

APPENDIX FINAL JUNE 2018



- A EXISTING CONDITIONS REPORT
- **B-HOUSING MARKET STUDY**
- C MARKET DEMAND/SUPPLY PROFILE
- D HEALTH IMPACT ASSESSMENT + CROSSWALK
- E SUSTAINABLE NEIGHBORHOOD ASSESSMENT
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Edison-Eastlake

CHOICE NEIGHBORHOODS

EXISTING CONDITIONS REPORT

FINAL SEPTEMBER 2017





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EXECUTIVE SUMMARY



The City of Phoenix was awarded a 2016 Choice Neighborhoods Initiative (CNI) Planning and Action Grant for the Edison-Eastlake Community (EEC). A program of the U.S. Department of Housing and Urban Development (HUD), the CNI program focuses on the creation of community-driven, action-oriented comprehensive neighborhood revitalization plans - i.e. Transformation Plans - for distressed communities.

This Existing Conditions Assessment is intended to provide a baseline understanding of the EEC's physical and social conditions today. This analysis will inform the determination of priority areas that will be addressed in the Transformation Plan for the EEC.

The analysis in this report is based upon primary and secondary sources of information, including on-the ground observations, secondary data sources, and third-party studies. Additionally, a Resident Survey of the current public housing residents at Frank Luke Homes, A.L. Krohn, and Sidney P. Osborn was conducted to collect current information about perceptions and needs in the community, as well as a survey of current employees who work in the EEC to understand their concerns and interests in the neighborhood.



Grid Bike station at North 12th Street Valley Metro Light Rail station

A summary of key findings include:

Strong market potential does exist in the EEC.

- With its proximity to downtown Phoenix, growing interest in in-town living, and continued population
 growth in the metro area, a recent housing market study determined that there would be strong demand
 for market-rate rental and homeownership housing in a variety of housing typologies in the EEC. Leading
 the market would be younger singles and couples, followed by traditional and non-traditional families, and
 then empty nesters and retirees.
- Among employees in the EEC, there was strong interest in possibly moving to the area if higher quality
 homeownership and rental opportunities were made available. Over half of the employee respondents
 commute 10 or more miles to work in the EEC. However, in addition to new housing, concurrent
 improvements are needed to support growth (e.g. public safety, neighborhood retail, beautification).

The EEC has excellent access to downtown Phoenix and the region, but residents are limited in their ability to capitalize on this asset.

- Set at the juncture of major north-south and east-west arterials as well as entrance ramps to Interstate 10, getting from the EEC to other parts of Phoenix is convenient...if one owns a vehicle. With low car ownership, residents are reliant upon public transportation or other means to travel out of the neighborhood. There are several Local and Key Local bus routes that pass through the neighborhood, but the nearest light rail station is over one-half mile away for most residents.
- With its flat terrain, Phoenix is ideal for cycling and walking. However, unless one owns a bicycle, this is not an option as the nearest Grid Bike station is located at the 12th Street light rail stop. Walking is convenient, but challenging especially during the very hot summer months due to the lack of natural or man-made shading. Additionally, while the roadways provide good access to the region, the high volume of traffic and speeding cars make crossing these arterials dangerous for cyclists and pedestrians alike.

Safety in the neighborhood, both real and perceived, is a major concern among both residents and non-residents, and negatively impacts the quality of life and enjoyment of the neighborhood.

- Currently, the incidence of Part 1 Violent Crimes and Part 2 Quality of Life crimes in the neighborhood hover around three times the City-wide rate. While residents generally feel safe in the neighborhood during the day, the need for better safety was strongly and frequently voiced during community meetings, and was a top concern identified in both resident and employee surveys. Improved perceptions of safety will be critical to the EEC being able to achieve its full redevelopment potential.
- Feeling unsafe impacted residents' ability to enjoy the amenities available in the neighborhood, especially Edison Park, and engage in leisure time physical activity in the area. Lack of safety also impacts the ability of the area to attract needed convenience retail.



The high percentage of vacant land in the EEC, while an asset for potential redevelopment opportunities, is also a liability due to poor maintenance and interrupting the fabric of the neighborhood.

- Beautification of the neighborhood and dealing with the trash and junk found throughout the community were among the top three improvements and top three problems cited by both residents and employees in the surveys. The prevalence of litter negatively impacts the perception of the neighborhood, detracts from neighborhood pride, and signifies to outsiders that this is a low-income and dangerous community.
- The large swathes of vacant land also mean that there are many stretches of area with no "eyes on the street," making parts of the neighborhood feel desolate and foreboding. Vacant land limits potential for a critical mass of people to take ownership in their community.



Trash and litter throughout the neighborhood negatively impact perception of the community

Much of the non-public housing stock is in fair to poor condition and offer few housing choices for households that do not want to live in a single-family households.

households that do not want to live in a single-family home or in a traditional apartment setting.

- Nearly one-quarter of the residential homes in the EEC are vacant, and addressing vacant/abandoned
 homes is among the top concerns of employees because of how they detract from the visual appeal of the
 neighborhood. This is less of a concern for current public housing residents because they are geographically
 separated from the other residential areas in the community where this is an issue.
- With nearly 70% of the non-public housing supply constructed prior to 1970, the size, features and amenities
 of the existing housing stock does not meet the tastes, needs and living preferences of most families today.
 With the potential for strong market interest from outsiders in addition to serving existing neighborhood
 households, diversification of the housing stock will be important to capture the breadth of the market,
 including both rental and homeownership opportunities.

While there are several commercial and retail establishments including a full-service grocery store in the EEC, very few serve the EEC community.

- Auto-related services and retail dominate the retail market in the EEC, which attracts in customers from
 across the region, but does not generally serve the needs of local residents, especially given the low rate
 of car ownership. Both residents and employees would like to see a greater range of businesses in the
 neighborhood, especially grocery stores, in the neighborhood, and the lack of community-serving retail was
 identified as one of the top challenges for the area.
- Attracting desired convenience retail to the EEC faces two challenges lack of population density and low income levels among existing residents, and the lack of real and perceived safety of the community by the business and retail market.

The EEC has outstanding access to health care facilities, but EEC residents suffer from poor physical and mental health.

- The rates of chronic health conditions among EEC residents are very high, particularly obesity, high blood pressure, high cholesterol and diabetes. Among children, asthma rates are particularly high, and among the elderly, the loss of teeth. Physical fitness programs, dental care, and tools for healthier living are among the top health care needs for residents.
- Issues around mental health are also very high in the community, from depression and stress/anxiety to unhealthy behaviors like smoking and substance abuse. Demand for mental health services is among the top requests by residents.



St. Luke's Medical Center is a key anchor institution in the Edison-Eastlake Community



Less than half of the children age 5 and under are enrolled in a center-based early learning program.

With two early learning centers in the EEC and six more within a mile radius that are accessible via public
transit, there appears to be sufficient capacity to serve additional children. More information is needed
to understand why more young children do not participate in a center-based program, whether it is
lack of awareness, knowledge of the benefits, transportation issues, space limitations, or transportation
challenges.

EEC students attend many different public and charter schools throughout the city, but the majority attend their local neighborhood school.

• As a whole, the public elementary and high schools primarily attended by EEC children have lower rates of proficiency as measured through the AzMERIT standardized test than the state average. Despite the lower school performance, residents were generally positive about the quality of the schools their children attend.

Out-of-school time program participation among EEC students is limited.

- The majority of students go home at the end of the school day versus participating in an organized afterschool program, even though the elementary schools offer a free before and after school program as well as summer programming, and the local branch of the Boys and Girls Club is not far away.
- The top reasons for non-afterschool program participation are cost and lack of knowledge of existing programs. Additional youth programs was among the top three "immediate needs" identified by residents in the survey.

The unemployment rate is high and work-able residents face multiple challenges to accessing employment opportunities.

- Nearly half of the adult population in the EEC does not have a high school diploma, which means that even middle-skills-level jobs are out of reach. Additionally, approximately one-quarter have limited English proficiency, and in an increasingly digital world, almost half don't know how to use a computer and over half do not have regular access to the internet at home.
- Employed residents tend to work in low-wage, low-skilled jobs including maintenance, administrative support, and food preparation.

Social and physical connections between public housing residents within their own housing community and between the sites located to the north of Van Buren (Frank Luke Homes and A.L. Krohn) and to the south of Van Buren (Sidney P. Osborn) are present but weak.

• With different school attendance boundaries and different access to neighborhood amenities, there are limited opportunities for interaction between the public housing residents from the different developments. Residents from Frank Luke Homes and A.L. Krohn tend to identify more with one another and voice similar concerns because of their adjacency. As the planning process proceeds and the redevelopment plan for the EEC evolves, it will be important to ensure equitable distribution of community improvements, facilities and programming on both the north and south side of Van Buren Street.







INTRODUCTION

In June 2016, the City of Phoenix was awarded a Choice Neighborhoods Initiatives (CNI) planning and action grant for the development of a comprehensive revitalization plan for the Edison-Eastlake Community (EEC), including Frank Luke Homes, A.L. Krohn, and Sidney P. Osborn. Together, these three developments comprise 577 units of public housing owned and managed by the City of Phoenix's Housing Department.

CNI is a program of the U.S. Department of Housing and Urban Development (HUD) focused on supporting communities to develop community-driven, results-oriented neighborhood transformation plans for distressed communities. With a \$1.5 million CNI planning and action grant - \$500,000 for planning and \$1 million for approved Action Activities) - leveraged with additional public and private dollars and in-kind resources, the City and its partners are engaged in a two-year long planning effort to develop a Transformation Plan for the EEC. The Transformation Plan will include goals, outcomes, strategies and actions that will result in sustainable and meaningful investments in the EEC to help it become a vibrant and thriving community.

REPORT PURPOSE AND OBJECTIVES

This Existing Conditions Assessment is intended to serve as a launching point for discussions regarding which physical and human capital improvements and investments are needed in the EEC based upon current realities. This report highlights the socioeconomic demographics, physical and social assets, current challenges, previous and future plans for the neighborhood, and a review of the policies that shape daily life and physical conditions in the neighborhood.

The City of Phoenix and its partners will use this baseline information to understand existing conditions and resources, articulate a realistic community vision, establish what is needed for positive change to occur, and shape their action plan. This baseline information will also be used to establish measurable outcomes for the resulting plan, such that as the plan is implemented, the community can assess progress towards goals, determine the effectiveness of its approach, and make dynamic changes as needed.

The Existing Conditions Assessment includes: a review of previous planning studies to understand how they relate and contribute to the EEC's future; and data on physical and social conditions including land use, zoning, pedestrian and bicycle infrastructure, transportation, crime, open space, housing conditions, educational institutions, major employers, and community services¹.

The information in this report is supplemented with the results of a Resident Survey conducted between January and April 2017 of 61% (341 responses) of the public housing residents in the EEC. The survey instrument asked public housing residents in the EEC questions ranging from their perceptions of the community to current needs. Additionally, a survey of employees that work in the EEC – St. Luke's Medical Center, Southwest Autism Research and Resource Center (SARRC), Arizona Department of Economic Security, etc. - was conducted to find out about their perception of the neighborhood and what would make the EEC a more desirable place to live and work. In total, 93 employees completed the survey. Copies of the survey results can be found in the Appendix to this report.

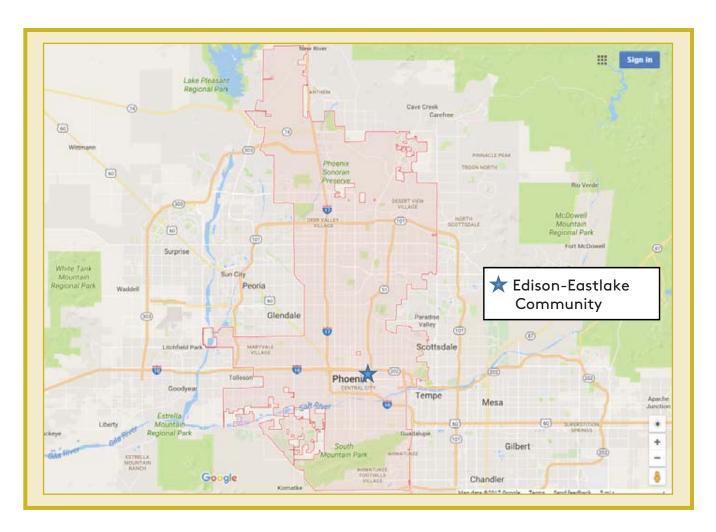
Findings from three other assessments commissioned as a part of the CNI planning effort - Health Impact Assessment by LISC and the Vitalyst Foundation, Market Demand and Supply Profile by LISC MetroEdge, and Residential Market Assessment by Zimmerman Volk Associates – are also included as relevant throughout this report.

¹ Secondary data sources include the 1990, 2000, and 2010 Decennial Censuses with information down to the block level, and 2011-2015 American Community Survey with information down to the block group level.

PROJECT LOCATION AND CONTEXT

The City of Phoenix is the capital and largest city in Arizona with a population of 1,445,632 (2010 Census). After its incorporation in 1881, the City's growth was spurred initially by the arrival of the railroad, leading to its growth as a trade center between eastern and western markets. The second major population boom occurred after World War II when many of those who had been stationed or trained in the area, returned to live there permanently. Since then, the City has seen steady growth buoyed by a strong economy based on construction, manufacturing and tourism. Today, Phoenix has grown from its modest half-square mile into a thriving metropolitan city spanning more than 517 square miles that is an economic powerhouse and home to a culturally diverse population.

The EEC is located in the central part of Phoenix approximately one mile east of downtown. The neighborhood is generally bounded by I-10 to the north and east, Union Pacific railroad tracks to the south, and 16th Street to the west. In 2011, supported by a HUD Sustainable Communities grant, the City embarked upon the ReinventPHX initiative to establish new transit-oriented development (TOD) models for urban planning and development for five neighborhood districts along the Valley Metro light rail. The EEC was a part of the Eastlake-Garfield TOD District study area, and the land use policies derived from the Reinvent PHX planning process serve as a key foundation for the Choice Neighborhoods planning effort. The EEC encompasses 371 acres (0.58 square miles) with residential and commercial uses mixed together, including St. Luke's Medical Center in the geographic center, and industrial uses in the southern part of the neighborhood.







CITY AND NEIGHBORHOOD OVERVIEW

CITY OF PHOENIX

Prior to the founding and incorporation of Phoenix, the area was home to a number of Native American tribes for thousands of years who cultivated the land along the Salt River. In 1881, the City of Phoenix was incorporated, covering one-half square mile with a population of approximately 2,500. Founded on an agricultural and natural resource economy, the economy began to shift with arrival of the Southern Pacific railroad to Phoenix. The City became a trade center, moving goods between the western and eastern markets, fueling economic and population growth.

Initially the territorial capital, Phoenix became the state capitol when Arizona was admitted to the Union in 1912. Statehood accelerated the City's growth with the population more than doubling between 1910 and 1920. World War II and the years after brought about dramatic change to the City. During the war, the area was a training hub for military personnel. After the war, many individuals returned to Phoenix with their families, and with a large labor pool, major industries moved to Phoenix and forever changed the economy from an agricultural center to one based on manufacturing, technology and construction. As a result, the City saw explosive growth during the 1950s, tripling its population to over 400,000, and it expanded geographically through annexation. In 1950, the City covered 17.1 square miles; by 1960, it had grown over 10 times to 185 square miles.

Van Buren Street (U.S. Route 80) was the major gateway into Phoenix and part of an early auto cross-country route from the Atlantic to the Pacific, going right through downtown Phoenix. From the mid 1920s through the 1960s, four major federal highways entered Phoenix through Van Buren: Routes 60/70/89 (Grand Avenue) north to Flagstaff, the Grand Canyon, and California, and Route 87 down to Casa Grande and Southern Arizona. The 1930s was a great time for the valley and Van Buren Street, which benefitted from being the route to the Sky Harbor Airport entrance on 24th Street. Van Buren Street began to decline in the mid 1960s with the expansion of the airport and industrial development adjacent to the Union Pacific railway south of Washington Street.

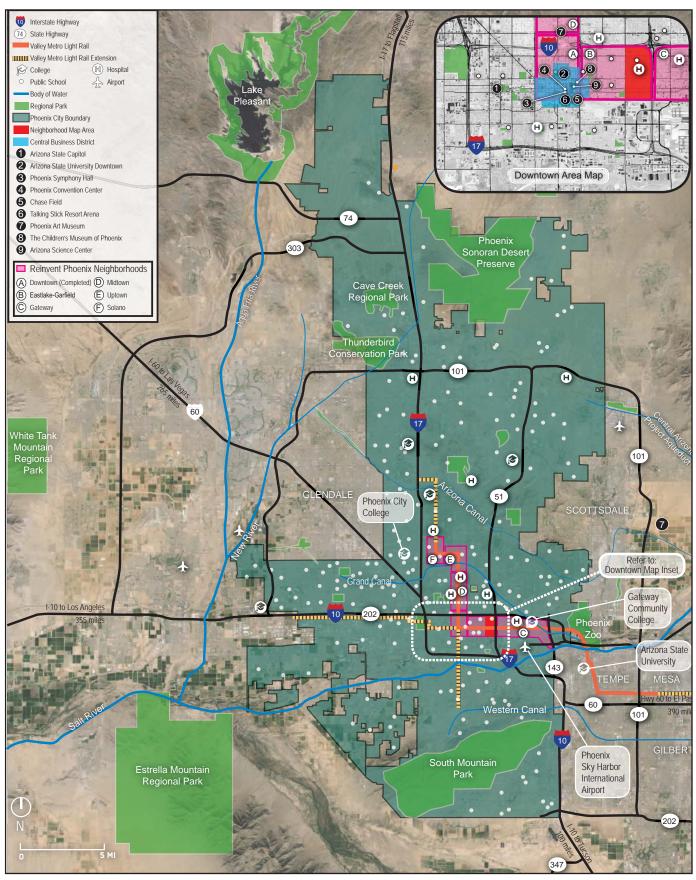
Today, Phoenix is part of a thriving and continually growing metropolitan area, and is the fifth largest city in the nation (recently surpassing Philadelphia). Spanning nearly 518 square miles with a population in excess of 1.4 million, Phoenix is home to numerous Fortune 500 companies, world-class higher educational institutions, City and State government offices, and a flourishing arts and cultural community, including a significant Latino population. In recent years, urban neighborhoods including downtown Phoenix, have seen renewed investment and interest spurred on by the Valley Metro light rail that began service in 2008.

The Valley Metro light rail has been instrumental in the resurgence of the central city area of Phoenix. To fully capitalize on the opportunities that the light rail present, the City, supported by a FY2011 Sustainable Communities grant from HUD, and 17 local organizations, engaged in a TOD planning and urban design effort – Reinvent PHX – for five districts along the light rail. The outcomes of the community-based Reinvent PHX process were policies and practices that would enable each district to fully capitalize upon the transformative potential of the light rail system in a sustainable manner for the benefit of current and future residents.

Population Change - 1920-2010 - City of Phoenix

	Population	% Change
2010	1,445,632	9%
2000	1321,045	34%
1990	983,403	25%
1980	789,685	35%
1970	584,303	33%
1960	439,170	311%
1950	106,818	63%
1940	65,414	36%
1930	48,118	66%
1920	29,053	

Source: U.S. Decennial Census



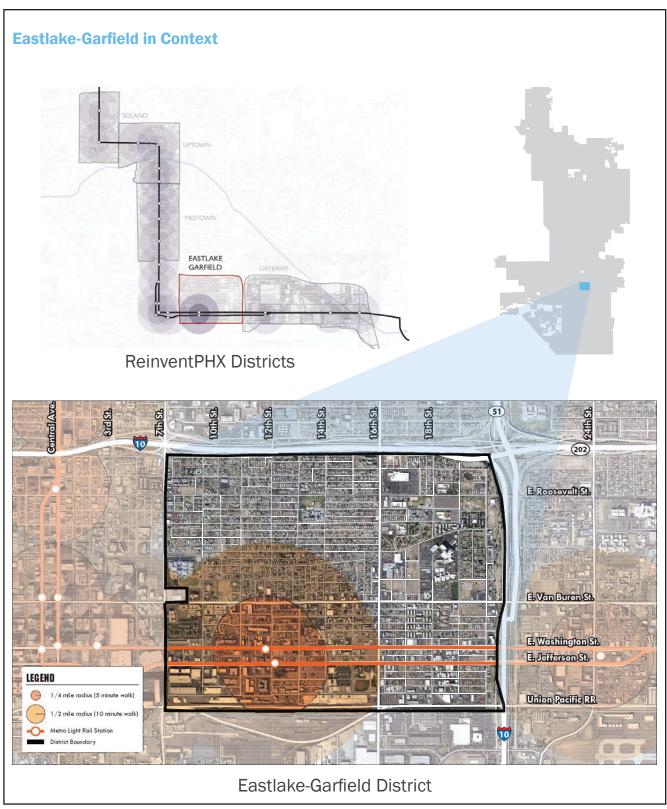
CITY OF PHOENIX

EASTLAKE-GARFIELD TOD DISTRICT

One of the five communities targeted by Reinvent PHX was the Eastlake-Garfield District where the 12th Street light rail stop is located. The Eastlake-Garfield TOD District, spanning the area between I-10 to the north and east, the Union Pacific railroad to the south, and 7th Street to the west, encompasses three neighborhoods - Eastlake, Garfield, and Edison Park. Each neighborhood in the District has its own colorful history:

- Garfield was annexed into the City in the late 1800s and was one of the first streetcar neighborhoods. Garfield was also one of the few neighborhoods north of Van Buren Street the 'de facto' boundary for minorities where Latino residents could live until the 1950s. Comprised of mostly modest single-family homes constructed between 1900 and 1930, much of the Garfield neighborhood received historic designation in the City of Phoenix Historic Property Register in 2005.
- Eastlake was the first African-American community in Phoenix. As a result of segregationist policies pre-1950, precluding minority home ownership north of Van Buren Street through redlining practices, Eastlake became a hub for African-American-owned businesses, churches, and civic institutions including newspapers. Desegregation, combined with an older housing stock, development of new communities further away and the growth of the interstate highway system, the Eastlake community slid into decline starting in the 1950s. Over the last several years, Eastlake has seen a resurgence of new housing and investment along the light rail corridor and near the light rail station at 12th Street, and remains a strong center for African-Americans through its churches and celebrations.
- Edison Park grew up around St. Luke's Home, now St. Luke's Medical Center, a tuberculosis treatment facility in the early 1900s. The first major residential development in Edison Park was Frank Luke Homes in 1942, a 230 unit public housing development, which at the time, was for whites only. After the war, to house returning veterans, Frank Luke Addition was constructed in 1947 to house returning veterans after WWII. In the 1960s, two additional public housing developments were constructed Sidney P. Osborn (1960) and A.L. Krohn Homes (1963). Frank Luke Addition was demolished in 2011 under a HOPE VI revitalization grant, and is currently a mixed-income development called Aeroterra. Even with the demolition of Frank Luke Addition, Edison Park still has the highest concentration of public housing in the City of Phoenix.

The Eastlake-Garfield TOD Policy Plan provides a shared community vision with consistent themes around strong local economy, affordable housing, walkable neighborhoods, and quality open space; and offers various strategies grouped into six planning elements - land use, mobility, housing, economic development, green systems and health - to achieve that vision. Since the plan's completion, the City and various stakeholders have been working on various initiatives to move the community forward. Some key investments and changes include remaking Van Buren Street into a Complete Street from 7th Street to 40th Street, bus service enhancements to better meet the transportation needs of residents, and the pursuit and award of a Choice Neighborhoods planning grant to focus on the challenges and assets in the eastern part of the District with its three remaining public housing developments so that this community and its residents also positively benefit from growing TOD investments.



REINVENT PHX - EASTLAKE-GARFIELD DISTRICT

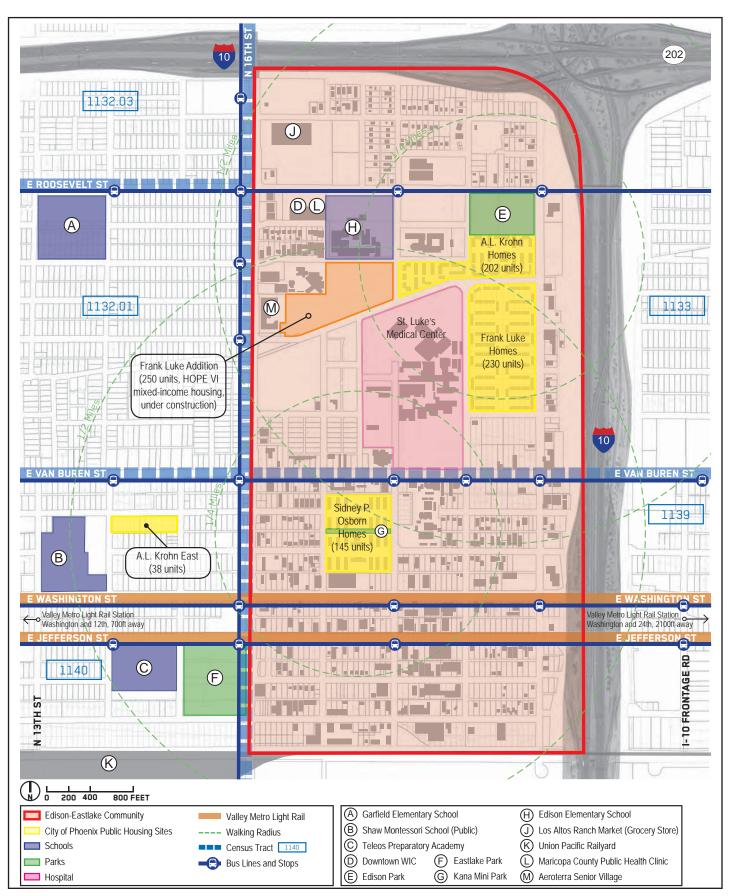
CHOICE NEIGHBORHOOD OVERVIEW

The Edison-Eastlake Community (EEC) is comprised of the Edison Park neighborhood and the eastern section of the Eastlake neighborhood located east of 16th Street. It is bounded by I-10 to the north and east, 16th Street to the west, and the Union Pacific Railroad tracks to the south (just south of Jackson Street). Most businesses are located along 16th Street, but there are also concentrations of businesses along Roosevelt, Van Buren, Washington, and Jefferson Streets. The EEC is also home to the largest concentration of public housing in the City of Phoenix. Within its boundaries are three public housing sites with a total of 577 units. These public housing developments account for nearly half of the residential opportunities in the EEC between Frank Luke Homes and A.L. Krohn Homes, located adjacent to one another north of Van Buren Street, and Sidney P. Osborn, located south of Van Buren Street. These developments are aging, obsolete, and in need of significant capital improvements, and as such, these developments have a depressing influence on investment interest in the EEC.

However, the EEC has many assets that can serve as the foundation of future revitalization efforts. The most prominent is St. Luke's Medical Center, which includes Fortis College—a medical and vocational training institute. St. Luke's is surrounded by large parcels of vacant land and is currently in the master planning process that may include the redevelopment of its existing site and buildings. The opportunity to grow the medical presence within the EEC on the vacant parcels surrounding St. Luke's could serve as a catalyst for future transformative developments in the neighborhood. The Valley Metro rail line also passes through the southern portion of the neighborhood. While there is no current rail stop in the EEC, there is future potential to add a stop depending upon how the community evolves over the next several years. Frank Luke Addition, demolished in 2011 via a HOPE VI Revitalization Grant, is now Aeroterra, a 190 unit mixed-income development offering both family and senior housing, plus a new community center. The community center, once completed, will offer a host of services and programs that will be available to the entire neighborhood. The City is also investing in Complete Streets improvements for Van Buren Street, a major transportation and commercial corridor in the EEC. With the final design completed, construction is slated to begin later in 2017. Finally, development pressure from downtown, located only one mile to the east of the EEC, can serve as a driver for new investment in the neighborhood.



Aeroterra, formerly Frank Luke Addition, was redeveloped with support from a FY2011 HOPE VI Grant



MAP OF EDISON-EASTLAKE COMMUNITY

DEMOGRAPHICS

Between 1990 and 2010, the EEC experienced an overall 4.6% population loss. While the population grew slightly between 1990 and 2000 (7.0%), this trend reversed between 2000 and 2010 when the EEC population dropped by 10.8%. The decrease in the overall population in the EEC is in stark contrast to tremendous growth in the City of Phoenix and Maricopa County during the same period. The City grew by 47.0% from 1990 to 2010, while Maricopa County grew by 79.9%.

Population Change, 1990-2010 - Edison-Eastlake v. City and County

	Edison-Eastlake	City of Phoenix	Maricopa County
Population (1990)	3,501	983,403	2,122,101
Population (2000)	3,745	1,321,045	3,072,149
Population (2010)	3,339	1,445,632	3,817,117
Population Change 1990-2000	7.0%	34.3%	44.8%
Population Change 2000-2010	-10.8%	9.4%	24.2%
Population Change 1990- 2010	-4.6%	47.0%	79.9%

Source: U.S. Census Bureau, 1990, 2000, 2010 Decennial Census

The EEC is more diverse racially and ethnically than the City of Phoenix and Maricopa County. Of the total population, 13.5% of the residents classify themselves as black (compared to 6.5% and 5.0% in the City and County), and 79.0% classify themselves as Latino (compared to 40.8% and 29.6% in the City and County). Among the large Latino population, a significant percentage have difficulty with English. Of the households that speak Spanish at home, nearly 40% are "limited English," meaning that all members 14 years of age and older have at least some difficulty with English. This is nearly double the rate found in the City and County.

Race, Ethnicity and Household Language - Edison-Eastlake v. City and County

itable, Etimote, and Flouriera Language Landon Landane in City and County							
	Edison-Eastlake		City of Phoenix		Maricopa County		
RACE							
White	1,519	45.5%	951,958	65.9%	2,786,781	73.0%	
Black	452	13.5%	93,608	6.5%	190,519	5.0%	
Other	1,105	33.1%	267,214	18.5%	489,705	12.8%	
ETHNICITY							
Hispanic/Latino (of any race)	2,638	79.0%	589,877	40.8%	1,128,741	29.6%	
HOUSEHOLD LANGUAGE							
English Only	376	32.1%	343,819	65.4%	1,068,918	74.1%	
Spanish	756	64.6%	140,539	26.7%	266,607	18.5%	
Limited English speaking	281	37.2%	29,180	20.8%	51,243	19.2%	
Not limited English speaking	475	62.8%	111,359	79.2%	215,364	80.8%	

Source: U.S. Census Bureau, 2010 Decennial Census, 2015 ACS 5-year

The EEC's population is significantly younger than the City and County's. Of the EEC residents, 48.0% are under the age of 18, which is markedly higher than the City and County (28.2% and 26.4%, respectively).

Age of the Population - Edison-Eastlake v. City and County

	Edison-l	Eastlake	City of	Phoenix	Maricopo	a County
Population age 0-17	1604	48.0%	408,341	28.2%	1,007,861	26.4%
Under 5 years	463	13.9%	119,911	8.3%	282,770	7.4%
5-14 years	885	26.5%	221,992	15.4%	559,937	14.7%
15-17 years	256	7.7%	66,438	4.6%	165,154	4.3%
Population 18+	1,735	52.0%	1,037,291	71.8%	2,809,256	73.6%
18 to 24 years	306	9.2%	150,671	10.4%	378,617	9.9%
25 to 39 years	607	18.2%	329,018	22.8%	807,095	21.1%
40 to 54 years	472	14.1%	296,641	20.5%	762,594	20.0%
55 to 61 years	137	4.1%	103,383	7.2%	287,104	7.5%
62 and older	213	6.4%	157,578	10.9%	573,846	15.0%

Source: U.S. Census Bureau, 2010 Decennial Census

At 70.2%, the EEC has a slightly higher percentage of family households than the City and County (64.2% and 66.1%). Of the family households, the EEC has a much higher percentage of female heads of household with no husband present (62.7%) versus the City (23.2%) and County (18.8%). There are more large households with 5 or more persons in the EEC (25%) than the City and County (16% and 13%, respectively).

Household Composition, Edison-Eastlake v. City and County

	Edison-Eastlake		City of Phoenix		Maricopa County	
TOTAL HOUSEHOLDS	1,0)23	514,806		1,411,583	
Family Households	718	70.2%	330,762	64.2%	932,814	66.1%
Male HH, No Wife	77	10.7%	36,234	11.0%	82,206	8.8%
Female HH, No Husband	450	62.7%	76,629	23.2%	175,551	18.8%
Household Size						
1-person	266	26%	139,665	27%	365,212	26%
2-person	191	19%	148,277	29%	463,215	33%
3-person	150	15%	78,692	15%	209,758	15%
4-person	160	16%	68,272	13%	185,929	13%
5-person	141	14%	40,417	8%	101,336	7%
6+ person	115	11%	39,483	8%	861,33	6%

Source: U.S. Census Bureau, 2010 Decennial Census

As noted previously, the three public housing developments account for nearly half of the housing units in the EEC (49%), but account for more than half of the residents in the neighborhood (56%). Between the public housing and non-public housing residents, there were many similarities with regard to demographic composition. There were, however, some key differences:

- Females comprise a greater percentage of the population at the public housing sites (55% versus 48%);
- The public housing population is significantly younger with 53% of the residents under the age of 18 compared to 42% for non-public housing residents; and
- The percentage of single female-headed households is significantly higher among the public housing population at 77% versus 43%.



HOUSING

Single-family homes dominate the EEC's housing landscape with handful of small and large multifamily developments. Limited housing diversity leaves few options for residents who do not want, or cannot afford, a single-family home. The majority of the housing stock was constructed prior to 1960 (54.4%).

Year Structure Built, Edison-Eastlake v. City and County

	Edison- City of		Maricopa
	Eastlake	Phoenix	County
Total Housing Units	1,458	598,236	1,668,555
Built 2000 or later	12.4%	19.1%	26.7%
Built 1980 to 1999	7.5%	34.5%	40.1%
Built 1970 to 1979	10.5%	20.3%	17.7%
Built 1960 to 1969	15.2%	10.2%	7.3%
Built 1959 or earlier	54.4%	15.9%	8.2%

Source: U.S. Census Bureau, 2015 ACS 5-Year Estimates

The quality of the existing housing stock is reflective of the age of the structures. A windshield survey of residential building facades found that 14% are in poor or dangerous condition. Only 17% were not in need of repairs. Of resident survey respondents, 55% identified improvements to vacant, abandoned, and deteriorating homes in the EEC as "very important".

Among local employees, 45% said they would be more interested in moving to the EEC if there were more quality homeownership options, and another 32% wanted more quality rental housing options. Additionally, 88% of employees felt that addressing vacant and abandoned homes was very important, echoing resident concerns.

A recent market study showed strong market demand for market-rate housing in the EEC, with an annual average demand of over 2,800 new and existing housing units in the neighborhood. Over the next 5 years, 440 to 585 new market-rate dwelling units could be easily absorbed. Of these households, 61% are likely to be younger singles and couples; 23%, traditional and non-traditional families; and 16%, empty nesters and retirees. Over 67% (1,895) will be in the market for new and existing rental units with the remaining 33% (925) seeking for-sale housing. For renter households, 35% have household incomes over 100% of the area median income (AMI); and for-sale households, 38%. In demand for-sale products include multi-family, single-family attached, and singlefamily detached homes.



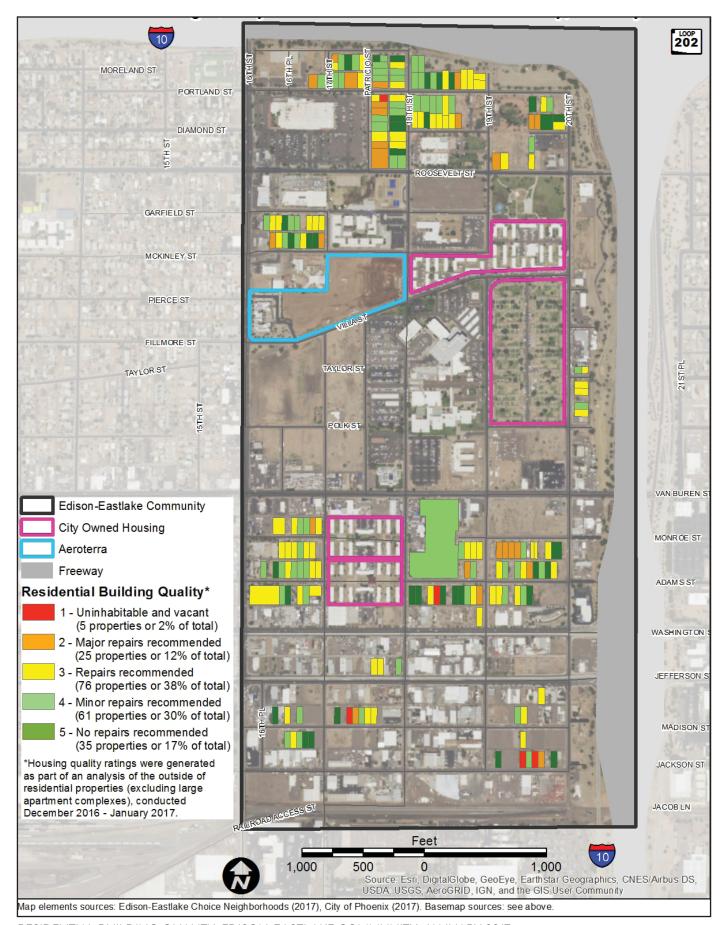








Homes of various quality in the EEC ranked from 1-uninhabitable and vacant (top) to 5-no repairs recommended (bottom)



RESIDENTIAL BUILDING QUALITY, EDISON-EASTLAKE COMMUNITY, JANUARY 2017



Occupancy and Vacancy

Nearly 13% of the existing housing stock is vacant, which is on par with City and County vacancy rates. Most of the occupied units are rental units. The homeownership rate in the EEC is only 7.6%, which is a fraction of the City and County homeownership rates. The three public housing developments in the EEC are one reason for the low homeownership rate, since they account for nearly 50% of the neighborhood housing stock. Looking more closely at the EEC itself, most of the vacant units are found in the surrounding neighborhood versus the public housing sites – the vacancy rate at the public housing developments is 1.2% as compared to 24.5% in the rest of the neighborhood.

Occupied and Vacant Housing Units, Edison-Eastlake v. City and County

	Edison-	Eastlake	City of	Phoenix	Maricopo	a County
Occupied Units	1,023	87.0%	514,806	87.2%	1,411,583	86.1%
Owner-occupied	78	7.6%	296,742	57.6%	910,320	64.5%
Renter-occupied	945	92.4%	218,064	42.4%	501,263	35.5%
Vacant Units	153	13.0%	75,343	12.8%	227,696	13.9%

Source: U.S. Census Bureau, 2010 Decennial Census

Home values are low due to aging housing stock, much of which needs rehabilitation, home values are low. The median housing value in the EEC (\$78,100) is less than half that of the City and County. The median gross rent is also low, but this is impacted by the presence of the three public housing developments, where rents are based on a household's income.

Housing Values and Rent, Edison-Eastlake v. City and County

	Edison-Eastlake	City of Phoenix	Maricopa County
Median Housing Value	\$78,100	\$163,400	\$187,100
Median Rent	\$565	\$884	962

Source: U.S. Census Bureau, 2015 ACS 5-Year Estimates



A.L. Krohn Homes with St. Luke's Medical Center in the background

Public Housing: Frank Luke Homes, A.L. Krohn Homes and Sidney P. Osborn

The three public housing sites located in the EEC - Frank Luke Homes (1942), A.L. Krohn Homes (1963) and Sidney P. Osborn (1960) – are managed by the City of Phoenix Housing Department. With a total of 577 units, they provide important affordable housing resources in the greater Phoenix area. However, these structures are between 55 to 77 years old, and are now obsolete. Many of their systems have reached the end of their useful life, and the housing units lack the space and amenities that families need today.

All three sites are constructed of masonry block and are structurally sound, but they no longer are a quality housing option due to obsolete infrastructure and poor design according to a 2016 Physical Needs Assessment. Immediate repair needs at all three developments exceeds \$40 million or nearly \$70,000 per unit. The aging plumbing and electrical systems - original to the construction of each property - threaten the health and well-being of residents. Electrical limitations within each unit force residents of Frank Luke and A.L. Krohn to rely on evaporative cooling, which is insufficient during 115 degree summer days. Furthermore, poor design means that less than 1% of all units meet Section 504 Standards and ADA Guidelines, and unit sizes are well below the standards found today, e.g. a 2-BR unit averages 641 square feet and a 3-BR unit averages 855 square feet. Their superblock configuration with few through streets also makes them easily identifiable as public housing.





Small units do not accommodate the space needs of today's households

Evaporative cooling units, a.k.a. "swamp coolers"





With their repetitive design and superblock configuration, Frank Luke Homes, A.L. Krohn Homes and Sidney P. Osborn are easily identifiable as public housing developments.

COMMERCIAL AND RETAIL PROFILE

There are over 150 businesses in the EEC, which are primarily concentrated along 16th Street. Additional areas with business concentrations include Van Buren, Washington, and Jefferson Streets, and the industrial area south of Jefferson Street adjacent to the Union Pacific Railroad. The business landscape is dominated by autorelated service and retail facilities (27% of all businesses). While there are 34 food outlets (24% of all businesses), most are convenient stores or fast food restaurants, pointing to a need for increased access to healthy food options in the neighborhood. There is one large, full-service grocery store – Ranch Market – located at the corner of 16th Street and Roosevelt Street. Residents indicated on the resident survey that they use Ranch Market frequently, but they also travel to Walmart located over 4 miles away to do their main grocery shopping to obtain "lower prices and a better selection" of groceries. The lack of community-serving retail was identified as one of the top challenges in the neighborhood, and the need for more shopping and retail options was considered to be "very important" for 68% of survey respondents.

The top three types of businesses that residents would like to see in the EEC were grocery stores, doctors' offices (like dental offices and health clinics), and drug stores/pharmacies. Employees that work in the area also identified a grocery store at the top of their list of desired businesses, followed by coffee shops and sit-down restaurants.

Top Businesses Desired in the Edison-Eastlake Community, Residents and Employees

Resident Survey	Employee Survey
54.1%	55.6%
28.5%	12.2%
27.9%	21.1%
25.9%	34.4%
23.2%	12.2%
22.9%	8.9%
20.9%	8.9%
17.6%	24.4%
14.1%	3.3%
12.6%	27.8%
11.5%	26.7%
9.7%	27.8%
7.4%	45.6%
7.4%	52.2%
4.1%	5.6%
3.5%	6.7%
	54.1% 28.5% 27.9% 25.9% 23.2% 22.9% 20.9% 17.6% 14.1% 12.6% 11.5% 9.7% 7.4% 4.1%

Source: Resident Survey and Employee Survey

A recent market demand and supply profile of the convenience trade area retail for the EEC confirmed that the neighborhood has a number of destination retail, but very limited convenience retail. Convenience retail typically includes "Saturday morning" shopping needs such as pharmacies, groceries, dry cleaners or hardware stores, of which customers typically prefer to find within a 10-minute walk or drive of their home. Convenience retail also seeks to capture business from employees during the day as they travel to and from work or during their lunch time. According to consumer data, the market areas that are in the greatest demand in the EEC are clothing and clothing accessories stores; health and personal care like a Walgreens or CVS; sporting goods, hobby, book and music stores; and food and beverage stores (groceries). However, there are two major challenges to attracting these types of retailers to the area: low population density in the EEC and the existing population's lower income levels; and lack of actual and perceived levels of safety by the business and retail base.





