



La Doce Community Health Assessment

Participatory Evaluation Institute

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MEL & ENID ZUCKERMAN COLLEGE OF PUBLIC HEALTH
Arizona Prevention
Research Center



CITY OF
TUCSON

ENVIRONMENTAL & GENERAL SERVICES

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Cover photo source: Tucson.com article [“Neto’s Tucson: Honoring La Doce’s traditions and potential to improve neighborhoods.”](#) . Artists Alex Jimenez and Johanna Martinez created “The Talking Mural” on the Raspados Oasis Building.

ONE-PAGE SUMMARY

2023 La Doce Community Health Assessment One Page Summary	
Methods	Data Collection: <ul style="list-style-type: none"> • Conducted 7 key informant interviews • Completed 2 community dialogues with 19 community members • Aggregated secondary data from publicly available sources
Primary Data Overview	
Assets	Challenges
<ul style="list-style-type: none"> • Easy access to amenities such as El Pueblo Center • Strong sense of community and pride in food, culture and history • Multigenerational houses, close-knit community • Desire to work together to improve the community 	<ul style="list-style-type: none"> • Historical groundwater contamination in the community • Houselessness and housing instability • Lack of healthy food options • Lack of green space • Vacant and abandoned properties • Perception of safety is worsening • Traffic, including street racing, and lack of pedestrian infrastructure
Secondary Data Overview	
<ul style="list-style-type: none"> • 1 in 3 residents and 1 in 4 children within La Doce live under the Federal Poverty Level • 1 in 4 households reported spending 30% or more of their gross monthly income on housing/renting costs • 1 in 3 households in La Doce receive SNAP benefits • Tree equity scores within La Doce boundaries are one of the lowest in Tucson with all areas being classified as high priority need for canopy coverage • More than two-thirds of the population of La Doce speak a language other than English at home • Cancer prevalence rate is lower within La Doce compared to Pima County and Arizona 	
Priorities for Redevelopment of Brownfield Site	
<p>Based on the results of the community health assessment, the priority for the redevelopment of a brownfield site would be a park that includes an accessible walking path, benches, green space, trees, lighting, and a small resource center. The park ideally would be in the northern half of the neighborhood.</p> <p>A park provides:</p> <ul style="list-style-type: none"> • Green space, tree coverage and shade • A free place for recreation, exercise and to gather as a community • A safe space where residents can organically meet their neighbors 	

2023 La Doce Evaluación de Necesidades de la Comunidad

Resumen de Una Página

Métodos	Recopilación de datos: <ul style="list-style-type: none"> • Entrevistas con 7 informantes claves • 2 diálogos comunitarios con 19 miembros de la comunidad • Datos secundarios agregados de fuentes disponibles al público 	
Información General sobre los Datos Primarios		
Activos		Desafíos
<ul style="list-style-type: none"> • Fácil acceso a servicios como El Pueblo Center • Fuerte sentido de comunidad y orgullo por la comida, la cultura y la historia • Casas multigeneracionales, comunidad unida • Deseo de trabajar juntos para mejorar la comunidad 		<ul style="list-style-type: none"> • Contaminación histórica del agua subterránea en la vecindad • Falta de vivienda e inestabilidad de la vivienda • Falta de opciones de alimentos saludables • Falta de espacios verdes • Propiedades vacías y abandonadas • La percepción de seguridad está empeorando • Tráfico, incluidas las carreras callejeras, y la falta de infraestructura peatonal
Información General sobre los Datos Secundarios		
<ul style="list-style-type: none"> • 1 de cada 3 residentes y 1 de cada 4 niños dentro de La Doce viven bajo el Nivel Federal de Pobreza • 1 de cada 4 hogares en La Doce informó gastar el 30% o más de su ingreso mensual bruto en costos de vivienda/alquiler • 1 de cada 3 hogares en La Doce recibe beneficios de SNAP • Los puntajes de equidad de árboles dentro de los límites de La Doce son uno de los más bajos en Tucson, y todas las áreas se clasifican como de alta prioridad para la cobertura del dosel • Más de dos tercios de la población de La Doce habla un idioma distinto al inglés en casa • La tasa de prevalencia de cáncer es menor en La Doce en comparación con el condado de Pima y Arizona 		
Prioridades para la Reurbanización del Sitio de Brownfield		
<p>Basado en los resultados de la evaluación de salud de la comunidad, la prioridad para la reurbanización de un sitio de brownfield sería un parque que incluya un sendero accesible para caminar, bancos, espacios verdes, árboles, iluminación y un pequeño centro de recursos. El parque estará idealmente ubicado en la mitad norte del barrio. Un parque ofrece:</p> <ul style="list-style-type: none"> • Espacio verde, cobertura arbórea y sombra • Un lugar libre para recrearse, ejercitarse y reunirse como comunidad • Un espacio seguro donde los residentes pueden conocer a sus vecinos de manera segura y orgánica 		

PURPOSE & BACKGROUND

Introduction to the Community Health Assessments

The City of Tucson Environmental and General services Department partnered with the Arizona Prevention Research Center (AzPRC) Participatory Evaluation Institute (PEI) to conduct community assessments in the Thrive in the 05 and the La Doce neighborhoods. This assessment was conducted under the City of Tucson's U.S. Environmental Protection Agency (EPA) 2018 Brownfield Assessment Grant (BF-99T74201). Brownfield sites include underused or vacant properties that may be contaminated due to historical use.

The purpose of the community health assessment is to:

- Identify specific public health challenges and assets for residents within the target neighborhoods and their underlying causes.
- Identify opportunities to reuse brownfield to strengthen existing assets and prioritize community health improvement.

This assessment is guided by the EPA's approach to successful brownfield revitalization, and includes information on safety, health, social, economic, and environmental assets and challenges. We engaged with a wide variety of community leaders, organizations, and community members to identify the most important priorities for each neighborhood.

Learn more:

- *EPA Brownfield Program:* <https://www.epa.gov/brownfield/brownfields-program-environmental-and-economic-benefits>
- *Brownfield Success Story including Old Fort Lowell Park in Tucson:* https://www.epa.gov/sites/default/files/2015-10/documents/epa_oblr_successstory_region9_openspace_v2_508.pdf

METHODS

The methods for the community assessment included secondary data review and analysis, key informant interviews, and community dialogues. All data collection methods focused on neighborhood challenges, assets and opportunities related to health, safety, economic, social, and environmental issues.

A **community asset and opportunity analysis** were completed using Google Map Software. Resources within an area extending to .5 mile beyond the neighborhood boundaries were identified and categorized by type. An analysis was conducted to understand assets and gaps for resources within easy access of the neighborhood.

Key informant interviews were conducted with representative community members and leaders who could provide broad or unique perspectives on each neighborhood. Key informant interviews were conducted virtually or in-person in Spanish or English, based on individual preference.

The **community dialogues** were an opportunity to seek input directly from community members. There was an option to participate in one virtual and one in-person community dialogue, and all activities and questions were available in both English and Spanish. The in-person community dialogues took place at the nearby community center and consisted of five stations with activities regarding neighborhood strengths, neighborhood challenges, prioritization of potential ideas for reusing brownfield sites, a mapping activity, and a storytelling activity.

Secondary data were collected from publicly available sources and analyzed based on the major census tracts within each neighborhood wherever possible.

The data collection activities for this community assessment were iterative and built upon each other to identify the most important priorities for the reuse and revitalization of brownfield sites. For example, the options included in the prioritization activity were those identified by key informants as the most important priorities for the reuse of a brownfield site. The final priorities were identified based on the results from all data collection methods.

BRINGING IT ALL TOGETHER: PRIORITIES FOR FUTURE DEVELOPMENT

Recommendation

In the La Doce neighborhood, the priority should be to redevelop a brownfield site into a park. Ideally, the park would be in the northern part of the neighborhood (north of Irvington Rd.), and it should include an accessible walking path, benches, green space, trees, lighting, and a small resource center.

Rationale

The assessment team considered all the data presented in this report to make this final recommendation and considered the challenges and assets in the neighborhood in the final decision. The specific rationales are listed below:

- A park would contribute to better tree coverage and improve the tree equity score of the neighborhood.
- La Doce residents have high rates of poverty, lack of insurance, as well as high rates of chronic disease. Parks provide a free space for recreation, gathering, and exercise, which can mitigate some of these challenges.
- While there is some access to parks and green space by residents in La Doce (notably Mission Manor Park and Rodeo Park), that amenity is notably absent in the northern part of the neighborhood, and residents north of Irvington would need to cross several busy streets to reach these spaces.
- Key Informants emphasized the need for green spaces for exercise and socializing. A park would build upon existing assets in the neighborhood, including community physical activity movements such as FUGA and improved mobility.
- The results from the community dialogues indicate that residents want a place to safely and organically meet their neighbors. Residents feel a strong connection to the neighborhood and build a sense of community through getting out and meeting their neighbors, but they emphasized that they don't feel as safe or comfortable doing this anymore. A park provides a location for neighbors to meet each other organically and build community connections, just as they used to do by walking throughout the neighborhood.

It's important to consider the amenities that a park would have. An accessible walking path with benches and shade cover would promote access to the aging population in La Doce and provide opportunities for multigenerational households to recreate together. Trees and canopy cover would create a shaded area for residents to gather and contribute to the goal of tree equity. Lighting is important to make residents feel safe in the park, as they noted a

decreased perception of safety walking around the neighborhood. A small resource center could provide information about community events, announcements, and nearby services. While the El Pueblo Activity Center is close by, a small resource center in the neighborhood could help connect more residents to these vital services.

In developing the park, local assets for neighborhood beautification should be considered. For example, an art installation ranked highly in the prioritization activities, and art or murals from local artists could be incorporated into the park design.

Alternative

The alternative to the park would be a small community center that caters specifically to the community with exercise equipment, a youth space, and a community gathering space. A community center could provide a space for gathering and meeting neighbors and serve some of the functions of the park but has a higher barrier to entry. A community center also helps to connect individuals to resources, and organizations that provide youth or senior programs, economic assistance and other social services could use the space to provide those resources to the community.

HISTORY & CURRENT EFFORTS

History of the La Doce Neighborhood

The La Doce neighborhood refers to an area within the City of Tucson Wards 1 & 5 that includes parts of the zip code areas 85706, 85713, and 85714, and adjacent neighborhoods. La Doce is just south of the Interstate 10 and east of the Interstate 19 extending about 3 miles along S. 12th Avenue. It is bounded by S. 15th/S. 16th/S. 17th/ S. Santa Clara Avenue to the West, S. Liberty Avenue to the East, W. 39th/W. 41st Street to the North, and W. Calle Ramona/W. Calle Alvord to the South.

Thousands of years ago, the Tucson basin area and the area along the Santa Cruz River was believed to be occupied by the Hohokam people. They were considered a sophisticated agricultural society as they constructed advanced irrigation systems utilizing the water from the river. The Hohokam are believed to be the ancestors of the Pima, the Tohono O'odham, and the Akimel O'odham. The Tohono O'odham Reservation is located just 63 miles west from Tucson, but the Tohono O'odham also have a 71,095-acre tract of land just southwest of La Doce, which also houses the Mission San Xavier del Bac.

In addition, the Pascua Yaqui Tribe has lived in the Gila and Santa Cruz River Valleys for hundreds of years. The Yaqui, known as Hiaki in the Yaqui Language and Yoeme in Spanish, have five communities throughout Arizona of which the New Pascua Reservation is located just southwest of La Doce and the Barrio Libre is in the City of South Tucson, a few miles north from La Doce. The peoples from both the Tohono O'odham and Pascua Yaqui Tribes are known to have active members in La Doce. In fact, the Pascua Yaqui Tribe holds Easter celebrations every year behind Pueblo High School on 44th Street and S. 16th Avenue.

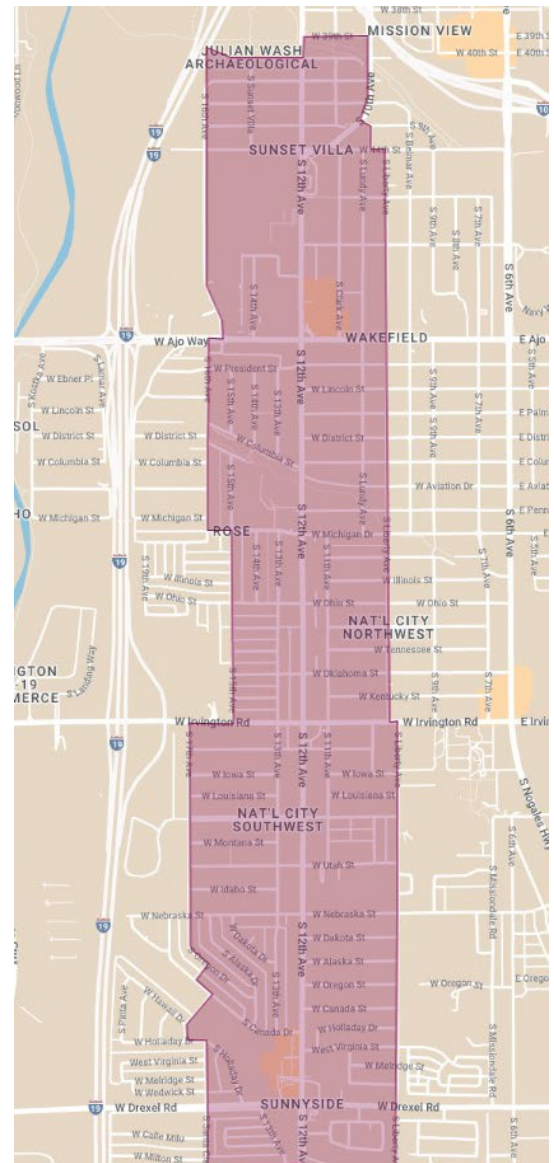


Figure 1. Map showing the boundaries of the La Doce neighborhood.

Learn more:

- *The Hohokam:* <https://www.arizonamuseumofnaturalhistory.org/plan-a-visit/mesa-grande/the-hohokam>
- *Tohono O’odham Nation Community Profile:* <https://naair.arizona.edu/tohono-oodham-nation>
- *Pascua Yaqui Tribe Community Profile:* <https://naair.arizona.edu/pascua-yaqui-tribe>

In the late 19th century, after Tucson was incorporated in 1871, the railroad, a mule-driven streetcar system, and the automobile were introduced expanding mobility for its residents. This encouraged the development of new subdivisions in the unincorporated areas surrounding Tucson, and at the beginning of the 20th century, S. 12th Avenue slowly began to see residential developments with the first recorded small development, the Arcadia Subdivision, completed by 1913. By the 1930s, S. 12th Avenue established two large residential developments, the Sunset Villa Addition and the first National City subdivision, locally known as Barrio National. Between the 1940s and 1950s, Tucson and Southern Arizona saw a large increase in its population as the World War II efforts created thousands of jobs within the aviation and manufacturing companies that operated in the area.

By the end of the war, a total of seventeen developments were recorded along S. 12th Avenue including an expansion of the National City subdivision and the addition of the Mission Manor subdivision. S. 12th Avenue now encompasses 95 subdivisions, which makes up most of what is considered La Doce neighborhood. St. John the Evangelist Catholic School is the oldest school along S. 12th Avenue founded in 1950. Mission Manor and Santa Clara Elementary Schools were built in 1953, Pueblo Magnet High School opened in 1956. Most of the S. 12th Avenue area was not part of the City of Tucson until 1960 when Pima County voted to annex it and the surrounding areas, which are now referred to as Tucson’s south side.

Learn more:

- *La Doce: Supporting a Naturally Occurring Cultural and Business District on South 12th Avenue:* https://www.tucsonaz.gov/files/pdsd/plans/La_Doce_-_FINAL_Spring_2016_1_small.pdf
- *South 12th Avenue Corridor Project Health Impact Assessment:* <https://staging.communitycommons.org/entities/c184a1ae-5aed-4230-936e-451aebf60e6a>

Today, S. 12th Avenue is a business corridor that is home to locally owned businesses offering a variety of goods and services to the City of Tucson’s south side for generations. La Doce is described by urban planners as a “naturally occurring cultural and business district,” known for its exquisite Mexican culinary offerings, its vibrant community, and its culturally inspired murals painted on the walls of businesses all along S. 12th Avenue. This has earned La Doce and the City of Tucson several distinctions including the UNESCO City of Gastronomy and the Visit Tucson’s “Best 23 miles of Mexican Food,” as well as being part of the “Best of the Barrio” food tours.

Learn more:

- *La Doce, South 12th Avenue:* <https://www.tucsonaz.gov/pdsd/la-doce-south-12th-avenue>

Ongoing Planning Efforts and Community-Driven Priorities

La Doce neighborhood has historically faced several challenges including economic disparities and infrastructure issues. However, in recent years, there have been revitalization efforts aimed at improving the quality of life for residents, promoting local economic development, and preserving the cultural fabric of the neighborhood.

