 units
- 20 acres per piece

Piece Color is **gold**

- 2 pieces to allocate



Urban Multifamily

- Est. of 600 units
- 1 piece = 300 units
- 10 acres per piece

Piece Color is **orange**

- 2 pieces to allocate

Employment Allocation



Retail

- Est. 3,500 jobs
- 1 piece = 1,000 jobs
- 20 acres per piece

Piece Color is **red**

- 3-4 pieces to allocate



Industrial/Flex

- Est. 2,300 jobs
- 1 piece = 1,000 jobs
- 50 acres per piece

Piece Color is **grey/black**

- 2-3 pieces to allocate



Office/Education/Health

- Est. 12,500 jobs
- 1 piece = 1,000 jobs
- 10 acres per piece

Piece Color is **blue**

- 12-13 pieces to allocate



Hospitality/Entertain.

- Est. 4,500 jobs
- 1 piece = 1,000 jobs
- 15 acres per piece

Piece Color is **pink**

- 4-5 pieces to allocate

SA



TOMORROW

Next Steps



Next Steps

- **NEXT PLANNING TEAM MEETING(S):**

- Community Meeting #2

- Thursday, November 3rd 2022
- Open House from 4:30 PM to 7:30 PM
- Walker Ranch Senior Center

- Planning Team Meeting #5

- Thursday, December 15th from 2:00 to 4 PM
- Land Use, Housing & Economic Development

- Planning Team Meeting #6

- Thursday, February 2nd from 2 to 4 PM
- Mobility & Streetscapes



**Greater Airport Area
Planning Team**
Meeting #4
Housing and Economic Development

Thursday, September 15, 2022
Zoom
2:00 – 4:00 PM



Cambridge Systematics, Inc.
Bowtie
Economic & Planning Systems, Inc.
Auxiliary Marketing Services
Mosaic Planning and Development Services
SJPA