Ranch Market is a full-service grocery store located at North 16th and Roosevelt Streets. Baiz Market specializes in Middle Eastern foods and atrracts customers from across the region.

Auto-related businesses provide destination-retail in Edison-Eastlake, but generally do not serve the needs of local residents - the majority of whom do not own a vehicle.









LAND USE

There are 807 parcels in the EEC according to Maricopa County Assessor data. Private, in-state owners own 75% of the parcels; out-of-state private owners, 14%; and the City of Phoenix, 10%. Maricopa County owns 2 lots (less than 1% of all lots).

Residential uses account for 30% of the land area in the EEC. Exempt uses, such as churches, schools, and public institutions account for 18% followed by 15% for general commercial/industrial. Park space weighs in at 2%.

Land Use, Edison-Eastlake Community

	Area (Acres)	Percent of Total Area*
Auto Sales and Services	20	7%
Exempt (Church, School, or Public Institution)	54	18%
General Commercial/Industrial	45	15%
Park	7	2%
Residential (Single and Multifamily)	92	30%
Retail/Restaurant	19	6%
Vacant	69	23%
TOTAL	305	100%

*excluding streets, freeways, railroad tracks, and other unaccounted for/non-parceled land Source: Maricopa County Assessor's Office (2017), City of Phoenix (2017), Edison-Eastlake Choice Neighborhoods Project (2017)

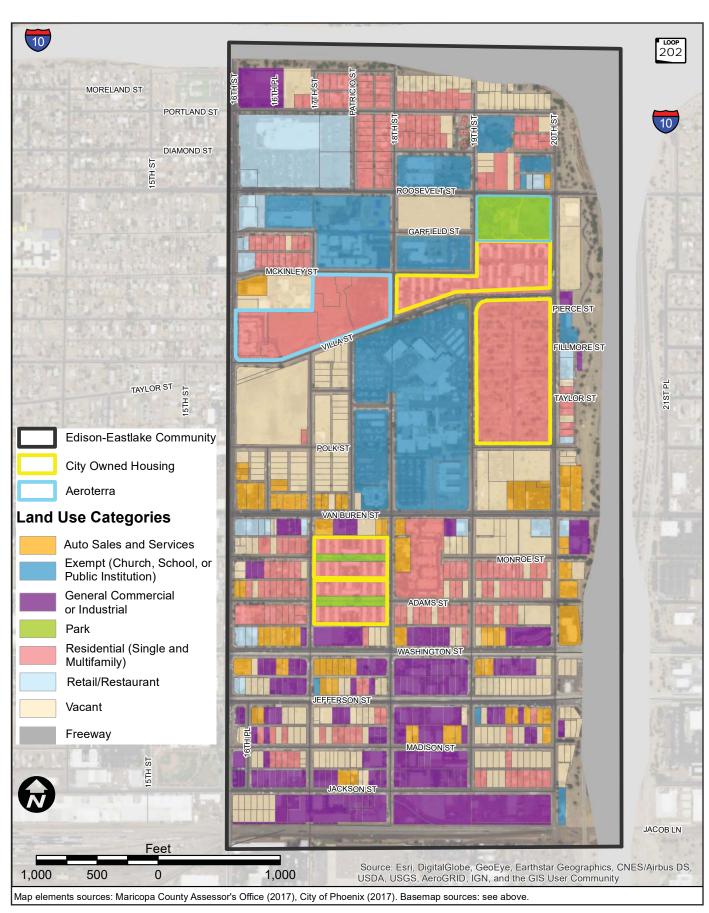
Currently, approximately 23% of the total land area in the EEC is vacant (265 parcels). A portion of this vacancy can be attributed to the overall loss of housing units between 2010 and 2015, due in part to the demolition of homes in the southern portion of the neighborhood located in the Phoenix Sky Harbor International Airport flight path in the southern portion of the neighborhood. There is also a significant concentration of large vacant parcels surrounding St. Luke's Medical Center that have been held in anticipation of possible expansion of the medical center and/or development of additional medical facilities. Of the vacant lots in the EEC, 74% are owned by private landowners, 8% by the City of Phoenix Aviation Department; 6% by the City of Phoenix Transit Department, 6% by the Arizona Department of Transportation, and 5% by Maricopa County.

Almost 25% of the total land acreage (74 acres) is used as paved surface parking lots. Although there are a handful of standalone parking lots, most are attached to a business, government office, or other institution. The total amount of surface parking lots is higher, however, if one includes vacant dirt lots that are also used for parking either permanently or occasionally. Reducing this percentage will be critical in addressing the severe urban heat island effect in the neighborhood.

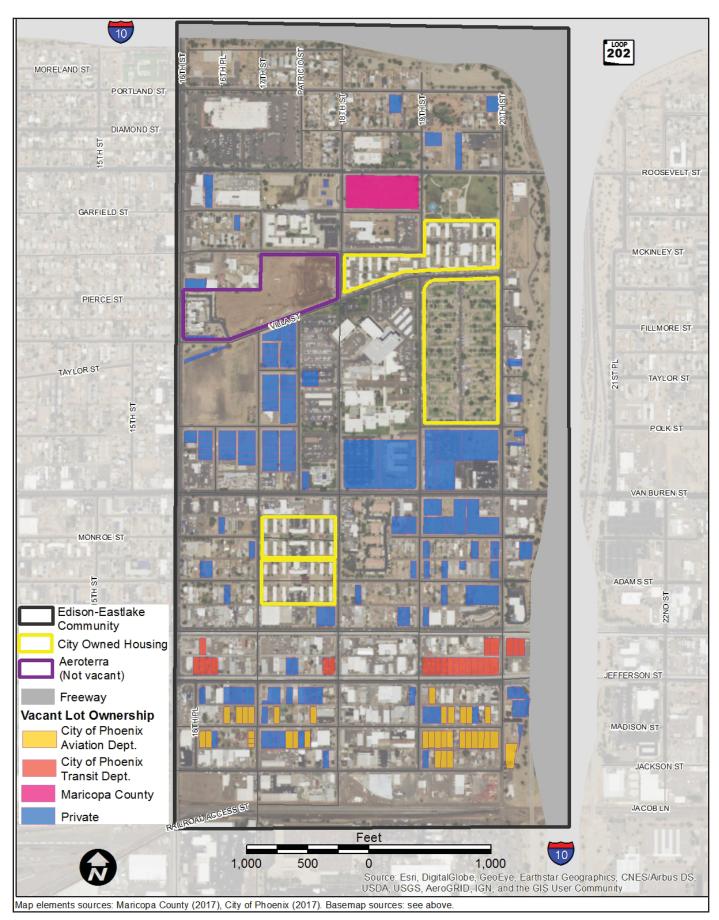


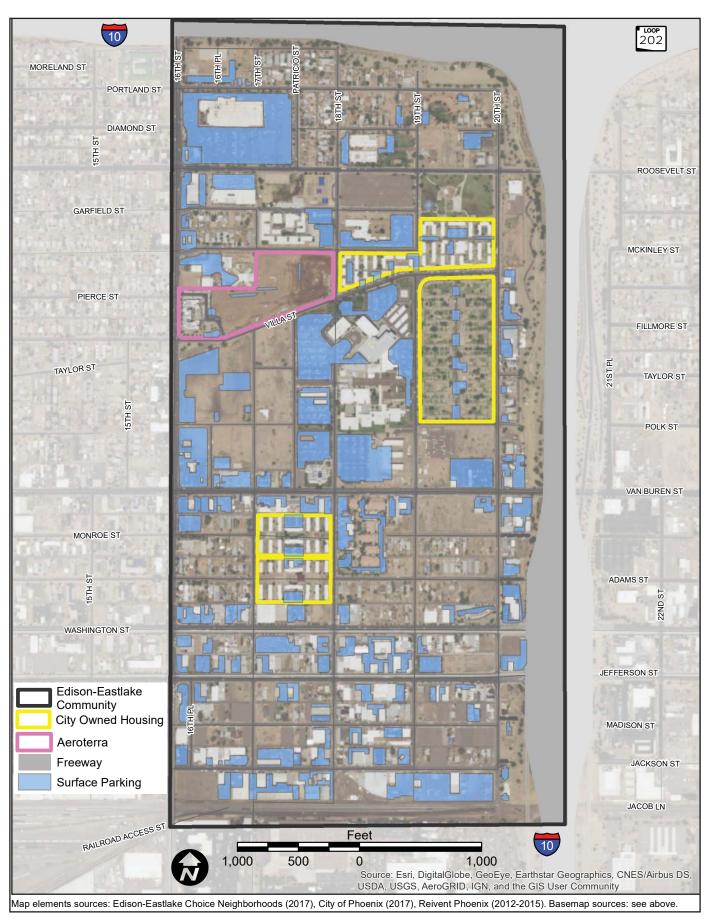


Vacant land around St. Luke's Medical Center (left) and one of the 30-plus City of Phoenix Aviation Department-owned vacant lots (far left)

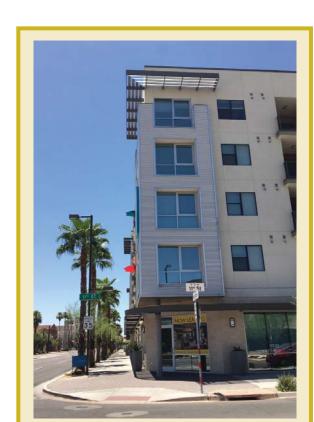








SURFACE PARKING, EDISON-EASTLAKE COMMUNITY, MARCH 2017



New mixed-use building along the Valley Metro light rail line at 11th and Washington Streets constructed under the Walkable Urban Code (WUC)

ZONING

The EEC is primarily zoned as commercial followed by residential. There are a few areas zoned for parking lots (although there are many more parcels used as parking lots than the zoning map indicates), and the southern section is zoned industrial. The public housing sites are zoned R-5, except for A.L. Krohn, which is zoned R-4.

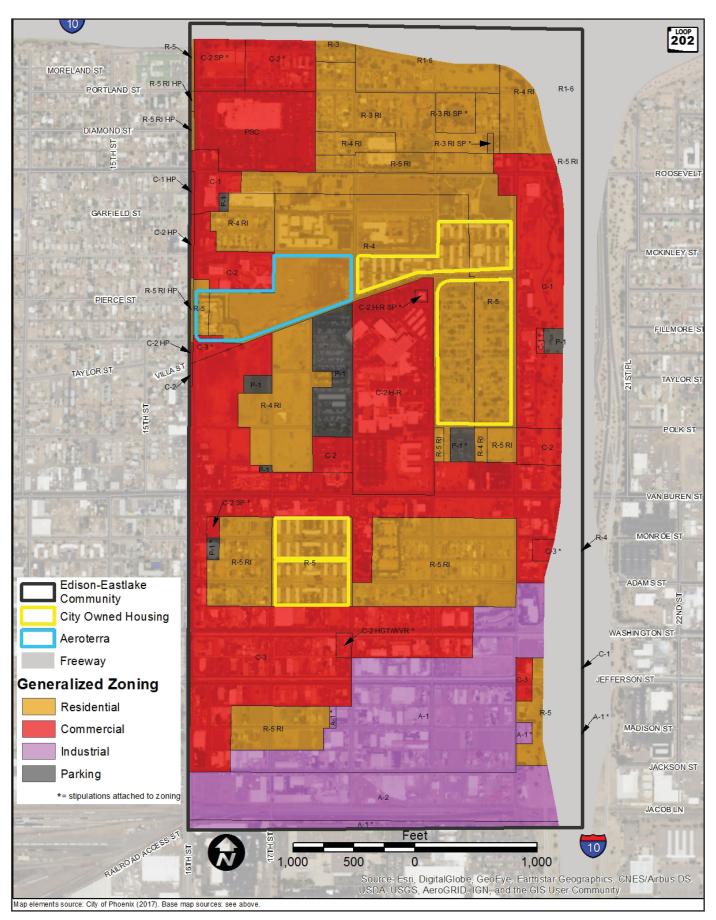
The City of Phoenix recently adopted a Walkable Urban Code (WUC), which has an applicable area covering all five ReinventPHX TOD Districts. The WUC standards are designed to facilitate more compact and dense development in the light rail corridor. Property owners in the EEC may request rezoning to the WUC to allow development with no density maximums and recommended building heights up to 56 feet.

In May 2017, the City's Planning and Development Department stated the intent to expand the Infill Development District boundaries to encompass the entire Eastlake-Garfield TOD District, which would include the EEC in its entirety. If this happens, it will include flexibility in standard development requirements to promote development in areas served by light rail and existing public infrastructure. Currently, the schedule is to start the process in August 2017 and the hearing process in October 2017.

FLOOD PLAIN

According to the Federal Emergency Management Agency (FEMA), the EEC is not located in a 100-year floodplain and is unlikely to be affected by floods from the nearby Salt River¹.

¹ Federal Emergency Management Agency. (2013). Flood Insurance Rate Map, number 04013C2210L, panel 2210. National Flood Insurance Program.



ZONING, EDISON-EASTLAKE COMMUNITY, MARCH 2017

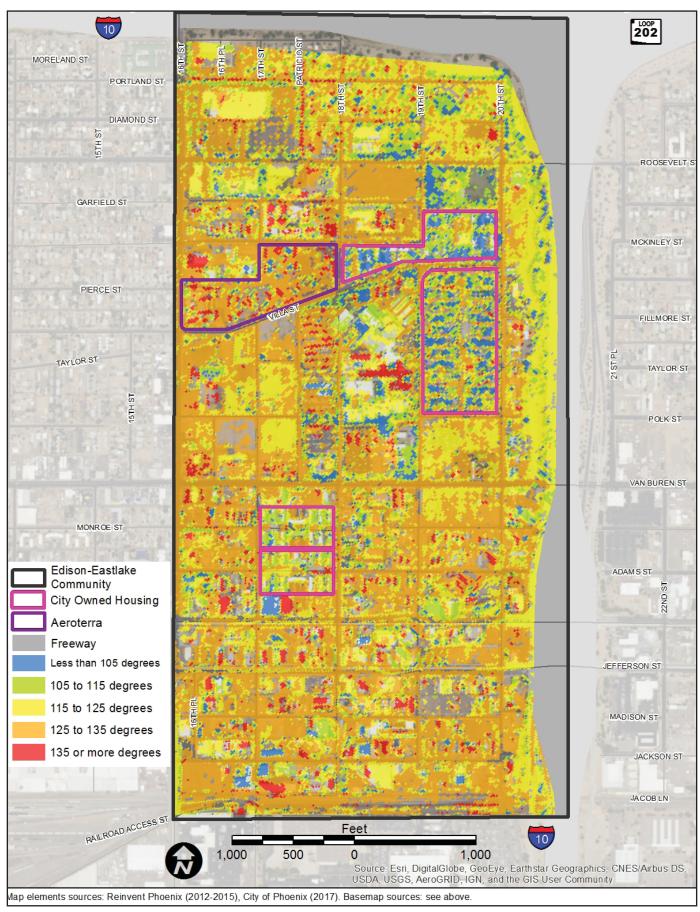
SURFACE TEMPERATURES

Extreme heat is the most serious weather-related risk faced by EEC residents. In July 2012, the surface temperatures throughout the EEC exceeded 105 degrees (the threshold for human health), and many times, above 130 degrees. Surface temperatures in the EEC are higher than many other parts of the City due to a lack of vegetation (trees, shrubs, grass) and man-made structures that provide shade. Heat island risks affect resident health, particularly vulnerable seniors and children, resident ability to walk outside and access services, and also adds vulnerability to service outages and disruption (particularly electrical).

The EEC also has a high concentration of building roofs, asphalt (streets and the two freeways on the EEC's' northern and eastern borders), cement, and vacant lots. These materials absorb heat during the day and release it at night—the urban heat island effect—and prevent nighttime temperatures from dropping below 90 degrees on summer nights. High night time temperatures increase heat-stress on residents and keep daytime temperatures artificially high.

The coolest temperatures in the EEC are primarily in the three public housing sites due to the large shade trees there. In May 2017, there were 328 trees in the three public housing sites: 33% at Sidney P. Osborn (107 trees), 24% at A.L. Krohn (78 trees), and 44% at Frank Luke (143 trees). Tree distribution is approximately commensurate with the size of the housing sites (Frank Luke has the largest footprint, followed by Sidney P. Osborn, and then A.L. Krohn). The surface temperature map indicates the Frank Luke and A.L. Krohn sites have lower summertime surface temperatures than Sidney P. Osborn, however. The relationship between trees and surface temperature depends on the number of trees, and tree health, as well as the amount of shade cover each tree provides.

The shade trees on each of the three public housing sites already play an important role in reducing summertime surface temperatures. However, more tree and shade coverage is needed to further reduce the urban heat island effect and protect EEC residents from heat-related illnesses. The City of Phoenix adopted a Tree and Shade Master Plan in 2010 that aims to achieve an average 25% shade coverage for the entire City by 2030. Existing trees on the public housing sites do not provide sufficient coverage, while the rest of the EEC has even fewer trees than the public housing sites. Targeted efforts will be needed to bring the EEC public housing sites—and the broader EEC—to the City's tree and shade coverage goal.







CIRCULATION AND INFRASTRUCTURE



VEHICULAR

16th Street on the EEC's western border is the only major north-south vehicular road. There are several east-west arterial roads that provide access to surrounding neighborhoods, downtown Phoenix, and Phoenix Sky Harbor International Airport: Roosevelt Street in the northern part of the neighborhood, Van Buren Street in the center, and Washington (westbound), and Jefferson (eastbound) Streets in the southern portion of the EEC. All five arterials have a maximum speed limit of 35 miles per hour (mph).

16th Street has two southbound lanes, three northbound lanes, and a central left-turn lane. At some intersections, 16th Street expands to include right turn lanes in one or both directions. Because of the Union Pacific railroad lines, which run along the southern edge of the EEC, as well I-10 on the northern edge, there are only three roadway options to cross the railroad tracks and Interstate going north-south - 7th, 16th, and 24th Streets – between 7th and 24th Streets¹. Limited crossings mean that all north-south traffic is funneled to one of these three roadways.

Additionally, I-10, which also runs along the eastern border of the EEC, inhibits east-west access to the EEC. Travelling east-west, I-10 can only be traversed via Roosevelt, Van Buren, Washington and Jefferson Streets. While I-10 isolates the EEC, the EEC also has good access to I-10. Via 16th Street and Washington Street exits and entrances, drivers get onto I-10 westbound (or exit eastbound into the neighborhood). Going eastbound, drivers can access I-10 at Jefferson Street, just east of 20th Street (or exit westbound into the neighborhood).

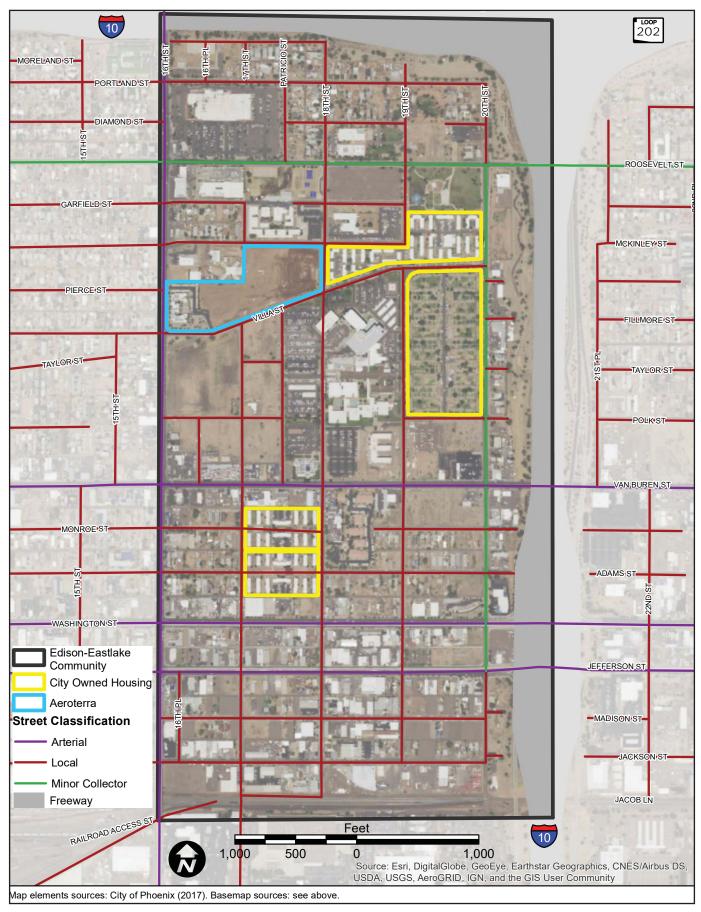
Roosevelt Street is a two-lane road with a 15 mph school zone when it passes by Edison Elementary. Van Buren Street has two lanes of traffic in both directions (with a central left-turn lane). Both 16th and Van Buren Streets need repaving. The City plans to improve Van Buren Street as part of a Complete Streets project, and repaving is one of the project components.

Washington and Jefferson Streets were both reconstructed in 2008 with the opening of the Valley Metro light rail, so the pavement and curbs are in good condition. Both streets have four lanes of traffic in one direction, with the light rail line separating one lane of traffic from the other three. The light rail line impedes vehicular access to these streets from some neighborhood streets, however. Cars can enter onto these streets at any time, but can only cross them at 16th, 18th, and 20th Streets where there are traffic lights.

Drivers can also cross I-10 via 12th Street, but not the Union Pacific tracks.



16th Street is a major north-south arterial on the western edge of the neighborhood



STREET CLASSIFICATIONS, EDISON-EASTLAKE COMMUNITY, MARCH 2017

BIKEWAYS AND PEDESTRIAN WALKWAYS

The EEC has several community-identified bikeways and pedestrian walkways along Roosevelt, 20th, Villa, Washington, and Jefferson Streets. All of these streets have bike lanes except for Villa Street, and 20th Street has bike lanes only in the portion north of Washington Street. Washington and Jefferson Streets have official bike lanes; the light rail line separates these bike lanes from all but one lane of automobile traffic.

Community-identified east-west walking paths are concentrated in the northern two-thirds of the EEC and are located on Diamond, Roosevelt, Garfield, McKinley, Villa, Taylor, Polk, and Van Buren Streets². A small portion of Washington Street in the eastern section of the EEC is also a community-identified walking path. North-south community-identified pedestrian walkways include 16th, 17th, 18th, 19th, and 20th Streets. Unfortunately, most, if not all, of these streets lack sufficient shade structures and trees to protect pedestrians from the Phoenix sun. Most are also in need of sidewalk improvements.

Washington and Jefferson Streets are by far the most pedestrian-friendly streets, given sidewalk and landscaping improvements as part of the 2008-reconstruction efforts. However, they are not currently commonly utilized pedestrian walkways because they are far from most housing in the neighborhood.

Although Van Buren Street is not currently a community-identified bikeway, it has the potential to become one with the Complete Streets project and the addition of bike lanes, shade trees and structures, and sidewalk improvements. The pedestrian experience in the EEC could be greatly enhanced with improvements along additional streets that are common pedestrian walkways but are not currently slated for improvements.

BICYCLE AND PEDESTRIAN HAZARDS

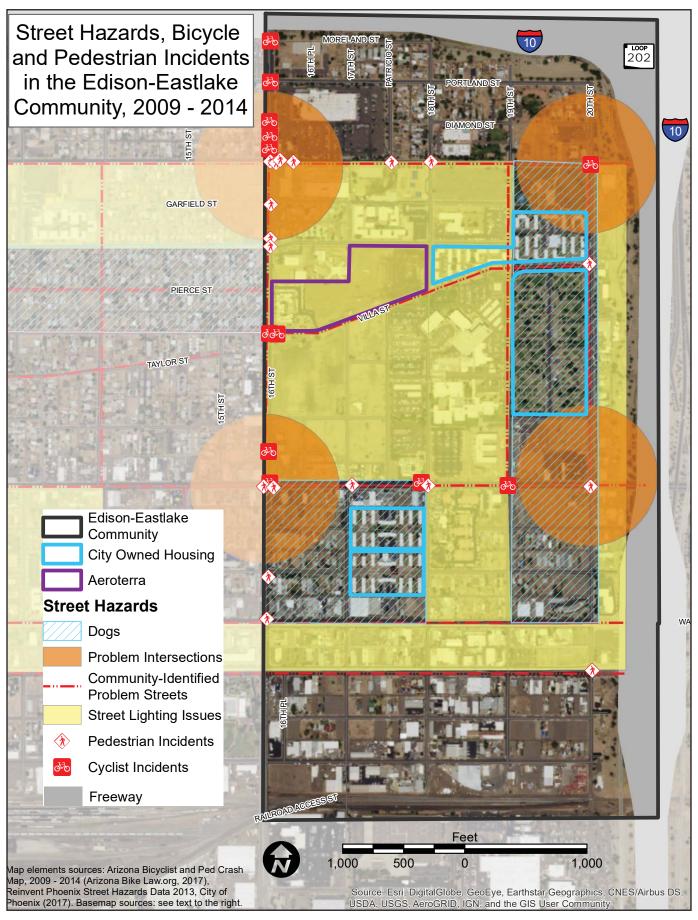
Traversing the EEC via bicycle or on foot is considered hazardous by residents. EEC residents point to speeding traffic, poor street lighting at night, and stray animals as key culprits. From 2009 – 2014, there were 18 reported pedestrian incidents, two of which were fatal, and four of which were severe. During the same period, there were 12 reported cyclist incidents, one of which was severe.

The intersections of greatest community concern are 16th Street and Roosevelt Street, 16th Street and Van Buren Street, 20th Street and Roosevelt Street, and 20th Street and Van Buren Street. 16th Street is the most dangerous street for pedestrians and cyclists in the EEC. There were nine reported cyclist incidents on that street (three near the Roosevelt intersection and two near the Van Buren intersection), and 11 pedestrian incidents (six near Roosevelt Street, and two near Van Buren Street). Given that 16th Street is a major north-south arterial, especially because it is one of the few crossings over the Union Pacific railroad tracks, it experiences very high traffic volume. On an average day, nearly 15,000 vehicles travel northbound on 16th Street near Roosevelt, and over 18,000 southbound³. At Van Buren Street, over 12,000 vehicles travel northbound and 10,000 travel southbound on 16th Street.

Roosevelt and Van Buren Streets are also hazardous, accounting for eight additional pedestrian and cyclist incidences. The remaining two incidents occurred at the corners of 20th Street and Villa Street, and 20th Street and Jefferson Street. Community members also identified 19th Street, Villa Street, and Washington Street as areas of concern.

² Community-identified bikeways and walkways were identified via walking audits with residents regarding how they accessed different parts of the community.

^{3 &}quot;Traffic Volume Map, August 2014," City of Phoenix Street Transportation Department.



TRANSIT

The EEC is connected to the City of Phoenix and the broader metropolitan area by bus and light rail, both of which are operated by Valley Metro. Residents have direct access to several bus routes with stops in the EEC, but must walk at least ½ mile to the nearest light rail stop at North 12th and Washington/Jefferson Streets.

BUS

The EEC is served by two different types of bus routes (Key Local and Local), with a total of 30 bus stops within or just outside of the EEC. Local routes operate approximately every 30 minutes on weekdays and every 30-40 minutes on weekends, and cover a smaller area than Key Local routes. Key Local routes cover a large area and stop in the EEC every 10-30 minutes on weekdays and every 30 minutes on weekends.

East-west routes that stop in the EEC include Route 1 Local (Washington-Jefferson), Route 3 Key Local (Van Buren), Route 10 Local (Roosevelt), and Route 32 Local (32nd Street). Only one north-south route directly serves the EEC: Route 16 Key Local (16th Street). The SR 51 RAPID bus route takes passengers from Central Avenue and Washington/Jefferson Streets to the Desert Ridge Market Place north of the Loop 101 in North Phoenix but the closest stop is at 12th Street and Washington/Jefferson.

TRANSIT LINES IN EDISON-EASTLAKE

Route 1 – Washington/Jefferson (Local)

Route 1 runs along Washington (westbound) and Jefferson (eastbound), with 6 stops inside or just to the west of the EEC (3 eastbound and 3 westbound). Route 1 west goes to the Central Avenue and Van Buren Street Transit Center in downtown (with access to additional light rail and bus transit), and east to Phoenix Sky Harbor International Airport and Priest Avenue. Headways are every 30 minutes every day of the week. Sunday through Thursday service generally begins and ends around 4:20am and 12:35am, with service until 2:00am on Friday and Saturday.

• Route 3 – Van Buren (Key Local)

Route 3 runs along Van Buren Street with 8 stops inside or just outside the EEC (4 in each direction). Route 3 goes west to 4th Street and La Canada Boulevard in Avondale, or east to the Phoenix Zoo. Route 3 also intersects the Central Avenue light rail station in downtown. Headways are every 10-30 minutes depending on the time of day. Sunday through Thursday service generally begins and ends around 4:10am and 12:15am, with service until 2:30am on Friday and Saturday.

• Route 10 – Roosevelt (Local)

Route 10 runs along Roosevelt Street with 6 stops inside the EEC (3 in each direction). Route 10 goes west to the Central Avenue light rail station at both Van Buren and Roosevelt Streets or east to 32nd Street (and the Maricopa Medical Center on 24th Street). Headways are every 30-40 minutes depending upon the day. Sunday through Thursday service generally begins and ends around 4:15am and 12:15am, with service until 2:15 am on Friday and Saturday.

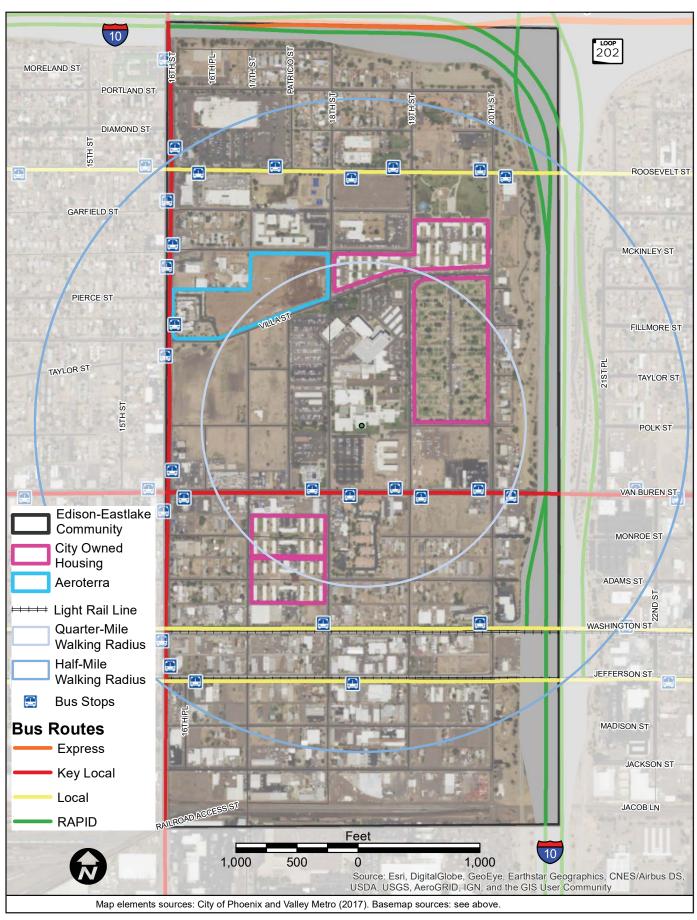
• Route 16 – 16th Street (Key Local)

Route 16 runs along 16th Street with 11 stops on either side of 16th Street (6 northbound and 5 southbound). Route 16 south goes to Central Avenue and Dobbins Road, and north to Paradise Valley Community College. Route 16 also provide access to SR 51 at Northern Avenue. Headways are Monday through Friday every 15-30 minutes, and every 30-40 minutes on Saturday and Sunday. Service generally begins and ends at 4:00am and 1:00am during the week, with service until 2:45am on Friday. On weekends, service generally begins at 5:00am and ends at 3:00am on Saturday and 11:30pm on Sundays.

• Route 32 – 32nd Street (Local)

Route 32 stops in the EEC at 16th and Roosevelt Streets on school days only. It goes to 32nd Street and Camelback Road, providing an additional way to access the Maricopa Medical Center (on Roosevelt and 24th Streets) and other locations along 32nd Street. On all school days except Wednesday, Route 32 stops at 16th and Roosevelt Streets going north at 6:19am, 6:43am, and 7:02am. On Wednesdays, it stops at 7:19am, 7:43am, and 8:02am. Route 32 southbound stops at the same location every school day at 3:35pm.





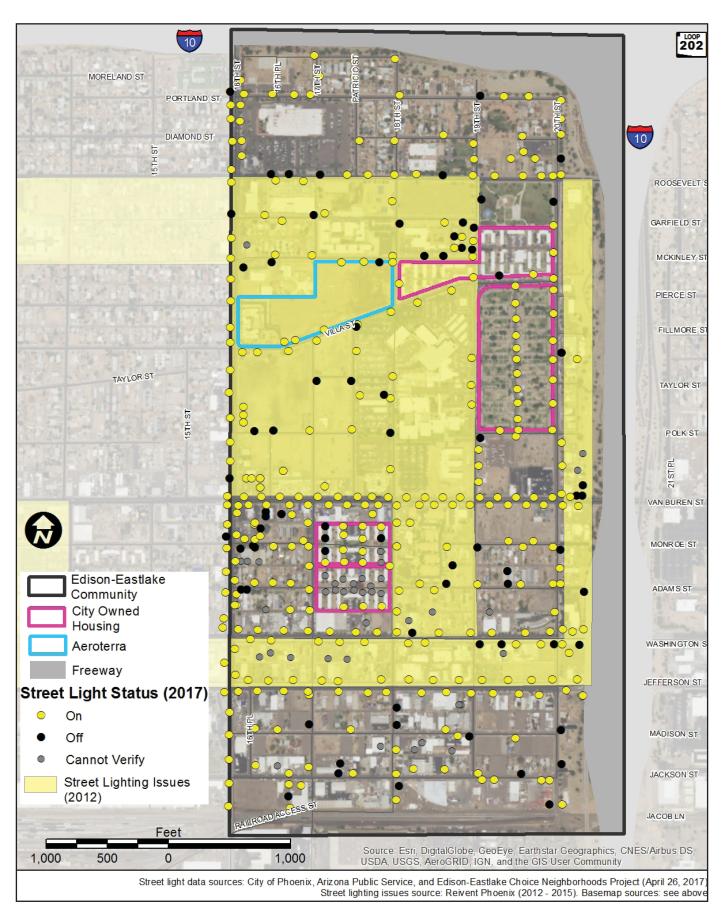


STREET LIGHTS

Lighting is one of the top issues cited by EEC residents. Many sections are dark due to a lack of street lights or street lights that not working. These dark areas make residents uncomfortable and may contribute to the neighborhood's crime rate. Places of concern include the area between Roosevelt, Van Buren, 16th, and 19th Streets (with a portion extending down to Washington Street) and the area along 20th Street. Arizona Public Service (APS) is responsible for streetlights in the EEC except for portions of the three public housing sites.

All of the public housing sites have dark areas due to street or building lights that are not working or are not nearby. Sidney P. Osborn and A.L. Krohn have bright, exterior building lights that turn on automatically although not all the lights were working when a light audit was conducted. Frank Luke has no exterior lights. At Frank Luke, there are about 180 street lights, 16 of which were not working. At Sidney P. Osborn, there are 52 street lights - 23 of which were not working, and 22 exterior building lights - 2 of which were out. A.L. Krohn has 18 street lights - 4 of which were out, and 55 exterior building lights - 13 of which were out.



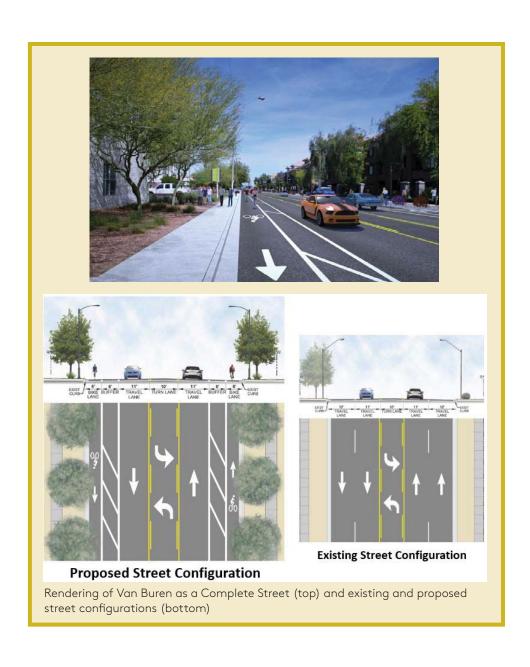




PLANNED IMPROVEMENTS

VAN BUREN COMPLETE STREETS

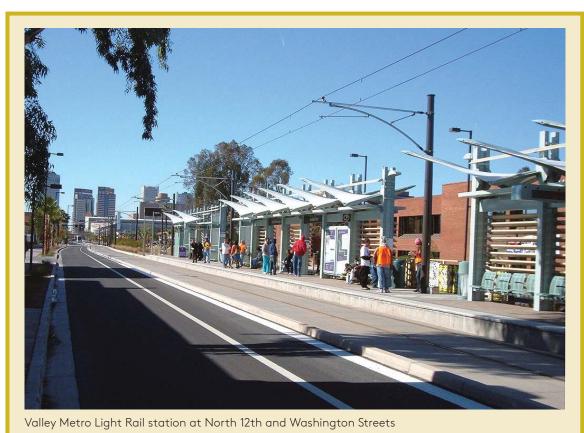
The City of Phoenix Street Transportation Department plans to transform Van Buren Street from 7th to 24th Streets to a Complete Street, converting it from an automobile-dominated street to a street that fosters multimodal travel. Planned improvements include bike lanes, better sidewalks, street lighting, landscaping, signage, and safe pedestrian and bike crossings. The design work is complete and construction is slated to begin later in 2018.



FEASIBILITY STUDY FOR LIGHT RAIL STATION NEAR 16TH STREET AND WASHINGTON/JEFFERSON STREETS

Valley Metro has initiated a 12-18 month study to research the feasibility of adding a light ration station near 16th Street and Washington Street (westbound) and Jefferson Street (eastbound). They are currently evaluating such factors as potential ridership, funding, construction feasibility, and costs. The closest current light rail stops to the EEC are at 12th Street and 24th Street—more than one-half mile away from the EEC borders, and even farther from where most FFC residents live.

A light rail station near 18th Street would provide EEC residents with easy access to north-central Phoenix and downtown Phoenix, as well as the cities of Tempe and Mesa. A new station would also provide expanded access to educational and vocational opportunities (Arizona State University's downtown Phoenix and Tempe campuses, Gateway Community College, etc.) as well as greater access to jobs, medical and childcare services, retail, and other important amenities. Lastly, a new light rail station in the EEC could foster the additional housing and retail development that the neighborhood needs. The light rail has already spurred new high-density residential and mixed-use development around the 12th Street Station, and could be an important catalyst for additional public and private investment in the EEC.







COMMUNITY FACILITIES AND SERVICES



PARKS AND OPEN SPACE

With the EEC, there are three public parks – Edison Park, Kana Mini Park, and Sohu Mini Park. At 5 acres, Edison Park is directly north of A.L. Krohn at the intersection of 20th and Roosevelt Streets, and offers a basketball court, play structures, multi-purpose field, splash pad and ramadas with picnic tables. Despite its close proximity to A.L. Krohn and Frank Luke Homes, residents express reluctance to use the park during the day and especially at night. Of resident survey respondents, 31% felt unsafe at Edison Park during the day, which increased to 60% at night. Poor to non-existent lighting, lack of programming, and loitering detract from residents feeling like it is a safe space to recreate. The City's Parks Department committed \$250,000 in its 2017-18 Capital Improvement Program (CIP) budget, and \$400,000 in its 2020-21 CIP to make improvements at Edison Park.

Kana Mini Park and Sohu Mini Park are each one-acre, mid-block, east-west linear parks that bisect the length of the Sidney P. Osborn development. Kana Mini Park was recently improved with play structures with shade, basketball court and a small multi-purpose field, this park primarily serves Sidney P. Osborn residents due to its location surrounded by public housing on the two long sides, and is maintained by the Phoenix Housing Department. Sohu Mini Park has not recently received any improvements and offers limited park facilities.

Just outside of the EEC on the other side of 16th and Jefferson Streets is Eastlake Park. An 8.86-acre historic park, Eastlake underwent a \$4 million renovation in 2013. Today, the park features a swimming pool, basketball and tennis courts, baseball and soccer fields, playgrounds, amphitheater, picnic areas and a recreation center with bathrooms and programming. Despite its proximity and newer amenities, Eastlake Park is not well-utilized by EEC residents. Crossing 16th Street – a major north-south thoroughfare – is considered to be dangerous with high-speed traffic and few marked crosswalks. Residents also feel unsafe at Eastlake Park during the day and night – 30% felt unsafe during the day and 47% felt unsafe at night. Additionally, Eastlake Park is situated nearly a mile away from Frank Luke and A.L. Krohn Homes, a distance that is neither easily traversed by foot nor by families with small children.



Aerial image of Kana Mini Park located in the middle of the Sidney P. Osborn public housing development.





In April 2017, the City Parks Department held an Edison Park Charrette to solicit feedback on what improvements should be made. Participants had the opportunity to "design their own park" and vote on their top two improvements.



PUBLIC LIBRARIES

The nearest branch of the Phoenix Public Library to the EEC is located over two and a half miles away on Central Avenue (Burton Barr Central Library) at the Central Avenue and McDowell Road light rail station. The library offers a number of different programs among its 17 existing physical locations, including Kindergarten Bootcamp, ReEngage Phoenix for adults and youth that have not completed high school, STEAM programming, and afterschool programs.

FIRE AND POLICE SERVICE

Fire protection is provided by the Phoenix Fire Department. The EEC is equidistant from and served by both Battalion 1 Fire Station #8 located at 10th and Polk Streets, and Battalion 2 Fire Station #11 on the west side of I-10 at 27th and Roosevelt Streets.

Police protection is provided by the Phoenix Police Department. The EEC is located in Precinct 5, Beats 513 and 516. In addition to public safety, the Police Department offers a number of community services to neighborhoods, including Block Watch support, Crime Prevention Through Environmental Design (CPTED) property reviews, and training for volunteer citizen patrols for the Phoenix Neighborhood Patrol program.



Luke Krohn residents participating in a Resident Conversation with Phoenix police officers.

CRIME AND SAFETY

Safety, the lack thereof or the need to improve it, was a frequent and constant concern voiced during public meetings and in the resident survey. Less crime/violence was the most important improvement identified by survey respondents (86%), and shootings and violence were considered a "big problem" by 45% of respondents. While concerns about safety are often perceptual in nature, a review of the crime statistics in the EEC compared to the City between 2013 and 2016 indicate that incidence of crime, particularly violent and quality of life crimes, do occur at a significantly higher rate in this community.

PART I VIOLENT AND PROPERTY CRIMES

The incidence of Part I Violent Crimes has consistently remained about three times higher in the EEC than the City between 2013 and 2016. In particular, there was an uptick in aggravated assaults in 2016. The location of where violent crimes happen is pretty widely distributed throughout the EEC, but there are higher concentrations of violent crimes in the vicinity of two locations – the area around 16th and Roosevelt Streets where there is a shopping center including Ranch Market; and around 18th and Van Buren Streets.