In 2017, the grassroots collective Tierra y Libertad Organization initiated La Doce Barrio Foodways Project to promote local food culture and economic development along S. 12th Avenue. The partnership included the City of Tucson, the Community Foundation for Southern Arizona, the Community Food Bank of Southern Arizona, and the Southwest Folklife Alliance, with a mission to support local food entrepreneurs, enhance access to fresh and healthy food options, and preserve the culinary traditions of the community. Several initiatives grew out of the project to provide economic support for local efforts. Regeneración, a grassroots organization, received the Vitalyst Spark Grant which will be used to support low-income residents with affordable housing through the development of a new City of Tucson Community Land Trust Policy.

In addition, S. 12th Avenue has benefited from citywide efforts to improve the pedestrian and cycling infrastructure including completed sidewalks, lighting, landscaping, and public space. The City of Tucson South 12th Avenue Transportation and Streetscape Improvement Project implemented a road diet between Irvington Road and Drexel Road, reducing the number of vehicle travel lanes while adding bike lanes and on-street parking, construction of sidewalks, consolidation of driveway entrances, and improvements to streetscape/landscape. The Liberty Bike Boulevard Phase I project created biking infrastructure along Liberty Blvd. which lies on the eastern boundary of La Doce. A map showing the planned improvements can be found on the [City of Tucson Parks and Connection Page](#).

Learn more:

- *LA DOCE: Current, Potential, & Completed Efforts Summary:* https://www.tucsonaz.gov/files/integrated-planning/South_12th_Ave_-_List_of_Efforts_2-14-20_0.pdf
- *Liberty Bicycle Boulevard Phase One: Los Reales Road to 43rd Street:* https://www.tucsonaz.gov/files/bicycle/libertybb-te_rnd_18-final.pdf

ASSET & OPPORTUNITY ANALYSIS

Methods

The purpose of the asset and opportunity analysis is to recognize the strengths and opportunities within the La Doce neighborhood and explore how they contribute to the overall health, economic well-being, social connection, environment, and safety of the community members. An asset map was created utilizing Google Earth, a virtual tool with satellite imagery, street views, and search functions which all aided in the identification of assets in the neighborhood.

La Doce Asset Map

[CLICK HERE](#)

OR

SCAN THE QR CODE
to access the asset map



The assessment team first outlined the neighborhood utilizing the boundaries provided by the City of Tucson. Since community members are not bound to the neighborhood when accessing resources and services, a half-mile (0.5) buffer from each boundary was added to capture a more accurate picture of the assets and opportunities that can be easily accessed by residents. The asset categories were then defined (see below), and a folder was created for each. The team then completed a thorough scan of the neighborhood and the buffer area utilizing Google Earth's functions, and when an asset was identified, a marker was placed on the asset and categorized in the appropriate folder. The markers

were also customized with icons to easily identify the type of asset (for example, a tree was used for parks and a cross was used for medical offices).

The asset map focuses on several categories including:

- **Medical Offices:** Healthcare facilities, hospitals, clinics, and other health-related services that are available within the neighborhood.
- **Pharmacy/Drug Stores:** Pharmacies and drug stores which may include stand-alone stores or those within a grocery store.
- **Social Services:** Social service organizations, counseling centers, and other resources that provide support and assistance to community members.
- **Community/Recreation Centers:** Facilities that provide community services and resources, sports facilities, and a space for community to convene.
- **Parks:** Includes playgrounds and green spaces that promote physical activity and leisure.
- **Grocery Stores:** Includes supermarkets, farmer's markets, and other sources of fresh and affordable food within the community.
- **Food Distribution/Pantry:** Entities that offer free or affordable foods for the community.

- **Places of Worship:** Religious institutions, churches, mosques, temples, and other places of worship that cater to the spiritual and social needs of community members.
- **Schools:** Educational institutions, including:
 - **Elementary Schools/Head start**
 - **Middle Schools**
 - **High Schools**
 - **Academies and Community Colleges**

Results

The asset map helped the assessment team visualize the volume of assets as well as their proximity to the neighborhood. The icons on the markers also helped us identify the strengths and opportunities of the availability of resources and services within the neighborhood. We then summarized our findings for each category in Figure 2 by providing the total number of assets identified and identifying significant characteristics that emerged from the asset map. We also provide a summary of the strengths and opportunities of the asset categories.

Asset Map

The asset map revealed that although S. 12th Avenue is a business corridor, a large majority of the markers fall within the buffer area and not within the neighborhood boundaries. Notably, most of the medical offices, social services, pharmacy/drug stores, and food distribution/pantry locations fall within the buffer area while most of the places of worship can be found along S. 12th Avenue within La Doce neighborhood. There are just as many grocery stores within the neighborhood as in the buffer area, but most of the grocery stores within the neighborhood are smaller grocery stores. No community/recreation centers fall within the neighborhood boundaries and all but one park falls within the buffer area. However, schools, including preschools, elementary schools, middle schools, high schools, academies, and community colleges, are well distributed throughout the neighborhood and in the buffer area.

Figure 2 summarizes the assets by category and provides significant characteristics.

Categories	Total Number of Assets	Significant Characteristics
Medical Offices	26	<ul style="list-style-type: none"> • Includes hospitals, clinics, dentists, and laboratories • Several medical offices are located within the buffer area and 4 are within the neighborhood boundaries • 1 Federally Qualified Health Center (FQHC) • most are clustered just west of I-19
Pharmacy/ Drug Stores	5	<ul style="list-style-type: none"> • Includes stand-alone pharmacies and pharmacies found within grocery/department stores • 4 are located within the buffer area and 1 within the neighborhood boundaries

		<ul style="list-style-type: none"> • 2 are inside a grocery/department store, 2 within a clinic, and 1 stand-alone pharmacy
Social Services	15	<ul style="list-style-type: none"> • Includes 2 shelters, 2 senior living centers, 9 resource centers, and 2 health department services • All of the social service locations are located within the buffer area • Most are clustered just northwest of the neighborhood
Community/ Recreation Centers	4	<ul style="list-style-type: none"> • Includes 2 activity centers, 1 public library, and 1 clubhouse • All of the community/recreation centers are located within the buffer area • The clubhouse caters to youth providing them with a space to hang out with other youth and stay active • The activity centers cater to both youth and adults and provide ways to stay active
Parks	10	<ul style="list-style-type: none"> • Includes parks with playgrounds and parks with just a field for sports • 2 parks within the neighborhood boundaries and 8 within the buffer area • The parks are well dispersed
Grocery Stores	11	<ul style="list-style-type: none"> • Includes grocery stores, markets, and superstores • 5 grocery stores are located within the neighborhood boundaries and 6 within the buffer area • Dispersed along S. 12th Ave and just west of the I-19
Food Distribution/ Pantry	5	<ul style="list-style-type: none"> • Includes 1 garden, 1 farm, 2 food banks, and 2 cooperative extension • 1 is located within the neighborhood boundaries and 4 within the buffer area
Places of Worship	33	<ul style="list-style-type: none"> • Includes religious institutions, churches, mosques, and temples • Most of the places of worship are well dispersed along S. 12th Ave • Most offer a variety of social services in addition to religious services
Preschools and Elementary Schools	8	<ul style="list-style-type: none"> • Includes preschools, schools that offer prek-8th grade enrollment, and elementary schools
Middle Schools	3	<ul style="list-style-type: none"> • Includes 1 charter school and 2 public middle schools
High Schools	4	<ul style="list-style-type: none"> • Includes 1 alternative high school, 1 charter high school, and 2 public high schools
Academies and Community Colleges	2	<ul style="list-style-type: none"> • Includes one academy and one community college • The academy enrolls kindergarten through 2nd grade and plan to expand their campus to enroll up to 12th grade • The community college offers both credit degree and certificate programs in a variety of disciplines

Figure 2. List of the number of assets and their characteristics that are in the La Doce.

Strengths

The greatest strengths of La Doce are the assets found within the medical offices, social services, places of worship, and school categories. Although most of the medical offices are located outside of the neighborhood boundaries, many are still close enough to be easily accessed through public transit, driving, and/or walking. In fact, there are several medical offices clustered at the Tucson Spectrum, just west of the I-19, all offering a variety of services including medical and dental care. There are several social services available to the community, especially at the El Pueblo Center, located on S. Nogales Hwy. and W. Irvington Rd., right next to the Laos Transit Center. Shelters for the unhoused and resource centers that offer social services are clustered near the I-10 and I-19 which avoids long travel for individuals looking to access these services. There is no shortage of places of worship as they are well dispersed along S. 12th Ave. and just outside of the neighborhood. Since some places of worship offer social services in addition to religious services, they complement the social services already offered by the shelters, resource centers, and even food banks. Schools of every level are also scattered throughout the neighborhood providing families with several educational options.

Opportunities

The categories that had the most opportunities for improvement are pharmacy/drug stores, community/recreation centers, parks, grocery stores, and food distribution/ pantry locations. There is a scarcity of pharmacy/drug stores within the neighborhood boundaries while most of them are located just west of I-19. There is also a pharmacy within El Rio Community Health Center at El Pueblo Center, but it's only available to El Rio patients. While there may not always be an immediate need for pharmacies, their availability and proximity to the neighborhood are essential for ensuring community members can have access to their medicines and other health-related items without having to travel long distances.

Community/recreation centers also have limited availability as all of them are located within the buffer area and most are clustered at the W. Irvington Rd. and S. Nogales Hwy. area, including the El Pueblo Activity Center. These centers are a critical asset for the neighborhood since they offer various physical activity and community gathering opportunities, both essential for health, socialization, and having a sense of belonging. The northern area of La Doce would greatly benefit from the development of additional community/recreation centers. Parks are well dispersed in and around the neighborhood, but the area between W. Irvington Rd. and W. Drexel Rd. within La Doce would greatly benefit from the development of a park. One thing of note is that there are only 2 parks within the neighborhood boundaries, and they only offer a playground for children. The larger parks with fields for sports and walking paths are all located within the buffer area.

Many of the grocery stores identified along S. 12th Avenue were small markets that offer a variety of Mexican culinary essentials. There are four major grocery stores within the buffer area, three of which offer food and other goods, and one that exclusively offers fresh and organic food options. There is a need for grocery stores that offer healthier food options along S. 12th Avenue, especially in the southern area of La Doce. Food distribution/pantry locations are primarily located on the northern edge of the buffer area. There is one food bank within La Doce and a garden at the southern edge of the neighborhood boundaries. The garden is primarily used by children and provides a safe green space, but it also offers children opportunities to grow their own fruits and vegetables. Nonetheless, La Doce may benefit from additional food distribution/pantry locations.

PRIMARY DATA: KEY INFORMANT INTERVIEWS

Methods

The purpose of key informant interviews is to gain detailed information from individuals who have a broad or unique perspective on health in La Doce neighborhood. Initial key informants were identified based on their involvement in or knowledge of the neighborhood and included neighborhood association board members, service providers who operate within the neighborhood, and recommendations from the City of Tucson. Additional key informants were identified through recommendations provided during the interviews.

The assessment team sent invitations in English and Spanish to potential key informants, who were asked to sign up for a time using a scheduling link. Key informant interviews were available in English and Spanish, and the individual had the option to complete the interview in person or via Zoom. Some key informant interviews included several people who joined the discussion.

The interviews were conducted with a guide that prompted discussion about assets and challenges in the neighborhood related to health, the environment, economic well-being, social connection, and safety. The interview guide can be found in Appendix C.

The interviews were conducted by members of the assessment team according to availability. The interviewer took notes during each interview and saved the responses in a REDCap database. The results were downloaded and analyzed using Dedoose. The major themes related to each of the assessment topics were identified, coded, and analyzed through an iterative content analysis process.

A total of 8 individuals completed key informant interviews, representing expertise in a wide range of topics. A full list of their roles, affiliations, expertise, and interview modalities is in Figure 3.

Role	Affiliation(s)	Expertise	Interview Modality
President/Treasurer	Sunnyside Unified School District Board; Sunnyside Neighborhood Association	Community leader; Community member; Elected leader; Schools/Education	In-person; included children's garden tour
Principal	Pusch Ridge Christian Academy	Schools/Education; Faith-based	In-person; included food tour
Director	Policy and Community Outreach,	Community leader; Community Food Bank Partner	In-person

	Community Food Bank of Southern Arizona		
President; Secretary (n=2)	Rose Neighborhood Association	Community leaders; Community members	In-person
Ward 1 Representative/Ride Leader/Board Member	City of Tucson; Families United Gaining Accessibility (FUGA); Bicycle Inter-Community Art and Salvage (BICAS)	Community Leader; Elected Leader	Virtual
Superintendent	Sunnyside Unified School District	Community Leader; Community Member; Schools/Education	Virtual
Ward 5 Council Aide	City of Tucson	Community Leader; Government	Virtual

Figure 3. Key informant interview participants.

Results

We organized the results by topic according to the EPA’s guidance on successful brownfield revitalization: health, economic well-being, social connection, environment, and safety. Emergent themes regarding challenges, assets and priorities are reported below. Many of the themes span multiple categories; for example, lack of shade impacts health because it makes exercise difficult, and it is also an environmental concern as it contributes to the heat island effect. For these cross-cutting themes, the information related to each category is reported in that section.

Assets

Community-Building and Community Development Initiatives

All the key informants shared that most of the community members are willing to help each other out. Many neighborhood associations in La Doce have organized community events such as neighborhood cleanups, tree planting, and potlucks to bring the community together. There have also been efforts to provide safe spaces for children such as the Children’s Peace Garden which provides children with opportunities to grow their own fruits and vegetables, and to engage in the arts and crafts.

“Created the community’s Children’s Peace Garden in 2003, noticed that there was an area within the park that could be used as a green safe space for children.”

– Community Leader

Several City of Tucson entities like the Ward 1 and Ward 5 Council Offices support development initiatives for La Doce to beautify the neighborhood and strengthen its local economy by supporting the local small businesses. The City has also been making investments to improve parks and with the help of Prop 411, plans to add more street lights to improve safety and mobility at night.

Mobility Improvements

Key informants mentioned there have been some improvements to roads throughout the neighborhood that have significantly improved the mobility for community members. There were two major improvements that increased safety for bicyclists. The road diet along S. 12th Avenue added a substantial buffer area between the bike lanes and car lanes and the construction of the Liberty Bicycle Boulevard created a continuous bike path all throughout La Doce along Liberty Avenue and San Fernando Avenue. Familias Unidas Ganado Acceso (United Families Gaining Access), a grassroots coalition, hosts several community bike rides throughout the neighborhood and advocates for improved neighborhood mobility and accessibility.

“In 2018, we began working with FUGA to bring attention to issues with mobility and to promote an active and healthy lifestyle.”

– Community Leader

Easy Access to Community Center and Resources

Many of the key informants referred to El Pueblo Center as one of the most important assets La Doce has because it offers so many resources for the community. Most importantly, they said it is very easy to access since you can just hop on a bus anywhere in the neighborhood and hop off at the Laos Transit Center which is right next door to El Pueblo Center. Here you will find the El Rio Health clinic, a recreation center, a community center for both adults and seniors, and several gathering spaces. Key informants also mentioned that the waiver of transit fees that started during the Covid pandemic has improved accessibility to the center.

“El Rio Center is becoming more important within the community. It is more accessible with transit remaining free. Using transit to get to El Pueblo Center, a space that can lend itself to a lot of the resources that the young and elderly can use.”

– Community Leader

Challenges

Pollution and Contamination

All the key informants mentioned challenges related to pollution and contamination in La Doce. Air pollution is introduced by the exhaust emitted by traffic on I-19 and I-10 which surround La Doce. In addition, the road diet along S. 12th Avenue has resulted in vehicles diverting into the neighboring residential streets to avoid the increased traffic on S. 12th Avenue. La Doce is also impacted by noise pollution since airplanes fly over the neighborhood when landing at Tucson International Airport. Additionally, illegal racing on the arterials adjacent to the neighborhood causes excessive noise. Trash is very present throughout the neighborhood which can be attributed to illegal dumping in vacant lots and in the washes. Key informants also mentioned the large presence of auto and tire shops along S. 12th Avenue and that they are concerned about the shops' waste disposal practices.

“Pollution from trash is very present, you can see it in the desert and in the little streams that we have. We always have to spend time cleaning up after others who come in and dump their household products here.”

– Community Member & Leader

“There's a lot of car shops down the corridor of S 12th avenue, south of Wakefield, so proper disposal of oil and other car parts can be concerning.”