Part 1 Violent Crimes - 2013-2016, Edison-Eastlake v. City of Phoenix

•				
	2013	2014	2015	2016
Edison-Eastlake Community				
Criminal Homicide	4	1	4	3
Forcible Rape	8	6	6	6
Robbery	16	14	18	17
Aggravated Assault	29	21	24	42
Total Part 1 Violent Crimes (BA31,BB31,BC31B)	57	42	52	68
EEC Violent Crime Rate per 1,000 Residents	17.1	12.6	15.6	20.4
City of Phoenix Violent Crime Rate per 1,000 Residents	6.0	5.0	5.2	6.1

Source: Phoenix Police Department

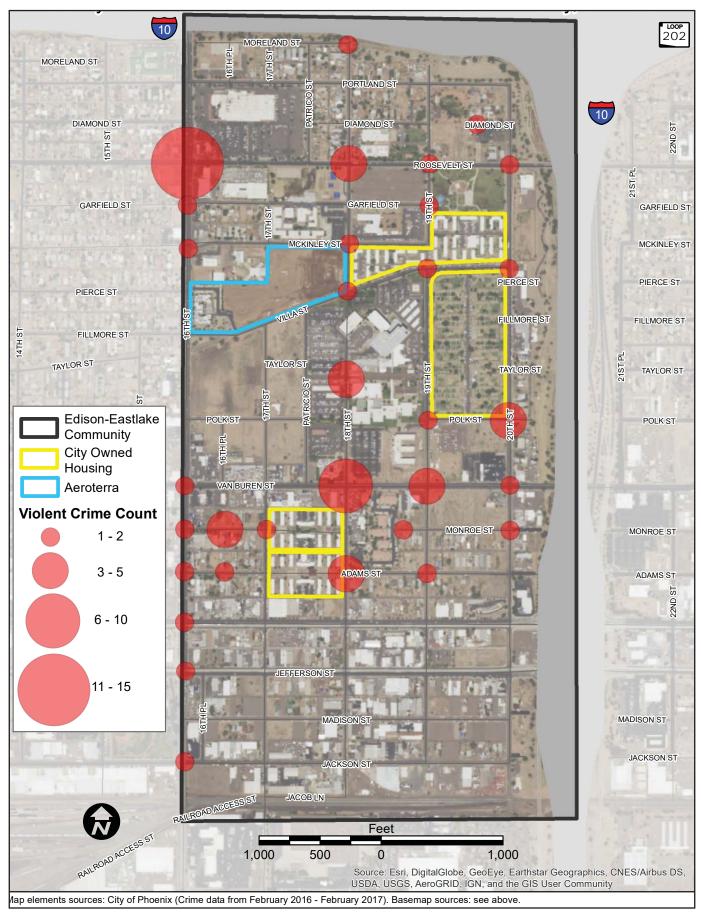
The EEC Part I property crime rate, while higher than the City, is not significantly greater. In fact, the property crime rate has decreased over the last several years, both at the City and neighborhood levels.

Part 1 Property Crimes - 2013-2016, Edison-Eastlake v. City of Phoenix

1 /			,	
	2013	2014	2015	2016
Edison-Eastlake Community				
Burglary	37	28	29	26
Larceny	136	136	87	73
Motor Vehicle Theft	24	23	19	27
Total Part 1 Property Crimes - EEC (BA31,BB31,BC31B)	197	187	135	126
EEC Property Crime Rate per 1,000 Residents	59.0	56.0	40.4	37.7
City of Phoenix Property Crime Rate per 1,000 Residents	40.0	37.2	33.8	31.0

Source: Phoenix Police Department





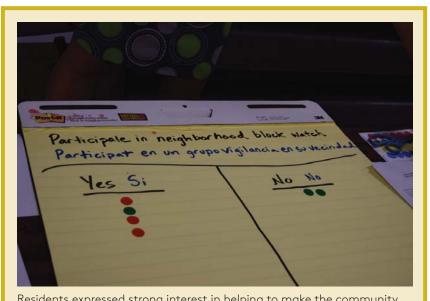
PART 2 QUALITY OF LIFE CRIMES

Looking at the incidence of other crimes that can be considered to impact the quality of life in an area, the EEC does experience overall nearly three times as many quality of life crimes than the City.

Select Part 2 Quality of Life Crimes - 2016, Edison-Eastlake v. City of Phoenix

	Edison-Eastlake		City of Phoenix	
	Number	Rate per 1,000	Number	Rate per 1,000
Simple Assault	72	21.6	11,434	7.3
Disorderly Conduct	7	2.1	1,073	0.7
DUI	17	5.1	4,816	3.1
Drug Offenses	50	15.0	9,011	5.8
Fraud	9	2.7	4,407	2.8
Liquor Offenses	0	0.0	535	0.3
Sex Offenses	16	4.8	2,171	1.4
Weapons Offenses	11	3.3	1,882	1.2
Other-Criminal	73	21.9	13,870	8.9
Other-Non Criminal	318	95.2	53,972	34.5

Source: Phoenix Police Department



Residents expressed strong interest in helping to make the community safer. At the Community Open House in March, 33 attendees indicated they would be interested in participating in a neighborhood watch-type of initiative.



NEIGHBORHOOD AMENITIES

As noted in the commercial and retail profile section, there are a number of business establishments located throughout the EEC. The majority of these amenities are clustered on the major thoroughfares like 16th, Roosevelt, Van Buren, Washington and Jefferson Streets. However, many of the businesses in the EEC are generally not neighborhood-serving, such as the many auto-related services, focused primarily on the business-to-business market, or are low-level retail such as convenience stores and gas stations. The EEC does have a bank, post office branch, a full-service grocery store (Ranch Market) and several other smaller food stores selling fresh produce including Baiz Market Place, an international grocery offering prepared foods and traditional as well as Middle Eastern products.

There are four churches located within the EEC: Fire and Water International Church, Greater Friendship Baptist Church, St. Philip-Deacon Catholic Center, and Trinity Church of God-Christ. None of these religious institutions has a particularly strong presence within the neighborhood.

ANCHOR INSTITUTION: ST. LUKE'S MEDICAL CENTER

The primary amenity as well as employer in the EEC is St. Luke's Medical Center. St. Luke's is a 200-bed hospital located in the center of the EEC. St. Luke's offers a variety of services including rehabilitation, wound care, heart care, surgical weight management, imaging, intensive care, mental health, ophthalmology, orthopedic care (including sports medicine), and mental health therapy. An additional 120-bed Transitional Care Center opened in Fall 2015 on the south side of St. Luke's campus. St. Luke's also houses Fortis College—a vocational and healthcare training college - that could provide local job training opportunities for EEC residents. St. Luke's is well utilized by neighborhood residents. In the resident survey, 60% of respondents utilized the services at St. Luke's often or sometimes.

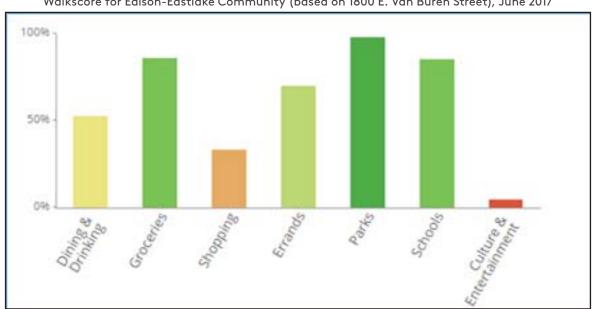
St. Luke's is currently developing a master plan for its campus, including facility upgrades and development of buildings to house expanded medical services. There is also discussion about developing a more robust medical campus on the vacant land around St. Luke's existing footprint that would bring additional jobs, private investment, and healthcare services to the EEC.



WALKSCORE

The quality of the neighborhood's amenities is reflected in its mediocre Walkscore of 59 (as measured from St. Luke's Medical Center). A Walkscore of 59 indicates that the area is somewhat walkable whereby some errands can be accomplished on foot. The Walkscore is negatively impacted by the lack of cultural and entertainment, and shopping options nearby.

Additionally, it is important to note that residents do not equal access to public amenities and programming due to the physical separation of Luke Krohn residents to the north of Van Buren and Sidney P. Osborn to the south. For example, Edison Park, which is adjacent to A.L. Krohn, is over ½ mile away from Sidney P. Osborn. Eastlake Park, even though it is within ½ mile of Sidney P. Osborn, is not easily accessed because residents must cross both North 16th Street and the Valley Metro light rail tracks to get to the park. For Luke Krohn residents, the amenities at Eastlake Park are nearly 1 mile away and these residents have to cross Van Buren as well as North 16th and the light rail tracks to get there.



Walkscore for Edison-Eastlake Community (based on 1800 E. Van Buren Street), June 2017

Source: Walkscore.com



RESIDENT SATISFACTION

In the survey, respondents rated the neighborhood highly on its access to public transportation, access to health care services, access to grocery stores, access to churches and places of worship, and availability of affordable housing. Poor ratings were given to access to retail/shopping centers, followed by being a safe environment, and access to places/objects of cultural or historical significance.

Resident Satisfaction wiith Neighborhood Amenities

	Excellent/Good	Fair/Poor
Access to public transportation	83%	15%
Access to health care services	80%	17%
Access to affordable housing	78%	18%
Access to churches/places of worship	74%	22%
Access to grocery stores	72%	27%
Access to places/objects of cultural/ historical significance	56%	32%
Being a safe environment	56%	44%
Access to retail/shopping centers	49%	47%

Source: Resident Survey

The top five most important neighborhood improvements identified by residents were less crime/violence, better street lighting, neighborhood beautification, better parks/recreational facilities and more youth programs.



The Maricopa County Comprehensive Health Center, while not located in Edison-Eastlake, is close by at 25th and Roosevelt Streets and is a Federally Qualified Health Center.

NEIGHBORHOOD PERCEPTION

Despite the existing challenges in the neighborhood, survey respondents were generally optimistic about the future of the community. Nearly half felt the community would get better over the next 5 years, and a third felt it would get worse. Residents also felt connected with their neighbors, but those connections were not deep. While respondents felt that people in the community get along with one another and help each other out, they also generally felt that they could not trust their neighbors and that they did not share the same values. Furthermore, Luke Krohn residents did not feel that there was a sense of community with Sidney P. Osborn residents and vice versa due to the geographic separation between the sites.

Resident Community Perceptions

	Strongly Agree/ Agree	Disagree/ Strongly Disagree
People generally get along with each other	63%	23%
People help each other out	58%	23%
We watch out for each other's children	55%	26%
There are people I can count on	50%	33%
People can be trusted	36%	44%
People share the same values	27%	42%
There are people who might be a bad influence on my children	52%	22%

Source: Resident Survey





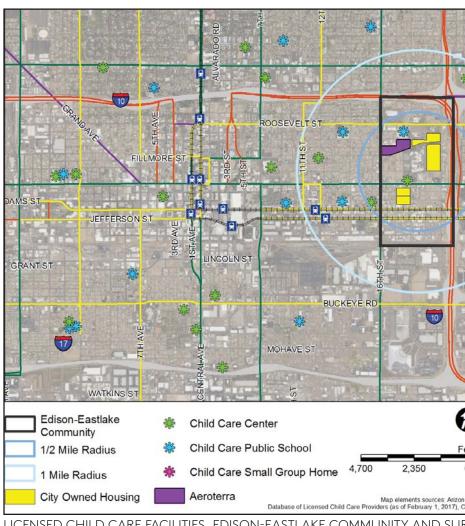
EDUCATION AND YOUTH

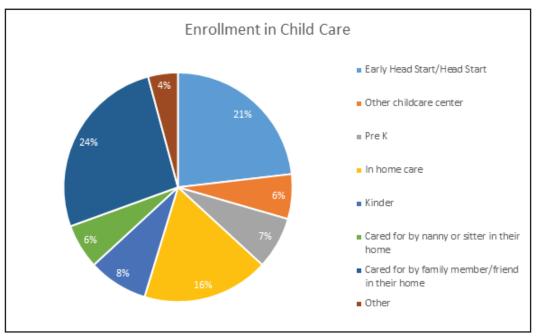
CHILD CARE – FACILITIES AND UTILIZATION

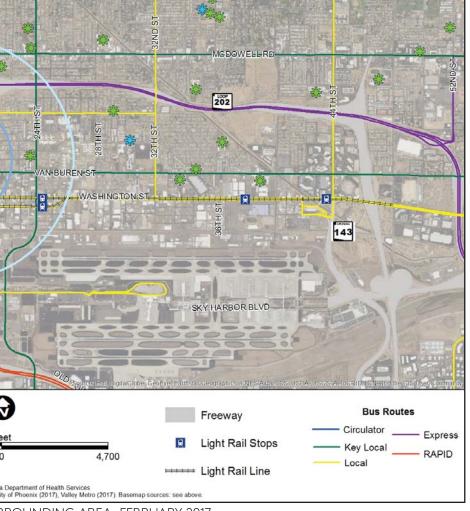
As discussed previously, the population in the EEC trends significantly younger than the rest of the City whereby nearly 50% of EEC residents are under 18 versus 28% City-wide. Of those under 18, nearly 30% are under the age of 5.

There are only two licensed childcare centers in the EEC - the Southwest Autism Research & Resource Center (SARRC) Community School and the Head Start program at Edison Elementary. The SARRC Community School serves both children with and without autism from 18 months to 5 years of age, and has a capacity of 101 children. There are two Head Start classrooms at Edison. Six more licensed facilities are located within a 1-mile radius of the EEC, and all are within relatively close proximity to a local bus line.

Of the respondents to the resident survey that had children 5 and younger, 41% were enrolled in an early childhood program such as Head Start/Early Head Start, another child care center, pre-K, and Kindergarten. The remaining young children were in an informal childcare setting cared for either by the parent, another family member/friend, or nanny/sitter in their home. The challenges of navigating the public transit system with small children and the lack of car ownership may prevent residents from using licensed childcare centers even though they are in proximity to the neighborhood.









SCHOOLS

Public elementary and high schools in the City of Phoenix are overseen by two separate districts. The Phoenix Elementary School District #1 (PESD) operates the K-8 public elementary schools, and the Phoenix Union High School District (PUHSD) oversees the high schools. Each public elementary and high school serves students within a geographic catchment. Families can apply to attend a different school than their catchment school, including schools in another district, and admission is determined by space at each individual school. There are also a growing number of charter schools at both the elementary and high school level in the City.

The EEC falls into the catchment of two elementary schools. Edison Elementary, which is located in the EEC at 18th and Roosevelt Streets, serves students living north of Van Buren Street including those living at Frank Luke Homes and A.L. Krohn. Garfield Elementary, located in the Garfield neighborhood to the west of the EEC at 14th and Roosevelt Streets, serves students south of Van Buren Street, including Sidney P. Osborn.

According to the resident survey, the majority of elementary school-aged children attend either Edison (54%) or Garfield (9%). The remaining students are dispersed either among a number of other public elementary schools or attend a charter school (20%).

The EEC is lies in the catchment for North High School, which is located north of the EEC at 12th Street and Thomas Road. Based on the resident survey, high school students attend a number of high schools aside from North High. Of the high school-aged students, 22% attend North High, 9% attend Camelback High, 9% attend Summit High which is located in an adjoining school district, and the rest attend a variety of other high schools. About 14% attend a charter high school.

As a whole, the three primary public schools attended by EEC children have lower rates of proficiency as measured through the AzMERIT standardized test than the state average. Despite the lower school performance, respondents to the resident survey generally reported favorably on the quality of schools their children attend – 35% rated the schools as excellent and 41% as good. The majority of respondents also felt that the community had excellent (22%) or good (40%) access to good schools. Approximately one-third of parents report involvement in their child's PTA/PTO or other school organization.



Resident School Satisfaction and AzMerit Scores

School Name	Survey Quality Rating		% Passing	on AzMERIT
	% Excellent	% Good	ELA	Math
PESD Schools	37%	40%	25%	25%
Edison	26%	48%	16%	22%
Garfield	43%	36%	17%	11%
Charter School K-8	38%	53%		
Statewide Elementary			38%	38%
PUHSD	42%	38%	20%	24%
North	42%	29%	26%	29%
Other High School	58%	17%		
Charter High School	40%	30%		
Other School	24%	47%		
Statewide High School			34%	37%

Source: Survey Quality Rating – Resident Survey, 2016 AzMERIT Scores – Arizona Department of Education



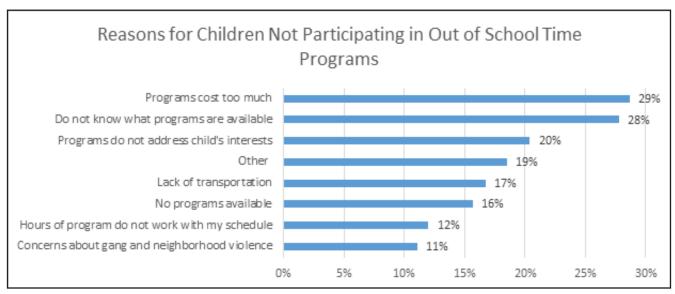
Located at 12th Street and Thomas Road, North High School is home to the International Baccalaureate Magnet Program, and is the catchment high school for Edison-Eastlake students.



OUT-OF-SCHOOL TIME PROGRAMMING

Afterschool, the majority of children go home (68%). PESD operates a free before and after school program called PEER (Phoenix Elementary Enrichment Resources) Club at each of its schools. The PEER Club operates from 6:30/7:00am to 6:00pm five days a week and is also open during spring and fall breaks and during the summer months. Participation by EEC students is low, as only 5% said that their children go to PEER Club after school. There is also very low participation (1%) with the Boys and Girls Club. The nearest location - Warner A. Gabel Branch - is located just north of the EEC near McDowell Road, which is on the other side of I-10.

When asked for the reason why children do not participate in out-of-school time programs, survey respondents cited cost (29%) and lack of knowledge of available programs (28%) as the most common reasons.







To address the lack of dedicated programming at Edison Park, the Phoenix Center for the Arts started bringing their Arizona Art Moble to Edison Park on a monthly basis. Similarly, the City of Phoenix Parks Department started weekly engagements of their PHXTeen Mobile Recreation Van at Edison Park.





EMPLOYMENT AND INCOME



SOURCES OF INCOME

The average median household income in the EEC is \$16,519; which is about one-third the median income in the City and County. Nearly two-thirds of the families earn an income below the poverty level, the rate of which is dramatically higher than in the City and County. Furthermore, over half of all families received Food Stamp/ SNAP benefits in the past 12 months, far more than in the City, and five times those in the County.

The lower household income is most likely a direct result of the fact that only 54% of EEC households have wage or salary income. This is over 20 percentage points lower than the City and County. This statistic also seems to indicate that while many EEC residents are working, they are working in low-wage jobs. It is also worth noting that 1 in 10 EEC households receive Supplemental Security Income (SSI), compared to 1 in 4 in the City and County. This high rate of SSI is consistent with EEC's higher rate of households with a member that has a disability (31%) versus the City (21%) and County (22%).

Income Levels and Sources of Income, Edison-Eastlake v. City and County

	Edison-Eastlake	City of Phoenix	Maricopa County
Median household income	\$16,519	\$47,326	\$54,229
Families below poverty	542 (66.8%)	61,105 (18.4%)	118,645 (12.6%)
Households with wage/salary income	627 (53.6%)	413,407 (78.7%)	1,088,782 (75.5%)
Households with SSI	112 (9.6%)	22,051 (4.2%)	50,703 (3.5%)
Households with cash public assistance	89 (7.6%)	12,457 (2.4%)	29,878 (2.1%)
Households with Food Stamps/SNAP benefits in past 12 mo.	669 (57.2%)	87,741 (16.7%)	170,880 (11.8%)
Income less than \$24,999	806 (68.9%)	136,237 (25.9%)	309,645 (21.5%)

Source: U.S. Census Bureau, 2015 ACS 5-year

Almost all public housing residents who took the resident survey had household incomes of less than \$30,000. The majority received food stamps (84%), 31% received Social Security or SSI, and 18% received other disability payments. Only 5% received TANF and 10% did not receive any of these sources of income. Low incomes lead to significant economic insecurity among public housing residents. Over half of the survey respondents indicated that they were often or sometimes worried that they would run out of food and that they would not have money to buy food when it ran out. Additionally, a number of respondents indicated issues with not being able to pay their phone bill therefore losing their phone service (42%), trouble paying their gas bill (47%), being assessed a late payment for not paying a utility bill on time (30%), and paying their rent on time (33%).



EDUCATIONAL ATTAINMENT

As of April 2017, the unemployment rate in metro Phoenix reached a 10-year low at 3.9%¹. The major growth sectors over the last 12 months were Leisure/Hospitality (6.7%), Mining, Logging and Construction (5.1%) and Financial Activities (5.1%). Within the State of Arizona, with regard to skilled jobs, 31% are considered high-skill jobs, 52% middle skill, and 17% low-skill.² It is anticipated that the percentage of skilled job openings by level will remain the same through 2024. Middle-skill jobs are defined as those which require education beyond high school but not a four-year degree, and make up the largest part of America's and Arizona's labor market. According to the National Skills Coalition, key industries in Arizona are unable to find enough sufficiently trained workers to fill these jobs.

These middle-skill jobs provide a valuable opportunity for non-college graduates to enter the workforce. However, within the EEC, educational attainment is extremely low. Nearly half of EEC residents age 25 and older (48.4.9%) have less than a high school diploma, which is more than double the rate in the City and triple the rate in the County.

The PUHSD high school graduation rate (81%) slightly edges out the average Maricopa County graduation rate (80%) and exceeds the statewide average (78%)³. The graduation rate at North High, the catchment high school for EEC students is 85%, and the dropout rate is less than 2%.

Educational Attainment for Persons 25 and Older, Edison-Eastlake v. City and County

	Edison-Eastlake	City of Phoenix	Maricopa County
No schooling completed	90 (4.5%)	17,586 (1.9%)	34,892 (1.3%)
Up to 12th grade, no diploma	869 (43.9%)	166,019 (17.5%)	310,729 (11.9%)
High school diploma (includes equivalency)	775 (39.1%)	439,694 (46.3%)	1,251,488 (47.9%)
Associate degree	101 (5.1%)	73,144 (7.7%)	219,795 (8.4%)
Bachelor's degree or higher	145 (7.3%)	253,950 (26.7%)	795,441 (30.4%)

Source: U.S. Census Bureau, 2015 ACS 5-year

An additional challenge for public housing residents is the lack of access to or knowledge of how to use a computer and/or the internet. According to the resident survey, nearly half of the respondents said they did not know how to use a computer (47%) and 51% said they did not have regular access to the internet at home⁴. For those without home internet access, the most common reason was cost (55%). Nearly 40% of respondents identified computer training as a current need.

^{1 &}quot;Phoenix Employment Update, June 2017," prepared by Jones Lang LaSalle, IP, Inc.

^{2 &}quot;Arizona Middle-Skill Fact Sheet, February 6, 2017," prepared by the National Skills Coalition.

^{3 &}quot;Cohort 2015 Four Year Grad Rate Data," provided by the Arizona Department of Education.

⁴ Of those who did not have access to the internet at home, about half did have a smartphone they used to access the internet.



EMPLOYMENT

The unemployment rate in the EEC is high (20.2%). This is more than twice the rate in the City and County. It is also worth noting that nearly half of residents 16 years and older are not in the labor force. This rate, which is higher than the City and the County, may reflect the higher rates of persons with disabilities, and those enrolled in school full-time or retired.

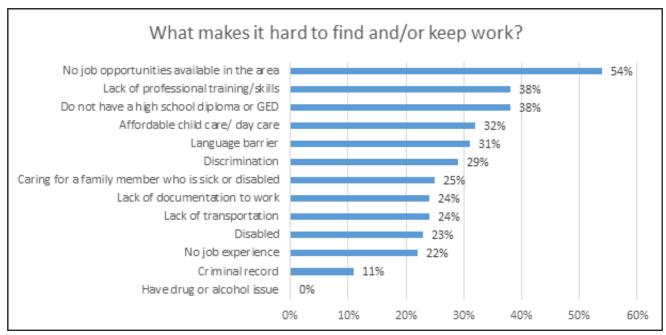
Labor Force Participation, Edison-Eastlake v. City and County

		•	,
	Edison-Eastlake	City of Phoenix	Maricopa County
Labor Force	1,324 (50.9%)	755,016 (65.6%)	1,977,494 (63.5%)
Employed	1,057 (40.6%)	687,885 (59.8%)	1,821,038 (58.4%)
Unemployed	267 (10.3%)	66,440 (5.8%)	152,461 (4.9%)
Not in labor force	1,278 (49.1%)	396,015 (34.4%)	1,138,179 (36.5%)
Unemployed (Among those in the labor force)	20.2%	8.8%	7.7%

Source: U.S. Census Bureau, 2015 ACS 5-year

Looking specifically at public housing residents, the unemployment rate was 31% according to survey respondents. However, resident data collected by the Phoenix Housing Department indicate that the unemployment rate is as high as 51%⁵.

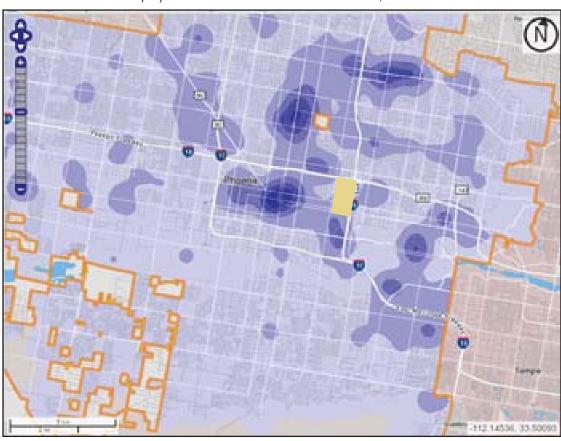
When public housing respondents were asked, "What makes it hard for you to find and/or keep work," the top response was a lack of job opportunities in the area (54%) followed by a lack of professional training/skills (38%) and lack of a high school diploma or GED (38%).



Because the resident survey did not survey all 557 public housing households and possibility of misinterpretation of the question by survey respondents, it is valid to assume that there would be a discrepancy between the survey results and Phoenix Housing Department data.

EMPLOYMENT CENTERS

There are a number of employment centers within the central city area. One of the largest is downtown Phoenix – with government offices. Other areas include north on Central Avenue and Thomas Road around the St. Joseph's Hospital and Medical Center, and north along 24th Street to East Camelback Road where there are several retail areas and shopping centers. Accessing the downtown, Central Avenue and Thomas Road employment centers is relatively easy via Valley Metro light rail, although there is not currently a light rail stop within the EEC. The Camelback area can be accessed via a local public bus from the EEC, but requires a bus transfer.



Employment Centers around Edison-Eastlake, June 2017

Source: U.S. Census Bureau, OnTheMap

INDUSTRIES AND OCCUPATIONS

According to the 2015 American Community Survey, nearly 50% of working EEC residents are employed in one of three industries: health care and social assistance (20.3%), accommodation and food services (14.6%), and administrative/support/waste management (12.2%). The rate of employment in these three industries is higher than the rate of both the City and the County. With respect to occupations, 60% have service (36.6%) or sales and office (23.6%) occupations. Within the service occupations, most are employed in building and grounds cleaning/maintenance and food preparation and serving. For sales and office, most are employed as office/administrative support. These occupations tend to offer lower wage employment, which contribute to the lower incomes seen in the EEC.

Top 5 Industries for EEC Residents v. City and County

	Edison-Eastlake	City of Phoenix	Maricopa County
Health care and social assistance	215 (20.3%)	83,608 (12.2%)	227,703 (12.5%)
Accommodation and food services	154 (14.6%)	59,774 (8.7%)	142,198 (7.8%)
Administrative/support/waste management	129 (12.2%)	50,205 (7.3%)	112,974 (6.2%)
Other services except public administration	89 (8.4%)	36,371 (5.3%)	87,668 (4.8%)
Construction	77 (7.3%)	52,044 (7.6%)	120,941 (6.6%)

Source: U.S. Census Bureau, 2015 ACS 5-year

Top 5 Occupations for EEC Residents v. City and County

	Edison-Eastlake	City of Phoenix	Maricopa County
Building and grounds cleaning/ maintenance	211 (20.0%)	41,222 (6.0%)	79,376 (4.4%)
Office/administrative support	163 (15.4%)	100,047 (14.5%)	271,636 (14.9%)
Food preparation and serving	118 (11.2%)	43,579 (6.3%)	108,033 (5.9%)
Construction and extraction	86 (8.1%)	41,747 (6.1%)	87,155 (4.8%)
Sales and related occupations	86 (8.1%)	80,432 (11.7%)	222,831 (12.2%)

Source: U.S. Census Bureau, 2015 ACS 5-year

COMMUTE TO WORK

Commute times for EEC workers tend to be longer than the average for the City and County, and they are far more reliant upon carpooling and public transit than other workers in the City and County. One in ten workers commute 60 minutes or more, which is twice the rate in the City and County. Rates of bicycling and walking to work are also much higher than the City and County.

The high reliance on carpooling or public transit is reflective of the fact that the rate of car ownership among EEC residents is significantly lower than that of the City and County.

Vehicle Availability, Mode of Transportation and Travel Time to Work, Edison-Eastlake v. City and County

	Edison-Eastlake	City of Phoenix	Maricopa County
No vehicles available	429 (36.7%)	47,775 (9.1%)	97,499 (6.8%)
Commuting to Work			
Car, truck, or van – drove alone	486 (46.5%)	508,424 (75%)	1,373,189 (76.5%)
Car, truck, or van carpooled	186 (17.8%)	80,835 (11.9%)	197,719 (11.0%)
Public Transportation	175 (16.7%)	24,179 (3.6%)	42,272 (2.4%)
Bicycle	49 (4.7%)	4,836 (0.7%)	16,072 (0.9%)
Walked	50 (4.8%)	12,890 (1.9%)	28,059 (1.6%)
Travel Time to Work			
Less than 30 minutes	565 (58.1%)	407,125 (63.2%)	1,043,008 (61.8%)
30 to 60 minutes	311 (32.0%)	204,593 (31.8%)	548,335 (32.5%)
More than 60 minutes	97 (10.0%)	32,062 (5.0%)	96,855 (5.7%)

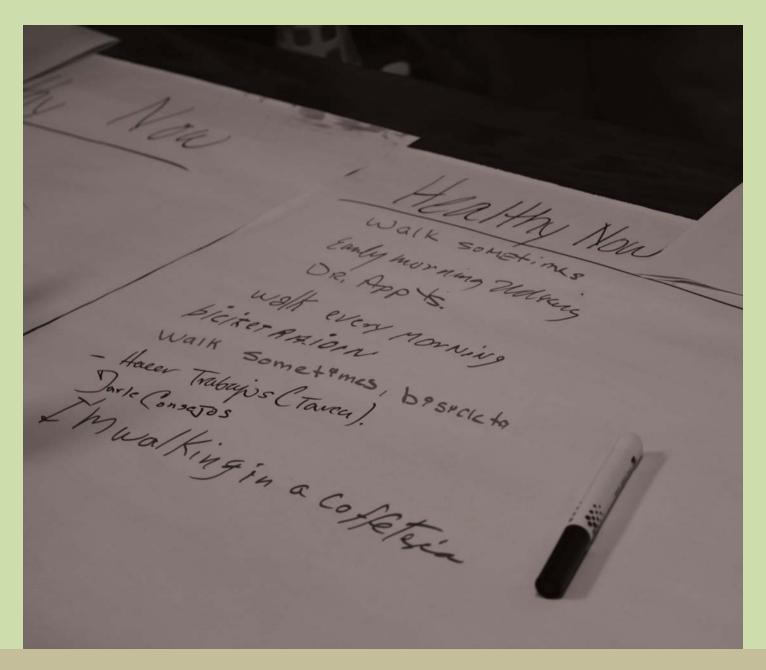
Source: U.S. Census Bureau, 2015 ACS 5-year

For public housing residents, the need for strengthening transportation and mobility options is highlighted by their transportation usage. While 60% of survey respondents said transportation is not a problem in the EEC, 32% considered it to be a very big or big problem. Aside from their own car, walking was the most frequent mode of transportation, followed by bus, light rail, and getting a ride from someone else. GRID Bike, the City bicycle share program was seldom used, which is unsurprising given that there are no GRID Bike stations in the EEC (the closest station is at the 12th Street light rail stop).

Mode of Transportation Most "Often" Used, Edison-Eastlake

	"Often" Used
Walking	45%
Your own car/truck/vehicle	42%
Public transportation – bus	36%
Public transportation – light rail	24%
Ride from someone else	16%
Тахі	9%
Bicycle	7%
Uber or Lyft	2%
GRID Bike	1%





COMMUNITY HEALTH AND WELLNESS



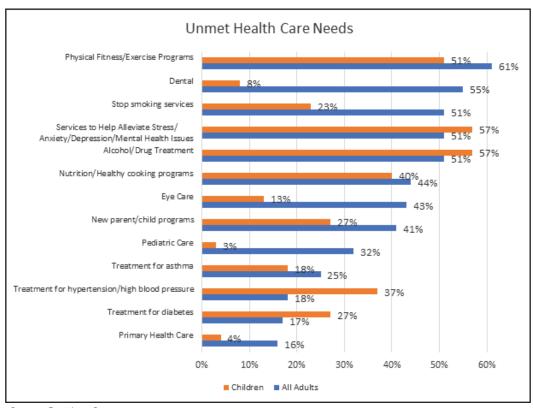
HEALTH INSURANCE COVERAGE

According to the U.S. Census, healthcare insurance coverage rates in the EEC are lower than in the City and County. Of EEC residents, 26.4% have no health insurance coverage, compared to 20.3% in the City and 15.2% in the County. For different age groups, uninsured levels vary, but as a whole, those between the ages of 18 and 64 tend to not have health insurance at higher rate than the City and County. However, some of the health insurance coverage information conflicts with data released by the Centers for Disease Control and Prevention (CDC) through their 500 Cities project¹. According to this data, the lack of health insurance is significantly higher for the 18 to 64 population in the EEC at 49%.

ACCESS TO HEALTHCARE

The EEC has good access to health care services with St. Luke's Medical Center in the center of the neighborhood, and the Maricopa County Comprehensive Health Center (CHC), a Federally Qualified Health Center (FQHC) located just east of the EEC on the other side of I-10. Access to health care services was among the top three assets identified by respondents to the resident survey.

Regardless of coverage status, 84% of respondents to the survey indicated that they regularly seek medical care. Only 47% reported using a primary care doctor when in need of health advice, while 26% go to an emergency room – most commonly Maricopa County CHC or St. Luke's Medical Center, 30% go to the hospital, and 12% use an urgent care center. Respondents as a whole highly rated the health care services that they receive with 88% rating it as excellent or good. Survey respondents identified a variety of unmet health needs, however. The most common were physical fitness and exercise programs, dental services, mental health services, and programs to address alcohol, drug use, and smoking.



HEALTH CONDITIONS

Self-reported health status among survey respondents is mixed, with fewer than half of the adults reporting excellent or good health. For children, the response was more positive, but still one in five were considered to be in fair, poor or very poor health.

CHRONIC HEALTH CONDITIONS

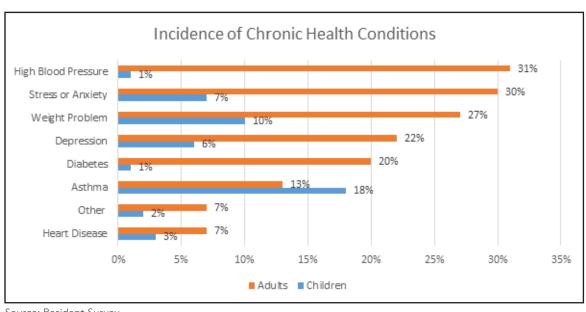
Based upon the CDC's 500 Cities project, EEC residents 18 and older suffer from a number of different health conditions at a higher rate than the City with the exception of cancer (excluding skin).

Incidence of Chronic Health Conditions, Edison-Eastlake v. City of Phoenix

	Edison-Eastlake	City of Phoenix
Obesity	42.4%	23.8%
High cholesterol	41.1%	37.4%
All teeth lost (65+)	33.2%	14.4%
High blood pressure	32.9%	26.7%
Arthritis	26.0%	21.6%
Physical health not good for 14+ days	24.6%	13.4%
Diagnosed diabetes	16.6%	9.4%
Asthma	12.9%	10.3%
Chronic obstructive pulmonary disease	11.1%	6.6%
Coronary heart disease	8.1%	5.3%
Stroke	4.9%	2.7%
Chronic kidney disease	4.3%	3.3%
Cancer (excluding skin)	4.2%	5.1%

Source: CDC 500 Cities Project

In the survey, public housing respondents reported a high incidence of chronic health conditions, with between 20 to 30% of the adult suffering from high blood pressure, stress or anxiety, weight problems, depression, and diabetes. Among children, the most prevalent condition was asthma.



HEALTH BEHAVIORS

Several of these chronic health conditions could be better managed or avoided with more physical activity. However, health is impacted by environmental factors that can prohibit or impede engagement in healthful activities. In the recent Health Impact Assessment of the EEC completed by the Vitalyst Health Foundation, safety or the lack thereof was a major barrier to residents going outside and engaging in leisure time physical activity both in the parks and in the neighborhood. Additionally, the EEC is impacted by the urban heat island effect. As noted previously, measurements taken in July 2012 indicated that the surface temperature in the neighborhood exceeded 105 degrees with most areas above 115 degrees, and night time temperatures did not often drop below 90 degrees. This extreme heat inhibits outdoor activity, and residents voiced a need for a community center with a gym and exercise classes both for safety and temperature reasons.

Additionally, per the 500 Cities project, EEC residents are less likely to demonstrate "healthy" behaviors, including getting enough sleep and leisure time physical activity, and not smoking.

Engagement in Various Health Behaviors, Edison-Eastlake v. City of Phoenix

	Edison-Eastlake	City of Phoenix
		,
Binge drinking	10.9%	15.3%
Current smoking	30.0%	20.4%
No leisure time physical activity	40.7%	23.5%
Sleeping less than 7 hours	42.7%	36.2%
Visiting doctor in last year for routine checkup	58.0%	62.6%
Visit to dentist/dental clinic	29.7%	55.9%
Cholesterol screening	59.1%	67.5%
Mammography (50-74 women)	64.4%	75.3%
Pap smear (21-65 women)	63.6%	77.7%
Fecal occult blood test/sigmoidoscopy or colonoscopy (50-75)	35.7%	57.9%
Up to date on core clinical preventative services (65+) – flu shot, PPV test, colorectal cancer screening, mammogram last 2 years (women)		
Male	21.2%	31.0%
Female	15.9%	30.3%

Source: CDC 500 Cities Project

MENTAL HEALTH CONDITIONS

Aside from physical health conditions, there is an urgent need to address mental health issues as well. According to the CDC 500 Cities project, 20.9% of EEC residents suffered from poor mental health for 14 or more days as compared to 13.5% for the City. In the resident survey, a substantial proportion of respondents reported mental health challenges in the past year along a number of different measures:

- 38% worried a lot more than most people would
- 35% felt sad, blue or depressed for more than two weeks
- 27% lost interest in most things like hobbies, work, or activities that usually give them pleasure for more than two weeks; and
- 21% felt worried, tense, or anxious for more than a month.

The need for mental health services is reinforced by the fact that among survey respondents, 57% said that services to help alleviate stress, anxiety, depression and other mental health issues were needed by adults, and 51% by children.





PREVIOUS PLANNING EFFORTS AND REPORTS

EAST AMP COMMUNITY VISION (2010)

The City of Phoenix Housing Department conducted the East Asset Management Project (AMP) Community Visioning project in 2010 with a focus on revitalizing the five public housing sites (Frank Luke Homes, Frank Luke Addition, A.L. Krohn, Sidney P. Osborn, and Sidney P. Osborn East) within the broader context of the surrounding neighborhood. Housing staff led a four-month long visioning process that included focus groups and public meetings that generated input from over 200 public housing and neighborhood residents, business owners, service providers, educators, and community organizations. The East AMP effort generated a series of guiding principles:

- Create a walkable community
- Preserve and improve public safety
- Preserve affordable housing and attract mixed incomes
- Preserve open space
- Foster private investment in surrounding properties
- Preserve and improve connections with and access to area businesses, parks, schools, churches, services and transportation
- Utilize appropriate architecture, safe/energy efficient building materials, and modern amenities
- Revitalization efforts should be respectful of existing neighborhood priorities

These principles directly shaped the City of Phoenix's application for 2010 HOPE VI revitalization grant for Frank Luke Addition. It prioritized the creation of additional key services, including early childhood education and parenting services; computer, health, nutrition, and ESL classes; and a One Stop Employment Center. The visioning process also led to a series of other important actions. These include strengthening the police walking beats in the area, creating neighborhood Block Watch groups in partnership with the police, adding more Spanish-English bilingual staff, and making maintenance work more efficient by giving staff hand-held devices.

Today, the redevelopment of Frank Luke Addition into Aeroterra, a mixed-income family and senior housing community with a community center, is nearly complete with only the community center still under construction. For the EEC Choice Neighborhoods planning effort, the guiding principles from the East AMP Visioning Study served as the starting point for deriving updated principles for the Transformation Plan.

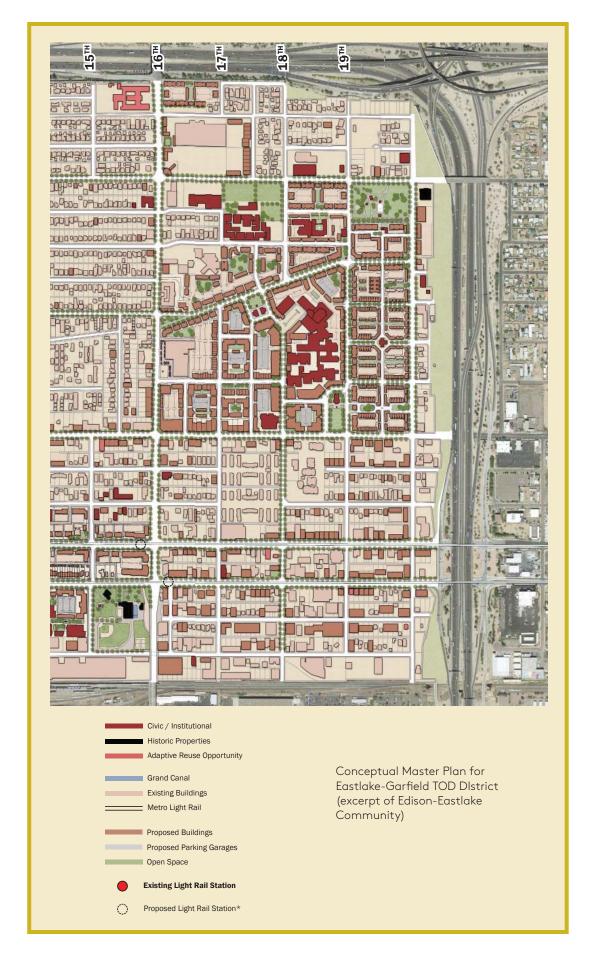
REINVENT PHX (2012 - 2015)

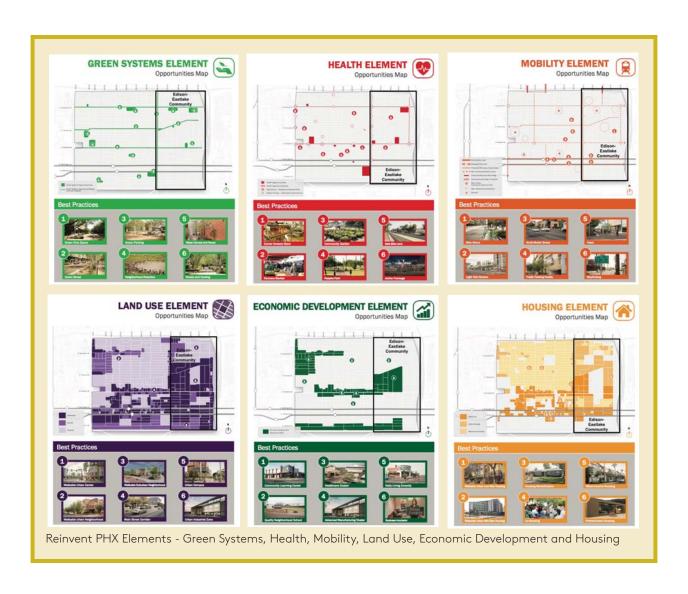
Reinvent PHX - a partnership between the City of Phoenix, HUD's Sustainable Communities program, Arizona State University, and 17 local organizations - engaged more than 3,000 residents in five districts to optimize new development along the Valley Metro light rail system. One of the districts, Eastlake-Garfield, included the EEC in its entirety. Reinvent PHX resulted in the identification of priority actions and programs to address issues of concern in the areas of health, economic development, housing, land-use, mobility, and green systems within each district.