– Community Leader

Key informants mentioned that contamination throughout the neighborhood has been a huge concern for many years as both TCE and PFAS had been detected in the groundwater and drinking water, in the past. These hazardous substances can have several health implications if consumed in high quantities. There have been concerted efforts to remove TCE and PFAS from the groundwater throughout the years thanks to grassroots organizing efforts by citizens. The City has maintained low levels as recommended by the EPA, however, there is still some skepticism from community members on whether the water is safe to drink.

“In the South Side of Tucson, water quality will always be an issue. PFAS and TCE have been present in our waterways in the past. Nothing has really been done to restore the faith in the community that the water we have is safe.”

– Community Member & Leader

Drug Use and Paraphernalia

Key informants also reported drug use and discarded paraphernalia as another prominent challenge in La Doce. The key informants relayed that these issues can be closely tied to

homelessness and squatting in vacant buildings and on abandoned properties. They stated that the ubiquitous drug use not only impacts those who are using the drugs, but it also affects the perception of safety in some areas of the neighborhood. There is an increase in drug use among youth, attributed in part to drugs like fentanyl being marketed to look like candy and sold at low prices. Drug paraphernalia is often discarded in public areas and in alleyways, and it leads to potential contamination or safety issues.

Unsheltered Population

Key informants mentioned that homelessness was also a challenge in La Doce. Many shared they had noticed an increase in the number of unsheltered individuals hanging out in parks and alleyways. Key informants had concerns that some unsheltered individuals may have mental illnesses, contributing to perceived safety issues and making families hesitant to visit parks. One key informant shared that they had a violent encounter with an unsheltered individual while at a park. Many unsheltered individuals also camp in alleyways leaving trash and drug paraphernalia for the homeowners to clean up.

“There was a cleanup by Tucson Clean and Beautiful and they found lots of trash, drugs, and missing property from a location known as an area to track the unsheltered.”

– Community Member & Leader

Housing Instability

Another challenge that key informants mentioned was the housing instability brought on by rising costs of living and stagnant wages. Many homes in La Doce are known to be multigenerational since many people are living in poverty and home prices within the area have skyrocketed in recent years. Residents also fear that many of the properties are being taken up by new developments that are unaffordable for current residents, further exacerbating the housing issues.

Vacant and Abandoned Properties

La Doce has several business properties along S. 12th Avenue of which some have been vacant and have attracted unsheltered individuals. Key informants shared that they have seen unsheltered individuals squatting and using drugs inside vacant buildings, which creates safety issues for the neighborhood. In addition, many of these properties have been abandoned for so long that the buildings have begun to deteriorate, which poses health risks such as exposure to asbestos and lead in deteriorating building materials and to pests.

“There are still a lot of vacant buildings throughout the neighborhood and the city needs to figure something out to deal with that. It doesn't look good when you have abandoned buildings, and it attracts the homeless, drug use, graffiti, etc.”

– Community Member & Leader

Other Concerns

Some other concerns were raised repeatedly by key informants but do not necessarily fit into the categories above. These include:

- Police presence is a challenge with several distinct facets. Some key informants mentioned that neighborhood association leaders have a close relationship with the Tucson Police Department, but they feel that the residents of their neighborhoods do not always appreciate this and feel uncomfortable about approaching the neighborhood association leaders with an issue. On the other hand, key informants have heard people complain that police are never around when needed, which can be attributed to the inability to fill the vacancies at both the Tucson Police Department and the Sheriff's Department.
- Undocumented people are less likely to access services and resources available to them in the community for fear of persecution. This worsens their health outcomes and perpetuates social isolation amongst this population.

“We try to establish a relationship among police patrols as they have become more present throughout the community. Some folks don't appreciate the increased presence but it's important to understand their focus on crime prevention within the neighborhood as well.”

– Community Leader

Themes Related to Key Categories

The assessment team analyzed the key informants' responses to identify the themes related to the challenges and assets of the health, environment, economic well-being, social connectedness, and safety of the neighborhood. Figure 4 summarizes the major themes from key informant interviews related to each category. The categories correspond to the EPA guidance on successful brownfield reutilization (see “Purpose and Background”) and are organized by challenges and assets related to each category.

Category	Challenges	Assets
Health	<ul style="list-style-type: none"> • Access to healthy foods • Environmental pollution causing various health issues 	<ul style="list-style-type: none"> • Access to resources, education, and services • El Pueblo Activity Center offers lots of resources and opportunities for physical

	<ul style="list-style-type: none"> • Lack of safe and well-maintained parks for physical activity • Access to mental health services • Drug use 	<ul style="list-style-type: none"> • activity and social connection • Many large parks surrounding the neighborhood • Safer bike paths and routes
Environment	<ul style="list-style-type: none"> • Old/vacant buildings (asbestos, lead, mold, pests, etc.) • Contamination: TCE/PFAS in groundwater, illegal dumping, drug paraphernalia • Lots of auto and tire shops generating waste • Heat island effect due to lack of trees and greenspaces • Erosion from washes • Noise pollution from air traffic and vehicular traffic • Air pollution from I-19 and I-10 	<ul style="list-style-type: none"> • New park being built along I-19 • Green safe space for children at the Children's Peace Garden • Improvements to roadways in the area • More trees being planted
Economic Well-Being	<ul style="list-style-type: none"> • Historical lack of investment has limited opportunities for growth and improvements • Large senior population on fixed incomes • Inflation and increased rent prices 	<ul style="list-style-type: none"> • Revitalization efforts underway • City making investments and providing support to the neighborhood • Lots of small local businesses that have served the community for years
Social Connectedness	<ul style="list-style-type: none"> • Lack of gathering space, especially for youth • Lack of trust and increased violence • Lack of communication from local leaders and officials to community members, especially to Spanish speakers • Generational divide hinders social connections 	<ul style="list-style-type: none"> • Many people with unique talents • Some active neighborhood associations that organize community events • El Pueblo Center offers opportunities for adults and elderly to gather and socialize • FUGA brings the community together through bicycling
Safety	<ul style="list-style-type: none"> • Drug paraphernalia • Perceived lack of safety in specific areas including some parks • Increased presence of unsheltered individuals • Increased traffic • Cars speeding through residential streets • Increased gun violence • Increased property crime rate 	<ul style="list-style-type: none"> • Increased presence of police and positive relationship with community members and leaders • Reduction of automobile crashes after the road diet

- Lack of adequate lighting in neighborhoods

Figure 4. Key categories of neighborhoods and their associated challenges and assets.

Priorities

The assessment team asked the key informants about their priorities for potential redevelopment of brownfield sites. The priorities are presented in alphabetical order in Figure 5. The priorities identified by key informants were used for the ranking and prioritization activity in the community dialogues.

Priority	Rationale
Art Installation	Key informants expressed an interest in having an interactive art installation for children to inspire art and creativity. It would also be a place of gathering for families.
Community Center	A Community Center is a gathering place and could help connect people to resources and information. El Pueblo Activity Center is close by, but key informants wanted a smaller community center that is closer and caters to the neighborhood.
Community Garden	A community garden for the general community would provide healthy food options, additional gathering space, and more green space in the neighborhood. There is the Children's Peace Garden, but it is almost exclusively for children.
Park or Green Space	More green spaces to provide additional opportunities for exercise and social connection. Investing in a small park or green space with amenities such as a walking path or playground would support the health of the neighborhood. The park can also house a resource center and/or gathering space.
Resource Center	A resource center within the neighborhood could bring resources and services to the community without the need to travel long distances. Key Informants mentioned they would like this to be a hub of resources for employment, economic assistance, and other social services.
Affordable/Low-Income Housing	Creating options for affordable housing would create opportunities for individuals who cannot afford to buy their own home due to rising prices and low wages.

Figure 5. List of priorities identified by key informants.

PRIMARY DATA: COMMUNITY DIALOGUE

Methods

The assessment team hosted two community dialogue events, one in-person at the El Pueblo Senior Center and one virtual via Zoom. Both events were held in the evening.

Flyers with information about the community dialogue events were posted in public places around the neighborhood and provided to individuals who participated in key informant interviews both in electronic and paper form. The City of Tucson sent postcard mailers with information about the community dialogues to all the addresses in the neighborhood boundaries. Potential participants were directed to sign up via a web form or call one of the assessment team members to sign up for the event. Gift cards were available to the first 25 people to register and attend each event. All information about the event was provided in English and Spanish. The community dialogues were designed to be completed in English or Spanish, based on the preference of the participant.

The community dialogues were designed for community members to give their input into the strengths, challenges, and priorities for their neighborhood. The in-person community dialogue was self-paced and consisted of five stations that could be completed in any order. Each of the stations had a question and materials for the participant to write, draw or respond to the question. The participants were provided with instructions as they entered the room along with a two-page handout that explained the purpose of the community dialogue and gave some background information on the project. Two assessment team members were available to answer questions and listen to additional feedback as the participants went through the activity.

The five stations for the in-person community dialogue included:

- Station 1: Neighborhood Strengths. Question: What do you love about your neighborhood? What are some things in the neighborhood that help your health and well-being?
- Station 2: Neighborhood challenges. Question: What are some challenges that people in your neighborhood experience that may impact their health and well-being?
- Station 3: Mapping Activity. Participants were provided with stickers and sticky notes to annotate a map. A legend was provided with the meaning of each sticker (e.g., blue cross sticker referred to a place that provides health or social service support).
- Station 4: Prioritization Activity. Participants were provided with five dots that they could use to 'vote' on the top priorities for the potential redevelopment of a brownfield site. The priorities were chosen based on the results from the key informant interviews.

Participants could provide additional information about their votes, and there was a “other” option for ideas that were not provided by the key informants.

- Station 5: Storytelling. Participants were invited to write stories about their neighborhood. They were provided with a series of prompts to choose from. For example, one prompt directed participants to write about a time when the people in the neighborhood came together for a common purpose.

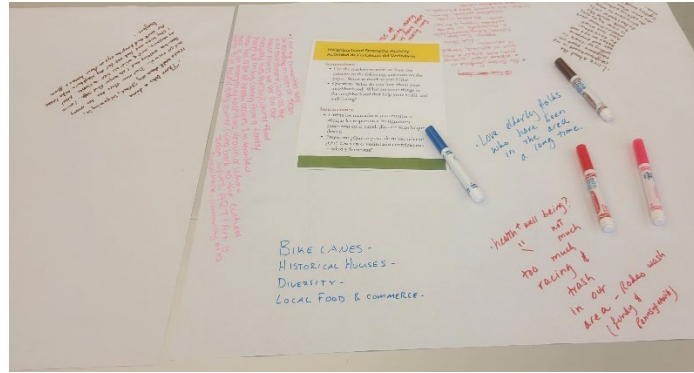


Figure 6. Photo of station within the community dialogue.

A picture of one of the stations in the community dialogue with the instruction page, markers, and some responses from participants.

The virtual community dialogue was designed as a group conversation that followed a similar format to the in-person dialogue. The participants were placed into Zoom breakout rooms based on their language preference (Spanish or English) so that they could participate fully in the discussion. The facilitator, a member of the assessment team, provided a brief presentation with the background and purpose of the dialogue. Then, the group discussed the same questions about neighborhood strengths and challenges as the in-person dialogue. The prioritization activity was completed using an online engagement tool called Slido, which allowed the participants to rank the options and view the results immediately. The virtual community dialogue concluded with the storytelling activity. The virtual community dialogue did not include a mapping activity, but participants were encouraged to share the cross streets or provide specific geographic information about their responses. The assessment team took notes of the answers provided by the participants, who were encouraged to speak or use the chat as they felt most comfortable.

Participants

A total of 17 community members participated in the neighborhood community dialogues. The following section describes the demographic information collected from the voluntary demographic surveys.

In the community dialogues participants were asked to fill out a demographic survey in which they were asked to describe their role in the community and the perspectives they brought to the dialogue. Participants were asked to identify their community roles, gender identity, race and ethnicity, zip code, and cross streets closest to their residence.

In total, 14 demographic surveys were completed, and the results are shown in figure 7 below. Note that participants could choose more than one option for most of the questions to provide complete information about the identities of the participants who completed the survey, so the percentages do not add up to 100.

La Doce Neighborhood CHA Demographic Survey Results	
Race/Ethnicity*	
White	21.4%
Hispanic/Latinx	71.4%
Native American	0%
Black/African American	7%
Middle Eastern	0%
South Asian	0%
Southeast Asian	0%
East Asian	0%
Gender*	
Man	28.6%
Woman	71.4%
Transgender	0%
Gender non-confirming	0%
Language*	
English	78.6%
Spanish	78.6%
Other	0%
Community Dialogue Participant Role*	
Community Member	85.70%
Community Leader	14.30%
Nonprofit/CBO	7%

*Note: participants were able to choose more than one answer.

Figure 7: 2023 La Doce Neighborhood CHA Demographic Survey Results.

Results

The combined results from both community dialogue events are reported below. The themes related to the strengths and challenges questions are noted below, along with some representative quotes from the dialogues.

Question	Themes	Quotes
<p>What do you love about your neighborhood? What are some things in the neighborhood that help your health and well-being?</p>	<ul style="list-style-type: none"> • Pride in food, culture and community. Strong connection to neighborhood and history. Desire to work together for improvements. • Family and community. People know their neighbors and look out for each other. Many multi-generational houses and families who have lived there for generations. 	<ul style="list-style-type: none"> • The Tucson south side is a vibrant desert, cultural area with access to Mexican food restaurants, transportation and education. • Familia, the connections, there's lots of families, people are always having fiestas and getting together, everyone always says hello to everyone. • Love about the neighborhood is my neighbors. Most are getting up there in age but everyone keeps an eye out for each other. • The food! I live around the corner from a taco shop, I smell it all the time. When neighbors cook their food smells so good.
<p>What are some challenges that people in your neighborhood experience that may impact their health and well-being?</p>	<ul style="list-style-type: none"> • Historical environmental and health inequities. Groundwater contamination (TCE and PFAS). • Perception of safety is worsening in the neighborhood. Homelessness, unruly neighbors. • Lack of pedestrian infrastructure. Lack of trees, sidewalks, lighting makes walking difficult. • Traffic safety. Racing, poor roads. Road diet on S. 12th leads to more neighborhoods cut-through traffic. • Contamination: needles, illegal dumping. 	<ul style="list-style-type: none"> • The Tucson south side has been historically disproportionately impacted by environmental and health disparities, and as a result of a historical groundwater contamination.... thousands of south side residents have been forced to drink water contaminated with and laced with chemical cocktail mixtures and toxic chemicals resulting in many health problems. • Safety issues—people race on 12th avenue... Doing wheelies near car wash. • More homeless persons in our neighborhood washes and alley ways. Out in the open drug use also bring more litter to the area. The section of 12th Ave between Drexel just before Irvington make more congestion and I believe more accidents are caused. • I no longer feel safe going for walks.

Figure 8. Themes related to the strengths and challenges of the in-person and virtual community dialogue questions.

Mapping Activity

The list below summarizes the markers that participants put on the map during the community dialogue. A picture of the completed map and list of locations can be found in Appendix E.

Many of the items on the map denoted safety issues (9 locations), centered around traffic issues (pedestrian safety, speeding, racing, etc.) according to the comments. There were also 4 locations noted as environmental issues, namely trash and illegal dumping. There were several locations with multiple trash and safety stickers clumped together, especially S. 12th Avenue and W. Ajo Way and along W. Michigan Dr. just east of S. 12th Avenue. There were several safety stickers interspersed along S. 12th Avenue and just to the west of the neighborhood boundaries near Irvington Rd.

Participants noted several food options (3 locations) along S. 12th Avenue, likely referring to restaurants. There were also food options just to the East of the neighborhood boundaries along with meeting places, places of note, and social services (3 locations) clustered around the El Pueblo Activity Center and Rodeo Park. Another green space, most likely Mission Manor Park, is noted just outside of the neighborhood boundaries to the South.

In the mapping activity, most of the positive spaces (green space, meeting places, places of note) are located just outside of the neighborhood boundaries and in the southern half of the neighborhood. These resources are accessible to many, but safety issues may prevent residents from easily accessing them.

Storytelling

In the stories, it was obvious that many of the participants grew up in and around the neighborhood and have fond childhood memories of playing with friends, using local amenities such as Mission Manor Park, and attending celebrations. There is also a pervasive theme of getting out and meeting neighbors, whether walking or biking. The stories reveal that La Doce has a friendly and welcoming atmosphere.

Stories About Being Active and Meeting Neighbors

- Neighbors being able to walk down the street and visit with your neighbor by the fence or walkway. NOW it's scary with the homeless walking the streets or running away because they stole from the Pawn shop etc.
- I enjoy the event Cyclovia...you get to see your neighbors especially the children. The evenings of bike riding or just walking down the sidewalk
- When I was a young girl I lived here with my mom and dad. Mom was always visiting neighbors, this was back in early 80s and 70s. Growing up, Mom would always have us visiting, she was a stay at home mom, so I was lucky and blessed that we were able to go and visit neighbors and have a connection with neighbors.