In particular, the Edison Park neighborhood was identified as a priority action area within the greater Eastlake-Garfield TOD District. A conceptual master plan was envisioned with a mixed-income neighborhood, the St. Luke's Medical Center, redevelopment of public housing, a proposed neighborhood public square, mixed use development with an emphasis on health-related businesses and institutions as well as residential uses, and opportunities for micro businesses and a corner market. The plan arranges diverse housing types within the fabric of transit-based neighborhood design, illustrating a range of housing types located on defined streets and squares for a neighborhood that is well-connected to parks, schools, commerce and the rest of the community. Two catalyst projects were identified: intersection safety improvements for 16th and Roosevelt Streets; and pursuit of a Choice Neighborhoods grant.

The City of Phoenix has already undertaken several actions recommended in the Reinvent PHX plan to foster TOD investment around light rail stations and improve quality of life in the five districts, including the adoption of the Walkable Urban Code (WUC). In the Eastlake-Garfield TOD District, these actions included securing a Choice Neighborhoods Planning Grant, securing commitments from the City Parks Department to improve Edison Park and the City Street Transportation Department to remake Van Buren Street (\$4.8 million to add new bike lanes and implement traffic calming and pedestrian improvements), increasing the hours and frequency of the Valley Metro bus service, and undertaking a feasibility study of adding a new light rail station between 16th and 18th Streets on Washington/Jefferson Streets. Additional recommendations for the EEC include exploring new retail uses along key corridors, intersection improvements at 19th and Villa Streets, potential bike share station, energy and water efficiency and renewable energy production, shade and community gardens, address indoor air quality and vapor intrusion, potential "Health District" promoting healthy lifestyles partnering with St Luke's Medical Center, green infrastructure, and potential combined heat and power system and microgrid to serve redeveloped housing and St. Luke's Medical Center.

The visioning and research findings generated by Reinvent PHX served as a starting point for the EEC Choice Neighborhoods effort.

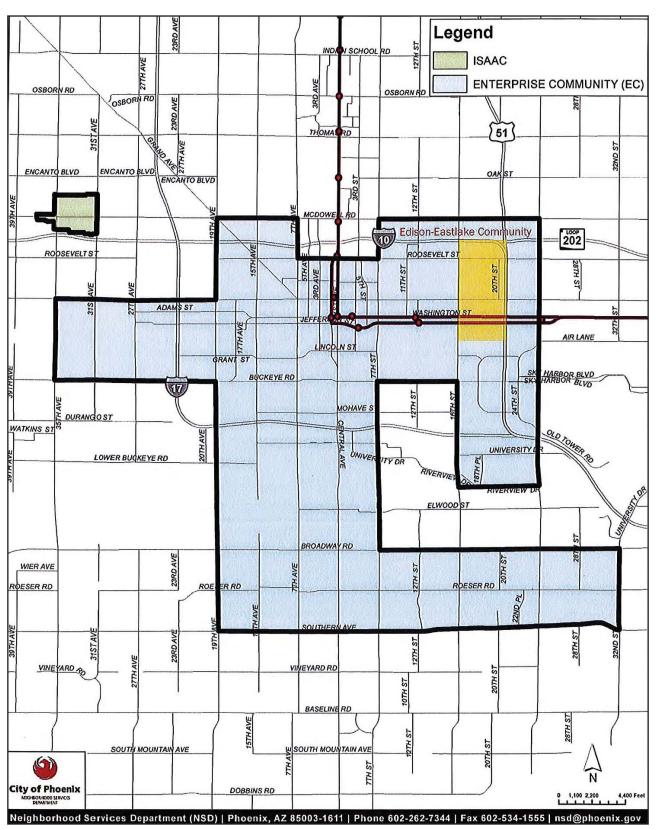






CITY OF PHOENIX NEIGHBORHOOD REVITALIZATION STRATEGY AREA

The EEC is also located within the boundaries of the City's Neighborhood Revitalization Strategy Area. HUD first designated this area as an Enterprise Community in 1999. The 2015-2019 City of Phoenix Consolidated Plan identifies several development priorities in this area. These include the production of additional affordable rental housing, support for rental subsidies and emergency housing, extensive rehabilitation of residential structures, improvements in neighborhood infrastructure and public services, additional employment and training opportunities, and small business loans and services to provide technical assistance. The Choice Neighborhoods effort could serve as a catalyst to achieve these goals within the EEC.



NEIGHBORHOOD REVITALIZATION STRATEGY AREA, CITY OF PHOENIX





APPENDIX

As part of the Choice Neighborhoods Initiative (CNI) Planning Process for the Frank Luke Homes, A.L. Krohn, and Sidney P. Osborn housing sites and surrounding Edison-Eastlake Community, the City of Phoenix's Housing Department developed and conducted a survey of the heads of household currently living at the sites. Staff from the City of Phoenix's

Housing Department conducted the survey between January and April 2017. Survey question topics included satisfaction with amenities; safety and social issues; employment and income; children and education; physical and mental health.

The response rate for the survey effort was 61%, or 341 out of 557 households.

Household Information

Among the 341 survey respondents, 77% live in either Frank Luke or A.L. Krohn, and 23% live at Sidney P. Osborn. Residents reported relatively short tenure – 58% have lived at their housing site for less than 5 years, 18% for 6 to 10 years and 24% for more than 10 years.

Table 1 below shows the demographic characteristics of the respondent population overall and by site. The demographic characteristics of the respondents at each site varies substantially, with more families living at Sidney P. Osborn, which does not contain any 1-bedroom units, and slightly older residents living at Luke/Krohn.

Table 1. Demographic Characteristics of Survey Respondents

	All Respondents	Luke/Krohn	Osborn
% Hispanic	68%	63%	79%
% White	52%	48%	56%
% Black	24%	26%	14%
% Female	79%	74%	95%
% Male	20%	25%	5%
% Households with Children	62%	45%	76%
ages 25 and under			
Ages 0-5	11%	12%	14%
Ages 6-12	21%	15%	23%
Ages 13-17	19%	16%	22%
Ages 18-54	39%	40%	38%
Ages 55-61	5%	8%	1%
Ages 62+	5%	9%	1%

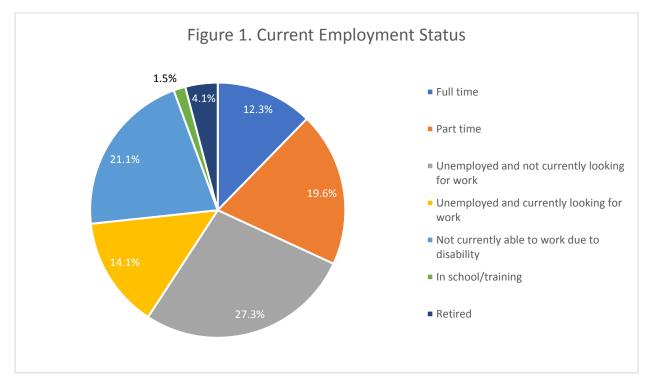
Income & Employment

Almost all respondents (99%) have household incomes of less than \$30,000; 83% have a household income of less than \$11,000. A majority (84%) of respondents receive food stamps, 31% receive Social Security or Supplemental Security Income (SSI), and 18% receive other disability payments. Only 5% of respondents receive TANF and 10% do not receive any of these sources of income.

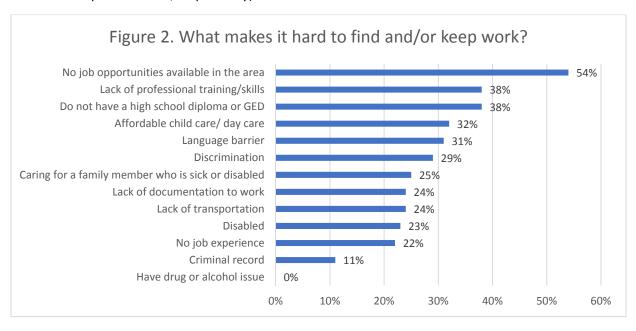
Survey data indicate economic instability among public housing residents based on a number of factors, including having insufficient funds for food, housing, and utilities. In the past 12 months:

- 54% of respondents worried often or sometimes that food would run out; 51% often or sometimes that they did not have money to buy food when it ran out.
- 44% often or sometimes could not afford to eat balanced meals.
- 42% were without phone service for more than 24 hours because they could not afford to pay their bill; 47% had trouble paying their gas bill on time.
- 30% were charged a late payment for a utility bill; 22% received a shut off notice for a utility; 9% had their utilities shut off.
- 33% had trouble paying rent on time; 15% paid their rent over two weeks late; and 22% received an eviction notice.

According to resident survey data, more than half (54%) of respondents are not in the workforce, (i.e., those not looking for work, unable to work, in school or training or retired). Among those who are in the workforce, the unemployment rate is 31%. Among those employed, 64% have worked at their job for at least one year.



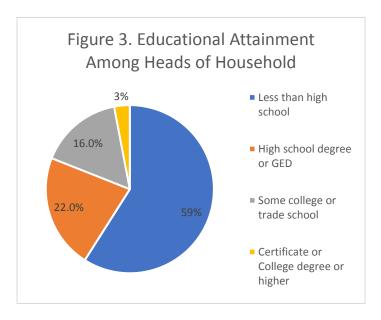
Among those unemployed and looking for work, the most commonly reported barriers to finding and keeping work include: no job opportunities in the area (54%), lack of high school diploma/GED (38%) and lack of professional training/skills (38%). Notably, among households with children, nearly half (47%) of respondents cited affordable child care as a barrier to employment. At the Luke/Krohn housing sites, which have older populations with higher rates of disability, a higher proportion of respondents are not currently working due to a disability than at the Sidney P. Osborn site (25% compared to 9%). Additionally, a higher proportion at Luke/Krohn indicated that caring for a family member who is sick or disabled is a barrier to work (28% compared to 14%). On the other hand, discrimination and language barrier are more common barriers to work among Sidney P. Osborn residents (46% compared to 24% and 38% compared to 18%, respectively).



Adult Education and Skills

As mentioned, limited educational attainment and lack of professional training and skills serve as barriers to employment for public housing residents. A majority (59%) of respondents reported not having a high school diploma. However, few are currently enrolled in an adult education and/or training program. Many residents did express a need ("immediate need" or "need") for services to improve their skills and credentials:

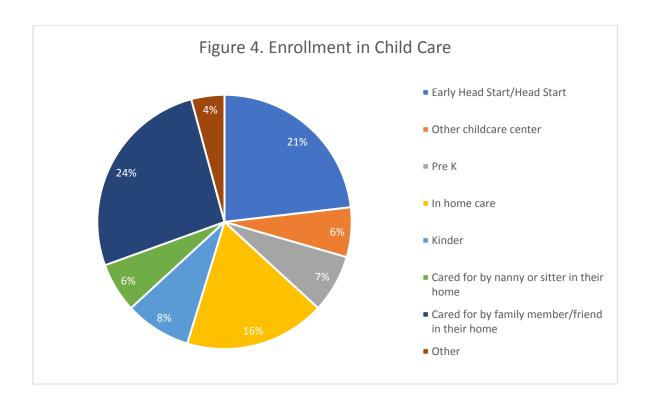
- 8% are currently enrolled in GED/adult education; 30% expressed a need for it
- 9% are currently enrolled in a job training/job readiness program;
 24% expressed a need for it



Survey data supports the presence of a digital divide among this population. Almost half (47%) of respondents reported not knowing how to use a computer, about half (51%) reported not having regular access to the internet at home, and nearly 1 in 5 (18%) reported that they did not access the internet from their home computer or their smart phone in the last 30 days. Among those who do not have access to the internet at home, affordability is the most common reason (55%).

Children's Education

A quarter of respondent households have children ages five and under. Forty-one percent of children ages 5 and under are enrolled in an early childhood program (including Head Start/Early Head Start, child care center, pre-k, and kinder), which is substantially lower than the HUD goal of having at least 65% of children ages 0-5 enrolled in an early education program.



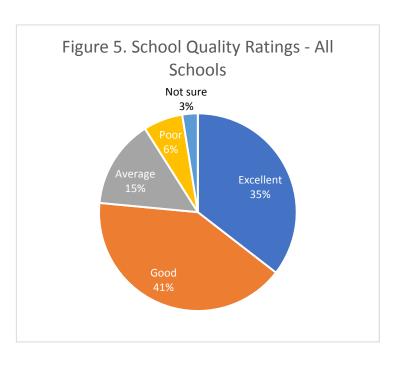
More than half (54%) of households with children have school-aged children (6-17). Based on respondent data reporting where each household's children attend elementary school, 49% attend a Phoenix Elementary School District #1 (PESD) elementary school, most commonly Edison and Garfield; and 11% attend a charter K-8 school. With respect to high school, 21% attend a Phoenix Union High School District (PUSD) high school, most commonly North High School (8%); 2% attend a charter high school; and 16% attend another school (see Table 2).

Table 2. School Enrollment and Quality Ratings

School Name	% Enrollment (All enrolled school- aged children)	Survey Quality Rating		% Passing on AzMERIT	
		% Excellent	% Good	ELA	Math
PESD Schools	49%	37%	40%	25%	25%
Edison	33%	26%	48%	16%	22%
Garfield	8%	43%	36%	17%	11%
Charter School K-8	11%	38%	53%		
Statewide Elementary				38%	38%
PUHSD	21%	42%	38%	20%	24%
North	8%	42%	29%	26%	29%
Other High School	4%	58%	17%		
Charter High School	2%	40%	30%		
Other School	14%	24%	47%		
Statewide High School				34%	37%

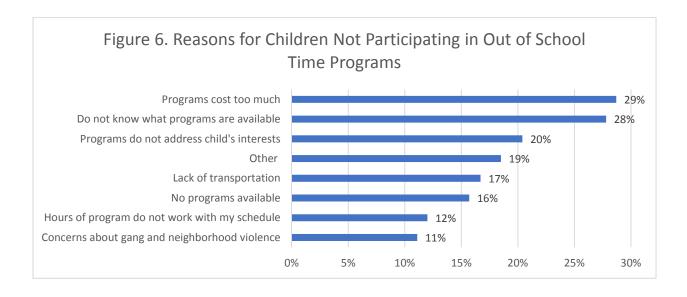
Sources: Edison-Eastlake Resident Survey and AzMERIT 2016

Table 2 also shows school enrollment data from the Resident Survey and AzMERIT standardized test scores from the Arizona Department of Education for 2016. These data show that most of the schools that survey respondents' children attend have lower rates of proficiency than the state average. Despite these data, residents generally reported favorably on the quality of schools their children attend. A strong majority of respondents positively rated the schools their children attend (35% Excellent, 41% Good) (Figure 5). A majority of respondents also rated their community's access to good schools as excellent (22%) or good (40%) (Figure 13, p. 14).



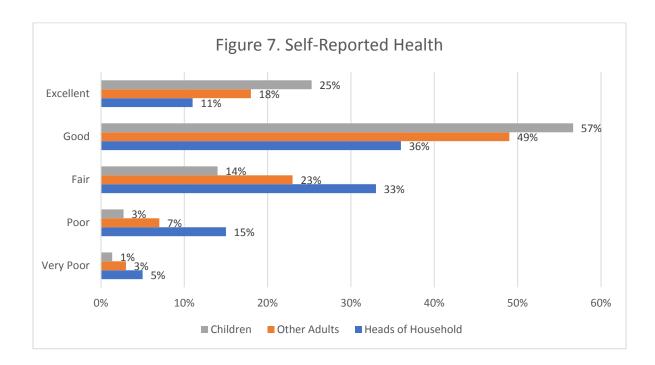
Almost a quarter (24%) of parent respondents reported that their children have special needs; but only half (51%) of these parents reported satisfaction with the services their children have received (22% somewhat satisfied, 29% extremely satisfied). Finally, nearly a third (32%) of parents reported involvement in the PTA/PTO or other school organization.

Households with children indicated that 42% of their school-aged children participated in organized after school programs. The most common reasons cited for non-participation are cost (29%) and lack of awareness of program availability (28%).



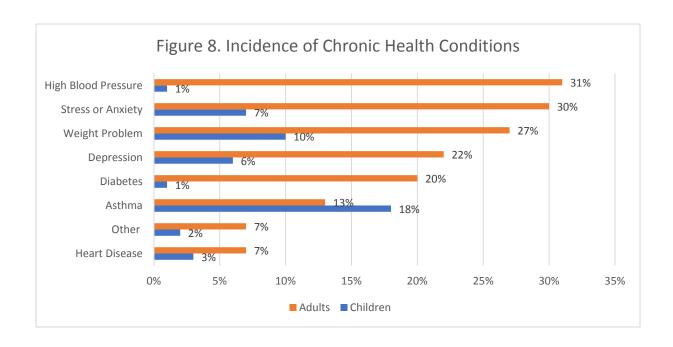
Health

Self-reported health among survey respondents is mixed, with less than half of heads of household reporting excellent or good health. Parents reported that their children's health is better, but still one in five children are in fair, poor, or very poor health.



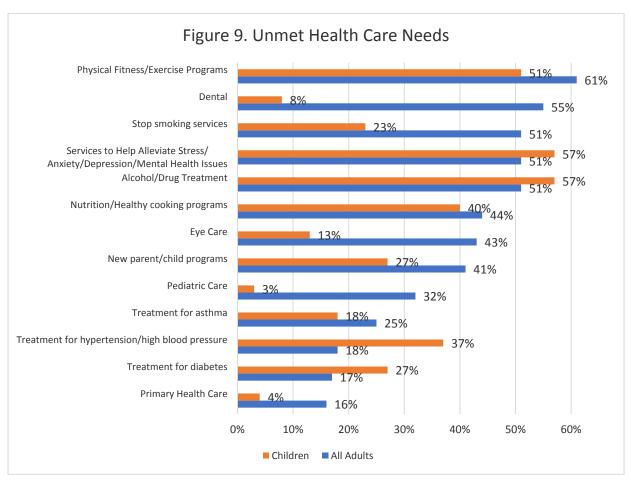
About one in five (21%) respondents do not have health insurance, slightly lower than for the City of Phoenix as a whole in which 24% lack coverage (CDC data). Respondents with children reported nearly universal coverage (98%) among children. Regardless of coverage status, most respondents do regularly seek medical care. Eighty-four percent of respondents reported receiving yearly medical checkups, 18% of whom reported no insurance coverage. However, less than half (47%) reported using a primary care doctor when in need of health advice. Instead, one in four (26%) respondents go to an emergency room when they need health advice (most commonly Maricopa County and St. Luke's), 30% seek health advice from a hospital, and 12% go to an urgent care center. Overall, respondents highly rated the health care services they receive, with 50% giving a good rating and 33% an excellent rating.

Respondents reported a high incidence of chronic health conditions. Among adults, the most common health conditions are high blood pressure, stress or anxiety, and weight problems. When compared with CDC health data for the City of Phoenix, a higher proportion of survey respondents report having diabetes (20% compared to 9%). For children, the most common health conditions are asthma and weight problems (Figure 8).



¹ Note: the CDC data reports incidence of diagnosed diabetes, whereas the survey data is self-reported data telling how many people in a household have the condition.

Respondents indicated a variety of unmet health care needs, most commonly: physical fitness and exercise programs, dental services, mental health services, and programs to address alcohol, drug use, and smoking (Figure 9).



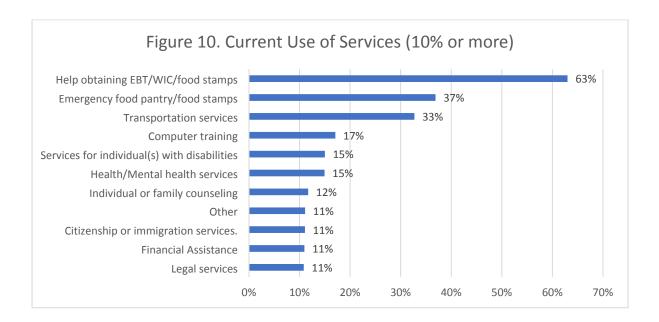
Survey data support the stated need for programming and services that support healthy living and address mental health concerns. In a usual week, only half of respondents exercise for at least 20 minutes four or more days a week; 14% never do. One in five (21%) respondents smoke cigarettes; one in ten report binge drinking (5 or more drinks in a day) at least once in the last 12 months. In addition, a substantial proportion of respondents reported mental health challenges in the past year along a number of measures:

- 38% worried a lot more than most people would
- 35% felt sad, blue or depressed for more than two weeks
- 27% lost interest in most things like hobbies, work, or activities that usually give them pleasure for more than two weeks

• 21% felt worried, tense, or anxious for more than a month

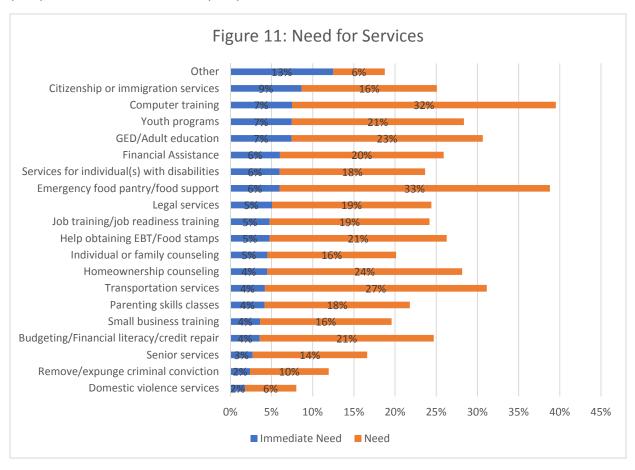
Services

By far the most commonly used service among survey respondents is getting help to obtain EBT/WIC/Food stamps (63%). The figure below shows the services that at least 10% of respondent households have used. Fifteen percent of respondents did not report using any of the services listed.

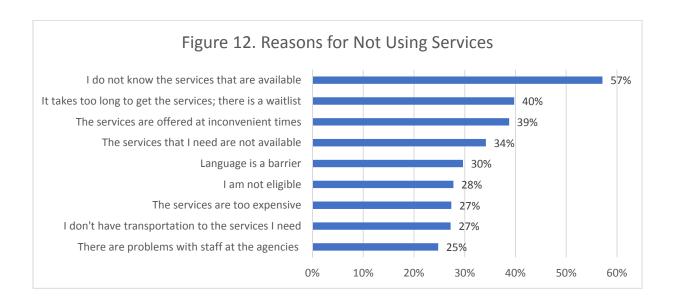


The most commonly used service providers/amenities in the community include St Luke's Medical Center (20% use often, 40% use sometimes), followed by Maricopa County Public Health Clinic (25% use often, 33% use sometimes). Respondents reported rarely using other, non-health services (e.g., Pilgrim Rest, Booker T. Washington Child Development Center, Child Crisis Center, Southwest Autism Research & Resource Center).

Respondents indicated a low level of need for non-health services, with less than 10% reporting an immediate need for any service, at least 60% reporting "No Need" for every service listed, and 20% reporting not needing any services at all. The most commonly needed services (i.e., Immediate Need + Need) are computer training (39%), emergency food pantry/food support (39%), transportation services (31%), and GED/Adult education (30%).



According to survey data, the driving factor behind the low utilization rate of services is a lack of awareness of their availability (57%). Other common reasons for not using services include taking too long to get services/waitlist (40%) and services being offered at inconvenient times (39%). Nevertheless, respondents generally agree that the community has good (48%) or excellent (23%) access to social services and social service providers, but they also think it is very important to have more social services (69%), senior programming (67%), and youth programming (75%).



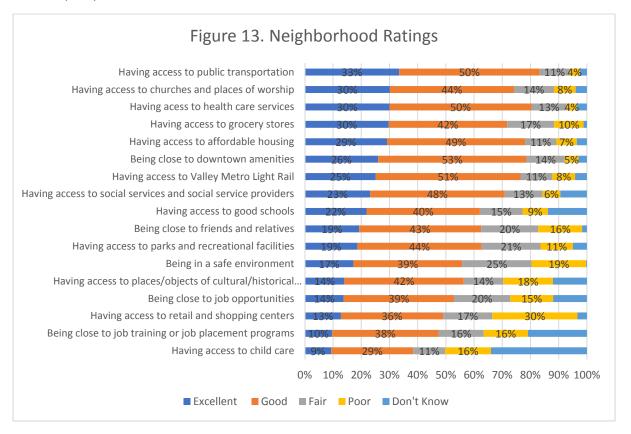
Neighborhood

Satisfaction with Amenities

Resident respondents provided valuable input on the amenities and needs of the neighborhood. Overall, respondents described the community as an affordable and convenient neighborhood with limited access to retail/shopping options and a need for quality of life improvements (e.g., safety, neighborhood beautification/clean-up and services).

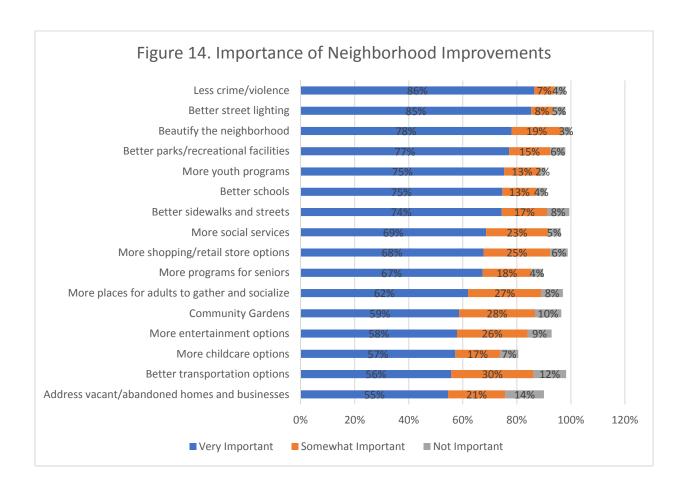
Respondents clearly identified the neighborhood's affordability as its most attractive feature: 65% cited affordability as the main reason they moved to the community (convenience is the next most common reason at 9.5%). Respondents gave the neighborhood the highest ratings ("excellent") for its access to public transportation (33%), health care services (30%), grocery stores (30%), churches/places of worship (30%), and affordable housing (29%).

Respondents gave the worst rating ("poor") to the neighborhood's access to retail and shopping centers (30%). Specifically, residents most often (54% of respondents) expressed a need for more grocery stores, relative to any other type of business. Currently, the most commonly used grocery store is Ranch Market (59%). Notably, a substantial portion of respondents often use stores that typically do not offer fresh produce to get food for their household: Dollar Stores (47%) and corner/convenience stores or gas stations (36%).

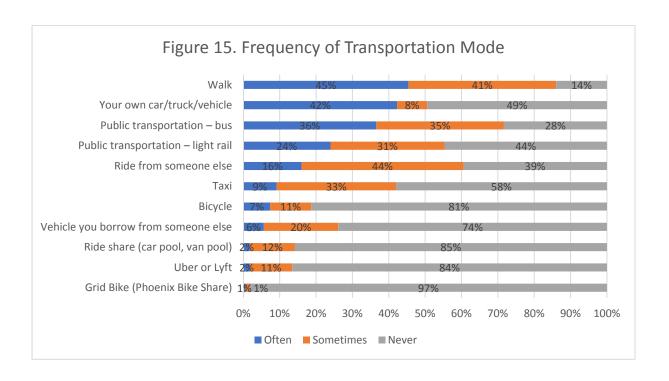


Ratings on various neighborhood characteristics varied somewhat by site, however. The Luke/Krohn sites, which are located approximately ½ mile north of the Sidney P. Osborn site, received lower ratings for being close to job opportunities (50% compared to 63%) and downtown amenities (76% compared to 86%) and having access to places/objects of cultural/historical significance (48% compared to 62%).

Residents' survey responses demonstrate an eagerness for a variety of community improvements, with more than half of respondents stating all proposed improvements were "Very Important". The most popular improvements voted on by respondents include: less crime/violence (86%), better street lighting (85%), beautify the neighborhood (78%), better parks/recreational facilities (77%), more youth programs (75%), and better schools (75%).



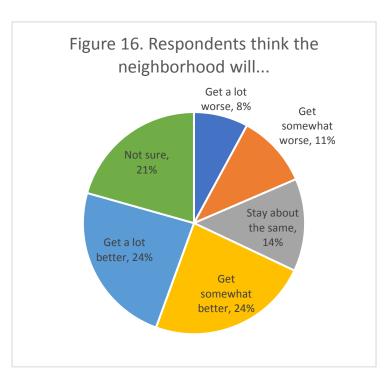
A majority (60%) of respondents reported that transportation is not a problem in the Edison-Eastlake Community, 22% say it is somewhat of a big problem and 10% say it is a very big problem (8% don't know). The most common mode of transportation among survey respondents is walking. Forty-five percent of respondents said they often walk, 42% often use their own vehicle, 36% take the bus, and 24% often take light rail. As shown in Figure 13 (page 14), access to public transportation, and the Valley Metro Light Rail specifically, were rated highly among neighborhood characteristics.

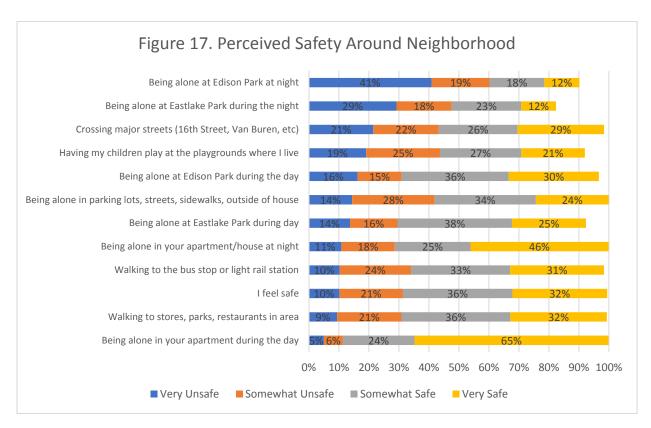


Safety and Social Issues

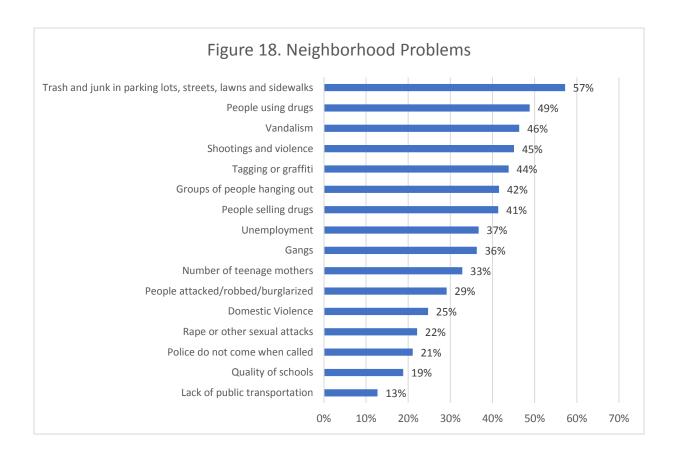
In general, respondents offered mixed responses when asked about the future of their community: 48% think the neighborhood will get somewhat or a lot better, 14% think it will stay about the same, and 19% think it will get somewhat or a lot worse (21% replied "Not Sure").

Respondents reported generally feeling safe in their community and at their housing site, especially inside their housing units. However, respondents feel the least safe at Edison and Eastlake Parks during the night (Figure 17). In addition, just under half of respondents rated the neighborhood as poor (19%) or fair (25%) for being in a safe environment (Figure 13, page 14).





According to residents, the biggest problems in the neighborhood relate to vandalism and littering, drugs, and loitering (Figure 18). However, respondents living at the Sidney P. Osborn site were more likely to report that tagging or graffiti and having trash and junk in parking lots, streets, lawns and sidewalks as a "Big Problem" than Luke/Krohn respondents (41% compared to 51%, and 51% compared to 74%, respectively).



The survey asked a variety of questions about residents' social and support network. Few respondents share the neighborhood with friends or family: 90.5% reported having none or few friends living in the community; and 98% reported having none or few family members living there. A majority of respondents agreed that people in their community get along (14% strongly agree, 49% agree), help each other out (8%, 50%), and watch out for each other's children (10%, 45%); but fewer than half reported that people can be trusted (5%, 31%) or share values (3%, 24%).

Despite what appears to be relatively limited social connections within the community, a majority of respondents (66%) expressed interest in returning to a unit in the Edison-Eastlake Community if the public housing sites were demolished and rebuilt; 22% need more information before deciding, 8% are not interested and 4% don't know.

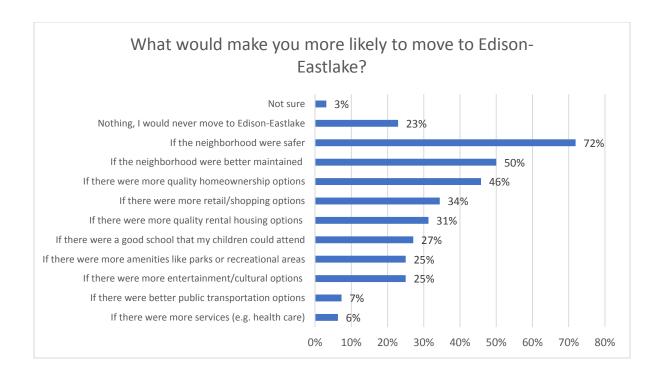
As part of the Choice Neighborhoods Initiative (CNI) planning process for the Edison-Eastlake Community (EEC), the City of Phoenix's Housing Department developed and conducted a survey of persons who work in the EEC. The survey was conducted online between March and June 2017 and staff from the City of Phoenix's Housing Department marketed the survey to local businesses and employers including St. Luke's Medical Center, Southwest Autism Research and Resource Center, Maricopa County Public Health Clinic and State of Arizona's Department of Economic Security. Survey question topics included household information, satisfaction with amenities in the neighborhood, and safety and social issues.

Respondent Information

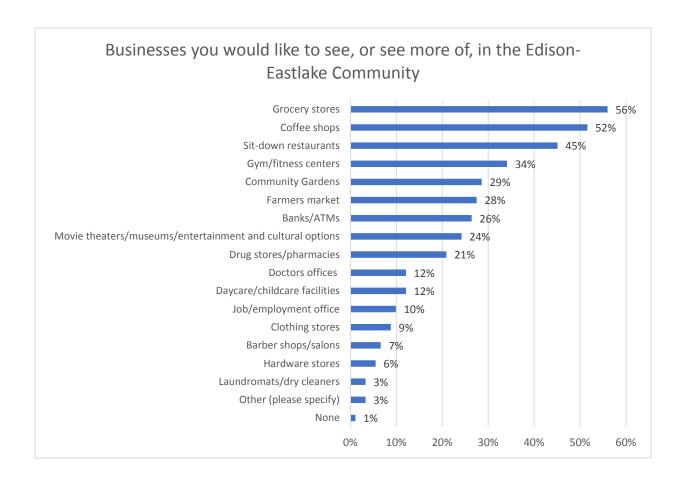
Ninety-eight people completed the survey. Respondents are predominantly non-Hispanic or Latino (86%), White (89%), and female (72%); two-thirds (67%) have annual incomes of \$50,000 or more. Of the respondents, 62% work at St. Luke's Hospital; 93% work full time. Almost none (1%) of the respondents live in the Edison-Eastlake Community.

Satisfaction with Neighborhood

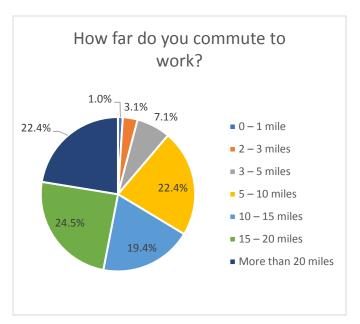
While most respondents (92%) indicated they are not currently interested in moving to the EEC, about a quarter (26%) of respondents expressed interest (i.e., "Very Interested" or Somewhat Interested") in moving to the EEC if it were improved. When asked what would make respondents more likely to move to the EEC, the most common response was improved safety (72%), followed by better maintenance of neighborhood (50%), and more quality homeownership options (46%).

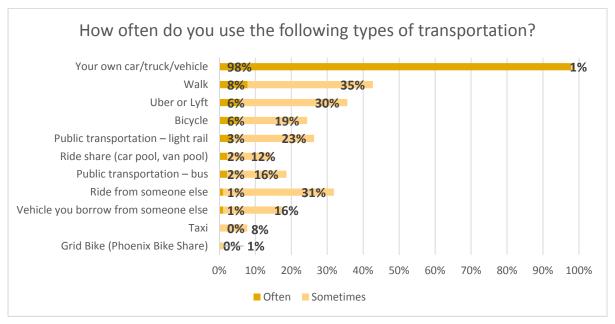


When asked what types of businesses you would like to see, or see more of, in the EEC, the most common responses were grocery stores (56%), coffee shops (52%), and sit-down restaurants (45%).



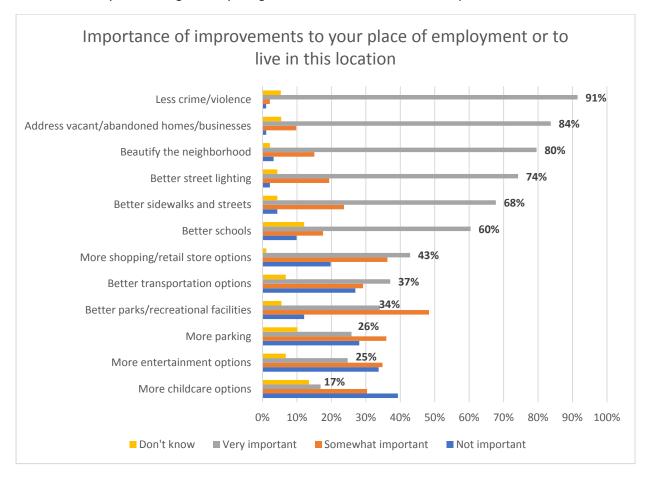
Not only do almost all respondents live outside the EEC, two-thirds (66%) travel more than 10 miles from their homes to work. As such, respondents almost exclusively drive their own vehicle (98% Often use their own vehicle). Respondents reported "Sometimes" walking (35%), taking Uber or Lyft (30%), and biking (19%). About a quarter of respondents reported "Often" or "Sometimes" using light rail (26%) and 18% "Often" or "Sometimes" using the bus.



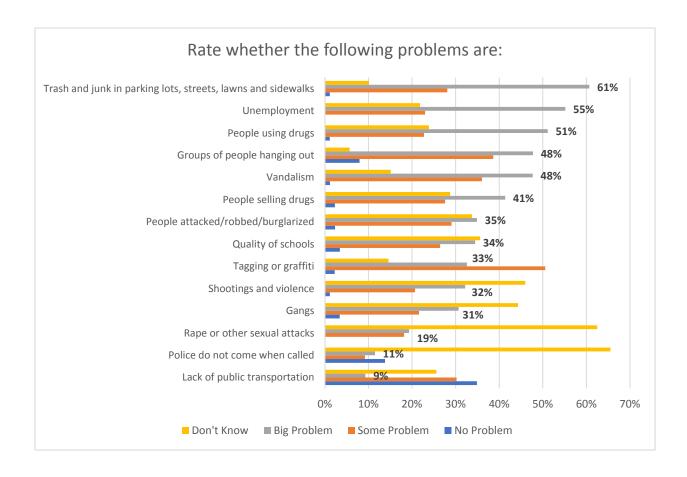


Safety and Social Issues

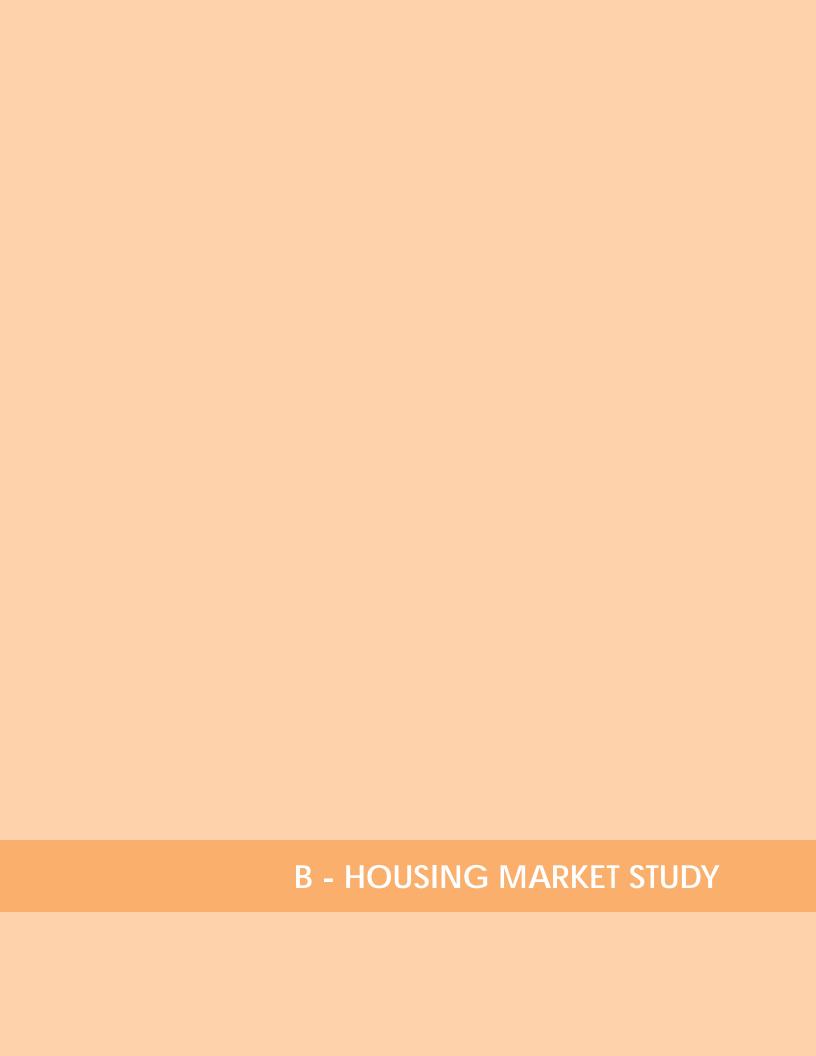
Respondents considered decreasing crime/violence as the most important improvement needed in the EEC, followed by addressing vacancy, neighborhood beautification, and improved street features.