<ul style="list-style-type: none"> • One thing I do enjoy in the neighborhood, I haven't seen it nearby, was the Cyclovia. They closed certain streets and we got an opportunity to get on bicycle and go around the neighborhood, that was a lot of fun. • Playing with my neighbors – riding our bikes after school. I miss those good ole days • Before the covid I could walk my dogs down my street, Wyoming, and greet the neighbors
Stories About a Welcoming Community Atmosphere
<ul style="list-style-type: none"> • For me, almost everyday, lots of folks whose parents immigrated to the country and contributed to the building of the community • Because of this community and Santa Cruz church community, they took me in and treated me so humanely, better than my own family had ever treated me. That feeling of community and family is why I love this area. They took this sad sack of a white girl and stood me back up and taught me how to be a human being after quite a traumatic event. I love our neighborhood, just because of the way I get treated, it's better than my own family.
Stories About Community Celebrations
<ul style="list-style-type: none"> • Neighbor celebrated 90th birthday with the entire block. Found new friends • Cyclovia where I got to walk around and learn about some of Tucson's identity and learning about the resources we are opened to; it was a great place that can offer many new opportunities. • I enjoy the event Cyclovia...you get to see your neighbors especially the children. The evenings of bike riding or just walking down the sideway • Celebrating life events, birthdays, graduations etc. lots of values placed on life's accomplishments. • There was a community yard sale. Everyone visited each other.
Stories About Mission Manor Park and Fond Childhood Memories
<ul style="list-style-type: none"> • Community memory—summertime—swimming lessons and mission manor park—making friends, learning how to swim and safety around the pool. End of summer pool party where families would share potluck style. Great fun and food! • I grew up on the area of 12th and Nebraska – I hold my childhood memories closely. I love my community. I grew up in the 1960s and I enjoyed Liberty Elementary School Teachers, time they put for me to help me learn. Mission Manor Park – swimming pool – and summers.

Figure 9. Sample storytelling prompts and answers provided during the community dialogue.

However, many of the stories also hint at unwelcome changes in the neighborhood. Participants noted changes in their comfort level walking around to meet their neighbors. They emphasized perceived safety issues such as drug use and homelessness and indicate that recent changes have negatively impacted their ability to socialize with neighbors.

Another theme from the storytelling and other community dialogue activities is how the neighborhood organized to fight for environmental justice related to groundwater contamination. Participants noted that neighbors came together to bring health concerns to light, and still work to bring support and resources to individuals impacted by the contamination.

Prioritization Activity

The results from the prioritization activity are shown below.

Ranking of priorities in-person community dialogue (61 votes)	Ranking of priorities virtual community dialogue (3 participants)
<ol style="list-style-type: none"> 1. Park/green space 11 votes 2. Community garden 11 votes 3. Art installation 10 votes 4. Resource Center 8 votes 5. Community Center 5 votes 6. Affordable or low-income housing 3 votes 7. Something else (traffic mitigation, safety measures) 13 votes 	<ol style="list-style-type: none"> 1. Community Center 2. Community Garden (tied for second) 3. Resource Center (tied for second) 4. Park 5. Art Installation

Figure 10. Ranking of prioritizations during the community dialogue by priorities identified by key informants.

The virtual community dialogue took place before the in-person community dialogue, and affordable or low-income housing was added to the list of priorities for the in-person dialogue based on the discussion during the virtual one.

A park or green space came first in the in-person activity and fourth in the virtual activity. Comments indicated a desire for walking and biking paths, as well as a memorial park for those who were lost to cancer caused by contaminated groundwater. One participant noted that a memorial park is already being developed in Mission Manor Park.

Participants in both dialogues emphasized a community garden as a place to enjoy the outdoors, grow healthy food, and host community gatherings.

The ideas for the resource center mainly focused on providing information on how to access available health/health insurance programs and socioeconomic programs and services such as the Health Insurance Market Place, Medicaid, SNAP, etc., as well as education to raise awareness about environmental concerns. It would also have people who can help fill out paperwork to apply for these programs and services. The participants noted that a community center can also serve as a resource center and can be used as a gathering space to bring people together and have a space to host activities and celebrations.

“Something” else had the most votes in the in-person community dialogue, and comments including traffic mitigation, safety measures like lighting, clinics, and improved water infrastructure. Many of the comments in the “something else” section are not very relevant to the redevelopment of a brownfield site.

SECONDARY DATA

The data included in this section is meant to give readers a sense of the most important health issues in the neighborhood, how they are changing over time, who is most affected, and how the neighborhood compares to Pima County and Arizona as a whole. We relied on publicly available data sources to give us an idea of the most important issues in the neighborhood. These sources can give us a good starting point, but it's important to understand their limitations. Publicly available data might not capture the entire picture of a neighborhood's health because it may not include specific details or up-to-date information. For example, publicly available data sources are often at least a few years old and meant to provide surveillance-level data for larger populations. The data may not be granular enough to show variations within the neighborhood or capture the experiences of different groups of people. Most of our neighborhood-level data was gathered by census tract (see Appendix B for a full description of how we chose census tracts and aggregated data), which allows us to get localized data, but the census tracts do not align perfectly within the neighborhood boundaries.

It is crucial to combine secondary data with insights from primary data collection to get a more comprehensive understanding of the neighborhood's health.

Icons will be used throughout this section to highlight the following:

! Notable Findings: Especially important or interesting statistic

⚖️ Notable Disparity: Health issues that affect some demographic groups more than others

🔍 Missing/Incomplete Data: Health area where there was a lack of publicly available data

It is important to note that racial and ethnic differences in health outcomes, risk factors, or socioeconomic disparities arise from systematic discrimination, barriers to care and other structural factors, and are not the result of inherent characteristics of any racial or ethnic group. Additionally, data in this report is presented in a sequence, often highlighting disparities without important context (historical, location, etc.). This framing is not meant to insinuate or place blame on individual populations or communities.

In this section, we sometimes report results by racial or ethnic categories to highlight these disparities. For example, the terms “Native American”, “African American”, and “Hispanic/Latino” are used throughout the document and correspond with the race and

ethnicity categories used by secondary data sources, which are often limited and only allow for one racial or ethnic identity. While these terms serve as broad categorizations, they can be limited in capturing the diversity and complexity within these communities. Native American tribes have distinct cultures, languages and histories, and African American have diverse backgrounds and experiences based on factors such as immigration, regional differences, and ancestral heritage. Similarly, the Hispanic/Latino label encompasses a wide range of ethnicities, nationalities, and linguistic backgrounds. It is important to recognize the rich diversity and unique identities within these categories, going beyond generalizations based solely on these broad terms.

In the demographic survey used for community dialogues (see “Participant Demographics”), we used an expanded and more inclusive list of racial and ethnic identities and allowed participants to choose more than one option. This complexity is not available in secondary data sources.

Below are some important definitions to help the reader understand the data presented in this report:

- **Age-Adjusted:** Many of the rates presented are age-adjusted. This means that the rates were calculated to account for the distribution of ages in the data collection sample. This makes the rate generalizable to the larger population and comparable to different populations with different age distributions.
- **Disparity:** A disparity means a preventable difference or discrepancy in health outcomes between populations. In this section, we will highlight notable health disparities, or difference in health rates or statistics by demographics including race, ethnicity, sex, and socio-economic status.
- **Prevalence:** Prevalence describes the commonness of a disease, or the number of cases of a disease or condition at any given time.
- **Incidence:** Incidence refers to the new occurrence of a case of a specific disease or condition over a specific amount of time.
- **Rate:** A rate is the quantity of something in terms of something else. The majority of rates in this section are reported as “per 100,000 population” or in other words, “for every 100,000 people in a designated area, we can expect this many individuals with the disease or condition”. Each rate was calculated from the total number of cases divided by the entire population and multiplied by 100,000.
- **Ratio:** A ratio is a comparison of the quantity of two things. For example, in 2022, 29 primary care areas within Arizona have a population-to-primary care physician ratio that is greater than 5,000:1 (AzMUA report, 2022). This means that for every 5,000 people in the population there was 1 primary care physician in that same population.
- **Social Determinants of Health:** As defined by the U.S. Department of Health and Human Services, social determinants of health (SDOH) are “the conditions in the

environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.” SDOH consists of five domains: economic stability, education access and quality, health care access and quality, neighborhood and built environment, and social and community context.”

Below is a list of acronyms that are used throughout this section:

Abbreviation	Name	Abbreviation	Name
ACS	American Community Survey	PCA	Primary Care Area
ADEQ	Arizona Department of Environmental Quality	PDEQ	Pima County Department of Environmental Quality
ADHS	Arizona Department of Health Services	PFAS	per- and polyfluoroalkyl substances
ATSDR	Agency for Toxic Substances and Disease Registry	PM	particulate matter
AzMUA	Arizona Medically Underserved Areas	PPB	Parts per billion
BRFSS	Behavioral Risk Factors Surveillance System	SNAP	Supplemental Nutrition Assistance Program
CDC	Center for Disease Control and Prevention	SVI	Social Vulnerability Index
DHHS	Department of Health and Human Services	TCE	Trichloroethylene
EJI	Environmental Justice Index	UNICEF	United Nations International Children’s Emergency Fund
EPA	Environmental Protection Agency	VA	Veteran Affairs
FPL	Federal Poverty Level	WHO	World Health Organization

Population Demographics

Population Density

According to the 2021 American Community Survey (ACS-5-year estimate) the population of La Doce was reported at 6,021 with a population reduction of 16.2% from 2010. The community of La Doce has a higher population density than Pima County and Arizona with a reported population density of 5975.9 people per square mile. The population density of Pima County and Arizona in 2021 was reported at 115.2 people per square mile and 64.5 people per square mile.

Sex and Age Distribution

According to the 2021 ACS, La Doce residents are younger in comparison to Pima County and Arizona.

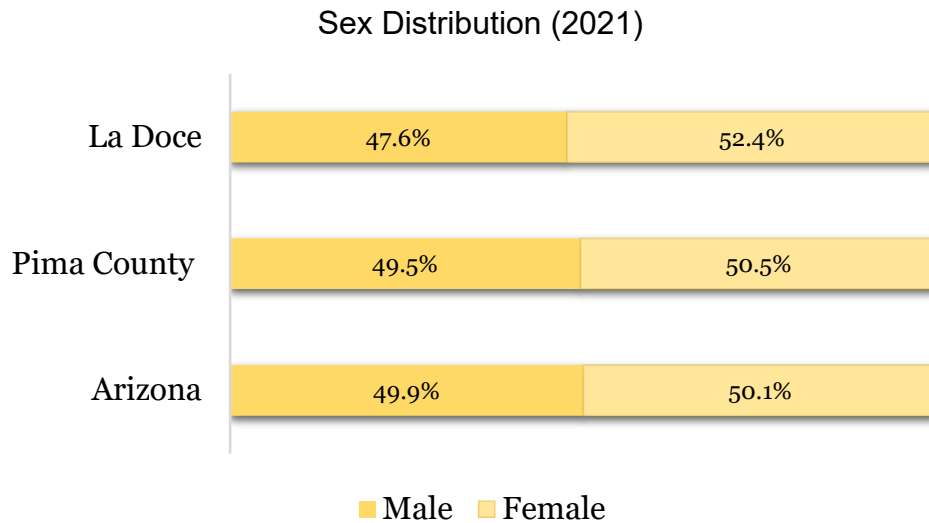


Figure 11. Sex Distribution within the neighborhood community of La Doce, Pima County, and Arizona in 2021¹

Age Distribution (2021)			
Age	La Doce	Pima County	Arizona
0-14	20.20%	15.8%	18.1%
15-19	7.4%	6.7%	6.6%
20-44	34.4%	33.3%	33.0%
45-64	24.5%	22.8%	23.8%
65-84	13.6%	18.6%	16.5%
85+	1.0%	2.1%	1.8%

Figure 12. Age Distribution of the neighborhood community of La Doce, Pima County, and Arizona in 2021¹

Education Attainment

In 2021, nearly two thirds of the population (65.4%) within La Doce had obtained a high school degree or higher and 1 in 10 people (10.4%) had obtained a bachelor's degree or higher. La Doce has a lower education attainment in comparison to residents of Pima County and Arizona (Figure 13).

People with higher levels of education are more likely to live longer and healthier lives. Education quality and access can also lead to greater opportunities for children to graduate high school and attend higher education. Through continued education attainment, children are more likely to obtain better paying jobs and have better access to health insurance. Moreover, families are less likely to live in poverty and deal with daily stress resulting in better physical and mental health².

Education Attainment (2021)			
	La Doce	Pima County	Arizona
Less than 9th grade	16.0%	3.9%	5.0%
Some High School Education	18.8%	5.6%	7.0%
High School Graduate	30.1%	22.3%	23.8%
Some College	24.9%	33.3%	24.9%
College/Professional Degree	10.4%	34.9%	39.1%

Figure 13. Education attainment of the neighborhood community of La Doce, Pima County, and Arizona in 2021¹.

! Notable finding: The number of individuals who obtained a bachelor's degree in 2021 was reported at 10.4%. The percent of the population who obtained a bachelor's degree has only grown by 1.3% from 2017. The percent of the population who obtained a high school degree or higher has only grown by 0.7% since 2017¹.

Language

In 2021, around two-thirds (66.7%) of the population within La Doce spoke a language other than English at home which is significantly higher than the rate of Pima County (27.3%) and Arizona (26.6%). There is no data on whether they are monolingual or bilingual. However, a language barrier can make it more difficult to access services or navigate the health and social service system.

Median Income, Poverty, and Unemployment

The median household income within La Doce in 2021 was \$30,534, about half of the median household income of Pima County and Arizona at \$59,000 and \$65,000, respectively. A low household income can make it difficult to cover essential expenses and meet basic needs. It also makes it difficult to adapt to inflation and increased prices for housing, food, education, and other essentials.

The average household size within La Doce is estimated to be 2.7 for all households and 3.88 for family households. A household is described as any number of persons who reside in a living unit and a family household is identified as the number of persons who reside in the same living unit and are related by birth, marriage, or adoption. According to the the U.S. Department of Health and Human Services, the poverty level for a family of four is \$30,000⁴. For 2023, the sole provider for a family of four with 2 adults and 2 children would need to earn \$38.78 per hour (\$80,663 per year) to make a living wage in Pima County, which is defined as a wage that is high enough to maintain a normal standard of living⁵. The living wage model accounts for geographical cost trends for food, childcare, health insurance, housing, transportation, and other necessities such as clothing and personal care items along with income and payroll taxes⁵.

In 2021, there was a higher percentage of adults and children living under the Federal Poverty Level in La Doce than in Pima County and Arizona (Figure 14), with more than 4 in 10 children (42%) within La Doce living below the FPL.

The unemployment rate within La Doce in 2021 was significantly higher than that of Pima County and Arizona as a whole. The unemployment rate in La Doce was more than 3-times the rate in Pima County and more than 5-times the rate in Arizona.

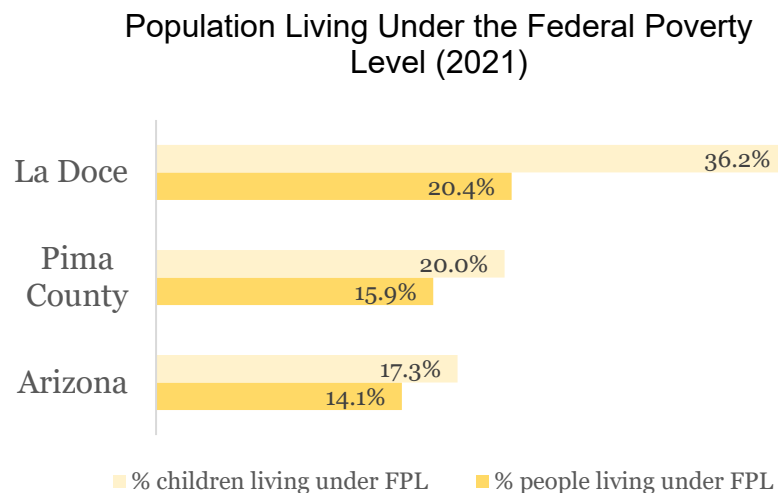


Figure 14. Percentage of children and total population that are living under the Federal Poverty Level within La Doce, Pima County, and Arizona in 2021¹.