When asked to rate problems in the EEC, a majority of respondents rated as a "Big Problem" trash and junk in parking lots, streets, lawns and sidewalks; unemployment; and people using drugs.







An Analysis of Residential Market Potential

The Edison-Eastlake Choice Neighborhoods Study Area

The City of Phoenix, Maricopa County, Arizona

July, 2017

Conducted by
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Research & Strategic Analysis

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Research & Strategic Analysis

AN ANALYSIS OF RESIDENTIAL MARKET POTENTIAL

The Edison-Eastlake Choice Neighborhoods Study Area

The City of Phoenix, Maricopa County, Arizona

July, 2017

INTRODUCTION		

The analysis to determine the market potential for new and existing housing units within the Edison-Eastlake Study Area in the City of Phoenix, Arizona included: delineation of the draw areas; determination of the depth of the potential market for new mixed-income housing in the Study Area; determination of the target households and the target residential mix corresponding to the housing preferences of the target households; and the optimum market position for new market-rate residential units within the Study Area.

For the purposes of this analysis, the Edison-Eastlake Study Area includes the area between Interstate 10 in the north and in the east; the Union Pacific Railroad in the south; and 16th Street in the west. The Study Area is strategically located east of Downtown Phoenix, the thriving urban core of the city, and adjacent to the Garfield neighborhood, a rapidly-revitalizing area. The Study Area encompasses three public housing properties—A.L. Krohn Homes, containing 202 units, Frank Luke Homes, containing 230 units, and Sidney P. Osborn, containing 145 units—the redevelopment of which is the core focus of the Choice Neighborhoods planning process. As part of the redevelopment, a total of 360 new units are proposed to be constructed at a site outside the Study Area, at 32 East Columbus Avenue and North Central Avenue, within two blocks of the Osborn Road/Central Avenue Light Rail station. The optimum market position for the market-rate component of that property is therefore also provided in this study.

The depth and breadth of the potential market for new and existing housing units within the Edison-Eastlake Choice Neighborhoods Study Area have been derived from the housing preferences and financial capacities of the draw area households, identified through Zimmerman/Volk

Associates' proprietary target market methodology and extensive experience with urban development and redevelopment.

The market potential for new mixed-income housing units within the Study Area was determined by target market analysis of households in the draw areas, and included:

- Determination of the draw areas for new and existing housing units within the City
 of Phoenix and within the Edison-Eastlake Study Area, based on historical settlement
 patterns, the most recent available migration data for the county, and incorporating
 additional data from the 2015 American Community Survey for the City of Phoenix
 and the Study Area, as well as other market dynamics;
- The depth and breadth of the potential housing market by tenure (rental and ownership) and by type (multi-family and single-family attached and detached units);
- The composition of the potential housing market by lifestage (empty-nesters/retirees, traditional and non-traditional families, younger singles/couples); and
- The incomes and financial capabilities of the potential housing market (income distribution based on HUD's 2017 income limits for below 30 percent AMI, between 30 and 50 percent AMI, between 50 and 80 percent AMI, between 80 and 100 percent AMI, and above 100 percent AMI).

SUMMARY OF FINDINGS

—THE DRAW AREAS —

Analysis of migration, mobility, demographic and lifestyle characteristics of households currently living within defined draw areas is integral to the determination of the depth and breadth of the potential market for new housing within the Edison-Eastlake Choice Neighborhoods Study Area.

Taxpayer migration data obtained from the Internal Revenue Service provide the framework for the delineation of the draw areas—the principal counties of origin for households that are likely to move to Maricopa County. These data are maintained at the county and "county equivalent" level by the Internal Revenue Service and provide a clear representation of mobility patterns. The IRS migration data have been supplemented by migration and mobility data for the City of Phoenix and for Maricopa County from the 2015 American Community Survey.

Based on the migration data, then, the draw areas for new and existing housing units within the Edison-Eastlake Choice Neighborhoods Study Area have been determined as follows:

- The <u>local</u> draw area, covering households currently living within the Phoenix city limits.
- The <u>county</u> draw area, covering households currently living elsewhere in Maricopa County.
- The <u>regional</u> draw area, covering households with the potential to move to the City of Phoenix from Pinal and Pima Counties, Arizona, and Los Angeles County, California.
- The <u>national</u> draw area, covering households with the potential to move to the City of Phoenix from all other U.S. counties.

Annual Market Potential by Draw Area The Edison-Eastlake Choice Neighborhoods Study Area City of Phoenix, Maricopa County, Arizona

City of Phoenix: 52.2%
Balance of Maricopa County: 30.7%
Pinal, Los Angeles and Pima Counties: 2.6%
Balance of the U.S.: 14.5%

Total: 100.0%

—Annual Market Potential for the Edison-Eastlake Study Area—

As determined by the migration and mobility analyses, an annual average of 2,820 households represent the annual potential market for new and existing housing units in the Edison-Eastlake Choice Neighborhoods Study Area each year over the next five years. The tenure and housing preferences of those 2,820 draw area households are shown on the following table (*see also* Table 1 *following the text*):

Tenure/Housing Type Propensities
Annual Average Market Potential For New and Existing Housing Units
The Edison-Eastlake Choice Neighborhoods Study Area
City of Phoenix, Maricopa County, Arizona

Housing Type	Number of Households	PERCENT OF TOTAL
Multi-family for-rent (lofts/apartments, leaseholder)	1,897	67.2%
Multi-family for-sale (lofts/apartments, condo/co-op ownership)	221	7.8%
Single-family attached for-sale (townhouses/live-work, fee-simple/ condominium ownership)	284	10.1%
Single-family detached for-sale (houses, fee-simple ownership)	420	14.9%
Total	2,820	100.0%

The 2,820 households that represent the potential market for new and existing rental and for-sale housing units in the Study Area have been segmented by income, based on the Phoenix-Mesa-Scottsdale median family income (AMI), which, for fiscal year 2017 is \$66,200 for a family of four, as follows:

- Households with incomes below 30 percent AMI (the majority of these households typically qualify only for public housing or older existing units);
- Households with incomes between 30 and 50 percent of AMI (these households typically qualify for new affordable rental housing or heavily subsidized ownership housing);

- Households with incomes between 50 and 80 percent of AMI (these households typically qualify for new workforce or affordable rental housing or subsidized ownership housing);
- Households with incomes between 80 and 100 percent AMI (these households typically qualify for new rentals or less-expensive for-sale housing); and
- Households with incomes above 100 percent AMI (these households generally have sufficient incomes to rent or purchase market-rate housing).

The segmentation by income of the 2,820 target households, combined with their tenure and housing type propensities, are detailed on the following table:

Tenure/Housing Type Propensities by Income Annual Average Market Potential For New and Existing Housing Units The Edison-Eastlake Choice Neighborhoods Study Area City of Phoenix, Maricopa County, Arizona

	Households	
Housing Type	Number	PERCENT
Multi-family for-rent (lofts/apartments, leaseholder)	<u>1,895</u>	<u>67.2</u> %
< 30% AMI	461	16.3%
30% to 50% AMI	261	9.2%
50% to 80% AMI	332	11.8%
80% to 100% AMI	173	6.1%
> 100% AMI	668	23.7%
Multi-family for-sale	221_	<u>7.8</u> %
(lofts/apartments, condo/co-op ownership)	4-	
< 30% AMI	49	1.7%
30% to 50% AMI	28	1.0%
50% to 80% AMI	40	1.4%
80% to 100% AMI	18	0.6%
> 100% AMI	86	3.0%
Single-family attached for-sale (townhouses, fee-simple ownership)	284	10.1%
< 30% AMI	64	2.3%
30% to 50% AMI	38	1.3%
50% to 80% AMI	53	1.9%
80% to 100% AMI	26	0.9%
> 100% AMI	103	3.6%

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	continued	from	preceding page

Housing Type		DED CENTE
Housing Type	Number	PERCENT
Single-family detached for-sale	420	14.9%
(urban cottages/houses, fee-simple ownership)		
< 30% AMI	90	3.2%
30% to 50% AMI	51	1.8%
50% to 80% AMI	81	2.9%
80% to 100% AMI	40	1.4%
> 100% AMI	158	5.6%
Total	2,820	

Note: For fiscal year 2017, the Phoenix-Mesa-Scottsdale, AZ MSA Median Family Income for a family of four is \$66,200.

Summarizing the incomes and financial capabilities of the 2,820 target households, 23.5 percent (664 households) have incomes at 30 percent or less than the AMI; 13.4 percent (378 households) between 30 and 50 percent AMI; 17.9 percent (506 households) between 50 and 80 percent AMI; 9.1 percent (257 households) between 80 and 100 percent AMI; and 36.0 percent (1,015 households) above 100 percent AMI.

LOUGEHOLDS

Sufficient numbers of new housing units in the Study Area will be required in order to replace the 577 existing public housing units to be demolished in the A.L. Krohn Homes, Frank Luke Homes, and Sidney P. Osborn properties and to attract new households to the Study Area. The target markets for new development in the Study Area therefore include a mix of the current residents of the existing public housing units, and households that would be moving to new dwelling units from elsewhere in Phoenix, from elsewhere in the county, and from elsewhere in the region and balance of the United States.

Successful mixed-income new developments must integrate the existing population of public housing with new target renters in a compatible way. Nearly 69 percent of the potential market-rate renter market is comprised of younger singles and couples; most of these younger households will be likely to lease studio or one-bedroom units. The family households currently living in the existing public housing will be likely to require significantly larger units, potentially three-, four-, or even five-bedrooms. In addition to requiring different unit types and configurations, families and younger singles and couples often have conflicting lifestyles, which must be considered in building and neighborhood design.

—TARGET MARKETS—

The recent protracted ownership housing slump has contributed to a measurable shift in market preferences from home ownership to rental dwelling units, particularly among younger households, yielding a higher share of consumer preference for multi-family rentals even among relatively affluent consumers than would have been typical a decade ago. At the same time, there has been a significant shift in preferences from suburban subdivisions toward mixed-use, walkable neighborhoods.

This shift has been driven by the convergence of the preferences of the two largest generations in the history of America: the Baby Boomers (currently estimated at 74 million), born between 1946 and 1964, and the estimated 88 million Millennials, who were born from 1977 to 1996 and, in 2010, surpassed the Boomers in population. The convergence of two generations of this size—simultaneously reaching a point when housing in walkable neighborhoods matches their life stage—is unprecedented.

In addition to their shared preference for walkable urban living, the Boomers and Millennials are changing housing markets in multiple ways. In contrast to the traditional family (married couples with children) that comprised the typical post-war American household, Boomers and Millennials are households of predominantly singles and couples. As a result, nationally, the home-buying market now contains more than 63 percent one- and two-person households, and the 37 percent of the homebuyers that could be categorized as family households are equally likely to be non-traditional (e.g.—single parents or unrelated couples of the same sex with one or more children, adults caring for younger siblings, to grandparents with custody of grandchildren) as traditional families. A major consequence of this evolution is that mixed-income development is now more likely to succeed than when suburban preferences dominated the housing market.

As determined by the target market analysis, the annual potential market (covering households of all incomes) for new and existing housing units in the Edison-Eastlake Choice Neighborhoods Study Area can be characterized by general lifestage and household type as follows (*see also* Tables 2 *through* 6 *following the text*):

- Younger singles and childless couples: 60.4 percent;
- Traditional and non-traditional family households: 23.8 percent; and

• Empty nesters and retirees: 15.8 percent.

At over 60 percent, younger singles and couples make up the largest share of the market for new housing in the Study Area. Among the principal factors in the larger share of the market held by younger households are:

- Their higher mobility rates—young people tend to move much more frequently than older people;
- Their strong preference for urban dwelling units; and
- Their strong preference for rental apartments, in part because many of them do not
 have sufficient funds for a down payment and in part because, since the collapse of
 the housing market in 2008, many of them remain skeptical about the value of
 owning versus renting.

Family households represent just under a quarter of the market for new dwelling units in the Study Area. Households with children are now increasingly diverse and in many urban areas are largely non-traditional families, notably single parents with one or two children.

The smallest general market segment, at 15.8 percent of the annual potential market for new housing units in the Study Area, is comprised of older households (predominantly empty nesters and retirees). A significant number of these households have adult children who no longer live in the family home; a small percentage are retired, with income from savings supplemented by social security, and for some, pensions, although the majority are still working.

—THE MARKET CONTEXT—

Summary information for rental and for-sale properties located in and near the Edison-Eastlake Choice Neighborhoods Study Area is provided as follows: for rental properties, see Table 7, and for for-sale properties, see Table 8, following the text.

—MULTI-FAMILY RENTAL PROPERTIES—

Summary information by bedroom size for the surveyed rental properties follows.

—Studios (5 Properties)—

- Rents for studios start at \$815 per month at Monterra Luxury Apartments on North 24^{th} Street.
- The highest studio rent is \$1,349 per month at Camden Copper Square, on East Van Buren Street.
- Studios range in size from approximately 475 square feet at Monterra to 718 square feet at Camden Copper Square.
- Studio rents per square foot fall between \$1.53 (Camden Copper Square) and \$2.33 (Monterra).

—One-Bedroom Units (8 Properties)—

- Rents for one-bedroom units start at \$424 per month at Lofts@Ten, an incomerestricted property east of the Interstate on East Van Buren Street.
- The highest one-bedroom rent is \$2,020 per month at Iluminate on East Roosevelt Street near Downtown.
- One-bedroom units range in size from approximately 475 square feet at Monterra to 902 square feet at Iluminate.
- One-bedroom rents per square foot fall between \$0.65 (Lofts@Ten) and \$2.24 (Iluminate).

—Two-Bedroom Units (8 Properties)—

- Rents for two-bedroom units start at \$508 per month at Lofts@Ten.
- The highest two-bedroom rent is \$2,319 per month at Camden Copper Square.
- Two-bedroom units range in size from approximately 800 square feet at Roosevelt Point on North 4th Street to 1,307 square feet at Camden Copper Square.
- Two-bedroom rents per square foot fall between \$0.52 (Lofts@Ten) and \$2.02 (Roosevelt Point).

—Three-Bedroom Units (3 Properties)—

- Rents for three-bedroom units start at \$960 per month at Agave Court Apartments on North 17th Street.
- The highest three-bedroom rent is \$2,397 per month for a furnished unit at Roosevelt Point.
- Three-bedroom units are as small as 1,000 square feet at Roosevelt Point and are as large as 1,206 square feet at Agave Court.
- Three-bedroom rents per square foot fall between \$0.80 at Agave Court and \$2.40 at Roosevelt Point.

—SINGLE-FAMILY ATTACHED AND DETACHED FOR-SALE PROPERTIES—

Table 8 details recent listings of new townhouses and resale units located in the adjacent Garfield neighborhood. At the time of the survey, there were no resales listed for the Study Area. Three new townhouses containing just under 1,200 square feet and priced at \$249,600 are listed for sale at Eastlake Garfield Commons on East Polk Street. However, most of the units available are resales, which range in asking price from \$149,900 for a three-bedroom/one-bath house built in 1931 on North 13th Street to \$369,980 for a three-bedroom/three-bath house built in 1926 on East Moreland Street. Prices per square foot range between \$87 to \$259 for resales and are \$209 per square foot for the new construction.

—OPTIMUM RESIDENTIAL MIX—

A total of 841 (or 44.3 percent) of the 1,895 target households who represent the annual potential market for new rental units in the Choice Neighborhood Study Area have incomes above 80 percent AMI and represent the potential for new market-rate rental units (see again Table 1). A total of 461 (or 24.3 percent) have incomes below 30 percent AMI and represent public housing replacement units. The remaining households (31.4 percent) represent the market for tax-credit units. This ratio represents the market-driven mix of the rental component of the Choice Neighborhoods redevelopment. If 300 public housing units were to be replaced on-site, then, to replicate the target residential mix exactly, a total of 1,235 new rental housing units would need to be developed, which would include 547 market-rate rental units, 388 low-income tax credit units, and 300 public housing replacement units. This ratio would greatly diversify the income mix in the neighborhood, given that the newest development, the 250-unit Aeroterra, contains predominantly low-income units.

—OPTIMUM MARKET POSITION: EDISON-EASTLAKE STUDY AREA—

The rents and price points for new market-rate housing units are derived from the financial capabilities and housing preferences of the 1,270 target households with incomes at or above 80 percent of AMI, as shown on the following table:

Tenure/Housing Type Propensities by Income
Target Households With Incomes at or above 80 Percent AMI
Annual Average Market Potential For New and Existing Housing Units
The Edison-Eastlake Choice Neighborhoods Study Area
City of Phoenix, Maricopa County, Arizona

	Households	
Housing Type	Number	PERCENT
Multi-family for-rent (lofts/apartments, leaseholder)	841	<u>62.5</u> %
80% to 100% AMI	173	12.3%
> 100% AMI	668	50.2%
Multi-family for-sale (lofts/apartments, condo/co-op ownership)	104	9.3%
80% to 100% AMI	18	1.5%
> 100% AMI	86	7.8%
Single-family attached for-sale (townhouses, fee-simple ownership)	127_	11.2%
80% to 100% AMI	26	2.1%
> 100% AMI	103	9.1%
Single-family detached for-sale (urban cottages/houses)	198	17.1%
80% to 100% AMI	40	3.1%
> 100% AMI	158	14.0%
Total	1,270	

Note: For fiscal year 2017, the Phoenix-Mesa-Scottsdale, AZ MSA Median Family Income for a family of four is \$66,200.

Supportable market-rate rents have been established at 25 percent of the annual gross incomes of the 841 potential renter households with incomes at or above 80 percent of the AMI. For the 429 potential buyer households with incomes at or above 80 percent of the AMI, supportable market-rate prices have been calculated for mortgage payments at 25 percent of annual gross income, with the assumption that the down payment of 10 percent is either paid by the buyers or is subsidized.

The Edison-Eastlake Choice Neighborhoods Study Area The City of Phoenix, Maricopa County, Arizona July, 2017

The optimum market position for new *market-rate* units within the Edison-Eastlake Choice Neighborhoods Study Area has therefore been established based on a variety of factors, including but not limited to:

- The lifestages, tenure and housing preferences of draw area households with incomes at or above 80 percent AMI;
- The physical and locational assets and opportunities of the Study Area, in particular its close proximity to Downtown Phoenix to the west; and
- Current residential market dynamics in the market area.

A major medical institution situated in the Study Area is St. Luke's Medical Center. In addition, the Study Area is home to Fortis College, offering programs in nursing, dental, and healthcare/medical professions; the Thomas A. Edison Elementary School, serving more than 600 students from preschool to grade eight; Edison Park, which is scheduled to be renovated; the Baiz Market Place, a large family-owned, Middle-Eastern market with an informal counter-service dining area, and the Los Altos Ranch Market, a larger supermarket anchoring a strip mall that also contains a bank, a laundromat, a Cricket wireless store, and two restaurants. The Garfield neighborhood to the west, an attractive revitalizing neighborhood of historic houses, links the Study Area to Downtown Phoenix.

The optimum market position for newly-constructed market-rate housing units within the Study Area is therefore summarized on the following table (*see also* Table 9 *following the text*):

Base Unit Rents, Prices and Sizes
The Edison-Eastlake Choice Neighborhoods Study Area
City of Phoenix, Maricopa County, Arizona

HOUSING TYPE	RENTS/PRICES	Unit Sizes	RENT/PRICE PER SQ. FT.
MULTI-FAMILY FOR-RENT—			
Apartments	\$800 to \$1,900/month	500 to 1,250 sf	\$1.52 to \$1.60 psf
MULTI-FAMILY FOR-SALE—			
Condominiums	\$135,000 to \$235,000	750 to 1,350 sf	\$174 to \$180 psf
SINGLE-FAMILY ATTACHED FOR-SALE—			
Townhouses	\$180,000 to \$245,000	1,000 to 1,400 sf	\$169 to \$180 psf
SINGLE-FAMILY DETACHED FOR-SALE—	-		
Urban houses	\$190,000 to \$250,000	1,050 to 1,400 sf	\$179 to \$181 psf

The Edison-Eastlake Choice Neighborhoods Study Area The City of Phoenix, Maricopa County, Arizona July, 2017

Based on the unit types, sizes, and rents/prices outlined in the optimum market position, the weighted average rents and prices for each of the housing types are as follows:

Weighted Average Base Rents, Prices and Size Ranges The Edison-Eastlake Choice Neighborhoods Study Area City of Phoenix, Maricopa County, Arizona

Housing Type	WEIGHTED AVERAGE BASE RENT/PRICES	Weighted Average Unit Size	WEIGHTED AVERAGE BASE RENT/PRICES PER SQ. FT.
Multi-family for-rent	\$1,300 per month	833 sf	\$1.56
Multi-family for-sale	\$165,000	928 sf	\$178
Single-family attached for-sale	\$207,500	1,188 sf	\$175
Single-family detached for-sale	\$221,500	1,235 sf	\$179

The proposed rents and prices are in year 2017 dollars and are exclusive of location or consumer-added options or upgrades. If a new Valley Metro light-rail station were to be located at 16th Street and Washington/Jefferson Streets, much of the Choice Neighborhoods Study Area would be within a quarter- to half-mile walking distance of the station, resulting in higher values than those outlined above, due to improved transportation cost efficiency and convenience for potential residents. Those values would be likely to increase by five to 15 percent as proximity to the light rail station increases.

With its high visibility, the county-owned parcel that fronts on East Roosevelt Street is the preferred location for the first housing phase. Ideally, a mix of all housing types should be developed on the parcel, ranging from small mixed-income rental apartment buildings, potentially located on the four corners of the parcel and flanking a new east-west alley, with for-sale townhouses and detached houses enfronting East Roosevelt and East Garfield Streets. It would be advisable to hold the introduction of condominiums until later phases when the quality and character of the redevelopment has been established, lending support to the value of higher-density ownership housing.

New mixed-income multi-family rental buildings should also be located adjacent to St. Luke's Hospital, preferably along 19th Street, to attract hospital employees who prefer to walk to work. The phases of redevelopment should move from north to south, with the redevelopment of the Sidney P. Osborn property held to the end when, again, the quality and character of the redevelopment has been established.

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—OPTIMUM MARKET POSITION: CENTRAL AND COLUMBUS SITE—

A total of 360 one- and two-bedroom rental units are proposed for the Central and Columbus site in north central Phoenix, of which the unit mix includes 147 public housing replacement units, 90 low-income housing tax-credit units, and 123 unrestricted, or market-rate units. The plan includes one-bedroom units containing an average 575 square feet and two-bedroom apartments containing an average 800 square feet.

The site is located approximately two blocks from the Osborn Road/Central Avenue Light Rail Station and within walking distance of several restaurants and shops. The Park Central shopping mall contains a Starbucks, a Jimmy John's, as well as local restaurants, retailers and services and is a short distance from the site. St. Joseph's Hospital and Medical Center is located at Thomas Road and North 3rd Avenue, less than half a mile from the proposed redevelopment.

Given its advantageous location, and close proximity to transit, the 123 apartments that make up the market-rate component of the Central and Columbus redevelopment should be priced as follows:

One-bedroom units	\$1,100/month	575 sf	\$1.91 psf
Two-bedroom units	\$1,350/month	800 sf	\$1.69 psf

Based on the forecast rental absorption paces outlined in the following section, 123 new market-rate rental units could be developed and absorbed on the Central and Columbus site over a one-and-a-half to two-year timeframe, depending on the phasing of the multiple four-story buildings that are proposed for the redevelopment.

—MARKET CAPTURE—

After more than 30 years' experience in numerous markets across the country, and in the context of the target market methodology, Zimmerman/Volk Associates has determined that an annual capture between 8 and 10 percent of the potential market for new market-rate rentals, and between 5 and 7.5 percent of the potential market for new market-rate condominiums, townhouses, and single-family detached houses are achievable.

The forecast annual absorption of each housing type, based on the aforementioned market capture rates, is shown on the following table:

Housing Type	Number of Households	Annual Capture Rate	Annual Absorption
Multi-family for-rent (lofts/apartments, leaseholder)	841	8-10%	67 - 84 units
Multi-family for-sale (lofts/apartments, condo/co-op ownership)	104	5-7.5%	5 - 8 units
Single-family attached for-sale (townhouses/live-work, fee-simple/ condominium ownership)	127	5-7.5%	6 - 10 units
Single-family detached for-sale (houses, fee-simple ownership)	<u>198</u>	5-7.5%	10 - 15 units
Total	1,270		88 - 117 units

Based on the forecast absorption paces outlined above, a total of 440 to 585 new market-rate rental and for-sale dwelling units constructed within the Edison-Eastlake Choice Neighborhoods Study Area could be absorbed over a five-year timeframe. Depending on the number of tax credit units that can be built and public housing units to be replaced within the Study Area, as many as 1,000 new units could be developed and absorbed over a five- to seven-year timeframe.

If a new Valley Metro light-rail station were to be located at 16th Street and Washington/Jefferson Streets, much of the Choice Neighborhoods Study Area would be within a quarter- to half-mile walking distance of the station, resulting in higher capture rates than those outlined above, due to improved transportation cost efficiency and convenience for potential residents.

Given the value placed upon access to transit by potential residents, a 15 percent capture of the potential market for new market-rate multi-family rental housing, and a 10 percent capture of the potential market for new market-rate for-sale housing units, would be achievable. The Study Area

would then be able to absorb an additional 84 market-rate rentals and additional 17 market-rate ownership units per year, with the additional units per year directly attributable to proximity to the 16^{th} Street station.

These housing type-specific capture rates are well within the parameters required for feasible development. The target market capture rates of the potential renter/purchaser pools are a unique and highly-refined measure of feasibility. Target market capture rates are not equivalent to—and should not be confused with—penetration rates or traffic conversion rates.

The **target market capture rate** is derived by dividing the annual forecast absorption by the number of households that have the potential to move to the site in a given year.

The **penetration rate** is derived by dividing the total number of dwelling units planned for a property by the total number of draw area households, sometimes qualified by income.

The **traffic conversion rate** is derived by dividing the total number of buyers or renters by the total number of prospects that have visited a site.

Because the prospective market for a property is more precisely defined using target market methodology, a substantially smaller number of households are qualified; as a result, target market capture rates are higher than the more grossly-derived penetration rates. The resulting higher capture rates remain within the range of feasibility.

—In-Unit and Building Amenities—

Younger singles and couples, principally the Millennial generation, are the largest target market for the new market-rate housing units in the Study Area. As a group, these households exhibit strong preferences for sustainable development and green building practices.

Building security should be provided with an internet-enabled video entrance system with key fobactivated entry for residents. Unit-specific alarm security could be provided at an extra cost.

General Recommendations:

In-unit amenities need not be elaborate, simply well-chosen. Renters will expect contemporary, durable finishes appropriate to urban living, as opposed to the "beige" interiors of conventional suburban multi-family housing.

- Wherever possible, recycled and genuinely sustainable materials should be used, with an emphasis on "genuine." Younger households can be skeptical of "greenwashing"—materials or practices that make false or only partially-true claims of sustainability. Materials that are low in volatile organic compounds (VOCs) will be important to this group.
- Access to high-speed internet and cable television should be provided in all units. High-bandwidth internet access is becoming increasingly important—particularly to younger households—as more media are accessed via the internet rather than conventional cable or satellite providers.
- Each unit should include at least one combination duplex outlet/USB charging socket, typically located at the dry end of the kitchen counter.
- Bamboo flooring in the living areas; carpeting in the bedrooms.
- Lighting fixtures capable of accommodating compact fluorescent or LED bulbs. All fixtures, faucets and lighting should be clean, minimalist and contemporary.
- Contemporary-design ceiling fans in living room and bedrooms.

The Edison-Eastlake Choice Neighborhoods Study Area The City of Phoenix, Maricopa County, Arizona July, 2017

- Washer/dryer hook-ups.
- Studio apartments should be designed without interior walls, with the exception of the bathroom, and with as much closet and storage space as possible.
- Kitchens: Although until recently, granite kitchen countertops have been the norm, "green" alternatives should be used to match the target markets' environmental sensitivity. These include products which are composed of recycled materials, quartz composite materials, or even the new terrazzo products. Durability and maintenance issues should be the criteria when selecting from among these relatively-new materials. For example, "solid surface" materials susceptible to damage by hot cookware should be avoided. Integral or undermount stainless sinks. White or black appliances, including dishwasher, microwave, refrigerator, and stove. Plain-front cabinetry. Tile or linoleum flooring—as opposed to vinyl—because it is made from renewable materials; linoleum is now available in a variety of modern designs and styles in keeping with today's market preferences.
- Bathrooms: Vessel-style sinks, low-flow toilets. Bathrooms in studios should be compact, with a shower compartment only. The one-bedroom units should have a shower compartment only, and the two-bedroom/one-bath units should have a combination tub/shower unit. Bathroom access in the one-bedroom apartments should never be through the bedroom. In the two-bedroom apartments, the master bath does not require a bathtub, but should have an upgraded shower enclosure with upgraded showerheads, *i.e.*—rain-showerheads. The second bath should contain a combination tub/shower unit.



Table 1

Average Annual Market Potential For New And Existing Housing Units

Distribution Of Annual Average Number Of Draw Area Households With The Potential
To Move To The Edison-Eastlake Choice Neighborhoods Study Area Each Year Over The Next Five Years
Based On Housing Preferences And Income Levels

Edison-Eastlake Choice Neighborhoods Study Area

City of Phoenix, Maricopa County, Arizona

City of Phoenix; Balance of Maricopa County; Pinal County, Arizona, Los Angeles County, California, and Pima County, Arizona; Balance of U.S. Draw Areas

Average Annual Number Of Households With The Potential To Rent/Purchase Within The City of Phoenix

147,175

Average Annual Number Of Target Market Households With Potential To Rent/Purchase Within The Edison-Eastlake Choice Neighborhoods Study Area

2,820

Annual Market Potential

	Below 30% AMI	30% to 50% AMI	50% to 80% AMI	80% to 100% AMI	Above 100% AMI	Subtotal
Multi-Family For-Rent:	461	261	332	173	668	1,895
Multi-Family For-Sale:	49	28	40	18	86	221
Single-Family Attached For-Sale:	64	38	53	26	103	284
Single-Family Detached For-Sale:	90	51	81	40	158	420
Total: Percent:	664 23.5%	378 13.4%	506 17.9%	257 9.1%	1,015 36.0%	2,820 100.0%

Note: For fiscal year 2017, Phoenix-Mesa-Scottsdale, AZ MSA Median Family Income for a family of four is \$66,200.

 $SOURCE:\ The\ Nielsen\ Company;$

Average Annual Market Potential By Lifestage And Income

Derived From Purchase And Rental Propensities Of Draw Area Households With The Potential To Move To The Edison-Eastlake Choice Neighborhoods Study Area Each Year Over The Next Five Years Based On Housing Preferences And Income Levels

The Edison-Eastlake Choice Neighborhoods Study Area

City of Phoenix, Maricopa County, Arizona

Number of	Total	Below 30% AMI	30% to 50% AMI	50% to 80% AMI	80% to 100% AMI	Above 100% AMI
Households:	2,820	664	378	506	257	1,015
Empty Nesters & Retirees	15.8%	11.6%	15.6%	14.8%	15.2%	19.2%
Traditional & Non-Traditional Families	23.8%	28.9%	19.8%	28.3%	24.9%	19.3%
Younger Singles & Couples	60.5%	59.5%	64.6%	56.9%	59.9%	61.5%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Note: For fiscal year 2017, Phoenix-Mesa-Scottsdale, AZ MSA Median Family Income for a family of four is \$66,200. Percentages may not add due to rounding.

SOURCE: The Nielsen Company;

Target Groups For New Multi-Family For Rent The Edison-Eastlake Choice Neighborhoods Study Area

City of Phoenix, Maricopa County, Arizona

.... Number of Households

Empty Nesters & Retirees**	30% to 80% AMI†	Above 80% AMI†	Total	Percent of Total
Multi-Ethnic Empty Nesters	12	28	40	2.8%
Cosmopolitan Couples	36	73	109	7.6%
Blue-Collar Retirees	5	9	14	1.0%
Middle-Class Move-Downs	3	5	8	0.6%
Hometown Seniors	2	1	3	0.2%
Second City Seniors	13	12	25	1.7%
Subtotal:	71	128	199	13.9%
Traditional & Non-Traditional Families††				
Multi-Ethnic Families	7	16	23	1.6%
Uptown Families	6	12	18	1.3%
Multi-Cultural Families	6	10	16	1.1%
In-Town Families	14	12	26	1.8%
Inner-City Families	36	38	74	5.2%
Single-Parent Families	30	31	61	4.3%
New American Strivers	17	14	31	2.2%
Subtotal:	116	133	249	17.4%

SOURCE: The Nielsen Company;

[†] For fiscal year 2017, Phoenix-Mesa-Scottsdale, AZ MSA Median Family Income for a family of four is \$66,200.

^{**} Predominantly one- and two-person households.

^{††} Predominantly three -to five-person households.

Target Groups For New Multi-Family For Rent The Edison-Eastlake Choice Neighborhoods Study Area

City of Phoenix, Maricopa County, Arizona

.... Number of Households

Younger Singles & Couples**	30% to 80% AMI†	Above 80% AMI†	Total	Percent of Total
New Bohemians	38	130	168	11.7%
Cosmopolitan Elite	5	18	23	1.6%
Small-City Singles	11	14	25	1.7%
Downtown Couples	70	86	156	10.9%
Twentysomethings	42	50	92	6.4%
Second-City Strivers	27	31	58	4.0%
Downtown Proud	197	240	437	30.5%
Multi-Ethnic Singles	16	11	27	1.9%
Subtotal:	406	580	986	68.8%
Total Households:	593	841	1,434	100.0%
Percent of Total:	41.4%	58.6 %	$\boldsymbol{100.0\%}$	

SOURCE: The Nielsen Company;

[†] For fiscal year 2017, Phoenix-Mesa-Scottsdale, AZ MSA Median Family Income for a family of four is \$66,200.

^{**} Predominantly one- and two-person households.

Target Groups For New Multi-Family For Sale The Edison-Eastlake Choice Neighborhoods Study Area

City of Phoenix, Maricopa County, Arizona

.... Number of Households

Empty Nesters & Retirees**	30% to 80% AMI†	Above 80% AMI†	Total	Percent
Multi-Ethnic Empty Nesters	3	8	11	6.4%
Cosmopolitan Couples	6	11	17	9.9%
Blue-Collar Retirees	1	2	3	1.7%
Middle-Class Move-Downs	2	1	3	1.7%
Hometown Seniors	0	1	1	0.6%
Second City Seniors	2	1	3	1.7%
Subtotal:	14	24	38	22.1%
Traditional & Non-Traditional Families++				
Multi-Ethnic Families	1	2	3	1.7%
Uptown Families	1	2	3	1.7%
Multi-Cultural Families	1	3	4	2.3%
In-Town Families	1	1	2	1.2%
Inner-City Families	3	4	7	4.1%
Single-Parent Families	5	4	9	5.2%
New American Strivers	2	1	3	1.7%
Subtotal:	14	17	31	18.0%

SOURCE: The Nielsen Company;

[†] For fiscal year 2017, Phoenix-Mesa-Scottsdale, AZ MSA Median Family Income for a family of four is \$66,200.

^{**} Predominantly one- and two-person households.

^{††} Predominantly three -to five-person households.

Target Groups For New Multi-Family For Sale The Edison-Eastlake Choice Neighborhoods Study Area

City of Phoenix, Maricopa County, Arizona

.... Number of Households

Younger Singles & Couples**	30% to 80% AMI†	Above 80% AMI†	Total	Percent
New Bohemians	5	21	26	15.1%
Cosmopolitan Elite	2	5	7	4.1%
Small-City Singles	1	1	2	1.2%
Downtown Couples	11	13	24	14.0%
Twentysomethings	3	3	6	3.5%
Second-City Strivers	2	3	5	2.9%
Downtown Proud	14	17	31	18.0%
Multi-Ethnic Singles	2	0	2	1.2%
Subtotal:	40	63	103	59.9%
Total Households: Percent of Total:	68 39.5%	104 60.5%	172 100.0%	100.0%

SOURCE: The Nielsen Company;

[†] For fiscal year 2017, Phoenix-Mesa-Scottsdale, AZ MSA Median Family Income for a family of four is \$66,200.

^{**} Predominantly one- and two-person households.

Target Groups For New Single-Family Attached For Sale The Edison-Eastlake Choice Neighborhoods Study Area

City of Phoenix, Maricopa County, Arizona

..... Number of Households

Empty Nesters & Retirees**	30% to 80% AMI†	Above 80% AMI†	Total	Percent
Multi-Ethnic Empty Nesters	7	14	21	9.6%
Cosmopolitan Couples	4	8	12	5.5%
Blue-Collar Retirees	2	1	3	1.4%
Middle-Class Move-Downs	2	1	3	1.4%
Hometown Seniors	0	1	1	0.5%
Second City Seniors	2	1	3	1.4%
Subtotal:	17	26	43	19.7%
Traditional & Non-Traditional Families††				
Multi-Ethnic Families	3	5	8	3.7%
Uptown Families	3	4	7	3.2%
Multi-Cultural Families	3	5	8	3.7%
In-Town Families	3	3	6	2.8%
Inner-City Families	8	7	15	6.9%
Single-Parent Families	6	7	13	6.0%
New American Strivers	3	2	5	2.3%
Subtotal:	29	33	62	28.4%

[†] For fiscal year 2017, Phoenix-Mesa-Scottsdale, AZ MSA Median Family Income for a family of four is \$66,200.

^{**} Predominantly one- and two-person households.

⁺⁺ Predominantly three -to five-person households.

Target Groups For New Single-Family Attached For Sale The Edison-Eastlake Choice Neighborhoods Study Area

City of Phoenix, Maricopa County, Arizona

..... Number of Households

Younger Singles & Couples**	30% to 80% AMI†	Above 80% AMI†	Total	Percent
New Bohemians	3	10	13	6.0%
Cosmopolitan Elite	3	10	13	6.0%
Small-City Singles	3	4	7	3.2%
Downtown Couples	22	27	49	22.5%
Twentysomethings	2	3	5	2.3%
Second-City Strivers	2	3	5	2.3%
Downtown Proud	8	10	18	8.3%
Multi-Ethnic Singles	2	1	3	1.4%
Subtotal:	45	68	113	51.8%
Total Households: Percent of Total:	91 41.7%	127 58.3%	218 100.0%	100.0%

SOURCE: The Nielsen Company;

[†] For fiscal year 2017, Phoenix-Mesa-Scottsdale, AZ MSA Median Family Income for a family of four is \$66,200.

^{**} Predominantly one- and two-person households.

Target Groups For New Urban Single-Family Detached For Sale The Edison-Eastlake Choice Neighborhoods Study Area

City of Phoenix, Maricopa County, Arizona

..... Number of Households

Empty Nesters & Retirees**	30% to 80% AMI†	Above 80% AMI†	Total	Percent
Multi-Ethnic Empty Nesters	13	30	43	13.0%
Cosmopolitan Couples	2	3	5	1.5%
Blue-Collar Retirees	8	13	21	6.4%
Middle-Class Move-Downs	5	6	11	3.3%
Hometown Seniors	2	1	3	0.9%
Second City Seniors	2	1	3	0.9%
Subtotal:	32	54	86	26.1%
Traditional & Non-Traditional Families††				
Multi-Ethnic Families	10	20	30	9.1%
Uptown Families	7	14	21	6.4%
Multi-Cultural Families	6	10	16	4.8%
In-Town Families	16	15	31	9.4%
Inner-City Families	11	10	21	6.4%
Single-Parent Families	6	6	12	3.6%
New American Strivers	3	2	5	1.5%
Subtotal:	59	77	136	41.2%

[†] For fiscal year 2017, Phoenix-Mesa-Scottsdale, AZ MSA Median Family Income for a family of four is \$66,200.

^{**} Predominantly one- and two-person households.

⁺⁺ Predominantly three -to five-person households.

Target Groups For New Urban Single-Family Detached For Sale The Edison-Eastlake Choice Neighborhoods Study Area

City of Phoenix, Maricopa County, Arizona

..... Number of Households

Younger Singles & Couples**	30% to 80% AMI†	Above 80% AMI†	Total	Percent
New Bohemians	0	3	3	0.9%
Cosmopolitan Elite	5	16	21	6.4%
Small-City Singles	10	14	24	7.3%
Downtown Couples	22	28	50	15.2%
Twentysomethings	0	1	1	0.3%
Second-City Strivers	0	2	2	0.6%
Downtown Proud	2	2	4	1.2%
Multi-Ethnic Singles	2	1	3	0.9%
Subtotal:	41	67	108	32.7%
Total Households: Percent of Total:	132 40.0%	198 60.0%	330 100.0%	100.0%

[†] For fiscal year 2017, Phoenix-Mesa-Scottsdale, AZ MSA Median Family Income for a family of four is \$66,200.

^{**} Predominantly one- and two-person households.

Table 7 Page 1 of 2

Summary Of Selected Multi-Family Rental Properties

City of Phoenix, Maricopa County, Arizona

May, 2017

Property (Date Opened) Address	Numbo of Uni		Reported Base Rent		Reported Unit Size		Rent per Sq. Ft.	-	Additional Information
Lofts @ Ten	78								100% occupancy
(1965:2014)	70	1br/1ba	\$424	to	652	to	\$0.65	to	Fitness center,
2247 East Van Buren Street		-2-, -23	\$673		775	•	\$0.87		pool, playground,
		2br/2ba	\$508	to	974	to	\$0.52	to	
55 Walk score		,	\$807		1,162		\$0.69		& laundry facilities.
Washington Points Ants	54								100% occupancy
Washington Pointe Apts (2014)	34	1br/1ba	\$623	to	674		\$0.92	to	100% occupancy <i>Fitness center,</i>
1555 East Washington Street		101 / 10a	\$023 \$747	to	0/4		\$1.11	ιο	pool, clubhouse,
1999 Eust Wushington Street		2br/1ba	\$747 \$747	to	836			to	& laundry facilities.
74 Walk score		201 / 10a	\$897	ιο	030		\$1.07	ιο	o munury jucinnes.
74 Walk Scole			ψΟΣΣ				ψ1.07		
Agave Court Apts	64								98% occupancy
(2001)		1br/1ba	\$720	to	580		\$1.24	to	Business center,
125 North 18th Street		,	\$1,140				\$1.97		media room,
		2br/2ba	\$845	to	930		\$0.91	to	
69 Walk score			\$1,365				\$1.47		laundry facility.
		3br/2ba	\$960	to	1,206		\$0.80	to	3,7 3
			\$1,730				\$1.43		
Monterra Luxury Apts	258								97% occupancy
(2000)		Studio/1ba	\$815	to	475	to	\$1.72	to	Swimming pool,
1333 North 24th Street			\$1,255		539		\$2.33		clubhouse, grilling
		1br/1ba	\$755	to	475	to	\$1.37	to	& picnic area.
66 Walk score			\$1,115		812		\$1.59		Covered parking
		2br/2ba	\$975	to	913	to	\$1.07	to	& gated access.
			\$1,335		1,057		\$1.26		
		3br/2ba	\$1,220	to	1,100		\$1.11	to	
			\$1,540				\$1.40		
Capital Place	292								83% occupancy
(2015)	2,72	Studio/1ba	\$945	to	615		\$1.54	to	Fitness center,
11 South 12th Street		Stadio, ibu	\$1,075		010		\$1.75		pool, clubhouse,
11 John 12m Office		1br/1ba	\$1,145	to	692	to	\$1.65	to	grilling area,
74 Walk score		-21, 22 u	\$1,415		850		\$1.66		picnic area,
		2br/2ba	\$1,520	to	1,022	to	\$1.49	to	,
		,	\$1,760		1,249		\$1.72		& coffee bar.
					,				22

SOURCE: Zimmerman/Volk Assocites, Inc.

Summary Of Selected Multi-Family Rental Properties

City of Phoenix, Maricopa County, Arizona

May, 2017

Property (Date Opened) Address	Number Unit of Units Type	Reported Base Rent	•	Reported Unit Size		Rent per Sq. Ft.	-	Additional Information
Iluminate	111							87% occupancy
(2016)	Studio/1ba	n/a		530	to	n/a		Fitness center,
290 East Roosevelt				660				clubhouse, sundeck,
	1br/1ba	\$1,585	to	698	to	\$2.27	to	pool, lounge,
92 Walk score		\$2,020		902		\$2.24		coffee bar
	1br/1ba w/den	\$2,055	to	918	to	\$2.24	to	& business center.
		\$2,400		1,080		\$2.61		
	2br/2ba			1,093				
Roosevelt Point	326							98% occupancy
(2013)	Studio/1ba	\$1,049	to	500	to	\$1.54	to	Fitness centers,
888 North 4th Street		\$1,075		700		\$2.10		study lounge,
	Studio/1ba furnished	\$1,089	to		to	\$1.59	to	swimming pools,
91 Walk score	·	\$1,115		700		\$2.18		grilling area &
	1br/1ba	\$1,165		675		\$1.73		community kitchen.
	1br/1ba furnished	\$1,205		675		\$1.79		Parking garage.
	2br/2ba	\$1,618		800		\$2.02		00 0
	2br/2ba furnished	\$1,698		800		\$2.12		
	3br/3ba furnished	\$2,397		1000		\$2.40		
	4br/4ba	\$3,156		1250		\$2.52		
Camden Copper Square	332							98% occupancy
(1999)	Studio/1ba	\$1,099	to	718		\$1.53	to	Fitness center,
901 East Van Buren Street		\$1,349				\$1.88		pool, volleyball court,
	1br/1ba	\$1,039	to	610	to	\$1.62	to	business center,
76 Walk score		\$1,299		802		\$1.70		parking garage
	2br/2ba	\$1,339	to	953	to	\$1.41	to	& pet care.
		\$2,319		1,307		\$1.77		

Table 8

Summary of Selected For-Sale ListingsGarfield Neighborhood, City of Phoenix, Maricopa County, Arizona

May, 2017

Property Address	Lot size	Sale/Asking Price	Unit Size	Price psf	Configuration	Year Built
		Att	ached Listin	gs		
		New Construct	ion: Garfield	Neighborhood	•••	
E <mark>astlake Garfield Commo</mark> 341 East Polk Street	ons					
Init 102	TH	\$249,600	1,193	\$209	3br/3ba	2017
Init 103	TH	\$249,600	1,193	\$209	3br/3ba	2017
Init 105	TH	\$249,600	1,193	\$209	3br/3ba	2017
		Resales: C	Garfield Neigh	borhood		
129 East Garfield Street	DUP	\$265,000	Two ι	ınits		1916
27 E Portland St, Apt. 21	CO	\$290,000	1,488	\$195	3br/2ba	2007
27 E Portland St, Apt. 6	CO	\$295,000	1,444	\$204	3br/2ba	2007
27 E Portland St, Apt. 30	CO	\$305,000	1,272	\$240	2br/1ba	2007
345 East McKinley	MF	\$979,000	Five ι	ınits	9br/5ba	1936
		Single-Fam	iily Detache	d Listings		
		Ü	Garfield Neigh	Ö		
05 North 13th Street	0.16	\$149,900	1,100	\$136	3br/1ba	1931
441 East Garfield Street	0.15	\$159,900	973	\$164	3br/1ba	1824
009 North 11th Street	0.16	\$220,000	912	\$241	3br/2ba	1930
149 East Fillmore Street	0.32	\$259,900	3,001	\$87	1br/1ba	1955
517 East Roosevelt Street	0.16	\$284,000	1,100	\$258	3br/2ba	1938
439 East McKinley Street	0.15	\$295,000	1,205	\$245	3br/2ba	1921
030 North 9th Street	0.86	\$299,000	1,154	\$259	3br/2ba	1920
115 East Fillmore Street	0.15	\$320,000	1,501	\$213	3br/2ba	1916
505 East Roosevelt Street	0.15	\$334,900	2,016	\$166	4br/3ba	1949
209 East Moreland Street	0.16	\$369,980	1,550	\$239	3br/3ba	1926

SOURCE: Multiple Listing Service; Zimmerman/Volk Associates, Inc.

Table 9

Optimum Market Position: 440 To 585 New Market-Rate Dwelling Units The Edison-Eastlake Choice Neighborhoods Study Area

City of Phoenix, Maricopa County, Arizona **May, 2017**

Housing Housing Unit Unit Base Share Preference Configuration Mix Rent/Price Size Per Sq. Ft. Market Capture								
Number								
Multi-Family For-Rent Studio/1ba 15% \$800 \$500 \$1.60 1br/1ba 20% \$1.050 \$650 \$1.62 2br/1ba 30% \$1.250 800 \$1.56 2br/2ba 20% \$1.550 1,000 \$1.55 3br/2ba 15% \$1,900 1,250 \$1.52 Weighted averages: \$1,300 833 \$1.56 8.2% Multi-Family For-Sale		<u>Prejerence</u>	Configuration	<u>IVIIX</u>	Kent/Price	Size	Per Sq. Ft.	<u>Market Capture</u>
Apartments		Multi-Family Fo	r-Rent					67 to 84 units
1br/1ba 20% \$1,050 650 \$1.62 2br/1ba 30% \$1,250 800 \$1.56 2br/2ba 20% \$1,550 1,000 \$1.55 3br/2ba 15% \$1,900 1,250 \$1.52 Weighted averages: \$1,300 833 \$1.56 8.2% Multi-Family For-Sale		•						
2br/1ba 30% \$1,250 800 \$1,56 2br/2ba 20% \$1,550 1,000 \$1,55 3br/2ba 15% \$1,900 1,250 \$1,52 \$1,52 \$3br/2ba 15% \$1,900 1,250 \$1,52 \$1,52 \$1,52 \$1,52 \$1,500 \$1,55 \$1,500 \$1,55 \$1,500 \$1,55 \$1,500 \$1,50	841	Apartments						
2br/2ba 20% \$1,550 1,000 \$1.55 3br/2ba 15% \$1,900 1,250 \$1.52 Weighted averages: \$1,300 833 \$1.56								
3br/2ba 15% \$1,900 1,250 \$1.52 Weighted averages: \$1,300 833 \$1.56 S.2% Multi-Family For-Sale								
Neighted averages: \$1,300								
Second			3br/2ba	15%	\$1,900	1,250	\$1.52	
104 Condominiums			Weighted av	verages:	\$1,300	833	\$1.56	
104 Condominiums	8.2%	Multi-Family Fo	r-Sale					5 to 8 units
2br/2ba 25% \$195,000 1,100 \$177 2br/2ba/den 15% \$235,000 1,350 \$174 Weighted averages: \$165,000 928 \$178 10.1% Single-Family Attached For-Sale 6 to 10 units 127		-						
2br/2ba/den 15% \$235,000 1,350 \$174 Weighted averages: \$165,000 928 \$178 10.1% Single-Family Attached For-Sale 6 to 10 units 127	104	Condominiums	1br/1ba	60%	\$135,000	750	\$180	
10.1% Single-Family Attached For-Sale 6 to 10 units			2br/2ba	25%	\$195,000	1,100	\$177	
10.1% Single-Family Attached For-Sale 6 to 10 units			2br/2ba/den	15%	\$235,000	1,350	\$174	
127 Townhouses 2br/1.5ba 50% \$180,000 1,000 \$180 2br/2.5ba 25% \$225,000 1,300 \$173 3br/2.5ba 25% \$245,000 1,450 \$169 Weighted averages: \$207,500 1,188 \$175 15.7% Single-Family Detached For-Sale 198 Urban Cottages 2br/2ba 30% \$190,000 1,050 \$181 2br/2.5ba 30% \$215,000 1,200 \$179 3br/2ba 40% \$250,000 1,400 \$179 Weighted averages: \$221,500 1,235 \$179 100.7% Weighted averages: \$221,500 1,235 \$179			Weighted av	verages:	\$165,000	928	\$178	
2br/2.5ba 25% \$225,000 1,300 \$173 3br/2.5ba 25% \$245,000 1,450 \$169	10.1%	Single-Family A	ttached For-Sale	<u>:</u>				6 to 10 units
2br/2.5ba 25% \$225,000 1,300 \$173 3br/2.5ba 25% \$245,000 1,450 \$169	107	Tarumbarrasa	Ola / 1 . Ela a	E007	¢100 000	1 000	¢190	
3br/2.5ba 25% \$245,000 1,450 \$169 Weighted averages: \$207,500 1,188 \$175 15.7% Single-Family Detached For-Sale 10 to 15 units 198 Urban Cottages 2br/2ba 30% \$190,000 1,050 \$181 2br/2.5ba 30% \$215,000 1,200 \$179 3br/2ba 40% \$250,000 1,400 \$179 Weighted averages: \$221,500 1,235 \$179 100.7%	127	Townhouses						
15.7% Single-Family Detached For-Sale 10 to 15 units 198 Urban Cottages 2br/2ba 30% \$190,000 1,050 \$181 2br/2.5ba 30% \$215,000 1,200 \$179 3br/2ba 40% \$250,000 1,400 \$179 Weighted averages: \$221,500 1,235 \$179 100.7%					· ·			
15.7% Single-Family Detached For-Sale 10 to 15 units			3br/ 2.5ba	25%	\$245,000	1,450	\$169	
198 Urban Cottages 2br/2ba 30% \$190,000 1,050 \$181 2br/2.5ba 30% \$215,000 1,200 \$179 3br/2ba 40% \$250,000 1,400 \$179 Weighted averages: \$221,500 1,235 \$179			Weighted av	verages:	\$207,500	1,188	\$175	
198 Urban Cottages 2br/2ba 30% \$190,000 1,050 \$181 2br/2.5ba 30% \$215,000 1,200 \$179 3br/2ba 40% \$250,000 1,400 \$179 Weighted averages: \$221,500 1,235 \$179	15.7%	Single-Family D	etached For-Sal	e				10 to 15 units
2br/2.5ba 30% \$215,000 1,200 \$179 3br/2ba 40% \$250,000 1,400 \$179 Weighted averages: \$221,500 1,235 \$179		,						
3br/2ba 40% \$250,000 1,400 \$179 Weighted averages: \$221,500 1,235 \$179 100.7% 88 to 117 units	198	Urban Cottages	2br/2ba					
Weighted averages: \$221,500 1,235 \$179 100.7% 88 to 117 units								
100.7% 88 to 117 units			3br/2ba	40%	\$250,000	1,400	\$179	
			Weighted av	verages:	\$221,500	1,235	\$179	
	100.7%							88 to 117 units
								per year

1,270 target households

NOTE: Base rents/prices in year 2017 dollars and exclude floor and view premiums, options and upgrades.

SOURCE: Zimmerman/Volk Associates, Inc.

ZIMMERMAN/VOLK ASSOCIATES, INC.

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Research & Strategic Analysis

ASSUMPTIONS AND LIMITATIONS—

Every effort has been made to insure the accuracy of the data contained within this analysis. Demographic and economic estimates and projections have been obtained from government agencies at the national, state, and county levels. Market information has been obtained from sources presumed to be reliable, including developers, owners, and/or sales agents. However, this information cannot be warranted by Zimmerman/Volk Associates, Inc. While the proprietary residential target market methodology employed in this analysis allows for a margin of error in base data, it is assumed that the market data and government estimates and projections are substantially accurate.

Absorption scenarios are based upon the assumption that a normal economic environment will prevail in a relatively steady state during development of the subject property. Absorption paces are likely to be slower during recessionary periods and faster during periods of recovery and high growth. Absorption scenarios are also predicated on the assumption that the product recommendations will be implemented generally as outlined in this report and that the developer will apply high-caliber design, construction, marketing, and management techniques to the development of the property.

Recommendations are subject to compliance with all applicable regulations. Relevant accounting, tax, and legal matters should be substantiated by appropriate counsel.



ZIMMERMAN/VOLK ASSOCIATES, INC.

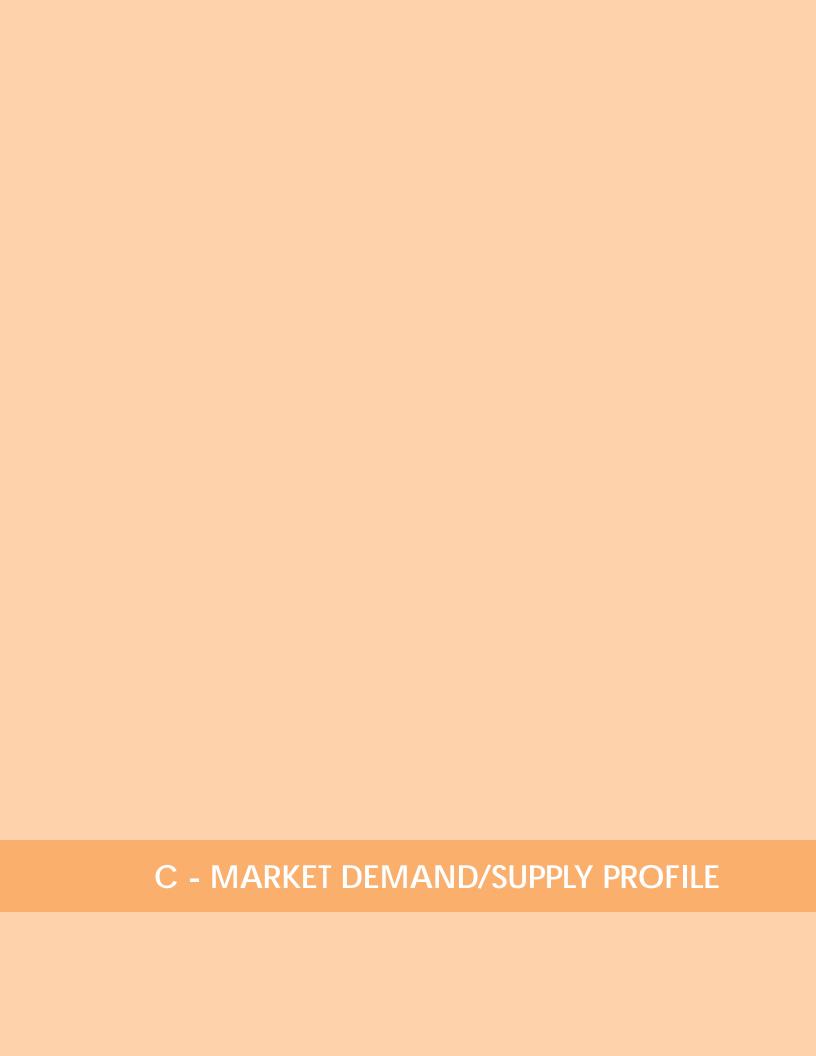
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Research & Strategic Analysis

RIGHTS AND STUDY OWNERSHIP—

Zimmerman/Volk Associates, Inc. retains all rights, title and interest in the ZVA residential target market methodology and target market descriptions contained within this study. The specific findings of the analysis are the property of the client and can be distributed at the client's discretion.

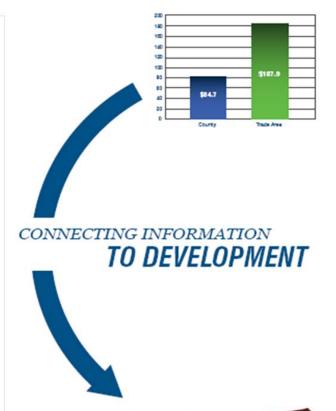




Choice Neighborhood Phoenix, Arizona Market Demand/Supply Profile

May 2017

LISC MetroEdge, a program of the Local Initiatives Support Corporation (LISC), works in urban markets nationwide assisting CDCs, local governments, developers and business associations to define their market potential and develop and implement strategies to achieve that potential.







Purpose and Value

- To provide information that will assist community, business, investors and civic interests to identify opportunities to improve their commercial corridor while improving access of goods and services to the communities and their residents
- To support community stakeholders to develop compelling stories of the rich potential of the people, markets and physical assets of markets to insure inclusion in the future of commercial corridors

Please note this included only a preliminary on the ground assessment or recommendations for action.



Market Basics

- Trade Areas
- Trade Area Demographics
- Convenience Trade Area Retail

Convenience Retail typically includes "Saturday morning" shopping needs such as pharmacies, groceries, dry cleaners or hardware stores. Customers typically prefer to find these goods and services within a 10-minute walking or driving distance of their home. The convenience retail businesses will seek to capture business from employees during as they travel to and from work or during their lunch time.

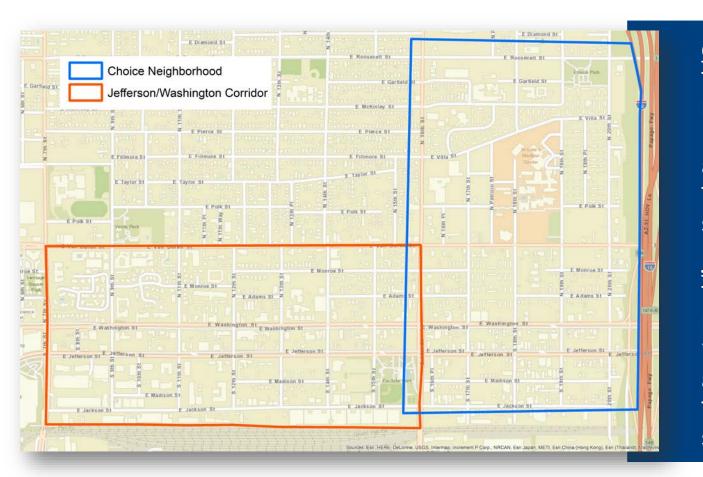


Trade Areas





Area Map



Choice Neighborhood

The area is bounded by Roosevelt (North), I-10 (East), 16th (West) and Jackson (South). This area is 0.88 square miles.

Jefferson/Wash Area

The area is bounded by Van Buren (North), 7th (West), 16th (East) and Jackson (South). This area is 0.70 square miles.



Residential Demographics

Selected data that impact business and retail



6/27/2017 Final

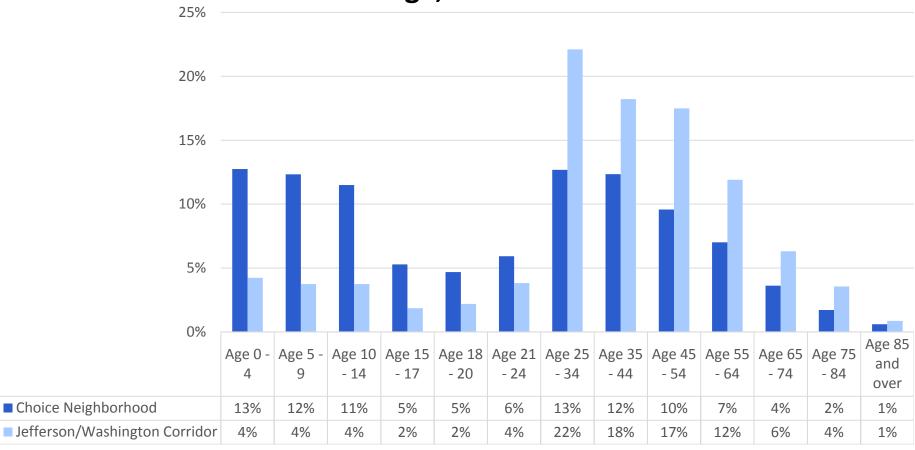
Basic Profile

Quick-Facts	2010 Choice Neighborhood	2016 Choice Neighborhood	2010 Jefferson /Washington Corridor	2016 Estimates Jefferson /Washington Corridor
Population	3,191	3,204	2,407	2,647
Median Age	21.4	23.3	37.8	39.6
Households	1,004	1,039	919	1,022
Families	690	714	322	358
Median Household Income	NA	\$14,999	NA	\$23,105
Housing Units - Occupied	1,004		919	
Average Household Size		3.06		1.84
Percent Occupied by Owner		6.59%		18.98%



A Profile





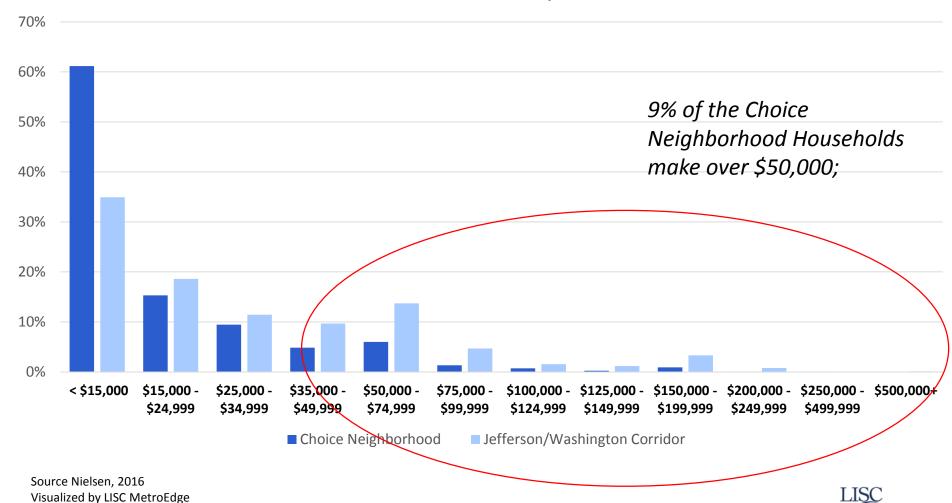
Source Nielsen, 2016 Visualized by LISC MetroEdge



A Profile

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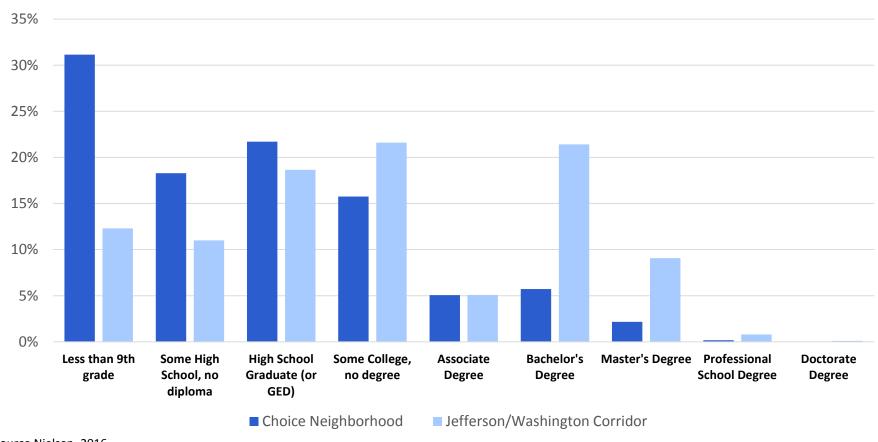
Household Income, 2016



Final

A Profile

Education, 2016

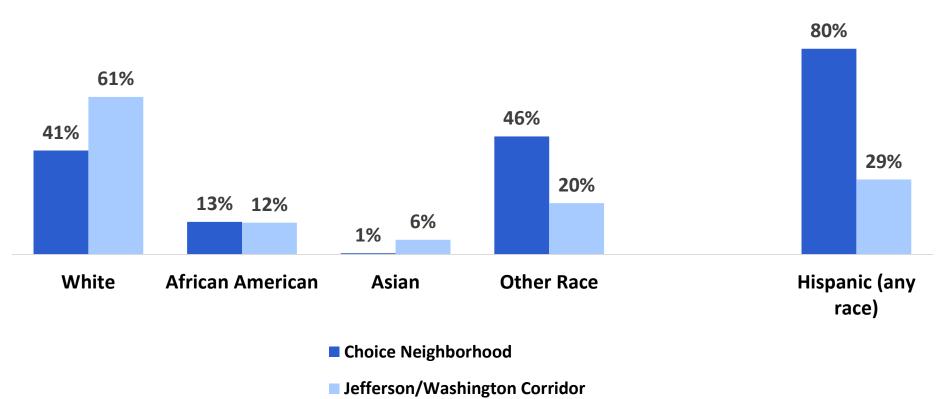


Source Nielsen, 2016 Visualized by LISC MetroEdge

LISC Metro EĐGE

A Profile

Race/Ethnicity, 2016



Source Nielsen, 2016 Visualized by LISC MetroEdge

LISC Metro EĐGE

Retail Demand & Supply



6/27/2017 Final

Retail Float

Definitions

Retail Float, a measure of the amount of retail opportunity in the trade area, and is calculated as the difference between buying power (demand) and retail sales (supply)

When Retail Float is a positive value there is unmet demand by residents in the trade area, representing opportunities for new or existing businesses to target.

When Retail Float is a negative value there is either a healthy concentration of retail to build from, or there is a saturation of retail that indicates limited opportunity for business growth or expansion.

- Retail such as restaurants, clothing or furniture stores attract shoppers looking for multiple stores. In many cases negative float for these categories indicates a business opportunity to start or grow a business to complement what already exists in the market.
- Retail such as hardware stores, general merchandise stores and grocery stores are less likely to grow or expand when there is negative float (when there is little or no unmet demand in the surrounding market)

Nielsen's Retail Market Power data is derived from two major sources of information. The demand data is derived from the Consumer Expenditure Survey (CE Survey, or CEX), which is fielded by the U.S. Bureau of Labor Statistics (BLS). The supply data is derived from the Census of Retail Trade (CRT), which is made available by the U.S. Census. Additional data sources are incorporated to create both supply and demand estimates.

Consumer Data for the Area

Retail Stores	Cho	ice Neighborh	nood	Jefferson/Washington Corridor		
	2016 Demand (Consumer Expenditures)	2016 Supply	Opportunity	2016 Demand (Consumer Expenditures)	(Retail	Opportunity Gap/Surplu s
Total Retail Sales & Eating, Drinking Places	\$27,065,427	\$98,900,520	-\$71,835,094	\$28,840,563	\$34,346,439	-\$5,505,876

Description	2016 Aggregate Expenditure Estimate (in 1000s)	% Comp	2016 Annual Avg per HH	Avg Annual % Growth
Total Specified Consumer Expenditures - (Choice Neighborhood)	\$22,392	88.62%	\$21,559	1.59%
Total Specified Consumer Expenditures (Jefferson/Washington Corridor)	\$25,268	112.85%	\$24,724	3.20%





Area

Choice Neighborhood

Category	Demand Trade Area	Supply Trade Area	Float	Float as % of Demand
Clothing & Clothing Accessories Stores	\$1,496,687	\$382,343	\$1,114,344	74%
Electronics & Appliances Stores	\$455,214	\$2,304,233	-\$1,849,019	-406%
Food & Beverage Stores	\$4,950,465	\$2,965,600	\$1,984,865	40%
Foodservice & Drinking Places	\$3,424,011	\$6,137,819	-\$2,713,808	-79%
Health & Personal Care	\$1,000,114	\$18,867	\$981,247	98%
Building Material & Garden Equipment	\$2,101,101	\$4,397,360	-\$2,296,259	-109%
Furniture & Home Furnishings Stores	\$499,775	\$11,080,202	-\$10,580,427	-2117%
General Merchandise Stores	\$3,875,322	\$4,613,854	-\$738,532	-19%
Miscellaneous Store Retailers	\$761,247	\$2,825,927	-\$2,064,680	-271%
Motor Vehicle & Parts Dealers	\$3,735,935	\$55,792,120	-\$52,056,184	-1393%
Sporting Goods, Hobby, Book, & Music Stores	\$571,291	\$31,651	\$539,640	94%

Source: Nielsen Corporation, 2016; Visualized by LISC MetroEdge 6/27/2017

JSC Metro*EÐGE*

Choice Convenience Area Profile

Convenience Area Retail Attractors



Clothing + Clothing Accessories \$1,114,344



Food Service + Drinking -\$2,713,808



Health +
Personal Care
\$981,247



Building Materials + Garden Equipment

-\$2,296,259



Motor Vehicle + Parts Dealers -\$52,056,184





Choice Neighborhood

Business Name	Address	NAICS Description	Location Type	Number of Local Employees
ST LUKES HOSPITAL MED CTR	1800 E VAN BUREN ST	General Medical and Surgical Hospitals	Firm	801
PUBLIC HEALTH DEPT	1645 E ROOSEVELT ST	Legislative Bodies	Firm	420
INTERSTATE MECHANICAL CORP	1841 E WASHINGTON ST	Plumbing, Heating, and Air- Conditioning Contractors	Firm	350
ST LUKE'S BEHAVIORAL HEALTH	1800 E VAN BUREN ST	General Medical and Surgical Hospitals	Firm	250
YOUTH DEVELOPMENT INSTITUTE	1830 E ROOSEVELT ST	Child and Youth Services	Firm	250
CNG RANCH LLC	1602 E ROOSEVELT ST	Supermarkets and Other Grocery (except Convenience) Stores	Firm	108
WESTERN WINDOW CLEANING	1745 E JACKSON ST	Commercial and Institutional Building Construction	Firm	90
EDISON ELEMENTARY SCHOOL	804 N 18TH ST	Elementary and Secondary Schools	Firm	70
AMERICAN CLEANING SYSTEMS	1745 E JACKSON ST	Janitorial Services	Firm	60
KINDRED TRANSITIONAL CARE	1880 E VAN BUREN ST	Offices of All Other Miscellaneous Health Practitioners	Firm	50

Source: Nielsen Corporation, 2016; Visualized by LISC MetroEdge 6/27/2017 Metro*EÐGE* 18



Jefferson/Washington Corridor

Category	Demand Trade Area	Supply Trade Area	Float	Float as % of Demand
Clothing & Clothing Accessories Stores	\$1,367,820	\$9,156,890	-\$7,789,070	-569%
Electronics & Appliances Stores	\$544,108	\$468,206	\$75,902	14%
Food & Beverage Stores	\$4,440,090	\$2,869,822	\$1,570,268	35%
Foodservice & Drinking Places	\$3,860,458	\$2,252,030	\$1,608,428	42%
Health & Personal Care	\$1,248,281	\$0	\$1,248,281	100%
Building Material & Garden Equipment	\$2,638,986	\$5,805,694	-\$3,166,708	-120%
Furniture & Home Furnishings Stores	\$567,416	\$0	\$567,416	100%
General Merchandise Stores	\$3,422,483	\$5,679,762	-\$2,257,279	-66%
Miscellaneous Store Retailers	\$828,670	\$872,517	-\$43,847	-5%
Motor Vehicle & Parts Dealers	\$4,671,897	\$7,193,669	-\$2,521,772	-54%
Sporting Goods, Hobby, Book, & Music Stores	\$534,702	\$47,849	\$486,853	91%

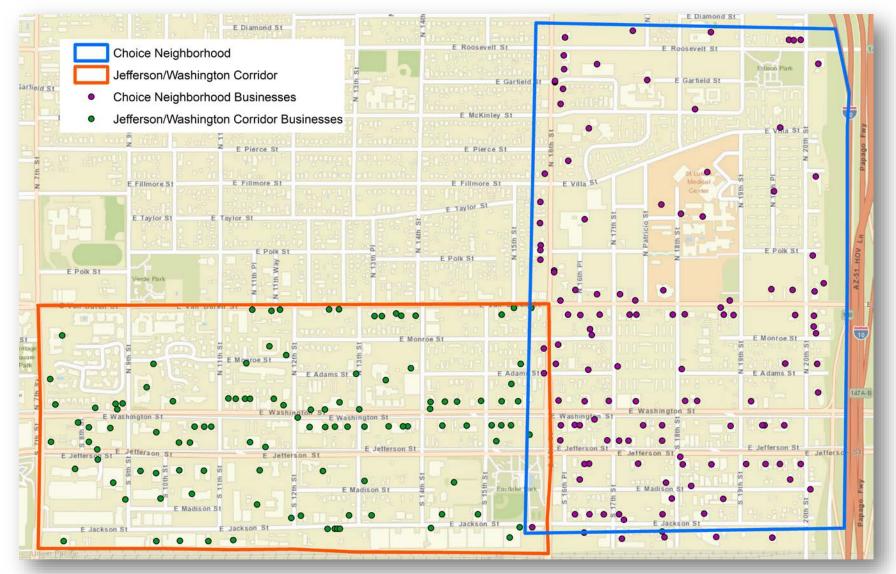




Business Name	Address	NAICS Description	Location Type	Number of Local Employees
PHOENIX FIRE DEPT	150 S 12TH ST	Fire Protection	Firm	250
IATSE STAGEHANDS	1425 E WASHINGTON ST # B	Labor Unions and Similar Labor Organizations	Firm	200
INTERNATIONAL ALLIANCE	1425 E WASHINGTON ST # B	Convention and Trade Show Organizers	Firm	200
PHOENIX NEW TIMES	1201 E JEFFERSON ST # A100	Newspaper Publishers	Firm	180
CORPORATE CLEANING INC	1150 E JEFFERSON ST	Janitorial Services	Firm	150
PHOENIX DESIGN & CONSTRUCTION	1034 E MADISON ST	Legislative Bodies	Firm	101
UNI FIRST CORP	104 N 14TH ST	Linen Supply	Firm	95
FARM FRESH CO	1033 E JACKSON ST	Fruit and Vegetable Markets	Firm	90
FOOD FOR THE HUNGRY	1224 E WASHINGTON ST	Business Associations	Firm	90
ARIZONA BRIDGE TO INDEPENDENT	1229 E WASHINGTON ST	Human Rights Organizations	Firm	80

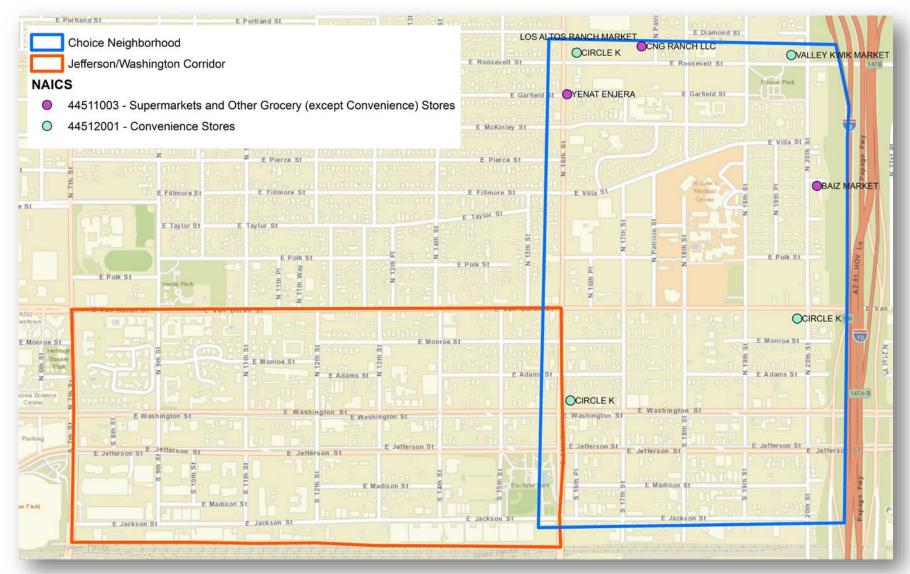
Source: Nielsen Corporation, 2016; Visualized by LISC MetroEdge 6/27/2017 Metro EĐGE 20

Business Locations

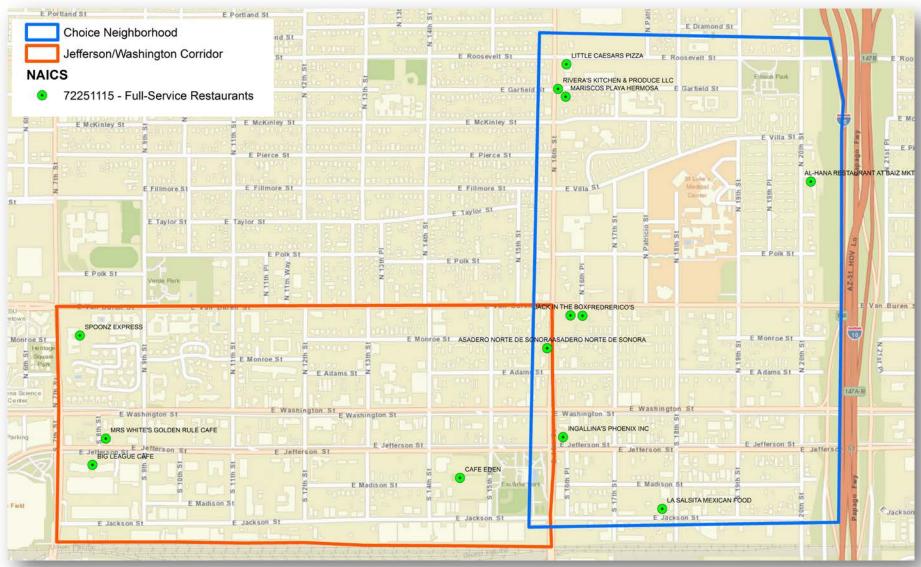




Business Locations



Business Locations









EDISON EASTLAKE COMMUNITY

CHOICE NEIGHBORHOOD INITIATIVE HEALTH IMPACT ASSESSMENT







This report is funded by Local Initiatives Support Corporation and Vitalyst Health Foundation

ACKNOWLEDGEMENTS

This health impact assessment (HIA) would not have been possible without the support and collaborative efforts of many people. I would like to thank Jane Pearson, consultant for the Local Initiatives Support Corporation of Phoenix (LISC), whose guidance, mentorship and co-authorship were crucial to this project's success.

Above all, I would like to thank the residents of the Edison Eastlake Community, particularly those that serve on the Resident Leadership Council, whose interest, concern, and commitment for their community were an inspiration and provided a guiding light for this HIA report.

I would like to thank Phoenix Revitalization Corporation, Eva Olivas, Executive Director, and Jessica Bueno, for their partnership with the Resident Leadership Council who served as the HIA Advisory Committee. Their facilitation and recruitment of key residents were foundational to this HIA.

Thank you to the team of technical experts who offered their time, insights, data and lessons learned to help contribute to this HIA findings and recommendations. These individuals include:

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- · Stephen Norman, King County Housing Authority
- · Erin Christensen and Heidi Oien, Mithun, Inc
- Allison Parisi and Hovi Nguyen, Maricopa County Department of Public Health

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This project would not have been possible without funding from LISC and Vitalyst Health Foundation. Deep gratitude for Terry Benelli, Executive Director for LISC Phoenix and C.J. Eisenbarth Hager, Director of Healthy Community Policies for Vitalyst Health Foundation, for their constant advisement and support throughout the HIA process.

Cynthia Melde, Health Analyst cynthiamelde@gmail.com



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EXECUTIVE SUMMARY

Background

Health is defined as more than just the presence or absence of disease. The World Health Organization defined health "as a state of complete physical, mental and social wellbeing" (World Health Organization, 2005). Health starts where we live, learn, work, play and connect. This means that health starts in our homes, schools, worksites, neighborhoods, and communities. Social, environmental, economic, and political factors directly and indirectly determine health and wellbeing. Housing is an important determinant of health. Healthy, safe, accessible and affordable housing can reduce the risk of illness and injury, while improving residential stability and improve physical health. It can also free up family resources, enhance social connections, reduce stress and improve mental and social health (Magbool, Viveiros, & Ault, 2015).

In 2010, the U.S. Department of Housing and Urban Development (HUD) developed the Choice Neighborhoods Initiative with the goal to redevelop distressed public housing, improve outcomes for people living in the community and revitalize distressed surrounding neighborhood, ultimately creating revitalized mixed-income communities across the country. To achieve these goals, communities must develop and implement a comprehensive neighborhood revitalization strategy, or Transformation Plan (Department of Housing and Urban Development, 2017). In 2016, the City of Phoenix was awarded a \$1.5 million Choice Neighborhoods Planning Grant to develop a Transformation Plan for the Edison-Eastlake Community (EEC), home to four public/affordable housing sites. Three of these sites built between 1942-1963 — Sidney P. Osborn, A.L. Krohn, and Frank Luke — are targeted for redevelopment through the Choice Neighborhoods Planning Grant.

About this Health Impact Assessment

Health Impact Assessments (HIA) are a six-step process that aims to identify positive and negative health impacts before a decision is made on a policy, project or plan. Using existing baseline conditions and potential health impacts, recommendations are developed for decision makers to consider integrating in the final policy, project or plan. The goal is to maximize the positive health effects while minimizing negative outcomes. Community stakeholders, especially vulnerable populations, are engaged so that possible health impacts on all affected populations are assessed and considered before the proposal is put in place.

This HIA furthers the goal of HUD's Choice Neighborhoods Initiative by making recommendations to create community conditions that promote the health and wellbeing of the current and future residents of the EEC. Health is critical to creating communities of choice.

Key Findings

Based on conversations with the HIA Advisory Group, the Resident Leadership Council (RLC), interviews with residents and other stakeholders, existing community health data and evaluation of potential health impacts affected by the redevelopment, several overarching health determinants were identified and assessed: thriving and resilient community, food environment, environmental quality, and safe, active neighborhood.

Thriving Resilient Communities

Community resilience is defined by a sense of place, shared common perspectives or interests, diversity in relationships and roles, sense of togetherness and joint action and engagement (Hughes, 2003). Central to resilience and community is social cohesion. In the broadest sense, social cohesion is the "glue" that holds communities together and enables them to build bridges to others. There are varying levels of relationships in the EEC, however, many residents do not report a sense of trust or shared values with each other. There is also limited interaction between residents living on either side of Van Buren Street, highlighting the physical and cultural divider that Van Buren Street plays in the community. To promote health, efforts must be made to minimize uncontrollable stressors and increase opportunities for connections among residents of varying ages, levels of ability and diverse backgrounds. There must be increased leadership opportunities for residents, improved family support and more youth engagement opportunities.

Food Environment

While nutrition is about what we eat, our eating choices are influenced by our environment. The location of food outlets, from supermarkets to convenience stores and farmers markets to fast food restaurants, can profoundly affect a community's collective health. Residents express a strong interest in another grocery store in the community. The existing food retail is limited to ethnic grocery stores or convenience stores. Grocery stores with healthy, affordable food are not as accessible to residents due to walking distance, transportation barriers, or cultural differences. Sidney P. Osborn is more limited in nearby healthy food options than Frank Luke and A.L. Krohn. Adopting policies to support new healthy food resources, enhancing and expanding the existing food retail infrastructure, and offering nutrition education and food preparation classes will improve the health of residents.