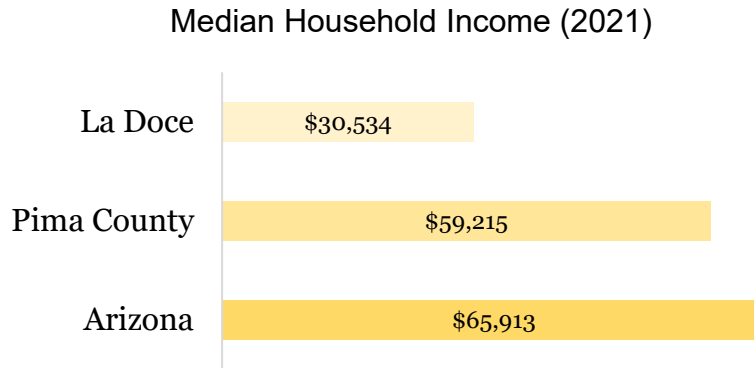


Figure 15. Median household income within the neighborhood community of La Doce, Pima County, and Arizona in 2021¹.

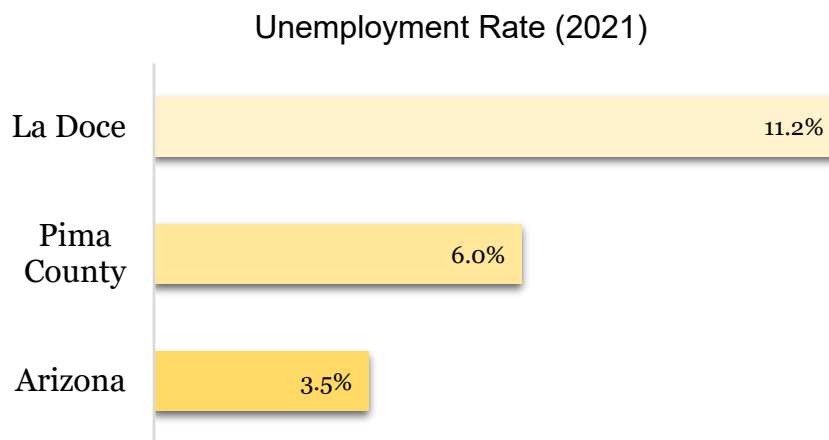


Figure 16. Unemployment rate within the neighborhood community of La Doce, Pima County, and Arizona in 2021¹.

¹ Notable disparity: The unemployment rate within La Doce is almost two times that of Pima County and three times that of Arizona.

Veterans

Nearly 1 in 20 (5.3%) people within La Doce are identified as veterans, or as persons who served in the active military, naval, or air service, and who was discharged or released therefrom under conditions other than dishonorable⁶. In addition, according to the 2021 ACS, 15% of veterans within La Doce are unemployed.

Disability

In 2021, 1 in 5 (20.7%) of people within La Doce identified as living with a disability. The population experiencing a disability within La Doce is higher than that of Pima County and Arizona at 14.9% and 13.6%, respectively. The presence of a disability impacts one's life in a

multitude of ways. Populations living with disabilities are more likely to experience health inequalities in reference to stigma, discrimination, poverty, and exclusion⁷. Moreover, both social and physical barriers can disproportionately impact the overall health of individuals living with disabilities who may experience poorer health and obtain limited resources to improve their quality of life.

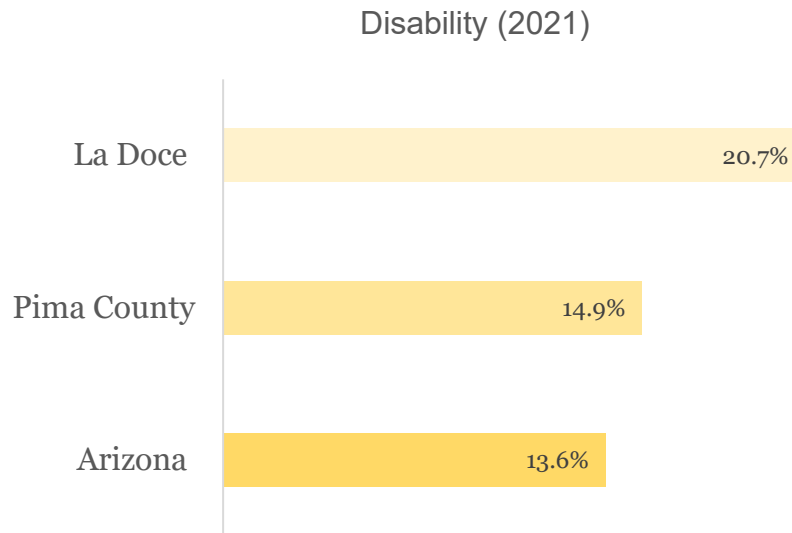


Figure 17. Percent of the population living with a disability in La Doce, Pima County, and Arizona in 2021¹.

Chronic Disease

Figure 18 summarizes the rates of chronic disease and chronic disease risk factors in the La Doce neighborhood and compares it to the rate of Pima County and Arizona as a whole. The table displays the prevalence rate, which is the percentage of the population with that disease or condition. In each case, this prevalence represents the percentage of people over 18 who have been told by their doctor that they have the condition. The residents of La Doce have higher rates of diabetes, heart disease, asthma, and high blood pressure than both Pima County and Arizona. The cancer prevalence for La Doce is lower than Pima County and Arizona.

Chronic diseases are closely intertwined with social determinants of health, and are impacted by factors such as poverty, access to health care, access to healthy foods and access to exercise opportunities. Individuals living in poverty often face limited resources and opportunities, making it challenging to afford and access nutritious food. This contributes to the development of chronic diseases such as obesity, diabetes, and cardiovascular conditions. Additionally, poverty and limited access to healthcare services can hinder preventive measures, early detection, and management of chronic diseases.

Chronic Disease and Chronic Disease Risks (2021)			
	La Doce (%)	Pima County (%)	Arizona (%)
Cancer	4.3	5.6	5.5
Diabetes	14.9	9.1	11.0
Heart Disease	6.9	5.5	6.3
Asthma	11.7	10.9	11.1
High Blood Pressure	32.1	28.0	30.2
High Cholesterol	32.5	29.0	28.6
Obesity	36.3	29.3	33.3
Smoking	21.4	15.8	18.9
Physical Inactivity	37.6	22.7	25.3

Figure 18. Adult prevalence rates of chronic diseases within La Doce, Pima County, and Arizona in 2021⁸.

Diabetes

Diabetes is now the seventh leading cause of premature death in Arizona and can significantly contribute to the early development of disabilities. Furthermore, it is estimated that 1 in 3 Arizonans have pre-diabetes⁹ which greatly increases the chances of developing diabetes later in life.

 Notable disparity: Individuals of Black/African American, Hispanic/Latino, and Native American descent are at higher risk of developing diabetes compared to other racial and ethnic groups due to historical disparities and discrimination that makes it more difficult for disadvantaged groups to access resources such as healthcare and healthy food options.

Heart Disease

Heart disease is currently the leading cause of death in both men and women of most racial and ethnic backgrounds and was ruled as the cause of death in 1 in every 5 deaths within the United States in 2020¹⁰.

Asthma

Several asthma triggers can pose severe and life-threatening situations. Allergens, air pollution and other airborne irritants can impact the quality of breathing of a person with asthma¹¹.

High Cholesterol

High Cholesterol is defined as a total blood cholesterol of > 200 mg/dL. Individuals with diabetes and obesity also tend to have higher blood cholesterol levels. In addition, risky health behaviors such as a food diet of high saturated fats and trans fats, smoking, and being physically inactive can all contribute to an increased risk for high cholesterol¹².

Health Risk Behavior: Smoking

Cigarette smoking is the leading cause of preventable death within the United States¹³. Smoking can lead to poor overall physical health among older adults and result in a greater risk of developing cardiovascular disease, respiratory diseases, and cancer.

Access to Healthcare/Preventative Health

Access to Primary Care

According to the Arizona Medically Underserved Areas Biennial Report, released in October 2022 by ADHS, census tracts encompassing La Doce were identified as an Arizona medically underserved area (AzMUA). The community of La Doce is within the boundaries of the Primary Care Area (PCAs) of Tucson South and was deemed medically underserved by several indicators including: population-to-primary care physician ratio, travel distance to nearest primary care physician, poverty, health insurance status, low birthweight birth rate, late or no prenatal care, infant mortality rate, and presence of populations that experience health disparities¹⁴.

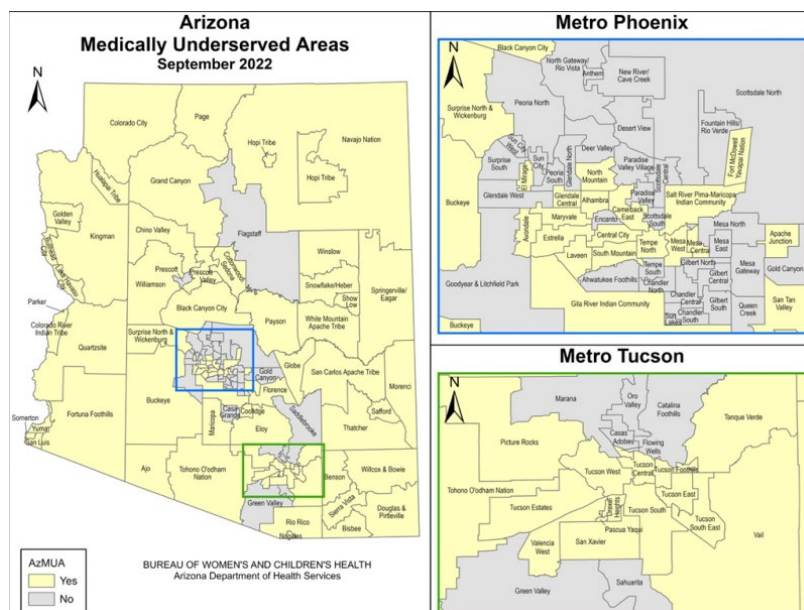


Figure 19. Map of Arizona Medically Underserved Areas (indicated in yellow)¹⁴.

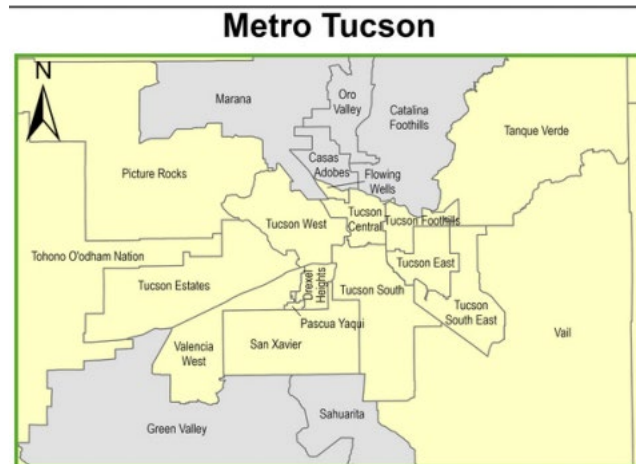


Figure 20. Map of Arizona Medically Underserved Areas, census tracts used to identify health indicators were identified to be in the Primary Care Area of Tucson South which was identified as an AzMUA¹⁴.

Lack of Medical Insurance

According to BRFSS 2020, 35% of the population over 18 within La Doce lack medical insurance, as compared to 17.7% in Pima County and 20.6% in Arizona. Lack of medical insurance can decrease the likelihood of an individual seeking primary medical and dental care. Low-income families and people of color are more likely to lack insurance.¹⁶

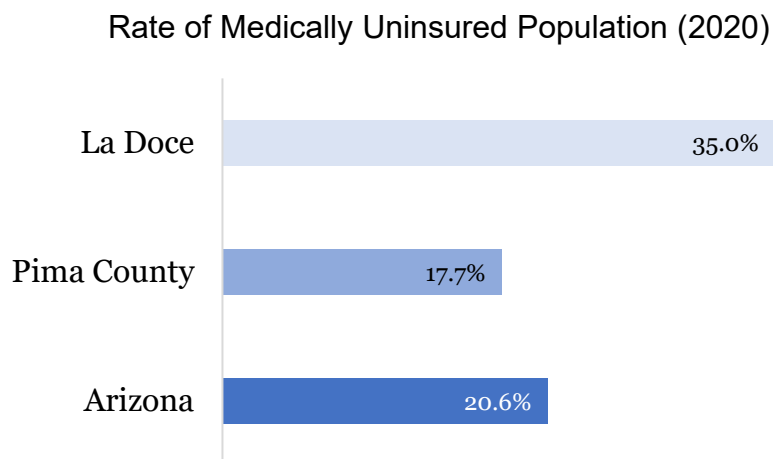


Figure 21. Rate of medically uninsured population within La Doce, Pima County, and Arizona in 2020⁸.

⚖️ Notable disparity: Native American and Hispanic/Latino individuals have the lowest percent of insurance coverage compared to other racial and ethnic groups.

Public Health Insurance Coverage

Population Enrolled in Public Health Insurance (2021)			
	La Doce (%)	Pima County (%)	Arizona (%)
Public Health Insurance	58.8	43.3	39.0
Medicare Alone	6.7	8.2	7.3
Medicaid Alone	34.9	16.8	15.0
VA Coverage	0.2	0.5	0.3

Figure 22. Prevalence rate of public health insurance coverage within the neighborhood of La Doce, Pima County, and Arizona in 2021¹.

Public Health Insurance Coverage by Age Categories (2021)			
Age	La Doce (%)	Pima County (%)	Arizona (%)
under 6	83.2	43.2	42.4
06-18	66.5	40.4	37.6
19-25	37.1	22.7	20.7
26-34	35.9	25.7	21.5
35-44	33.8	24.3	19.6
45-54	30.9	22.7	18.6
55-64	57.9	25.9	22.9
65-74	98.8	95.9	95.0
75 and over	100.0	99.0	98.5

Figure 23. Prevalence of public health insurance coverage by age categories of La Doce, Pima County, and Arizona in 2021¹.

Public health insurance programs provide free and affordable plans for low-income persons, families and children, pregnant women, the elderly, and people with disabilities. Public health insurances plans are funded by government and include Medicare, Medicaid, the Children’s Health Insurance Program (CHIP), VA coverage, state-specific plans, and Indian Health Services¹⁶.

Within La Doce, there is a higher rate of public health insurance coverage and for Medicaid coverage alone when compared to Pima County and Arizona. Medicare coverage and VA coverage programs have a lower rate of coverage as compared to Pima County and Arizona.

Children and the elderly have the greatest prevalence within public health insurance coverage throughout all geographic areas measured. However, a higher percentage of children within La Doce are covered by public health insurance program than for Pima County and Arizona. All age demographic categories within La Doce have a higher rate of coverage through public health insurance as compared to Pima County and Arizona.

Private Health Insurance

In 2021, 17% of adults within La Doce, reported obtaining health insurance from their employer. Employer-based health insurance coverage rate within La Doce is lower when compared to Pima County and Arizona at 39.5% and 42.4%, respectively.

In 2021, the direct-purchase private health insurance coverage rate within La Doce (2.6%) was also lower than in Pima County and Arizona at 4.9% and 5.3%, respectively.

Annual Check Up

In 2021, 7 in 10 (70%) adults within La Doce reported visiting a doctor for a routine checkup within the last 12 months, which is similar to the rates for Pima County and Arizona at 71.3% and 68.3%, respectively. The rate used to describe the BRFSS 2020¹⁵ analysis did not include reports for a general physical exam, or an exam based on a specific illness or injury. Adults that routinely visit a doctor's office tend to also be able to easily access and afford their prescription medication through their health insurance policy plan.

Dental Visit

In 2020, almost 4 in 10 (39.7%) adults over the age of 18 reported visiting a dentist or dental clinic within the last year. This is lower than the rate of adults in Pima County and Arizona with 58% and 54.8% of adults that reported having had visited a dentist within the last year. Regular visits to an oral care professional can prevent the development of oral diseases and allow for continued use of teeth while aging.

Preventative Health Care: Cancer Screenings (2021)			
	La Doce (%)	Pima County (%)	Arizona (%)
Mammography	73.6	70.9	64.4
Cervical Cancer Screening	73.1	79.9	78.1
Colorectal Cancer Screening	58.3	68.6	61.3

Figure 24. Displays the prevalence rates of cancer screenings among adults within La Doce, Pima County, and Arizona in 2021⁸.

Figure 24 summarizes the rate of cancer screening for residents of La Doce and compares it to the rate of Pima County and Arizona. Residents of La Doce have a higher rate of female breast cancer screening, but lower rates of cervical and colorectal cancer screenings compared to residents of Pima County and Arizona.

Behavioral/Mental Health

Alcohol Use: Binge Drinking


Excessive alcohol use, also called binge drinking, is one of the leading causes of preventable death among adults and can reduce the average age of death by 26 years among those whose death has been associated with excessive drinking¹⁷. Binge drinking is defined as having had 4 or more drinks for women and 5 or more drinks for men on an occasion. Within La Doce, 14.7% of adults over the age of 18 reported having participated in binge drinking in the last 30 days. Chronic health effects from continued excessive alcohol consumption can result in the development of alcohol use disorder and lead to problems with learning, memory, and mental health. In addition, alcohol consumption increases the risk of injury in association with motor vehicle crashes, acts of violence, and falls.