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Environmental Quality

Where we live matters to our health in part due to the physical environment. The air we breathe, the water we drink, and the land and buildings around us impact and influence our ability to live a healthy life (Centers for Disease Control and Prevention, 2017). The EEC suffers from urban heat island impact, being one of the hottest neighborhoods in Maricopa County. There are air quality challenges being near the freeway and an existing superfund site that impacts the community. In addition, there is a high rate of vacant lots increasing the blight of the community. Adopting and implementing heat mitigation strategies in the housing and neighborhood redevelopment is important to the health of residents. In addition, improving landscaping, shading, greening and activating vacant lots can positively improve the health of the community.

Active, Safe Community

Environments that make it easier for people to walk or bike help increase physical activity and make neighborhoods better places to live (Centers for Disease Control and Prevention, 2011). Safety of the EEC is a top concern for residents. Edison Park, particularly at night, is reported to host activities that negatively impact the community, such as drug exchanges and gang-related activity. This limits residents' ability to move through the community particularly for recreation purposes. By adopting policies and practices that improve the safety and ability to be active in the neighborhood design, creating multigenerational opportunities to be active and offering programming to support residents ability to be physically active, the health of the residents will improve.

Edison Park is reported to host activities that negatively impact the community, such as drug exchanges and gang-related activity.

Recommendations

Recommendations were developed for each of these health determinants. Each health determinant can be positively or negatively impacted by policy changes, infrastructure development and programming offered during and after the redevelopment. Thus, recommendations are categorized by these three domains. Some recommendations overlap between categories and across determinants underlining the importance of integrating community efforts to address health as a whole. For greatest impact on health, recommendations from all three domains — policy, infrastructure, and programming — should be adopted and implemented.

RECOMMENDATIONS FOR EDISON EASTLAKE COMMUNITY

THRIVING AND RESILIENT COMMUNITY

POLICY

Adopt management policies and practices that prioritize inclusive resident leadership and utilize resident assets.

INFRASTRUCTURE

Create a community of opportunity by prioritizing healthy child development from birth through college entry through infrastructure development and high quality services for children and youth.

Ensure equitable distribution of community infrastructure, facilities and programming on both the north and south side of Van Buren Street.

PROGRAM

Partner with community organizations and allocate resources to provide ongoing trainings and programming on facilitation, mediation, restorative justice and leadership development to all residents to support community participation and engagement.*

Support both formal and informal family support programming to strengthen caregiver/parenting skills and families.

FOOD ENVIRONMENT

POLICY

Promote Urban Agriculture through zoning. Urban Agriculture includes community gardens, urban farms, farmers markets, community supported agriculture, and mobile produce vendors.*

Encourage the development of a Farmers Market by adopting supportive policies and practices.*

INFRASTRUCTURE

Create a small business development initiative, Healthy Corner Store Initiative, to improve access to healthy and affordable food.*

Determine the market potential for an additional full-scale grocery store as a long-term strategy to create a community of choice.*

PROGRAM

Work with a community-based organization to develop a community garden association lead by residents, including youth.*

Partner with residents to determine specific food preparation, food storage, and other nutrition education classes to offer at each housing site. Allow residents to lead classes when appropriate and bring partner organizations onsite to offer free classes to all residents.

Work with the local Walmart (36th Street & Thomas Road), Fry's (30th Street & Thomas Road) and Ranch Market (16th Street & Roosevelt Street) to introduce free shuttle buses for residents of EEC.

^{*} Denotes similar recommendations made in the Reinvent PHX HIA completed in 2013.

ENVIRONMENTAL QUALITY

Urban Heat Island Air Quality Water Quality Vacant Lots

POLICY

Urban Heat Island

Comply with the standards established in the Interim Transit Oriented Overlay Districts specifically as it relates to shade.

Urban Heat Island

Adopt heat mitigation policies and strategies in the redevelopment of the urban form, including prioritizing the use of surfaces and building materials that provide cooling effects. Placement and orientation of buildings should also maximize cooling.

INFRASTRUCTURE

Urban Heat Island and Air Quality

Increase greening and improve landscaping by adding trees, sod and other vegetation throughout the community to help improve the air quality and mitigate the urban heat island effect.

Air Quality

Install high efficiency HVAC systems in the housing units and community buildings. Advanced air filtration should be installed through air handling units for all sites.

Vacant Lots

With resident leadership, activate vacant lots for community benefits. This may include, but not limited to, urban agriculture, pop-up parks, green spaces, and art spaces.*

PROGRAM

Urban Heat Island

Continue and expand programming for residents to enhance heat coping mechanism and learn about heat-related illness. Empower residents to share their stories of coping with heat and their visions for improving the conditions.

Urban Heat Island and Air Quality

Provide education to residents on how to best use of new energy efficient appliances and HVAC systems.

Urban Heat Island, Air Quality and Vacant Lots

Support resident leadership throughout strategies used to address environmental quality. To support green infrastructure, allow residents with landscaping experience opportunity to provide maintenance of common spaces in exchange for housing stipend or community service hours. Support resident leadership to establish community clean-up and other neighborhood beautification efforts. Provide programming support for any activation of vacant lots.*

SAFE. ACTIVE COMMUNITY

POLICY

Work together with the City of Phoenix Police Department to use Crime Prevention Through Environmental Design (CPTED) guidelines in the design of the properties, including the enhancements to Edison Park.

Utilize the Active Design Guidelines in the neighborhood and housing redevelopment plan to incorporate multigenerational physical activity opportunities.*

INFRASTRUCTURE

Implement specific street recommendations found in Table 12 of the full HIA report. Priority should be given to Roosevelt Street, the intersection of 20th and Roosevelt Streets, 20th Street, the intersection of 18th and Van Buren Streets, and 18th Street.*

Work with the City of Phoenix Department of Transportation to design open space and pathways to assure connectivity to Van Buren Street and the light rail from housing sites.

PROGRAM

Support resident leaders to form walking clubs in housing areas.

Support programs and resident leadership to address the crime in the community. This includes supporting the community action program or the creation of one or more Block Watches. Providing regular, organized recreation programs in Edison Park and enforce Edison Park hours with active police monitoring at night.*

^{*} Denotes similar recommendations made in the Reinvent PHX HIA completed in 2013.

INTRODUCTION AND BACKGROUND

Health, Housing and Neighborhood

Health starts where we live, learn, work, play and connect. This means that health starts in our homes, schools, worksites, neighborhoods, and communities. Access to social and economic opportunities; the resources and supports available in our homes, neighborhoods, and communities; the quality of our schooling; the safety of our workplaces; the cleanliness of our water, food, and air; and the nature of our social interactions and relationships all play a role in our health. (Office of Disease Prevention and Health Promotion, 2017). Healthy, safe, accessible, and affordable housing can reduce the risk of illness and injury while improving residential stability and freeing up family resources, thereby reducing stress and other adverse mental health outcomes (Magbool, Viveiros, & Ault, 2015).

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Housing quality, location, affordability and neighborhood characteristics influences health on many levels (National Center for Healthy Housing, 2016). For instance, dampness and mold exposure in a home is accountable for 21 percent of asthma cases in the U.S. (PEW Charitable Trusts, 2016). Housing location dictates a community's air pollution levels and accessibility to resources. Poorly constructed housing or proximity to heavily traveled roadways can disrupt sleep and result in serious health conditions. Research shows that residents tend to have higher levels of physical activity when they live near parks or open space. Additionally, housing affordability impacts a community's disposable income. Families navigate trade-offs between paying for essential items, such as rent, utilities and food. Less affordable housing results in less disposable income for medication and other health enhancing resources. Neighborhood characteristics, such as social inclusion and capital, segregation, and concentrated poverty can impact a community's health. When families move from a community with higher rates of concentrated poverty to a community with lower rates of concentrated poverty, the family experiences a decrease in stress from being exposed to crimes and violence, decrease in anxiety and a decrease in behavioral problems (National Center for Healthy Housing, 2016).







HIA Overview

A Health Impact

Assessment is a tool

that aims to identify

positive and negative

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a decision is made on a

policy, project or plan.

An HIA is a tool that aims to identify positive and negative health impacts before a decision is made on a policy, project or plan. It is a tool that can be used to demonstrate the relationships (pathways) between health determinates such as housing quality, location, affordability and neighborhood characteristics and physical or mental health outcomes. Through an HIA, researchers apply a variety of methodologies to analyze current and potential health conditions in a community and how these conditions relate to the policy, project or plan. While an HIA uses quantitative and qualitative analytics, data collection might also include participatory techniques, including town-halls, charrettes and other community feedback sessions. Robust community engagement is essential during an HIA to ensure that HIA recommendations do not only represent professional expertise but also community needs. Ideally, community engagement occurs in a collaborative environment that empowers the community and leverages local knowledge.

There are several principles that guide HIA practice (World Health Organization, 1999):

- 1. **Democracy:** The HIA process should involve and engage the public and inform decision makers and stakeholders.
- 2. Equity: The HIA process should be transparent and inclusive of underserved and hard-to-reach populations. The process should investigate inequitable distribution of health impacts based on socio-economic status, religion, age, gender, ethnic background or other characteristics.
- 3. Sustainable Development: The HIA recommendations should consider the sustainability of the community in terms of equity, economic and environmental impacts. Any development should consider both short- and long-term consequences.
- 4. Ethical Use of Evidence: Any data collected as part of the HIA should be rigorous and based on scientific principles and methodologies. Like any scientific study, data should be collected in a manner to preserve privacy while still providing a comprehensive assessment.
- 5. Comprehensive Approach to Health: The HIA is grounded in emphasizing that a broad range of factors influences physical and mental health.

While the above principles guide the overall HIA project, an HIA should progress through a series of distinct steps (Centers for Disease Control and Prevention, 2016):

- 1. Screening: Identify the decision (project, policy or plan) for which an HIA is deemed useful.
- 2. Scoping: Identify how comprehensive the HIA will be and what health risks and health benefits will be examined.
- 3. Assessment: Identify underserved and affected populations and collecting and analyzing qualitative and quantitative data.
- 4. Recommendations: Work with community members and key stakeholders to agree on recommendations that mitigate negative health impacts and enhance positive health impacts.
- 5. Reporting: Present findings and recommendations to decision makers, community members and key stakeholders.
- 6. Monitoring and Evaluation: Determine the HIA's impact on the decision and health status of the target population.

Realistically, the HIA process is iterative and non-linear, moving back and forth between steps as new information is gathered.

Choice Neighborhoods Initiative

U.S. Department of Housing and Urban Development developed the Choice Neighborhoods Initiative with the goal to redevelop distressed public housing, improve outcomes for people living in the community, and revitalize distressed surrounding neighborhood, ultimately creating revitalized mixed-income communities across the country. The initiative requires community participation, locally driven solutions, and increased partnerships between organization to catalyze critical improvements in the community, including vacant property, housing, services and education. To achieve these goals, communities must develop and implement a comprehensive neighborhood revitalization strategy, or Transformation Plan. This plan serves as a blue-print for the revitalization of the public and/or assisted housing units and the transformation of the surrounding neighborhood and positive outcomes for families (Department of Housing and Urban Development, 2017).

This HIA will further the goal of the national Choice Neighborhoods Initiative by making recommendations to create community conditions that promote the health and wellbeing of the community through the housing redevelopment process.

In 2016, the City of Phoenix was awarded a \$1.5 million Choice Neighborhoods Planning Grant to develop a Transformation Plan for the Edison-Eastlake Community (EEC), home to four public/affordable housing sites (Appendix A). Three of these sites built between 1942-1963 — Sidney P. Osborn, A.L. Krohn, and Frank Luke — are targeted for redevelopment through the Choice Neighborhoods Planning Grant. One million of these dollars will be used to leverage and finance innovative activities that kick start neighborhood change in 2018.

This HIA will further the goal of the national Choice Neighborhoods Initiative by making recommendations to create community conditions that promote the health and wellbeing of the community through the housing redevelopment process. By adopting these recommendations in the Transformation Plan and redevelopment process, the EEC community will grow healthy learners, support healthy workers, and foster healthy families. Health is core to creating opportunities for all.

Screening and Scoping Should an HIA be completed?

This section describes the steps taken to determine if the HIA was feasible and will contribute to the planning for the targeted Edison-Eastlake Community (EEC). Three main questions, can inform whether or not to complete an HIA:

- 1. Is the proposal associated with potentially significant health impacts that otherwise would not be considered or would be undervalued by decision makers?
- 2. Is it feasible to conduct a relevant and timely analysis of the health impacts of the proposal?
- 3. Are the proposal and decision making processes potentially receptive to the findings and recommendations of a health impact analysis?

Utilizing the Screening Whitepaper developed by Human Impact Partners as a guide, screening was completed in partnership with the City of Phoenix planning team, the consultant hired to assist in the planning process and Phoenix Revitalization Corporation in December 2016 (Human Impact Partners, 2009). It was determined the timing of the planning process would allow for an HIA to be useful. The draft Transformation Plan is due in December 2017, and the final plan due in June 2018. In addition to existing data sources and literature, the HIA could gather health-related information through the Choice Neighborhoods planned community engagement process including resident and employee surveys and community workshops. The scope of the Choice Neighborhood Planning grant includes assessing the social, economic and

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environmental issues impacting the community; however, the direct connection to how these issues could impact health will not be considered. This created an opportunity for the HIA to explore how the Transformation Plan can improve the health of the community and its residents and influence future revitalization efforts.

The HIA could also partner with Phoenix Revitalization Corporation who is responsible for facilitating the Resident Leadership Council (RLC) for the planning process. The RLC's role is to ground the Transformation Plan in local context and develop community-driven solutions. Serving as the HIA advisory committee would provide the RLC a leadership opportunity and empower residents to better understand the health of their community and advocate for change. With an appropriate timeline, adequate financial resources provided by LISC, stakeholder desire to contribute to the HIA and decision makers open to the HIA process, it was determined an HIA would be completed.

What should the HIA assess?

The second step in the HIA is to determine the scope of the HIA. In this stage, key stakeholders help develop the goal and key research questions for the HIA to assess. A comprehensive list of data sources and methods for the assessment is developed and final scope is developed based on community need, stakeholder input and available data.

The scoping of this HIA was completed in January and February of 2017. The Choice Neighborhoods Planning process was conducting several additional studies, including Housing Market Study, Business Development Study, and Phase 1 Environmental Report. This HIA sought to not duplicate other studies and worked with the City of Phoenix planning team, HIA advisory committee, technical experts, and key stakeholders to determine the scope of the HIA. The HIA advisory group, or RLC, was also formed and engaged during this stage. A list of HIA advisory members can be found in Appendix B. This group was critical to guiding and grounding the entire HIA process.

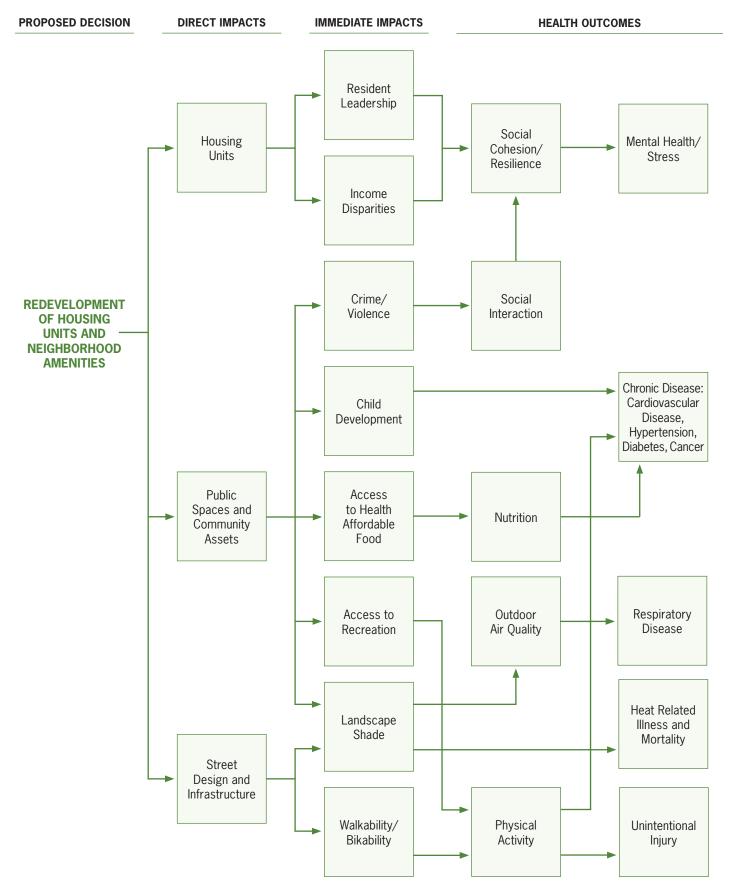
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HIA Goal To identify the potential health impacts of the redevelopment of the EEC and provide health-promoting recommendations to be adopted in the Transformation Plan.

HIA Research Questions:

- 1. How will the redevelopment impact the social and community traits of the neighborhood?
- 2. How can the redevelopment impact access to healthy, affordable food?
- 3. How can the redevelopment address environmental issues in the neighborhood?
- 4. How can the redevelopment improve the community safety and active living of the neighborhood?

Using input from residents and other community stakeholders, research questions were further divided into key health issues and concerns. A pathway diagram (Figure 1) was developed connecting these research questions to various downstream health outcomes including respiratory diseases, chronic diseases, mental health, intentional and unintentional injury, and mortality.



METHODOLOGY

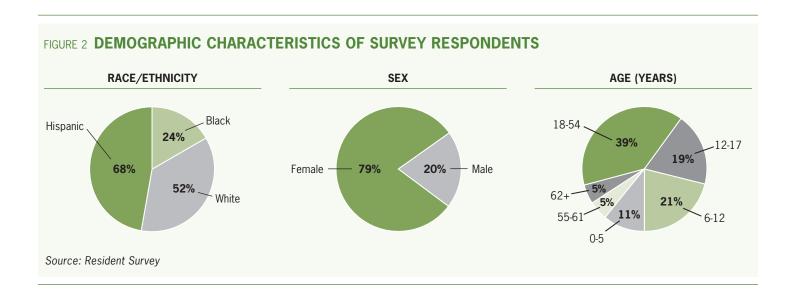
The following section outlines the methodology and data sources used to assess the health impacts of the Choice Neighborhood Transformation Plan. Additional methodology is provided in later sections that describe the findings for the key research questions this HIA seeks to inform. Overall, the following data sources were used to inform this HIA's assessment:

Reinvent PHX HIA

In 2012, the City of Phoenix, in partnership with Arizona State University and Vitalyst Health Foundation, received funding from HUD's Sustainable Communities Initiative. As part of this project, a HIA was completed on the Transit-Oriented Development Plan that this initiative produced. The EEC was included as part of the Eastlake-Garfield District. This HIA sought to build on the Reinvent PHX Eastlake-Garfield District HIA findings and report. Utilizing previously data collected during Reinvent PHX, this HIA assessed implementation of recommendations from the report. For example, in the section on active, safe communities, we assessed any changes that were recommended to improve street safety in the Reinvent PHX HIA.

Resident Survey

In March and April of 2017, the City of Phoenix conducted resident surveys with public housing residents. City of Phoenix housing staff and interns completed surveys with residents and offered residents \$5 gift cards in exchange for their time. Surveys were conducted in English and Spanish. There was a total of 83 questions included in the survey asking about transportation, employment, health, grocery shopping, use of amenities and access to the internet. A total of 341 of the 577 (61%) residents completed the survey answering questions about themselves and members in their household. The figures below describe the demographic profile of the survey respondents and household members.





Community Interviews

Qualitative interviews with various community stakeholders were conducted in-person or via telephone during the scoping and assessment phases to better understand the community and health issues. A total of 11 residents that live in public housing were interviewed. Key service providers and potential community partners were also interviewed to better understand the assets and programming provided for residents. Organizations interviewed included Edison Elementary School, Maricopa Integrated Health System, Mountain Park Health Center, Southwest Institute of Autism Research and Resource, Boys & Girls Clubs of Metro Phoenix - Gabel Branch, and First Things First Phoenix South Region. Key departments within the City of Phoenix were included in stakeholder interviews including staff from District Eight, the police, streets, planning, environmental services, and housing.

Community Workshops

The City of Phoenix hosted three community workshops during the HIA process. The first workshop was centered on identifying assets and visions for the future. The second workshop was focused on Edison Park and how to improve the infrastructure at the park. The third workshop was a design charrette where residents shared feedback to the initial housing and neighborhood plan. These workshops provided additional insight into the HIA research questions.

Quantitative Data

Existing quantitative data was collected from numerous resources to assess the existing conditions of the community. This included the 2010 Census and American Community Survey — five year estimates. Crime data was provided by the City of Phoenix Police Department. Health data was provided by the Maricopa County Department of Public Health and sourced from the hospital discharge database. This data represents individuals living in the community that access hospital and emergency services. Arizona Department of Health Services provided a Special Area Report that describes healthcare services and usage for both census tract 1133 and 1139. A variety of data sources are used to develop this report including US Census data, hospital discharge data, healthcare board records, and vital records.

ASSESSMENT

The assessment, the fourth step in the HIA, provides a profile of existing conditions and evaluates the potential health impacts of the redevelopment. The first part of this HIA's assessment describes the characteristics and health profile of the EEC. In later sections, the assessment findings for the key research questions and recommendations to promote positive health outcomes are discussed.

Existing Conditions

The Neighborhood

The EEC is comprised of the Edison Park neighborhood and the eastern section of the Eastlake neighborhood located east of North 16th Street. It is bounded by I-10 to the north and east, North 16th Street to the west and the railroad tracks to the south (just south of Jackson Street). A map of the EEC can be found in Appendix A. Most businesses are located along North 16th Street, but there are also concentrations of businesses along Roosevelt, Van Buren, Washington, and Jefferson Streets. The EEC is also home to the largest concentration of public housing in the City of Phoenix. Within its boundaries are three public housing sites with a total of 577 units. Between Frank Luke Homes and A.L. Krohn Homes, located adjacent to one another north of Van Buren Street, and Sidney P. Osborn, located south of Van Buren, these public housing developments account for nearly half of the residential opportunities in the EEC.

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Who Lives in the Community?

Poverty

The percentage of EEC families living in poverty is 66.8%, significantly higher than the City of Phoenix (18.4%) and Maricopa County (12.6%). In 2016, the federal poverty level was an income of \$12,228 for a single-person household or an income of \$24,563 for a household of four people. People living in low-income neighborhoods are less likely to have access to healthy food and safe places to be physically active. The median income of the EEC is \$16,519. (See Table 1)

Disability

The percentage of households in the EEC receiving Supplemental Security Income (SSI) is 9.6%, greater than the 4.2% in the City of Phoenix and 3.5% in Maricopa County. Thirty-one percent of households in the EEC have a member with a disability which is also higher than the 21% of households in the City of Phoenix.

TABLE 1 SOURCES OF INCOME			
	EDISON-EASTLAKE	CITY OF PHOENIX	MARICOPA COUNTY
Median household income	\$16,519	\$47,326	\$54,229
Families below poverty	542 (66.8%)	61,105 (18.4%)	118,645 (12.6%)
Households with wage/salary income	627 (53.6%)	413,407 (78.7%)	1,088,782 (75.5%)
Households with SSI	112 (9.6%)	22,051 (4.2%)	50,703 (3.5%)
Source: U.S. Census Bureau, 2015 ACS 5-year			

Racial/Ethnic Minorities

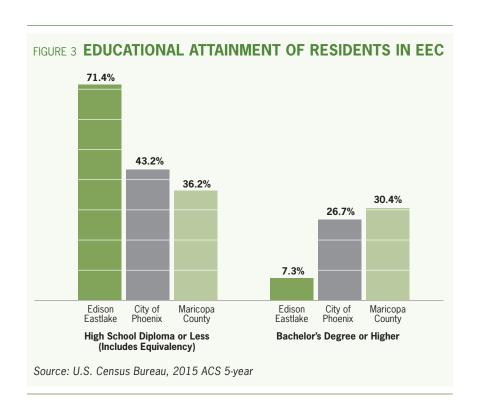
Of the total population, 13.5% of the residents classify themselves as black (compared to 6.5% and 5.0% in the City and County, respectively), and 79.0% classify themselves as Hispanic (compared to 40.8% and 29.6% in the City and County, respectively). Among the large Hispanic population, a significant percent has difficulty with English. Of the households that speak Spanish at home, nearly 40% are "limited English," meaning that all members 14 years of age and older have at least some difficulty with English. This is nearly double the rate found in the City and County (Table 2).

INDICATORS	EDISON-EASTLAKE	CITY OF PHOENIX	MARICOPA COUNTY
RACE			
White	45.5%	65.9%	73.0%
Black	13.5%	6.5%	5.0%
Other	33.1%	18.5%	12.8%
ETHNICITY			
Hispanic/Latino (of any race)	79.0%	40.8%	29.6%
HOUSEHOLD LANGUAGE			
English Only	32.1%	65.4%	74.1%
Spanish	64.6%	26.7%	18.5%
Limited English speaking	37.2%	20.8%	19.2%
Not limited English speaking	62.8%	79.2%	80.8%









Educational Attainment

Educational attainment is low for the residents living in the EEC. Only 7.3% of residents have a bachelor's degree or higher compared to 26.7% in the City of Phoenix and 30.4% in Maricopa County. As Figure 3 shows, most residents have a high school diploma (or equivalent) or less. Of the 71.4% of residents with a high school diploma or less, only 32.2% have an actual diploma or equivalent. This means that nearly half of residents have not completed any school or have completed up to 12th grade but did not receive a high school diploma.

Age

The EEC's population is significantly younger than the population of the City and County. As shown in Table 3, 48.0% of the EEC residents are under the age of 18, which is markedly higher than the City and County (28.2% and 26.4%, respectively). While living in poverty impacts all ages, children growing up in poverty experience greater mortality and morbidity than adults. They are more likely to become obese, participate in risky sexual behaviors, use tobacco, alcohol and other substances, be a victim of violence and/or have an accidental injury. (Robert Wood Johnson Foundation, 2017).

AGE	EDISON-EASTLAKE	CITY OF PHOENIX	MARICOPA COUNTY
POPULATION AGE 0-17	48.0%	28.2%	26.4%
Under 5 years	13.9%	8.3%	7.4%
5-14 years	26.5%	15.4%	14.7%
15-17 years	7.7%	4.6%	4.3%
POPULATION 18+	52.0%	71.8%	73.6%
18 to 24 years	9.2%	10.4%	9.9%
25 to 39 years	18.2%	22.8%	21.1%
40 to 54 years	14.1%	20.5%	20.0%
55 to 61 years	4.1%	7.2%	7.5%
62 and older	6.4%	10.9%	15.0%

Household Composition

At 70.2%, the EEC has slightly more family households than the City and County (64.2% and 66.1%, respectively). Of the family households, the EEC has a much higher percentage of female heads of household with no husband present (62.7%) versus the City (23.2%) and County (18.8%). There are more large households with 5 or more persons in the EEC (25%) than the City and County (16% and 13%, respectively).

INDICATORS	EDISON-EASTLAKE	CITY OF PHOENIX	MARICOPA COUNTY
HOUSEHOLDS	1,023	514,806	1,411,583
Family Households	718 (70.2%)	330,762 (64.2%)	932,814 (66.1%)
Male Household, No Wife	77 (10.7%)	36,234 (11.0%)	82,206 (8.8%)
Female Household, No Husband	450 (62.7%)	76,629 (23.2%)	175,551 (18.8%)
HOUSEHOLD SIZE			
1-person	266 (26%)	139,665 (27%)	365,212 (26%)
2-person	191 (19%)	148,277 (29%)	463,215 (33%)
3-person	150 (15%)	78,692 (15%)	209,758 (15%)
4-person	160 (16%)	68,272 (13%)	185,929 (13%)
5-person	141 (14%)	40,417 (8%)	101,336 (7%)
6+ person	115 (11%)	39,483 (8%)	86,133 (6%)

Health Status

There is a growing body of research that is focused on understanding the root causes of health. For a number of years, researchers have identified particular groups of people that have increased risk for poor health outcomes across the country. These groups include people with low incomes, people of color, people with disabilities, people with less than a high school education, and young and older age groups. (Centers for Disease Control and Prevention, 2013). Neighborhood traits, such as safety, access to jobs, transportation and quality healthcare, can further impact health disparities.

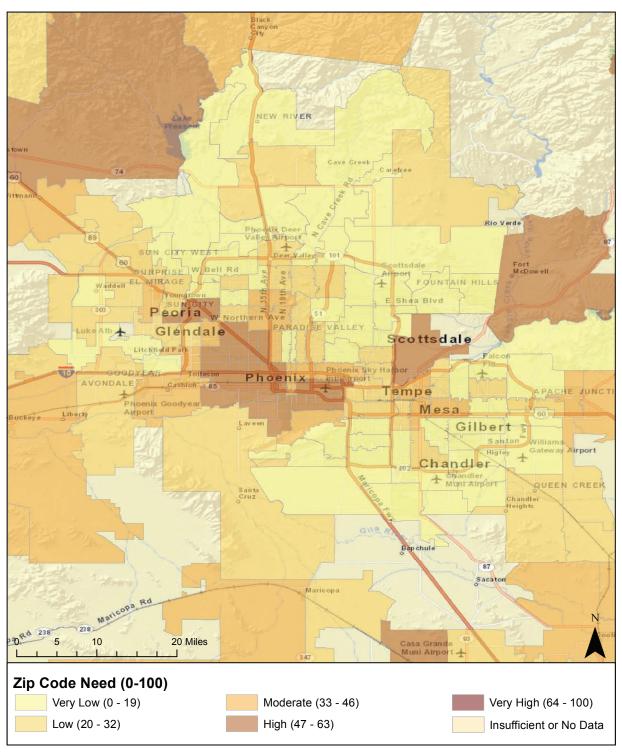
The EEC is home to more vulnerable populations to poor health outcomes when compared to the City of Phoenix and Maricopa County.

Health Conditions

Based on life expectancy maps developed by Virginia Commonwealth University infants born in different parts of the city of Phoenix face a 14-year difference in life expectancy. Infants born in 85006, where A.L. Krohn and Frank Luke housing sites are located, have a life expectancy of 75. With only 85004 having a lower life expectancy, this zip code has the second lowest life expectancy in Phoenix. Unfortunately, there was insufficient data to calculate life expectancy for the zip code that Sidney P. Osborn is located in. (Virginia Commonwealth University, 2015).

FIGURE 4 ARIZONA HEALTHY COMMUNITIES OPPORTUNITY INDEX - PHOENIX METROPOLITAN AREA

The Arizona Partnership for Healthy Communities developed a Healthy Communities Opportunity Index that describes the health need of each zip code in Arizona. Based on the index, the EEC is in very high need zip codes indicating living in this area increases your chances for poor health outcomes.

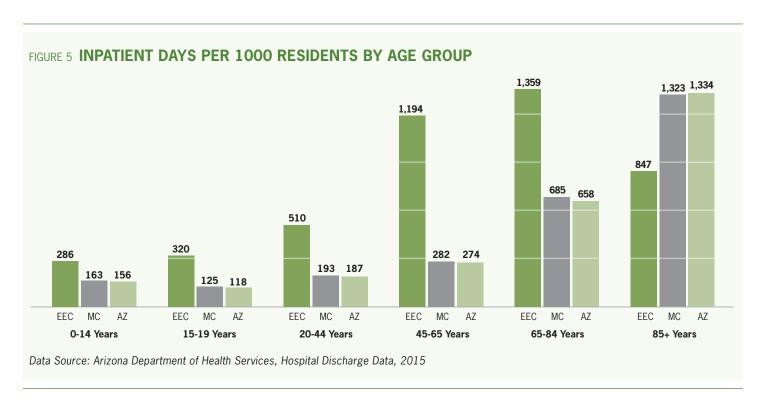


Note: Zip code need score intervals were calculated using Jenks natural breaks classification method.

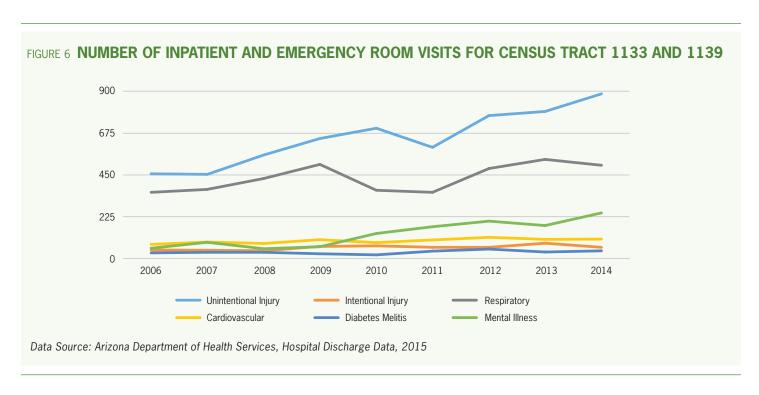
Source: Arizona Partnership for Healthy Communities. Data sources: Esri, HERE, DeLorme, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), Mapmylndia, @OpenStreetMap contributors, and the GIS User Community



The number of days residents are hospitalized inpatient is double the rate of the surrounding county, 593 days per 1000 residents compared to 272 days per 1,000 residents in Maricopa County. Figure 5 shows inpatient days are higher than the county and state across all ages accept for 85 and older. Forty-five to 84 year olds experience significantly more inpatient days than the surrounding county and state indicating that poor health conditions impact residents earlier in life in this neighborhood resulting in early morbidity and mortality and reduced life expectancy. In addition, emergency room utilization is has increased through the years with 1500 more visits in 2014 compared to 2006.



In 2014, 19.6% of inpatient stays and emergency room visits are due to unintentional injuries, followed by respiratory diseases (11.1%), and mental illness (5.4%). These conditions have also been steadily increasing over time as shown in Figure 6. Unintentional injuries, including falls, motor vehicle collisions and unintentional poisonings are the 4th leading cause of death in Maricopa County. (Maricopa County Department of Public Health, 2012). In 2014, 19% of respiratory disease visits were due to Asthma compared to 15% in the City of Phoenix.



Many health conditions if properly addressed and managed through primary care and settings outside of hospitals could prevent hospital stays and emergency room visits. These conditions are known as ambulatory care sensitive conditions (ACSC) and are considered an indicator for access to primary care and quality of care in a community (Agency for Healthcare Research and Quality, 2001). Examples of ACSC conditions include, hypertension, asthma, diabetes, chronic obstructive pulmonary disease, dehydration, urinary tract infections and congestive heart failure. Table 5 shows the ACSC rate for residents living in the EEC census tracts. When compared to the state and Maricopa County, the EEC census tracts have significantly higher rates of ACSC.

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TABLE 3 MIVIDULA	IUNIU	MARES	DENSITVE	COMDITIONS FEE	R 1000 RESIDENTS. 2	OIO

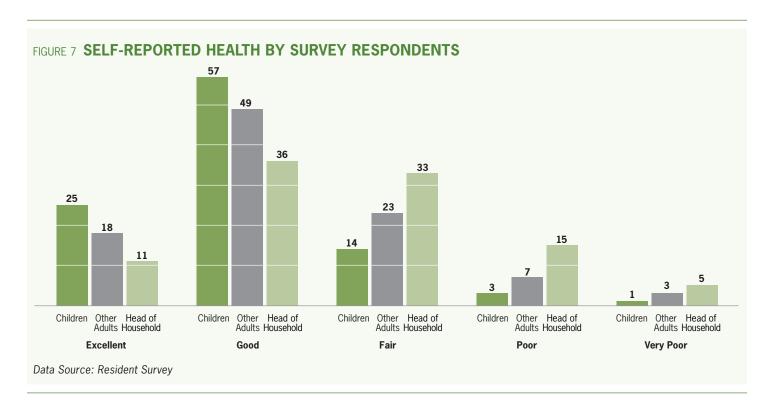
	CENSUS TRACT 1133	CENSUS TRACT 1139	BOTH CENSUS TRACTS 1133 & 1139	MARICOPA COUNTY	ARIZONA
ACSC/1,000 residents less than 65 years old	97.8	86.0	95.2	24.6	24.2
Points Above State Average	73.6	61.8	71.9	0.4	N/A

Source: Arizona Department of Health Services, Hospital Discharge Database

Resident and Community Findings

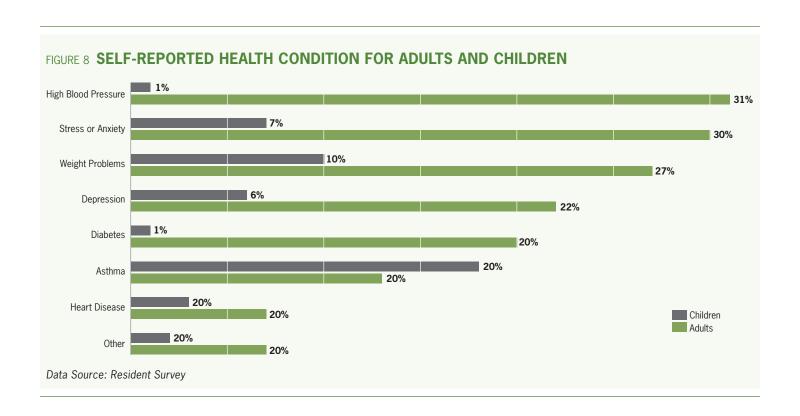
Resident Survey

Self-reported health among survey respondents is mixed. Respondents were more likely to report good or excellent health for children in the household, but still nearly one in five (18%) children are in fair, poor or very poor health. More than half (53%) of head of households reported having fair, poor or very poor health.



Respondents with children reported nearly universal coverage (98%) among children. Regardless of coverage status, most respondents do regularly seek medical care. Eighty-four percent of respondents reported receiving yearly medical checkups, 18% of whom reported no insurance coverage. However, less than half (47%) reported using a primary care doctor when in need of health advice. Instead, one in four (26%) respondents go to an emergency room when they need health advice (most commonly Maricopa Integrated Hospital and St. Luke's Medical Center), 30% seek health advice from a hospital, and 12% go to an urgent care center. Overall, respondents highly rated the health care services they receive, with 50% giving a good rating and 33% an excellent rating.

Residents reported various health challenges they are currently facing. Adults were most likely to report high blood pressure and stress/anxiety. Fifty-three percent of respondents identified mental health conditions (depression and stress/anxiety) for adults, followed by cardiovascular conditions (high blood pressure and heart disease combined are 38%). Asthma was the most common health condition reported for children. Respondents identified weight problems for both adults and children. It was the third most common condition for adults and second most common condition for children.



Qualitative Interviews

The following themes emerged from the resident interviews. Most individuals interviewed had lived in their respective housing project for several years. Residents in Sidney P. Osborn project felt safe and liked that everybody watched out for the children. Residents at Frank Luke and A.L. Krohn reported feeling less safe and noted gang activity especially in Edison Park. Most interviewed used private cars for transportation, although adolescents used public transportation to go to school. Most interviewed did grocery shopping at Walmart, Food City and specialty stores. Several stated that they look for the best price and bargains. Few regularly shopped at Ranch Market and no one shopped at Baiz Market. They expressed concerns about the quality and pricing of food at Ranch Market.

Almost all residents thought there needed to be more programming especially for youth. Several residents felt that the properties were not well maintained. Specifically, in Sidney P. Osborn, the grass in the mini-park was dormant because the sprinklers were broken and had not been repaired. At both properties, residents reported that there were issues within their apartment that had not been repaired despite repeated requests.

Service Providers and Community Partner Interviews

Service providers interviewed in the community identified various challenges in serving the community. Many reported low service numbers for residents living in the public housing sites. While not all child care facilities in the area were interviewed, those that were interviewed reported low number of public housing children in attendance. Barriers identified by these providers were limited transportation for families to access services or inconsistent attendance by families in programming. While there are examples of highly engaged parents, service providers generally felt families were less engaged in their child's school and care. Children with less engaged parents were described to be the youth that were more likely to get in trouble with school or law enforcement. Language barriers were also identified as a challenge. With a large Spanish-speaking population, service providers were limited in bilingual staff which further limited their ability to connect and serve these families. Generally, service providers felt challenged in outreach, engaging and serving families living in the public housing sites.

Residents reported receiving health care in many different places. There was a general satisfaction with their healthcare provider.

FINDINGS AND RECOMMENDATIONS **FOR HEALTH DETERMINANTS**

The following section outlines the assessment findings, implications for health outcomes and recommendations to improve health for each of the key research questions. Additional background is provided on specific methodology used to assess each health area. Recommendations are categorized as policy, infrastructure or programming strategies. Implementing strategies from all three categories will have the greatest impact on health outcomes for the EEC.

THRIVING COMMUNITIES AND FAMILIES

Why it Matters

A resilient community describes both the resilience of the individuals making up the community and the resilience of the community as a whole. Individual resilience is composed of three components: (1) biological adaptability to stress; (2) attachment, or capacity to form meaningful, caring relationships; and (3) sense of control, or ability to make sense of and/or manipulate one's environment. A community is defined by a sense of place, shared common perspectives or interests, diversity in relationships and roles, sense of togetherness, and joint action and engagement (Hughes, 2003).

Central to resilience and community is social cohesion. In the broadest sense,

social cohesion is the "glue" that holds communities together and enables them to build bridges to others. In 1995, the U.N. World Summit on Social Development defined a socially cohesive society as one in which all groups have a sense of belonging, participation, inclusion, recognition and legitimacy (Chinchilla, 2016). Research suggests that individuals who feel a sense of security, belonging and trust in their community have better health. Conversely, those that feel isolated and not connected are less likely to engage in health-promoting behaviors. Building a community of choice where everyone has the means and opportunity to make choices that lead to their healthiest life greatly relies on the social cohesion and resilience in the community. Strong, meaningful social support — from a partner, friends, or family — leads to healthier, more resilient individuals and communities. These social resources can provide emotional support in difficult times, a ride to work when the family car breaks down, or shared health-promoting information amongst neighbors. Access to social support is associated with protective health effects including improved mental health outcomes, reduced stress, better cardiovascular health, better immune system functioning and more (Berkman & Kawachi, 2000). Children living in thriving neighborhoods with strong social connections, community involvement and supportive family structures are more likely to have upward mobility or improved economic opportunity between generations (Chetty, Hendren, Kline, Saez, & Turner, 2014). Improved economic opportunity is correlated with improved health outcomes (Katikireddi, 2016). Thus, the interdependence of each other in a community cannot be taken lightly. When some residents do not have the opportunity, or means to live healthfully, this affects the entire community. Providing opportunities for all existing and new residents

Providing opportunities for all existing and new residents in EEC to forge relationships, foster social support and deepen connections is important for all ages and at all stages of the redevelopment process.

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Fostering social cohesion in a diverse, mixed income community can happen in variety of ways from resident leadership opportunities to property management practices and from access to public gathering spaces to opportunities for youth engagement (Chinchilla, 2016). A thriving community has strong social cohesion, strong family support, strong programs for children and opportunities for all including vulnerable populations.

Methodology

Although thriving communities can be difficult to measure, relevant research has validated proxy measures for social cohesion including community trust and civic engagement. To measure the level of trust and relationships in the community we included seven questions in the resident survey. Residents were asked to rate their level of agreement with each statement listed in Table 6.