Mental Health: Depression

Depression, also known as major depression disorder or clinical depression, is a type of mood disorder that can affect the way a person interacts with life activities such as sleeping, eating, and working and **can** further affect one's thoughts, emotions, and actions¹⁸. 1 in 5 (21.3%) adults within La Doce reported being told **by** a healthcare professional that they have a depressive disorder.

Suicide

In 2022, the suicide mortality rate within Pima County was 23.2 deaths per 100,000 population. The suicide mortality rate within Arizona was reported as 21.9 deaths per 100,000 population¹⁹. To maintain patient privacy, the suicide mortality rate within La Doce could not be determined. The rate of suicides within Pima County rose by 8.5% from 2021, with more males being affected than females.


 **Missing/Incomplete data:** Secondary data used within this report accessed publicly available data at the county level¹⁹. (See reference in Appendix A). This data may not accurately represent the most accurate data as counties with fewer than 10 cases were not reported, and the suicide mortality rate was unavailable.

Drug Overdose

Drug overdose is a current epidemic throughout the United States and Arizona. In 2022, the drug overdose death rate within Pima County was reported at 46.8 deaths per 100,000 population. The data to specifically locate within which neighborhood boundaries the drug overdoses occurred were not reported to protect the privacy of the residents.

Nonfatal opioid overdose rate was slightly higher within Pima County-with a rate of 57.4 non-fatal overdoses per 100,000 as compared to 45.4 non-fatal overdoses per 100,000 in Arizona²⁰.

In 2022, Pima County reported an opioid fatality rate of 31.7 per 100,000. Moreover, within Pima County between the years 2020-2021 hospital related charges in relation to opioid related hospitalizations cost an estimated \$700 million²¹.

 Missing/Incomplete data: Secondary data used within this report accessed publicly available data at the county level²⁰. (See reference in Appendix A). This data may not accurately represent the most accurate data as counties with fewer than 10 cases were not reported, and the opioid mortality and non-fatal overdose rate was unavailable.

Environmental

Environmental Justice Index (EJI)

The environmental justice rank is a ranking system created with information from the U.S. Census Bureau, the U.S. Environmental Protection Agency, the U.S. Mine Safety and Health Administration, and the U.S. Centers for Disease Control and Prevention and cumulates a ranking based on environmental injustice factors on human health. EJI factors include environmental, social, and health factors that affect the environment and human health²².

The EJI rank ranges from 0 to 1, with 0 being the best care and 1 being the worst. The score in La Doce is .75, which means that the census tracts within the neighborhood boundary fare worse than 75% of the census tracts in the nation²³.

Air Quality

Air quality is measured through various forms of pollutant concentrations and by the duration of time in which the pollutant is at a specific threshold within the environment. Monitors used to collect the information report the hourly concentrations of their dictated air pollutant and thus some monitors do not report specific air pollutant concentration measurements. Only information on ozone level and PM 2.5 were available due to the type of air quality monitor that is located within the neighborhood boundaries. Information on particulate matter 10, nitrogen oxide species (NO_x), and sulfur dioxide (SO₂) were not reported.

Missing/Incomplete Data: Specific air pollutant concentrations were unavailable due to the types of monitors that are present within the neighborhood boundaries. Data on concentrations are good, moderate, and exceedance threshold levels were not available for PM 10, nitrogen oxide species, and sulfur dioxide.

Ozone

Ozone is present in the upper atmosphere and at ground level. Ground level ozone is a harmful air pollutant that is created through chemical reactions between nitrogen oxide species and volatile organic compounds commonly emitted through industrial facilities and motor vehicle exhaust. Ground level ozone is known to be harmful to humans and the environment, especially in interaction with long sun and heat exposure. Ozone inhalation can lead to reduced lung function, irritation of the airways, and lead to greater risk of developing respiratory diseases through continued exposure²⁴. In 2022, La Doce saw 0 days in which ozone hit an exceedance level in comparison to an aggregate of Tucson which hit the exceedance level on 7 days.

Ozone exceedance is determined by detecting an ozone concentration of 70 parts per billion (ppb) within an 8-hour timeframe. Moderate days are established by a detection of 55-70 ppb within an 8-hour time frame. Good days are established by the detection of 0-54 ppb within an 8-hour time frame²⁷.

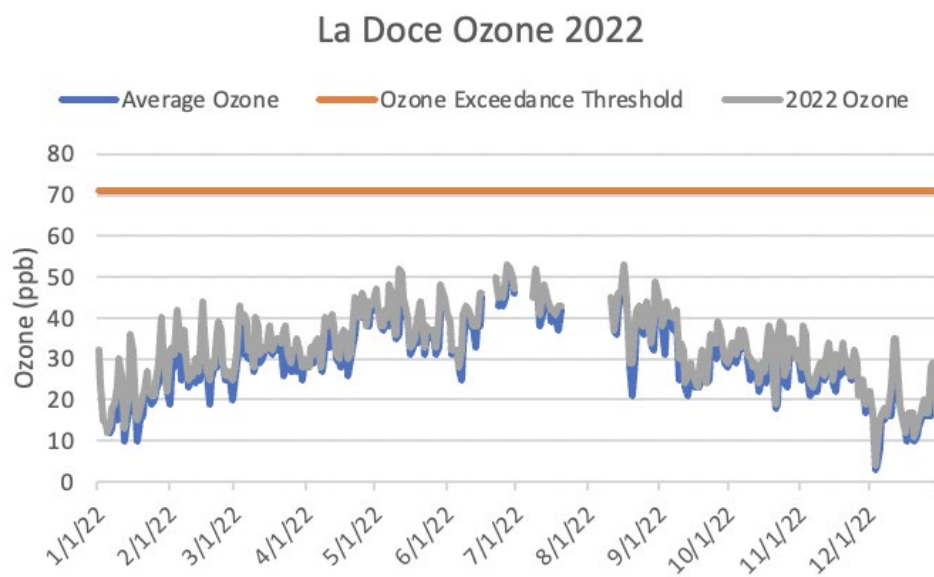


Figure 25. Annual ozone levels in 2022 in parts per billion at Rose Elementary station²⁸.

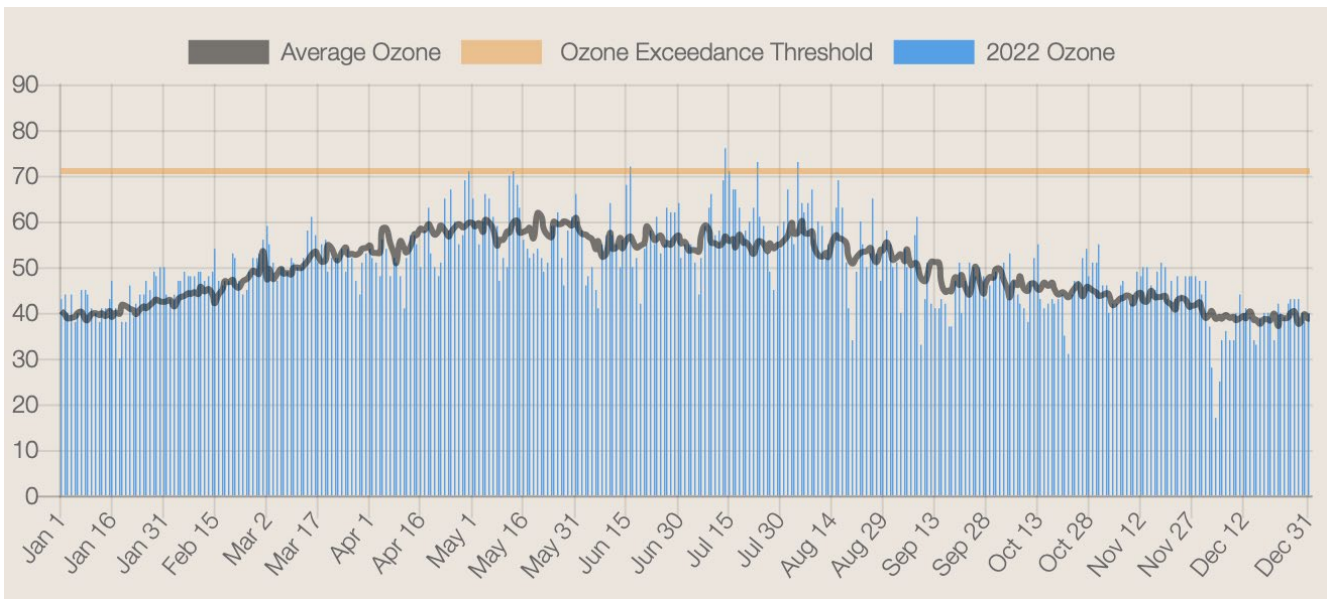


Figure 26. Annual Tucson Ozone levels parts per billion in 2022²⁹.

	Good Days	Moderate Days	Exceedance days
Number of Days	256	102	7

Figure 27. Table for the number of days in Tucson in 2022 when ozone levels were good, moderate, and exceeded threshold²⁹.

PM 2.5

Particulate Matter 2.5, PM_{2.5}, encompasses inhalable particles with a diameter of 2.5 micrometers and smaller. Sources of PM 2.5 vary but include construction sites, unpaved roads, fires, power plants, and vehicles. PM 2.5, in general, presents the greatest risk to human health than larger particles, as they are small enough to penetrate the lungs and enter the bloodstream²⁵.

As of January 2023, the EPA announced a proposed change in PM 2.5 concentration levels. At the time of this report, PM 2.5 exceedance levels were defined as more than 35 $\mu\text{g}/\text{m}^3$ over 24 hours, a moderate level as 12.0 $\mu\text{g}/\text{m}^3$ to 35 $\mu\text{g}/\text{m}^3$ over 24 hours, and good levels as less than 12.0 $\mu\text{g}/\text{m}^3$ over a 24-hr time frame²⁶.

In 2022, Rose Elementary air quality monitor reported 0 days of PM 2.5 exceedance within La Doce, and aggregate Tucson air quality monitors also reported 0 days of PM 2.5 threshold exceedance²⁸.

La Doce PM2.5 2022

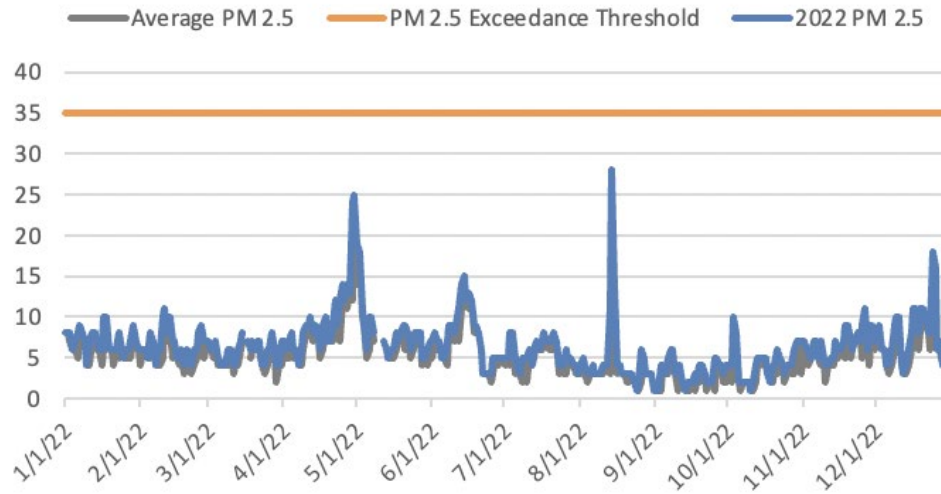


Figure 28. Annual La Doce PM 2.5 concentration in ug/m³ in 2022²⁸.

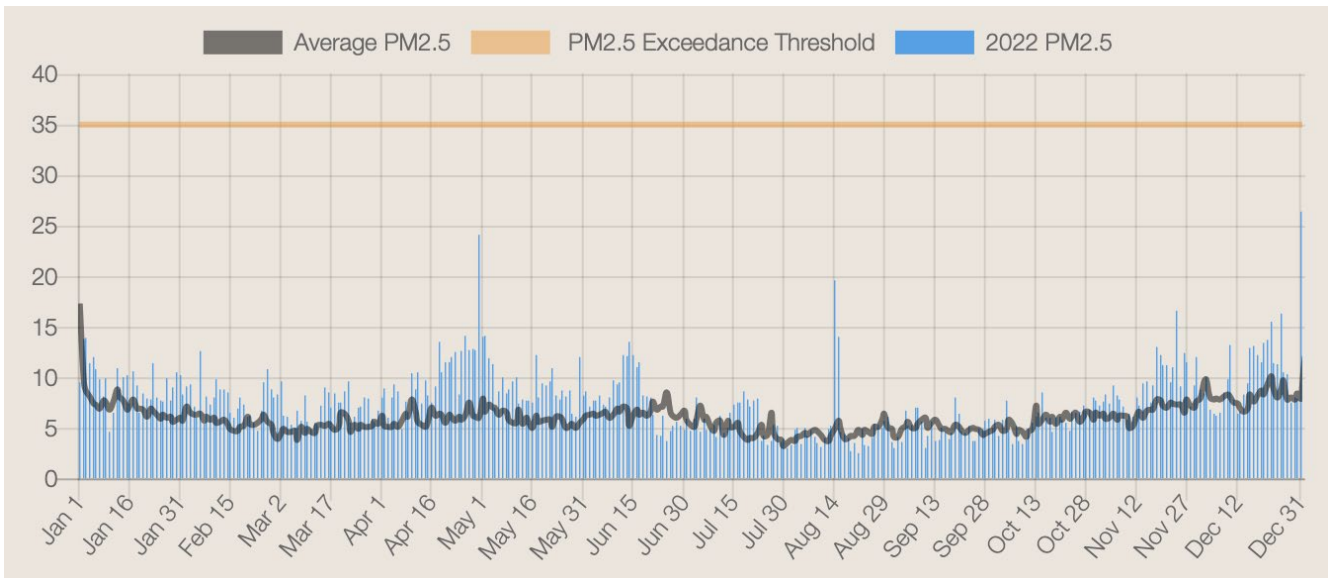


Figure 29. Tucson annual aggregate of PM 2.5 concentration in ug/m³ in 2022²⁹.

	Good Days	Moderate Days	Exceedance days
Number of Days	332	33	0

Figure 30. Table for the number of days in 2022 when Tucson PM 2.5 levels were good, moderate, and exceeded threshold²⁹.

Ground Pollution

Within the neighborhood boundaries of La Doce, there are no known or reported Resource Conservation and Recovery Act (RCRA) hazardous waste sites or hazardous waste-Large Quantity Generators. These RCRA hazardous waste sites are reported to the Arizona Department of Environmental Quality, and none were present in 2022. Although no hazardous sites are listed within La Doce, a hazardous waste site known as Honeywell CCA is located less than a mile from South 12th avenue³¹.

Water Pollution

Currently, drinking water quality within La Doce is meeting EPA standards and no contaminants have been reported to ADEQ for any drinking water sources³².

However, the historical distribution of contaminated groundwater to residents of southern Tucson has led to distrust within the community. For over three decades, residents in southern Tucson drank and recreated in water contaminated with trichlorethylene (TCE)³³. TCE is an industrial solvent used commonly for stripping paint, degreasing, and cleaning. Starting in the 1950's, Hughes Aircraft, now Raytheon Missiles Systems Co., introduced TCE into groundwater through intentional dumping into open pits, onto the ground, and by disposal into drains³³. In 1981, Pima County Health Department found TCE contamination in groundwater in southern Tucson and closed the affected groundwater wells. The site was added to the Superfund National Priority List (NPL), and cleanup began in 1987. The continued long-term exposure to TCE containing water resulted in increased cases of certain cancers among residents of southern Tucson³³.

More recently the presence of dioxane in 2002 and PFAS (per- and polyfluoroalkyl substances) in 2021 and 2022 have resulted in the elimination of specific water sources for drinking water and commercial use³³.

Groundwater pollution

No known groundwater pollution sites are known to be present within the neighborhood of La Doce³².

Site Contamination

Leaking underground storage tanks sites are locations where certain contaminants have been released from underground storage tanks into the environment. Such contaminant releases can pose a danger to the environment and/or human health. At the time of this report, the ADEQ underground storage tank database did not list active leaking underground storage tank sites within the neighborhood of La Doce³¹.

Economic

SNAP Benefits

The Supplemental Nutrition Assistance Program, more commonly known as SNAP is a government assistance program run by the U.S. Department of Agriculture. Individuals and families who are enrolled in the program receive nutrition supplemental assistance to aide in food budget needs to families to purchase healthy foods³⁴.

According to the 2021 ACS, 31.3% of households within La Doce reported having received SNAP benefits in the last 12 months. This metric is 2-times that of Pima County and Arizona with 12.9% of households and 11.2% respectively.

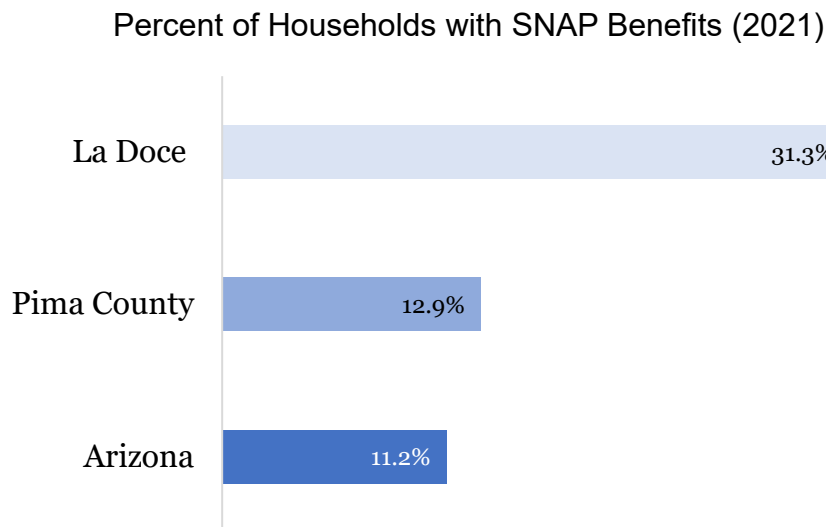


Figure 31. Percentage of household who reported receiving Supplemental Nutrition Assistance Program (SNAP) benefits in La Doce, Pima County, and Arizona in 2021¹.

! Notable finding: A much larger percent of families in La Doce receive SNAP benefits as compared to Pima County and Arizona as a whole

Housing Affordability

In 2021, 4 in 10 (41.3%) households in La Doce reported owning the property in which they resided. The rate of owner-occupied housing within La Doce is low compared to that in Pima County and Arizona with 6 in 10 households reporting owning the property in which they reside.

Cost-burden housing is when more than 30% of the income is spent on housing, which reduces one's ability to pay for everyday expenses such as food and transportation. Within La Doce, nearly 4 in 10 (39.9%) households reported spending more than 30% of the monthly gross income on housing costs. The rate is higher than that of Pima County (30%).

The average property value within La Doce is lower than that of Pima County and Arizona with an estimated property valued at \$124,700. Property values are dictated by various factors including neighborhood competition, location, home size and usability of the space, the local market, and economic indicators.

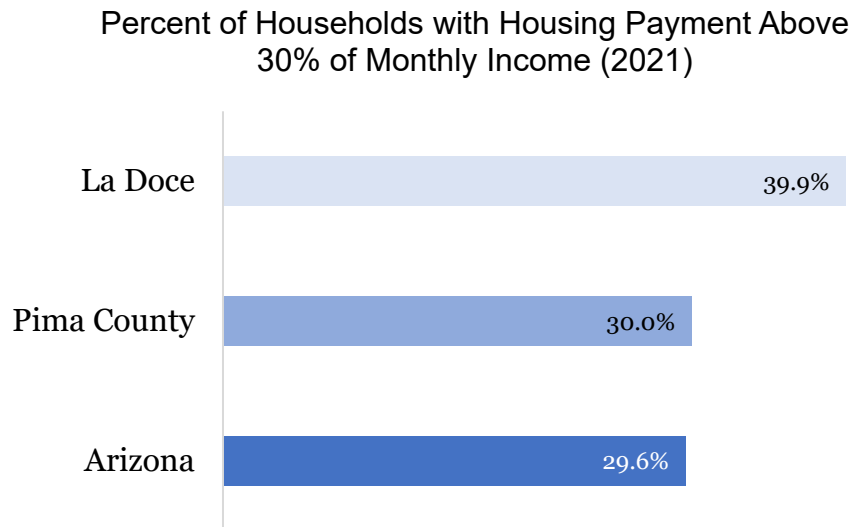


Figure 32. Housing affordability rate in which at least 30% of income is spent on housing among households in La Doce neighborhood, Pima County, and Arizona in 2021¹.

! Notable finding: Nearly 4 in 10 households within La Doce spend 30% or more of their monthly gross income on housing.

Income Inequality

Gini Index Score	Interpretation
< 0.2	Perfect income equality
0.2 – 0.3	Relative equality
0.3 – 0.4	Relatively reasonable income gap
0.4– 0.5	High income disparity
> 0.5	Severe income disparity

Figure 33. Gini Index rankings³⁴.

Income inequality is the extent to which income is distributed unevenly among a population. A common value indicator used in economics to determine the measure of distribution of income across a population is known as the Gini index, also known as Gini coefficient. The Gini index ranges between 0 and 1, with 0 indicating perfect equality to 1 indicating perfect inequality. Within La Doce, a Gini Index of 0.45 was determined and per UNICEF ranking it is a community with high income disparity³⁵.

Safety and Social

Violent and Property Crime Rates (2022)						
	No. of Reported Crime in La Doce	Calculated Rate in La Doce*	No. of Report Crime in Pima County	Calculated Crime Rate in Pima County**	No. of Reported Crime in Arizona	Calculated Crime Rate in Arizona**
Homicide Mortality Rate	3	49.83	22	2.08	496	6.7
Aggravated Assault Rate	53	880.25	611	57.8	19,640	266.9
Robbery-related Crime Rate	40	664.34	100	9.5	4,969	672.2
Burglary Rate	70	1162.6	1199	113.4	17,889	243.1
Larceny-Theft Rate	500	8303.3	5650	534.2	103,142	1,401.50
Arson Rate	1	16.6	46	4.3	752	10.2
Motor Vehicle Rate	31	514.9	612	57.9	16,394	222.8

*Rates calculated by methodology on Appendix B with data from Tucson Police Data and Analysis³⁶.

**Rates calculated by methodology on Appendix B with data from Arizona Crime Statistics Report³⁷.

Figure 34. Violent and Property Crime Events and Crime Rates per 100,000 within the neighborhood of La Doce, Pima County, and Arizona in 2022.

Violent Crimes

Violent crimes are classified to include events where a victim is harmed by or threatened with violence³⁸. Crimes within this definition include incidence of homicide, aggravated assault, and robbery-related crime. The rates for homicide, aggravated assault, and robbery are all higher compared to the rates in Pima County and Arizona.

Property Crimes

Property crimes are classified as crimes in which a victim's property is either stolen or destroyed without the use or threat of force against the victim. These crimes include burglary, larceny, arson, and motor vehicle theft. All property crimes within La Doce were found to have a higher crime-incidence rate in comparison to Pima County and Arizona.

Transportation and Walkability

Pedestrian-Vehicle Collision

In 2022, it was reported that 2 separate victims at different occasions were involved in a pedestrian-vehicle collision within the neighborhood boundaries of La Doce³⁹.

Walkability Index

The national walkability index provides national data on specific geographical block groups within a city. These block groups are then ranked on their relative ability to be walkable. Factors included in the process of determining a block group score include intersection density, proximity to transit stops, and the diversity of lands (employment and household mix). A neighborhood that is deemed more walkable has stores, jobs, and other services within walking distance and promotes a more active lifestyle. Lifestyle changes such as walking around the neighborhood can improve human and environmental health by eliminating the number of cars on the road, removing additional air pollutants, and help reduce obesity and diabetes rates among adults.

In 2021, throughout La Doce, the score for walkability ranged between 10.51 and 20, indicating that the neighborhood is considered above average in terms of walkability. However, it is important to note that the score of walkability does not consider individuals who must utilize wheelchairs and other forms of transportation besides vehicle use⁴⁰. It also does not consider tree cover which is an important safety consideration to avoid heat-related illness and make walking possible during the summer months.

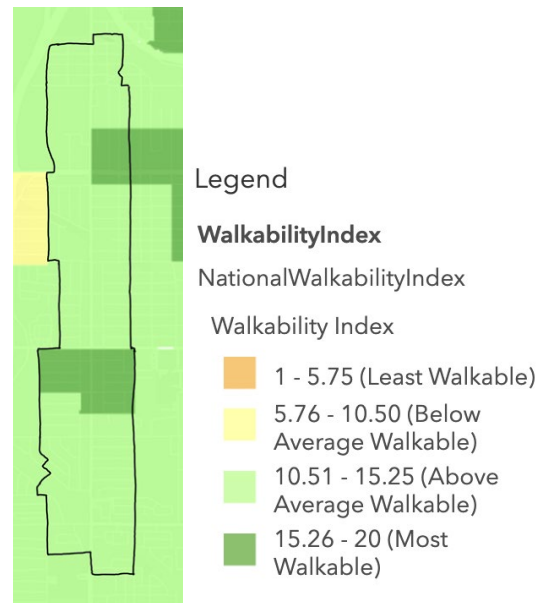


Figure 35. National Walkability Index Ranking of La Doce blocks in 2021³⁹.

Tucson Tree Equity

Tree coverage can encourage walking and other outdoor recreation, especially in hot climates like that of Southern Arizona. Increased tree coverage can provide the coverage necessary to protect pedestrians from continued sun exposure, reduce heat island effects, and aide in reducing carbon emissions. Generally, higher income areas have better tree coverage.

Tree Equity Scores were reported for neighborhoods throughout Tucson by the American Forests Dashboard (2020). Data used to score each area were derived from factors based on canopy cover, climate, population demographics, and socioeconomic data. Tree equity scores range from 0-100 with lower scores being assigned to neighborhoods with the greatest need for improved tree coverage.

Throughout La Doce, all neighborhoods were identified as a high priority, signifying the need for additional canopy coverage. The neighborhood of Sunset Villa, within La Doce, received the lowest tree equity score of 51 with an existing tree canopy coverage of 5% within the boundaries. The neighborhoods of Wakefield, Rose, National City Northwest, National City Southwest, and Sunnyside reported an existing tree canopy coverage also within the single digits⁴¹.

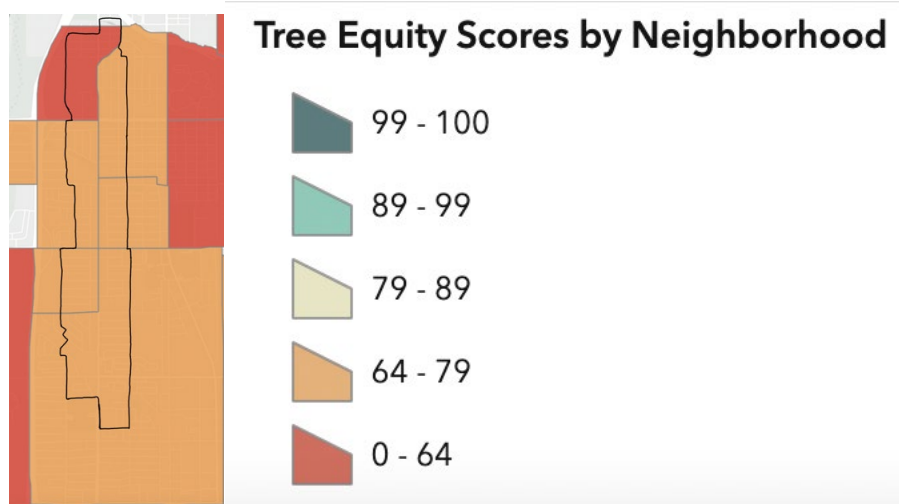


Figure 36. Tree Equity Scores for La Doce in 2020⁴¹.

! Notable disparity: All areas within the neighborhood boundaries of La Doce fall within the high priority tree equity need and report a canopy coverage below 7% of the neighborhood total area.

Social Vulnerability Index

Socioeconomic Vulnerability Index Ranking (2020)	
SVI Categories	La Doce
Social Vulnerability Index Score	0.9848
Socioeconomic Vulnerability Score	0.9691
Household Characteristics Vulnerability Score	0.9821
Housing Type and Transportation Vulnerability Score	0.8689

Figure 37. Social Vulnerability Index Ranking and SVI subcategory scores within La Doce in 2020⁴².

Social vulnerability can be defined as the potential negative effects on communities caused by external stressors on human health. Such stressors may include natural or human-cause disasters or disease outbreaks⁴³.

The SVI score is determined based on 16 U.S. census variables included variables related to population demographics, population economic stability, population housing type and transportation, and population household characteristics.

The SVI rankings are divided by census tracts and range between 0 and 1, with 0 indicating least socially vulnerable and 1 indicating the most socially vulnerable. An SVI score for census tracts within the neighborhood boundaries of La Doce was reported at 0.9848, indicating a very high social vulnerability as compared with other census tracts within Pima County.

APPENDIX A: REFERENCES AND DATA SOURCES

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APPENDIX B: DATA ANALYSIS

Census Tracts

The following outlines the census tracts that were used to identify the secondary data that was aggregated in this report. With respect to reporting appropriate community health indicators, various census tracts were used to report the health status of La Doce community, within Tucson, Arizona. These census tracts were derived from a report from Census Tract Pima County – Arizona.

Within la Doce, census tracts 24.00, 25.09, and 38.01 were used. These census tracts were used in accordance with their proximity to S. 12th Avenue with the neighborhood boundaries encompassing the Interstate-19 and Interstate-10 intersection to the north and E. Irvington Rd to the south. Consideration on the inclusion of census 25.09 was discussed given its large size and large northward expansion that did not incorporate the neighborhood. However, the exclusion of census tract 25.09 would have caused the absence of almost half of the population of La Doce. Therefore, it was ultimately decided to include census tract 25.09 within the data collection process to ensure the inclusion of the neighborhood population. However, it is important to note that the neighborhood boundaries of La Doce differed by several reports. In this discovery it was determined that census tract 38.02 was left out during the data collection process and therefore, the estimates are not within accurate neighborhood boundaries and may encompass those who do not live within La Doce as well as exclude certain communities that do live within the boundaries of La Doce.

Aggregated Information

I. ACS

- a. To properly determine population demographics and additional health indicators at the census level, the percentage of the population who self-reported to fall within the specified categories that were asked were pulled at the census level for each community. Similar methods in aggregating the information were implemented and followed direct standardization to determine an aggregate of the three census tracts used.

II. CDC Places

- a. To properly determine health indicators within each neighborhood, prevalence rates from CDC places were pulled by census tracts for each community. To properly aggregate the census tracts data for each neighborhood direct standardization was used to compare prevalence rates and aggregate an average within the census tracts of each community.
- b. The usage of direct standardization requires a known prevalence rate which was determined for each census tract on CDC places. Given that the population of each census tract was known, we calculated the number of events that occurred

and created a table where each stratum was a census tract (rows) followed by the population, events, known prevalence, standard population, and expected events (columns).

- c. To determine the expected events, the known rate (prevalence of each stratum) was multiplied by the standard population. The expected events were rounded up to the nearest whole number.
- d. This method of standardizing allowed us to compare each census tract and their expected cases, given that they had the same population distribution. From the completed table, an adjusted rate was calculated by dividing the sum of expected events of the trats divided by the sum of the standard population.
- e. The adjusted prevalence rate was reported for each health indicator within the report.

III. Tucson Police Data and Analysis

- a. To properly determine the crime rates for La Doce, reported crime from Jan. 1, 2022 – Dec. 31, 2022, were identified within the Tucson Police Reported Crimes. At the time of writing this report, a map of Tucson, within the reported crimes dashboard, displayed the known locations for a reported crime which were broken down by type of crime (i.e., homicides, aggravated assault, burglary, etc.). The neighborhood boundaries that were discussed earlier in Appendix B were used to determine the number of events that were present within La Doce.
- b. After the total number of events had been identified. The number of events were divided by the total population within the specific geographic location multiplied by the length of time. Therefore, the incidence rates of each crime rate were calculated as previously stated and reported in Figure 23.

IV. Arizona Crime Statistics Report

- a. To properly determine the crime rates within Pima County and Arizona, the Arizona Crime Statistics Report was used to determine the total number of events for each crime. The events (total number of times a specific crime was reported within a specific geographical boundary) were then divided by the total population of the specific geographic location multiplied by the length of time in which the number events were calculated. A crime incidence rate was then reported and an adjusted per population of 100,000 compared to other geographic locations.

APPENDIX C: KI INTERVIEW GUIDE

All KIs will be asked ten (10) questions. Nine (nine) questions are universal, for all KIs participants (Q1-Q6a and G7-Q10). With question 6b only being asked towards key informants associated with law enforcement or neighborhood watch affiliation.

Target	Question(s) and Prompt(s)
General/All	<p>1. Could you tell us a bit about yourself, including:</p> <ul style="list-style-type: none"> • Any identities you'd like to share with us? • Any role(s) you have in your community? • What services you provide for your community?
	<p>2. Can you tell me about your neighborhood? What do you love about it? What are some challenges that you or your neighbors experience?</p> <p>Prompt:</p> <ul style="list-style-type: none"> • What are some positive aspects of the neighborhoods? • What are some challenges experienced by people in the neighborhood?
	<p>3. What are some resources in this neighborhood that help people get and stay healthy? Think about resources, services, programs, etc., that support:</p> <ul style="list-style-type: none"> • Physical health or exercise? • Mental health? • Health for specific populations (infants, youth, senior, minority populations, etc.) • Resiliency and the ability to overcome hardships. <p>Prompt:</p> <ul style="list-style-type: none"> • What are some strengths or assets in your community? • Can you identify any barriers that prevent people in your community from achieving optimal health? • Can you name some specific resources, places, programs, or services? • What programs/services are needed in the community? • Who most needs them?
	<p>4. What are the environmental concerns or issues that exist in the neighborhood, such as pollution, waste disposal, or access to green spaces?</p>

	<ul style="list-style-type: none"> • Are there any environmental hazards or risks that affect the health and well-being of residents, such as contaminated soil, air pollution, or unsafe buildings? • Can you point out on a map where some of these issues are in your neighborhood? • Are there any ongoing environmental initiatives or efforts in the neighborhood to improve the environment? If so, how successful are they?
	<p>5. What opportunities does your community provide to support connectedness and a sense of belonging? (i.e., social gatherings, community potlucks, community day of action, etc.)</p> <ul style="list-style-type: none"> • What might be some barriers/challenges your community faces that prevent social connectedness and a sense of belonging?
	<p>6a. What are the safety concerns or issues that residents face, such as crime, violence, or lack of lighting in public areas?</p> <ul style="list-style-type: none"> • Are there existing safety measures in the neighborhood, such as police patrols, surveillance systems, or crime prevention programs? If so, how effective are they? • Are some areas safer than others? Why? <p>Prompt:</p> <ul style="list-style-type: none"> • If you don't feel safe, could you list some reasons why you might feel this way? (i.e., crime, drug use, vagrancy/homelessness, etc.) Can you point out these places on a map?
Law Enforcement/Neighborhood Watch	<p>6b. What are some safety risks you've seen in the community? (i.e., crime, drug use, vagrancy/homelessness, etc.) Could you point out on a map where these risks are?</p>
General/All	<p>7. What are the most important issues that affect the health of people in this neighborhood?</p> <ul style="list-style-type: none"> • Who is most affected by these? • Are there specific health challenges that residents face, such as access to healthcare services, healthy food, or green spaces/parks? • What might help prevent some of these issues? <p>8. Considering your answer to all these questions, what do you wish existed in this neighborhood?</p>

	<ul style="list-style-type: none"> • What would help the people of this neighborhood get and stay healthy? <p>Prompt: Consider the idea of reusing a brownfield site.</p> <ul style="list-style-type: none"> • What could be developed or built that would most benefit your community?
	<p>9. Is there anyone else you would recommend we speak with as a Key Informant?</p> <ul style="list-style-type: none"> • Are there any opportunities you can think of where we might be able to get community feedback (e.g. upcoming meetings or events in or near the neighborhood)?
	<p>10. Is there anything else you'd like us to know?</p>

Figure 38. Key informant interview guide.

APPENDIX D: COMMUNITY DIALOGUES – AGENDA & OUTLINE

Community Dialogue Outline

The community dialogues were a self-paced activity in which residents were invited to join in discussions with other community members along with facilitators on the most pressing issues that were occurring in the neighborhood.

Part I: Sign-in and Introduction

1. Participants should sign-in prior to engaging in the activities that were to occur during the community dialogue. Names and phone numbers and emails/should be collected in case follow-up is needed. (See appendix x: Community dialogue sign-in sheet)
 - a. If completed virtually, participants should fill out a virtual sign-in sheet within the same information as they enter the call.
2. The facilitator(s) will briefly introduce themselves, the purpose of the community dialogue, and provide assistance throughout the self-paced activities.
 - a. Sample introduction
 - i. Hello, my name is, and I am helping with the neighborhood collaboration to assess the health and well-being of La Doce residents. We welcome your active participation to share your knowledge and value the dialogue that is created through other residents.
 - ii. The activities are self-paced and therefore you may partake in any of the dialogues that you prefer in whatever manner you see best fit.

Part II: Community Dialogue Activities

Using markers/pens write down or draw the answers to the following questions on the paper. You may write as much as you'd like.

1. Neighborhood Strengths Activity
 - a. What do you love about your neighborhood?
 - b. What are some things in the neighborhood that help your health and well-being?
2. Neighborhood Challenges Activity
 - a. What are some challenges that people in your neighborhood experience that may impact their health and well-being?
3. Mapping Activity (See Appendix X for results)
 - a. Use the map to show what is going on in the neighborhood by placing stickers on areas of note. Please use the key below to understand what each sticker means.
 - b. You may add a sticky note to provide a little bit more information about each sticker and why it should be noted.

4. **Prioritization Activity**
 - a. A list of the top priorities for reuse/redevelopment of brownfield sites within the neighborhood were displayed.
 - b. Participants were then encouraged to ‘vote’ on the ideas that they related to or liked the most. Each participant received 5 dots.
 - c. Participants could distribute the dots in which ever manner they pleased (i.e., one idea could receive all 5 dots)

5. **Storytelling Activity**
 - a. A list of 10 questions were displayed for participants to choose from. Participants were encouraged to share a moment in time in which one of the following prompts were noticed within their neighborhood.
 - i. Share a memorable experience you’ve had in the neighborhood.
 - ii. Tell us about a significant event or celebration that took place in the neighborhood.
 - iii. Describe a time when the neighborhood came together to address a challenge or achieve a common goal.
 - iv. Share a store about a neighbor who made a positive impact on the community.
 - v. Tell us about a place in the neighborhood that holds special meaning to you and why.
 - vi. Describe a time when you felt a strong sense of community in the neighborhood.
 - vii. Share a story about a tradition or cultural practice that is important to the neighborhood.
 - viii. Tell us about a historical event or moment in the neighborhood that you find interesting or significant.
 - ix. Describe a time when you witnessed acts of kindness or support among neighbors in the neighborhood.
 - x. Share a store that reflects the diversity and cultural richness of the neighborhood.

Virtual Community Dialogue

The virtual community dialogues were structured and facilitated to be completed together in a group. Two breakout rooms were offered to allow for discussion to be represented in either English or Spanish.

Section	Time	Description	Admin
Introductions	10 minutes	Introduce the CHNA team and check-in participants. Allow people to get into their specified room based on their preferred language. Review Zoom etiquette and go over agenda.	Participants are asked to self-mute and if needed to confirm their presence either private message in zoom chat or within the designated breakout room. Participants are placed in designated breakout rooms

			based on preferred language for discussion.
CHA Presentation	10 minutes	Presentation of CHA purpose, methods, results of data collection.	
Community Dialogue Activities	35 minutes	<p>Ask participants a series of questions regarding the neighborhood health status and safety that encourages dialogue between the participants.</p> <p>Discuss the questions as stated earlier regarding the following activities:</p> <ul style="list-style-type: none"> • Neighborhood strength activity • Neighborhood challenges activity • Prioritization Activity • Storytelling Activity 	<p>Facilitate and monitor the discussion to ensure that the group is moving along and speaking. While discussions are occurring a CHA member staff can document the responses and dialogue from participants.</p> <p>Can use Slido to share selected results.</p> <p>A staff member can remain in the main room to wait for late participants and guide them into the proper room and assist with technical issues.</p>
Closing	5 minutes	Thank audience, discuss next steps (upcoming events, reports, etc.)	

Figure 39. Virtual community dialogue outline.

APPENDIX E: COMMUNITY DIALOGUES MAPPING RESULTS

The mapping activity provides community members with the opportunity to specifically point out, document, and engage in conversation on specific locations throughout the neighborhood that should be identified given its resources or its need.

The following is the map that was used within the mapping activity for the in-person community dialogue:

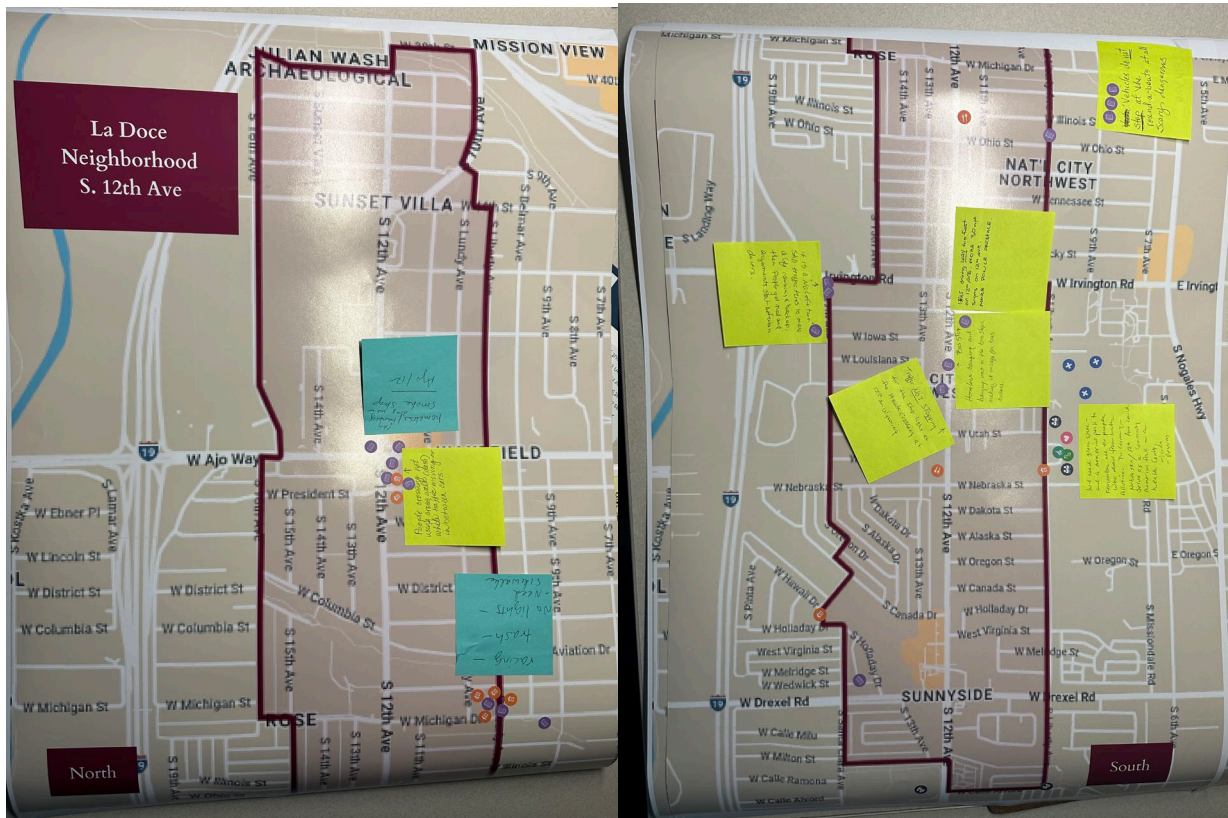


Figure 40. Community dialogue mapping activity results.

Participants were offered the opportunity to place a sticker, see legend below, and provide information on why the designated sticker was placed on the specified area.

Below is the legend used to correspond with the stickers utilized in the mapping activity:

Sticker	Meaning
Green Weight	Signifies a green space or a place where one can spend time outdoors (i.e., park or community garden)

Blue Cross	Signifies a place that provides health or social service support to the neighborhood (i.e., nonprofit, clinic, etc.)
Orange Utensil	Signifies a food establishment (i.e., grocery store or farmer's market)
Purple Book	Signifies a safety issue (i.e., a crime hotspot) or a location where one does not feel safe due to (i.e., present crime or lack of lighting)
Two people "meeting"	Signifies a place that allows for social connectedness/gatherings
Heart	Signifies an important location to note that does not meet the criteria offered
Trash	Signifies an environmental issue (i.e., trash, water contamination, pollution, etc.)

Figure 41. Community dialogue mapping activity legend.

Below is a list of responses that were received during the mapping activity:

Crossroads	Comments/Concerns	Details (if provided)
Alongside 9 th Ave.	Safety Issue	Vehicles do not stop at the roundabouts, very dangerous and scary
12 th Ave. and Ajo	Safety Issue	Homeless and/panhandling, noticed drug use and a smoke shop
Between Ajo and Presidente at 12 th Ave.	Safety Issue/Trash	People cross the street in non-designated crosswalks and will walk in between cars. Noted trash and lots of agreement among other participants for this location.
Between Irvington and Nebraska at 12 th Ave.	Safety Issue	A homeless camp is nearby, and many congregate at the bus stops. Cars also drive very fast and more than 30mph. Higher police presence and stricter enforcement could help in stopping this.

Wyoming and 12 th Ave.	Safety Issue	Cars do not obey the Hawk light crossing when flashing making it dangerous for pedestrians.
Illinois and 12 th Ave.	Food Icon	n/a
Nebraska and 12 th Ave.	Food Icon	n/a
Just south of Calle Ramona and St. and 12 th Ave.	Meeting Icon	n/a
Between Pennsylvania and Michigan St. at Liberty	Safety Issue/Trash	<p>A lot of racing goes on in this area. The lack of lighting at night and the sidewalk makes it very dangerous. Trash is also very apparent in this area.</p> <p>Lots of agreeance in this area among participants noting it as an important area.</p>
Between Irvington and Nebraska at Liberty	Green space/Food icon/Meeting icon / Important Icon	<p>We need a greenspace and a memorial park to remember all the people who died from water pollution. The corner of Nebraska and 12th Ave. could serve as a community memorial park or a health center.</p> <p>Lots of participants agreed and placed additional stickers as well as it could lead to a new meeting place, promote health, and provide sociability.</p>
Irvington and 17 th Ave.	Safety Issue	<p>It is a “No left turn” spot, however people still turn left, and it causes a lot of accidents, arguments and general unsafety.</p> <p>Lots of participants agreed and placed important icon in support.</p>
Halladay Dr. and Hawaii Dr.	Trash icon	n/a

Wedwick St. and Holladay Dr.	Important Icon	n/a
Calle Alvord and Liberty	Meeting Area Icon	n/a

Figure 42. List of location and comments noted by community members during community dialogue mapping activity.

APPENDIX F: AZPRC PARTICIPATORY EVALUATION INSTITUTE ASSESSMENT TEAM

About the Arizona Prevention Research Center Participatory Evaluation Institute

The Participatory Evaluation Institute (PEI) is part of the Arizona Prevention Research Center at the University of Arizona Mel and Enid Zuckerman College of Public Health. The PEI partners with organizations throughout Southern Arizona to complete health assessments and evaluate public health programs. The PEI uses a participatory methodology that is oriented to the needs of the community and grounded in community knowledge and expertise to support effective public health programs and decision-making. The PEI completed the 2021 Pima County Community Health Needs Assessment and is committed to conducting high quality, actionable assessments to guide public health programs and policies. The Pima County Community Health Assessments are excellent resources to understand health priorities and support public health planning.

Learn more:

- *Arizona Prevention Research Center Participatory Evaluation Institute:* <https://azprc.arizona.edu/participatory-evaluation-institute-pei>
- *Healthy Pima; Pima County Community Health Assessments:* <https://www.healthypima.com/community-health-needs-assessments>

The assessment team is listed below with brief biographies:

- Kathryn Tucker Ortiz y Pino, MPH is the program director for the Participatory Evaluation Institute. She has over ten years of experience in health promotion planning and evaluation with communities in Africa, Central and South America, and Southern Arizona. Since 2017, she has worked as a participatory evaluator and researcher on a variety of projects in Southern Arizona, particularly along the US-Mexico border. She led the 2021 Pima County Community Health Needs Assessment team.
- Rodrigo Valenzuela Cordova, MPH is a Participatory Evaluation Specialist working on several evaluation projects in Cochise County. Prior to joining the PEI Rodrigo worked alongside various projects in the southern Arizona area that addressed health disparities in under-represented communities. Rodrigo is a Tucson native and grew up in the La Doce neighborhood.
- Alfonso Trujillo is a first year MPH student in the epidemiology concentration. He is interested in addressing health disparities that are unique to migrant health along the US-México border region and disease prevalence within migrant communities. Prior to joining the team, Alfonso worked with the Arizona Poison Center on the county health

department response to monkeypox in Southern Arizona and worked to address education disparities among low-income and at-risk youth in Oregon.