Civic engagement was measured by voter turnout for the 2016 presidential election. The target area falls between two precincts that go beyond the EEC boundaries. The residents north of Van Buren Street, including those that live in A.L. Krohn and Frank Luke, are located in the Edison precinct and the residents south of Van Buren Street, including those that live in Sidney P. Osborn, are located in the Monroe precinct. For benchmarking, the county and state level data were included. State level data was obtained from the Arizona Secretary of State. The precinct and county data were provided by Maricopa County Recorder's Office. We also interviewed residents and made observations about community leadership roles for residents that can be an opportunity for local engagement.







Family and youth engagement were also assessed as a component of thriving, resilient community, particularly focusing on early childhood development. Early childhood marks a time of peak plasticity in the brain, and early adversity can weaken the foundation upon which future learning will be built; in other words, positive developmental experiences in early life are crucial. (Center of the Developing Child at Harvard University, 2010). Existing data points were limited to help assess the strength of families and early childhood experiences. We used qualitative resident interviews, community workshops and interviewed key service organizations in or near the community that provide services for families with children. Key organizations that were interviewed included Edison School, Boys & Girls Clubs of Metro Phoenix - Gabel Branch on 15th Street and McDowell Road, Southwest Autism Research and Resource Center, City of Phoenix Police Department and First Things First.

Existing Conditions

Community Connection and Trust

Based on resident survey results, most residents reported that they had no or only a few family or friends that live in the community. Over half of residents felt people generally get along with each other and help each other out, but fewer residents felt people could be trusted or shared the same values. Table 6 shows that while connections exist in the community, they are often surface level connections. This was reinforced while completing resident interviews. Two interviews with long-term residents that lived in the A.L. Krohn and Frank Luke community for over 27 years reported that they did not know their neighbors. Resident interviews and the RLC also indicated that Sidney P. Osborn and Frank Luke residents rarely interact. This is due in part by the physical barrier of Van Buren Street. Overall, there are minimal deep connections and friendships among residents living in the public housing sites.

	STRONGLY AGREE/AGREE	DISAGREE/STRONGLY DISAGREE
People generally get along with each other	63%	23%
People help each other out	58%	23%
We watch out for each other's children	55%	26%
There are people I can count on	50%	33%
People can be trusted	36%	44%
People share the same values	27%	42%
There are people who might be a bad influence on my children	52%	22%

Van Buren is a significant barrier in the EEC. It effectively divides the community in to two neighborhoods, one south of Van Buren and one north of Van Buren, Sidney P. Osborn, located south of Van Buren, is surrounded by more industrial land use and somewhat isolated from community assets, such as parks, grocery store, hospital, neighborhood school and the community center at Aeroterra. Even the children living on either side of Van Buren attend different schools. Children that live in the Sidney P. Osborn community live in the Garfield Elementary School catchment area and are bused to the school at Roosevelt Street and 13th Street. Children living at A.L. Krohn, Frank Luke and Aeroterra attend Edison School that is walking distance from the housing sites.

Additionally, the current uses of Van Buren Street are not consistent with the type of neighborhood residents want to cultivate. Originally a major U.S. highway, Van Buren Street was home to numerous motels and motor courts. Some of that lodging still exists today mostly to the east of the EEC. The Reinvent PHX HIA for the Gateway and Edison District reported that many of the remaining motels are now home to registered sex offenders, prostitution and other criminal activities. While, there are no motels in the EEC area, residents have expressed worry about their children being exposed to the adult entertainment business along Van Buren Street. In the EEC, most businesses located on Van Buren Street are convenience stores that are licensed for off-site liquor sales, used car lots, automotive repair, and fast food outlets. There is one adult entertainment business on the west side of Van Buren Street and 16th Street that residents talk about with concern.

Through observation and resident interviews, it became clear there is a different sense of community on either side of Van Buren. Sidney P. Osborn is physically isolated from the assets north of Van Buren and residents of Sidney P. Osborn are reluctant to participate in activities north of Van Buren citing safety as a major concern. An interview with the neighborhood officer indicated that there is still gang activity in the A.L. Krohn and Frank Luke housing sites that is not at the Sidney P. Osborn site. Residents living in A.L. Krohn and Frank Luke report fear of retribution when reporting incidents to the police. Some residents felt they needed to share their contact information with the police which would lead the police to contact them or identify them in the neighborhood by knocking on their door.

Despite Sidney P. Osborn lacking assets and resources, residents reported neighbors helped watch out for neighborhood kids, neighbors kept "people who do not belong onsite" out of the community, and neighbors helped give rides and provide transportation at times for each other.

Civic Engagement

Looking at civic engagement metrics, Table 7 shows that the precincts that include the EEC target area are less likely to turnout to vote when compared to Maricopa County or Arizona. Although still below the county and state, the precinct that Sidney P. Osborn is located in, Monroe precinct, has a higher voter turnout rate than the precinct that includes A.L. Krohn and Frank Luke housing sites.

Furthermore, resident leadership opportunities are limited in the community. There are resident councils at each housing site. However, the meetings are led by the property manager for the purpose of presenting new rules and policies for the tenants. There is one newly formed resident leadership opportunity that was created through the Choice Neighborhood planning grant which is the resident leadership training program and RLC facilitated by Phoenix Revitalization Corporation. There are four churches located within the boundaries, however, these religious institutions seem to serve members outside of the community and lack a strong presence with residents living in the public housing sites.

Family Support, Youth and Early Childhood

The EEC is a young community with 50% of the residents under 18 compared to 28% citywide. Of those under 18, 30% are under the age of five. In both neighborhoods, residents report the need for family support and family-driven services. Resident interviews repeatedly expressed concern about parent engagement and unsupervised children in the neighborhood. While parenting programs and other classes are offered onsite, community service providers identified challenges in the community due to poor attendance or low participation rates. The resident survey confirmed low attendance with 91% of residents surveyed reported never using parenting skills classes offered. To meet child care needs, most residents surveyed that had children five and younger reported using informal childcare settings where children are cared for by a family member/friend, a nanny/sitter, or parent in a home setting. Respondents indicated that 41% of young children were enrolled in an early childhood program such as Head Start/Early Head Start, another child care center, pre-K and Kindergarten.



TABLE 7 VOTER TURNOUT 2016 PRESIDENTIAL ELECTION

GEOGRAPHICAL AREA	VOTER TURNOUT (%)
Edison Precinct	55.11
Monroe Precinct	62.61
Maricopa County	74.43
Arizona	74.17

Source: Maricopa County Recorder's Office and Arizona Secretary of State

When asked how the community will change in the next five years, a third felt it would get worse and nearly half of the residents surveyed felt it would get better.

For school age children, residents report lack of afterschool opportunities, particularly for middle to high school youth. The resident survey indicates that most school-age children go home (68%) after school. Phoenix Elementary School District operates a before and after school program called Phoenix Elementary Enrichment Resources (PEER) Club at each of its schools. The PEER Club is free and operates from 6:30/7:00am to 6:00pm five days a week and is also open during school breaks. Participation by students is low as only 5% said that their children go to PEER Club after school. There is also very low participation (1%) with the Boys & Girls Clubs of Metro Phoenix. The nearest location — Gabel Branch — is located just north of the EEC community on the other side of I-10. When asked for the reason why children do not participate in out-of-school time programs, survey respondents cited cost (29%) and lack of knowledge of available programs (28%) as the most common reasons. Interviews with residents also shared concern for quality of after school programming. Some reported activities did not engage the older school age children. Interviews with the principal in Edison shared similar sentiments that there are no programs that engage the 10-12 year olds and teenagers in the community. This is often the age that residents reported youth getting in trouble with neighbors and police.

While there are challenges to overcome, there is hope among residents for future change in the community that will make a difference for residents. When asked how the community will change in the next five years, a third felt it would get worse and nearly half of the residents surveyed felt it would get better. Sixty-five percent of those surveyed indicated a desire to return to the community after the redevelopment and only 9% did not want to return. The remainder didn't know or wanted more information to make the decision.

Evaluating Health Impact

Fostering a resilient community that is connected, trusting and engaged can improve the health and wellbeing of the community through all phases of the development. There are various challenges that might hinder individual and community resilience throughout the EEC's redevelopment process. First, the resident population is very diverse, with people of varying ages, household structures, languages and cultures and levels of ability. The redevelopment will add another level of diversity among income levels which can further challenge the social cohesion of the community. In addition, the relocation and replacement of housing communities may disrupt existing social ties among residents as they move into a new, larger mixed income housing. This may make it more challenging at first to reach out and forge new connections among residents. Furthermore, Van Buren is a clear divider in the community. This was found to be consistent with the Reinvent PHX findings and, if not fully addressed, will prohibit community-wide social cohesion.

Given the large population of young children in the community, particular attention needs to be made to support families with young infants and children. Children in low-income families often are exposed to more adverse early childhood experiences and environmental factors that delay or compromise their development and place them at a disadvantage for healthy growth and school readiness (Shonokoff & Garner, 2012). In addition, low-income families are less likely to enroll children in center-based child care. A study in 2010 found that less than half of children in families in the lowest income quartile were enrolled in center-based early childhood education programs (Duncan, Van Buren is a clear divider in the community. This was found to be consistent with the Reinvent PHX findings and, if not fully addressed, will prohibit community-wide social cohesion.

Given the large population of young children in the community, particular attention needs to be made to support families with young infants and children.

2013). Research shows that every \$1 invested in early childhood can yield returns between \$4 and \$16 (First Things First, 2016). Benefits are realized for young children, families and communities. Young children with positive rich learning environments are more likely to graduate high school and have better health outcomes. Mothers are more likely to gain employment and income. Communities are less likely to experience crime or child abuse and neglect, and schools save from less remedial education (Reynolds, Temple, & Ou, 2010). This makes investing early in life a key opportunity to promote the health of the EEC.

Further opportunities to promote health include minimizing uncontrollable stressors, increasing opportunities for diverse connections among residents of varying ages, levels of ability and diverse cultures, increasing leadership opportunities for residents and improving family support and youth opportunities. These have the potential to strengthen community resilience and social cohesion for the redeveloped EEC, both of which are integral to positive physical and mental health outcomes.

Recommendations

The following recommendations are intended to improve the resiliency and social capital of individuals and the community. There are recommendations for policy adoption, infrastructure development and programming support. For best results, policy, infrastructure and programming recommendations should be adopted to maximize the health impact.

Policy

· Adopt management policies and practices that prioritize inclusive resident leadership and utilize resident assets.

The City should work with the RLC to form one single Resident Council/ Tenant Association for each housing site including establishing an incentive for participation in the association. Creating a single organization across tenure can help eliminate power dynamics between market rate and subsidized renters in the community. It will promote collaborative decision making and set shared housing values. The association should be involved in rule making, addressing building management conflicts and programming offered in the community.

Explore ways to employ residents in maintenance and management of the building. This may include offering landscaping/maintenance services, providing onsite programming for youth, or serving as a community health worker.

Allow community spaces to be utilized when staff is not onsite to increase access to resources. Vetted resident(s) can be responsible for opening and closing community spaces with very clear accountability guidelines for this role.

Rationale: Creating a resident-driven process will offer community ownership and increase engagement in the community. In addition, these associations will offer opportunities for diverse residents to interact and build connections to one another. Creating leadership roles in the community will also help individual self-efficacy increase which further promotes social cohesion.

Creating a residentdriven process will offer community ownership and increase engagement in the community.

Infrastructure

· Create a community of opportunity by prioritizing healthy child development from birth through college entry through infrastructure development and high quality services for both adults and children.

Dedicate appropriate space in the housing redevelopment to offer onsite child care and youth programming. Work with community partners to offer sustainable programming onsite in the space dedicated for children. These programs should provide services to all children living in the community, regardless of income.

Explore how to meet standards to offer in-home family child care regulated by Arizona Department of Economic Security - Child Care Administration, and include these design elements in the housing plan.

Rationale: Providing onsite care will improve the opportunity for participation. To promote a cohesive community, all children in the community should be able to participate in the program to further social cohesion across incomes and race. For example, the childcare program may offer Quality First scholarships or Head Start spaces for low-income families while other families may pay full rate for services. Children and families are treated the same and offered the same programming regardless of income or race.

Given many families in the community currently use family, friends or neighbors for care, it is important to improve the quality of these services. Creating units that can serve as regulated family child care homes can support quality improvement of these homes as well as offer employment opportunity for residents living in the unit.

· Ensure equitable distribution of community infrastructure, facilities and programming on both the north and south side of Van Buren Street.

All sites should have onsite community centers that offer computer access and community rooms that can be used by residents and other programming as identified by residents.

Expand the parks and public gathering spaces throughout the community to foster community connections among housing residents. Design the spaces with amenities that best suit the housing units. For example, one to two bedroom units will attract singles, young adults and couples without children, whereas three to five bedrooms will likely house families and adults with children. Particular attention should be given to the Sidney P. Osborn neighborhood where park space is limited and not well maintained. If Sidney P. Osborn is the last housing site to be redeveloped, there should be effort to bring the existing mini-park back to life by fixing irrigation, installing sod, adding soccer fencing to the soccer goal posts for the current families living onsite.

Rationale: Creating shared public gathering spaces on site will foster cohesion within each housing site. Van Buren Street is a historical divider in the community and will take time to develop community cohesion across the divider. Fostering social cohesion within the housing sites may improve the ability to create long-term community cohesion.

Expand the parks and public gathering spaces throughout the community to foster community connections among housing residents.

Creating units that can serve as regulated family child care homes can support quality improvement of these homes as well as offer employment opportunity for residents living in the unit.

Program

Partner with community organizations and allocate resources to provide ongoing trainings and programming on facilitation, mediation, restorative justice and leadership development to all residents to support community participation and engagement.

(Similar recommendation to Reinvent PHX HIA completed in 2013)

Rationale: Strengthening residents community building and community organizing skills will foster greater social cohesion among residents and help shape more effective neighborhood groups/tenant associations. Simply creating mechanisms for inclusive participation does not ensure their success, and it is important to explicitly take into account social difference and unequal access by guaranteeing representation of marginalized social groups (Young, 2000).

• Support both formal and informal family support programming to strengthen caregiver/parenting skills and families.

Offer family-driven support programs such as Cruciendo Unidos, Facts of Life, Home Visitation, Parent Ambassador Program and others. Work with resident leaders and tenant councils to determine type of programming and aid in the outreach and participation of the programs.

Enhance the quality of child care services using Family, Friend and Neighbor programs, such as Kith and Kin.

Encourage the development of mothers' clubs and sports leagues led by residents with support from the City of Phoenix and/or community-based organization.

Rationale: Facilitating opportunities for parents/caregivers to interact with one another will help families build social connection, build support systems with each other and strengthen parenting skills to better support outcomes for children living in the community.

Encourage the development of mothers' clubs and sports leagues led by residents with support from the City of Phoenix and/or community-based organization.



ACCESS TO HEALTHY AFFORDABLE FOOD

Why it Matters

Good nutrition is vital to good health, preventing disease and healthy development of young children and adolescents. Evidence shows that nutritious diets and regular physical activity plays an important role in preventing obesity, heart disease, stroke, cancer and diabetes, which together comprise the leading causes of death and disability in the U.S. (CDC, 2017). Changing dietary and lifestyle patterns can dramatically improve population health. Specifically diets that include a variety of vegetables, whole fruits, whole grains, fat-free or low-fat dairy and/or fortified soy beverages, a variety of protein foods, oils, and limits saturated and trans fats, added sugars and sodium (U.S. Department of Health and Human Services and U.S. Department of Agriculture, December 2015).

While nutrition is about what we eat, our eating choices are influenced by our environment, where we live, work, play and learn. The location of all food outlets, from supermarkets to convenience stores, farmers' markets to fast food restaurants, can profoundly affect a community's collective health. Often income levels of neighborhoods can predict the availability of healthy food in a community. Minority or low-income families are more likely to live in communities with limited or no access to healthy, affordable food, often called low access communities (Rhone, Ploeg, Dicken, Williams, & Breneman, 2017). The lack of conveniently accessible, healthy and affordable retail food outlets, coupled with low family income and high transportation cost, can exert substantial influence over what a family eats. While the EEC does not meet the technical definition of a food desert, the district does face serious barriers to accessing healthy and affordable food.

By improving the food environment of the EEC, the health of its current and future residents can be largely improved.

Methodology

To assess the healthfulness of the food retail outlets, an evidence-based shortform corner store audit tool (SCAT) was completed on 11 food outlets (DeWeese, 2016). Based on type and quantity of food items available and participation in WIC, each retail outlet was rated on a 1 to 7 scale where 7 is the healthiest retail outlet. The scores were further grouped into categories: good (5-7), fair (3-4), and poor (0-2) to describe the healthfulness at each food outlet. (Appendix B)

Geographical information system (GIS) was used to visualize the food outlets in the community and calculate walking distance to food outlets that received a good SCAT score.

We also reviewed the Reinvent PHX HIA that assessed and made recommendations about the food environment.

Existing Conditions

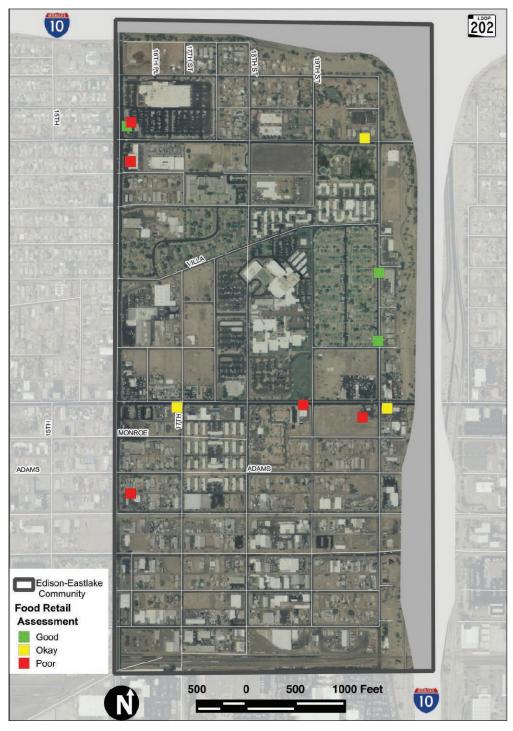
Food Retail

The EEC has 11 food retail outlets, largely composed of convenience stores. There is one supermarket or large-scale grocery store, Ranch Market, located at 16th Street and Roosevelt. Baiz is a small-scale grocery store located on 20th Street between Van Buren and Roosevelt Streets. Both Ranch Market and Baiz are ethnic grocery stores specializing in Hispanic and Middle Eastern foods, respectively. The nine other food retail outlets are convenience stores.

While the EEC does not meet the technical definition of a food desert, the district does face serious barriers to accessing healthy and affordable food.

We analyzed the healthfulness of the food retail outlets using the SCAT form found in Appendix B. Only three of the 11 food retail outlets, Ranch, Baiz and Patty's Market received good scores. The least healthful outlets were the convenience stores that tended to have less variety of fresh produce. It was also noted the convenience stores were all off-premise liquor stores with liquor advertisements displayed.

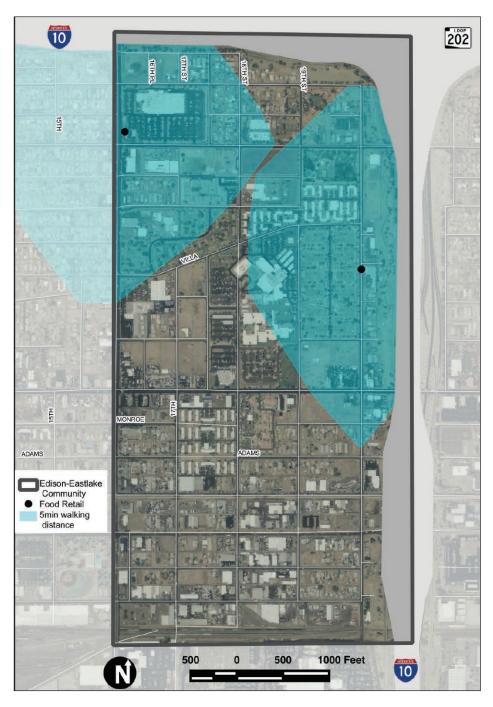
FIGURE 9 FOOD RETAIL ASSESSMENT



Map Source Elements: Esri World Imagery, QGIS and QGIS community

The resident survey indicates that only 42% of residents have access to their own vehicle. As such, many residents report walking, using public transportation, or getting a ride from someone to access resources, such as grocery stores. With 45% of residents reporting that walking is often used as their mode of transportation, we analyzed walking distance to the food outlets with a good SCAT score in the neighborhood. Analysis from the National Household Travel Survey indicates that most people who walk for food or meals tend to walk shorter distances than if walking for recreation purposes (Yang & Diez-Rouz, 2012). With the added challenge of summertime heat, we used a five-minute walk as our standard and found that only 15% of the residents live within a five-minute walk of Ranch Market, 37% live within a five-minute walk of Baiz Market and 31% live within a five-minute walk to Patty's Food Mart. Sidney P. Osborn residents have the least access to healthy food retail outlets in walking distance.

FIGURE 10 RANCH AND BAIZ WALKING MAP



Map Source Elements: Esri World Imagery, QGIS and QGIS community

Food Shopping Experience

Residents are not satisfied with the food retail outlets in their neighborhood. Residents voiced the need for another large-scale grocery store through the community workshops, surveys, RLC, and resident interviews. Seventy-two percent of residents surveyed rated access to grocery stores as good or excellent, however, this is also the number one business (54.1%) they'd like to see more of in the neighborhood. The employee survey revealed similar findings with 55.6% of employees working in the neighborhood indicating that grocery stores are the business they'd like most to see more of in the community. The resident survey revealed that Ranch Market is used frequently, but residents also travel to Walmart located over four miles away to grocery shop to obtain "lower prices and better quality." The RLC and resident interviews shared concerns about pricing and the quality of food, particularly the meat and produce section at Ranch Market. No one interviewed shopped at Baiz Market. Resident interviews revealed that, when possible, residents chose to grocery shop at the Walmart on 38th Street and Thomas Road or the Fry's at 30th Street and Thomas Road. Convenience stores are also frequented by residents, likely due to proximity to residents, where the food options tend to be limited and less healthy.

TABLE 8 FOOD RETAIL	. OUTLETS	FREQUENTED	BY	RESIDENTS
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FOOD RETAIL OUTLET	OFTEN	SOMETIMES	NEVER
Ranch	58%	37%	6%
Dollar Stores	48%	41%	11%
Walmart	41%	48%	10%
Fry's or other grocery store	37%	45%	18%
Convenience Stores	36%	40%	24%
Church	13%	33%	54%
Food Pantries	12%	35%	53%
Costco/Sam's Club	9%	29%	62%
Source: Resident Survey			

According to the resident survey, 84% received SNAP benefits and many were concerned about running out of food. Over half of the survey respondents indicated that they were often or sometimes worried that they would run out of food and that they would not have money to buy food when it ran out. Research shows that SNAP participants juggle multiple priorities when food shopping. SNAP participants value nutrition and taste as much as other consumers, but their time and money constraints complicate the task of making healthy food choices. Compared to higher income shoppers, SNAP participants place more importance on price and convenience. This is not surprising given budget constraints trying to meet rent, utilities, transportation, etc. Compared to higher income shoppers, SNAP shoppers are less likely to shop weekly and more likely to shop once a month or less. This may be related to the monthly distribution of SNAP benefits or to having a more difficult time getting to the grocery store — 14 % of SNAP respondents reported that it took them more than 30 minutes to get to a grocery store, whereas eight percent of higher income shoppers needed that much travel time (Mancino & Guthrie, 2014).



When consumers shop less frequently, choosing foods that store well make a difference. These types of foods tend to have less nutritional value, leading to less healthy eating.

All food stores accept SNAP, but only Ranch Market accepts the Supplemental Assistance for Women, Infant and Children vouchers (WIC). From the standpoint of making healthy food affordable, WIC plays an important role. It provides food assistance to low-income pregnant or breastfeeding women or families with young children to purchase healthy food, such as milk and fresh fruits and vegetables. WIC has been shown to provide better health outcomes for infants, young children and their mothers, as well as improving the food environments in low-income neighborhoods (Carlson, 2017). With a higher proportion of young children ages zero to five living in EEC, WIC is an important resource for residents.

Other Food Options

There is one mobile vendor, Fresh Express, that brings fresh fruits and vegetables to the public housing sites. Fresh Express serves Sidney P. Osborn residents every other Tuesday from 9am to 10am and as of August 2017 serves Frank Luke and A.L. Krohn residents every other Tuesday from 1pm to 2pm. Fresh Express accepts SNAP and offers Double Up Food Bucks Arizona. Double Up Food Bucks AZ is a fruit and vegetable incentive program operated by Pinnacle Prevention and modeled from the Fair Food Network Double Up Food Bucks Program. The goal of is to make purchasing locally grown fruits and vegetables more affordable for those most in need. For every SNAP dollar spent at a Double Up Food Bucks site, like Fresh Express, participants receive a dollar for dollar match, up to \$20 additional dollars per day to buy locally grown fruits and vegetables. Research shows that when Double Up is in place, SNAP recipients shop more often and eat more produce (Fair Food Network, 2016).

There are two community garden locations in the EEC. One is located on Aeroterra property and requires a key card to access it. The other is on Sidney P. Osborn where there is a small plot dedicated for residents to garden that was installed in 2012 with the Let's Grow Phoenix Gardens Program. Today, it is not well used by residents. Resident interviews and the RLC identified a few barriers to the garden. The location of the garden made it hard to keep eyes on the space, and residents report that it was frequently vandalized possibly by the youth living in Sidney P. Osborn. One resident continues to maintain a raised bed, and there are a few fruit trees still growing. The RLC and community members attending community workshops expressed interest in community gardens to grow their own food. Sixty percent of residents indicated that community gardens are very important improvement they would like in the neighborhood and an additional 30% thought they are somewhat important.

Evaluating Health Impact

Although this community is not identified as limited supermarket access area, there are clear challenges to accessing healthy and affordable food to support a healthy diet. With the community's high reliance on public transportation, walking and getting rides from others and getting to and from the grocery store is

PARTNER SPOTLIGHT: FRESH EXPRESS

Fresh Express by Discovery Triangle is a mobile produce market that provides access to high-quality, affordable produce to residents with little to no access to healthy food. We proudly serve individuals, families, school-age children, senior citizens, educators and many others in the Phoenix and Tempe regions. Our mission is to enhance the health of Valley residents by increasing access, availability, and affordability of fresh produce and providing health and wellness resources to empower community members to make healthy choices.

challenging for most residents. Most residents reported a preference for food shopping outside of the community at grocery stores that had better pricing and quality, from their perspective. In between grocery trips, residents are reliant on nearby food outlets, predominantly convenience stores with less healthy options. Improving the availability and affordability of healthy food, like fruits and vegetables, in the community's existing food outlets will support residents adopting a healthy diet and improving health outcomes.

During community workshops, interviews and surveys, residents in the community share an interest in urban agriculture. There are residents from cultures that value farming living in the public housing sites. However, spaces to garden, farm, or host a farmers market are limited to nonexistent in the community. Creating shared spaces to maintain and grow food will not only help increase the availability of fresh fruits and vegetables, but also provide opportunities to be physically active and connect with others living in the community (Centers for Disease Control and Prevention, 2010). Thus, urban agriculture has the potential to improve resident's physical and mental health.

Additionally, affordability of food is a concern for most residents due to limited incomes. Nutrition assistance programs, like SNAP and WIC, can help reduce the food price point for residents. Double Up Food Bucks Arizona can help reduce the cost of locally grown fruits and vegetables sold at farmers markets. Bringing in these programs and offering programming as requested by residents can help stretch food budgets and decrease food insecurity in the community. Improving the food environment and nutrition resources in the community can support healthy learners, healthy workers and a healthy community.

Recommendations

The goal of these recommendations is to improve access to healthy and affordable food in the neighborhood. There are recommendations for policy adoption, infrastructure development and programming support. For best results, policy, infrastructure and programming recommendations should be adopted to maximize the health impact.

Policy

· Promote Urban Agriculture through zoning. Urban Agriculture includes community gardens, urban farms, farmers markets, community supported agriculture, and mobile produce vendors.

(Similar recommendation to Reinvent PHX HIA completed in 2013)

Identify dedicated space for farmers markets and community gardens to operate in the neighborhood, possibly at parks, on housing site or on school grounds. Activate vacant lots for urban agriculture purposes. Partner with community based organizations, such as International Rescue Committee or TigerMountain Foundation, to empower residents in establishing and maintaining a community garden. This community is located in the Salt River Project Water District which may be able to offer low cost water solutions.

Rationale: Zoning allows or prohibits different types of land use. Including urban agriculture as a land use option will increase access healthy affordable foods for residents. It will also create opportunities for engagement and leadership in the community.

Creating shared spaces to maintain and grow food will not only help increase the availability of fresh fruits and vegetables, but also provide opportunities to be physically active and connect with others living in the community. · Encourage the development of a Farmers Market by adopting supportive policies and practices.

(Similar recommendation to Reinvent PHX HIA completed in 2013)

Streamline the vendor process and agreements to operate and manage a farmers market on public city space. This would include offering an open and rolling solicitation for individuals proposing to operate and manage a farmers market. Additionally, fees should be waived to operate in public city space, particularly in low food access designated communities or low-income census tract. Remove vendor maximum and allowable space requirements to allow markets to best meet community needs and remove requirements for the approval of City of Phoenix for any media or promotions of markets. Lastly, encourage community non-profits to participate in markets by removing non-vendor stipulations.

To reduce the price point of food sold at farmers markets, adopt a policy that requires all farmers markets to accept EBT or other nutrition assistance benefits, like WIC Farmers Market Coupons and Double Up Food Bucks AZ, as appropriate.

Rationale: Removing barriers and costs to operate farmers markets in low-income and low food access communities will bring more fresh fruits and vegetables to those who are in most need. Requiring markets to use tools to reduce the cost of food to low-income residents will help make healthy food more affordable.

Infrastructure

Removing barriers and

markets in low-income

communities will bring

more fresh fruits and

who are in most need.

vegetables to those

and low food access

costs to operate farmers

· Create a small business development initiative, Healthy Corner Store Initiative, to improve access to healthy and affordable food.

(Similar recommendation to Reinvent PHX HIA completed in 2013)

Partner with residents, Local First Arizona and Maricopa County Department of Public Health to develop a Healthy Corner Store Assistance initiative to improve the existing corner store marketing, availability and quality of healthy food. With the RLC form a small resident committee to work with the grocery and corner store operator to receive complaints, monitor responses and make suggestions. When possible empower vendors to become WIC certified vendors.

Rationale: Making intentional efforts to decrease the time and travel costs of food shopping and increase the feasibility of shopping more frequently to alleviate concerns about how well food keeps and encourage SNAP shoppers to purchase increased amounts of healthy perishables, such as fresh fruits and vegetables. WIC requires certain healthy foods always be stocked in WIC approved stores. This helps improve the healthy food offerings in small stores.

· Determine the market potential for an additional full-scale grocery store as a long-term strategy to create a community of choice.

(Similar recommendation to Reinvent PHX HIA completed in 2013)

Rationale: While this is a long-term recommendation, the expansion of this supermarket to the area is particularly important given the residential units being proposed in the area. This will increase the number of people living in the area who will need access to healthy and affordable food.

Program

· Work with community-based organizations to develop a community garden association lead by residents, including youth.

(Similar recommendation to Reinvent PHX HIA completed in 2013)

Rationale: To maximize the use and sustainability of a community garden, it is important for residents to learn to operate and manage the space. This is a leadership opportunity for both residents and youth living in the neighborhood which will lead to community buy-in and less vandalism. A community-based organization to help support residents and youth to formalize and develop a community garden association is critical for its success. Master gardener classes, offered through the University of Arizona Cooperative Extension, can help train a core group of residents and youth on how to plant, grown and maintain the garden.

· Partner with residents to determine specific food preparation, food storage, and other nutrition education classes to offer at each housing site. Allow residents to lead classes when appropriate and bring partner organizations onsite to offer free classes to all residents.

Rationale: Learning how to store, prepare and how to get and use food benefit programs such as SNAP, WIC and Double Up Food Bucks Arizona to help make ends meet may result in increase in healthy food purchasing. Residents should be involved in identifying the type of programs that will meet their needs and be able to facilitate classes when appropriate. A potential partner organization is the Arizona Health Zone, operated by the Arizona Department of Health Services and its contractors. This program provides free nutrition education and support to SNAP-eligible adults and children.

· Work with the local Walmart (36th Street & Thomas Road), Fry's (30th Street & Thomas Road) and Ranch Market (16th Street & Roosevelt Street) to introduce free shuttle buses for residents of EEC.

Rationale: Residents are limited in accessing supermarkets due to distance and lack of car ownership. This shuttle service can be modeled on free shuttle services offered in underserved communities by local Walmarts in Michigan or the shuttle service study by University California Davis (Cassady & Mohan, 2004). Shuttle services may remove transportation barriers that prevent residents from shopping at locations that offer healthy food options. This is a short-term solution to offer while efforts are being made to develop and support a healthier community food environment.

COMMUNITY SUCCESS SPOTLIGHT: GARFIELD'S GARDEN ON THE CORNER

Garfield's Garden on the Corner is a healthy hub within the city of Phoenix, Arizona. Located on the Garfield Elementary School campus, Garfield's Garden on the Corner integrates edible education across core middle school subjects during the school day and opens to the community after school hours. Students learn essential life skills through highly engaging project-based activities. Learning is brought to life in the garden through hands-on scientific investigations such as growing, tending, and harvesting seasonal produce while deepening students understanding of the world around them. In the kitchen, relevant and animated historic tales are told while consistent peer-to-peer engagement is experienced through shared meals. Through the garden and kitchen lessons, Garfield's Garden on the Corner empowers students to develop a healthy connection to food, themselves, and others.

Garfield's Garden on the Corner is open to Garfield Elementary School students, surrounding schools, parents, and neighborhood residents after school hours. Community activities such as tending the garden, harvesting produce, sharing a meal, listening to a story, practicing yoga, painting a mural, and celebrating special occasions empower the Garfield neighborhood with essential and culturally appropriate skills of self-sufficiency to transform their current behaviors to healthier, life-long habits. Community days aim to remove barriers of access and affordability to fresh, nutrient-dense food. By teaching practical life skills and encouraging others to do the same, Garfield's Garden on the Corner promotes mentorship and a true sense of collaboration.

Directed by the Mollen Foundation in partnership with Phoenix Elementary District, this shared use space includes gardens and fruit trees, a learning kitchen, regional and nutrition integrated food education, fitness activities, volunteer opportunities, art murals and special events always coupled with an appreciation for good food.

ENVIRONMENTAL QUALITY

Why it Matters

Where we live matters to our health in part due to the physical environment. The air we breathe, the water we drink, and the land and buildings around us impact and influence our ability to live a healthy life (Centers for Disease Control and Prevention, 2017).

Urban Heat Island

Extreme heat is considered a public health threat and while it can impact anyone, specific groups are more vulnerable to heat than others. Older adults, infants and children, low-income communities, people with chronic disease, and people working or being active outdoors for work or sports are more likely to be impacted by extreme heat than other groups (Centers for Disease Control and Prevention, 2017).

In more populated urban environments, where natural environments are replaced with roads and buildings, heat islands — or areas that are hotter than nearby rural areas — form (Environmental Protection Agency, 2008). The surfaces of buildings and pavements that replace natural vegetation absorb solar radiation and become extremely hot, which in turn warm the surrounding air. Cities that have been "paved over" do not receive the benefit of the natural cooling effect of vegetation (Akbari, 2005). On a hot, sunny summer day, the sun can heat dry, exposed urban surfaces, like roofs and pavement, to temperatures 50 to 90°F (27 to 50°C) hotter than the air, while shaded or moist surfaces remain close to air temperatures (Environmental Protection Agency, 2008). Heat islands can increase energy demand particularly during summertime peaks increasing air conditioning costs, contributing to poor air quality and greenhouse gas emissions, water quality and heat-related illness and mortality.

The air we breathe, the water we drink, and the land and buildings around us impact and influence our ability to live a healthy life.

Outdoor Air Quality

Outdoor air quality contributes to respiratory and cardiovascular health. Asthma and other respiratory diseases, such as chronic obstructive pulmonary disease, are affected by outdoor air pollutants. Air pollutants can contribute to the development of childhood asthma and other respiratory symptoms, such as difficulty breathing and asthma attacks (Centers for Disease Control and Prevention, 2014). Research shows that air pollution can trigger heart attacks, stroke, and irregular heart rhythms — especially in people who are already at risk for these conditions. This includes men over the age of 45, women over the age of 55, anyone with family history of heart disease, anyone overweight or not physically active and all cigarette smokers (Environmental Protection Agency, 2016).

The EPA identifies two key outdoor air pollutants, ozone and particulate matter, that can affect asthma. Ozone, found in smog, tends to be worse on hot days in the afternoon and evening. Particulate matter found in haze, dust and smoke can be bad any time of year, but particularly on calm weather days. Small particulate matter is also the key pollutant that is the greatest concern for cardiovascular health (Environmental Protection Agency, 2017). Traffic is also a major source of both pollutants, as well as other known health hazards such as carbon monoxide and nitrogen oxides. Exposure to traffic-related pollution is linked to asthma and other respiratory symptoms, development of childhood asthma, cardiovascular disease and death (National Heart, Lung, and Blood Institute, 2007).

Vacant Lots

Vacant lots, unoccupied housing and substandard housing are correlated with lower pre-kindergarten literacy, stunted physical development in children, poor mental health status, loss of social networks, less healthy behavior like exercise habits, and more chronic disease. It contributes to the feelings of being unsafe in a neighborhood, real and perceived, which also contributes to disinvestment in neighborhoods. Furthermore, some researchers attribute the breakdown in social capital to vacant lots and abandoned buildings. This results in a less organized and engaged community that is willing to step in to help each other or prevent crime. Vacant lots are also associated with increased community stress that negatively impacts health (De Leon & Schilling, 2017).

Water Quality

Water quality is critical for public health. Poor water quality can lead to disease outbreak and adverse health effects, including gastrointestinal illness, reproductive problems and neurological disorders. Infants, young children, pregnant women, the elderly and people whose immune systems are compromised because of AIDS, chemotherapy or transplant medications, may be especially susceptible to illness from some contaminants (Centers for Disease Control and Prevention, 2017).

Methodology

Urban Heat Island

Heat experts at Arizona State University provided three data sources to assess the urban heat island impact in the EEC:

- Air temperature records: Maricopa County Air Quality Department (MCAQD) maintains an air quality monitoring site, Central Phoenix station, within the community boundaries that also records meteorological data. Standard meteorological temperatures are available dating back to 2006. We used a ten-year monthly average temperature to compare with other nearby MCAQD monitors in the area to assess heat.
- Surface temperature data: Satellite images at the scale of 100-meters and finer are available from NASA spanning 30 years of observations. Arizona State University collected approximately 100 recent images at 100-meter scale from which comparison of surface temperature across the community can be made.
- Vegetation data: The satellite images from NASA can also be used to calculate an index of greenness called Normalized Difference Vegetation Index (NDVI). This quantifies vegetation by measuring the difference between near-infrared (which vegetation strongly reflects) and red light (which vegetation absorbs). Arizona State University provided maps of the NDVI for the neighborhood and nearby communities for analysis.

We also reviewed the Reinvent PHX HIA that addressed urban heat island in the area.



Outdoor Air Quality

MCAQD maintains an air quality monitoring station in the EEC. Particulate Matter 10 (PM 10) is monitored at this station but not Particulate Matter 2.5. Using PM 10 measurements, we examined the number of days the EPA's Air Quality Index (AQI) would have designated the air days as "moderate," "unhealthy for sensitive groups" and "unhealthy" over a three-year time between 2013-2015. The EPA's AQI was designed to help people understand how local air can impact health. The AQI is divided in to six categories from good to hazardous and the thresholds for each category differ based on the pollutant. For PM 10, an AQI of 100 or "unhealthy for sensitive groups" is equivalent to 150 micrograms per cubic meter (Environmental Protection Agency, 2014). A literature review was used to assess traffic-related air pollution.

Water Quality

To assess the impact of the Motorola Street Superfund (M52) Site, an environmental expert reviewed the Environmental reports, the Community Information Group Webinar Meeting by the U.S. Environmental Protection Agency (EPA) on October 26, 2016 and the Environmental Phase 1 reports completed by the City of Phoenix recently.

Vacant Lots

City of Phoenix provided data and maps on vacant lots and land ownership for our analysis. Resident feedback and literature were used to assess the health impact of vacant lots.

Assessment

Urban Heat Island

In Phoenix where ambient temperature can be as high as 120°F with a relative humidity of less than 20%, the excess of hardscape exacerbates the urban heat island effect. The nighttime temperature can stay above 90°F (Balling & Brazel, 1987). Central Phoenix Station records the hottest average monthly temperature for all months except August when it becomes the second hottest station. Temperatures at Central Phoenix range from about 2°F higher than the regional average during the peak of the summer to more than 3.5°F higher than the regional average in the winter months. See Table 9 for more information.

TABLE 9 10-YEAR MONTHLY AVERAGE FOR SELECT MARICOPA COUNTY AIR QUALITY MONITORING STATIONS (2006-2015)

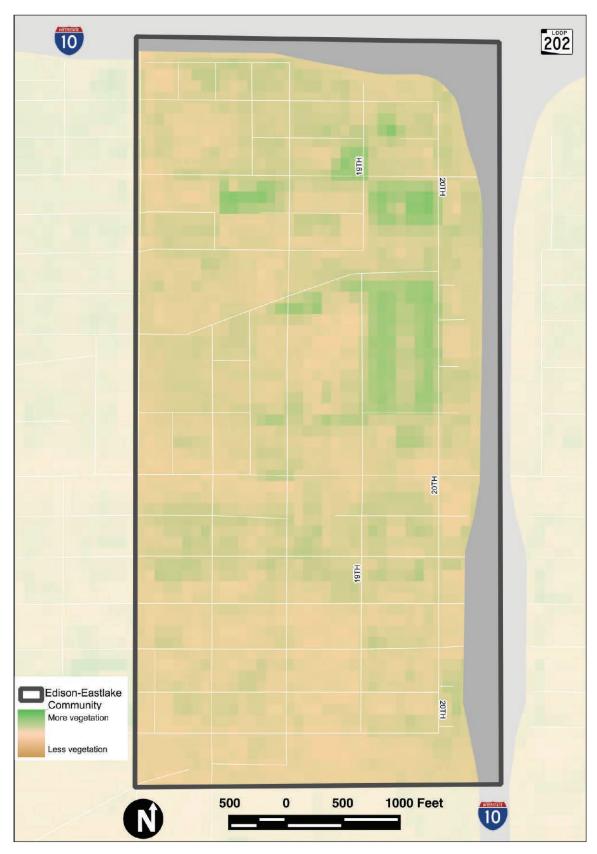
MCAQD STATION	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPT	OCT	NOV	DEC
West 43rd Ave	53.49	57.63	66.13	73.00	82.01	92.72	95.71	94.22	88.14	75.42	62.35	52.16
West Phoenix	53.81	57.75	65.53	72.54	81.47	92.12	95.00	93.93	88.03	75.12	62.82	52.40
North Phoenix	54.13	57.49	65.01	71.70	80.51	91.04	94.10	92.93	87.37	74.79	62.93	52.29
Dysart	54.38	57.56	64.95	71.75	80.54	91.05	94.22	93.09	87.36	75.07	63.09	52.60
South Phoenix	54.95	59.02	66.73	73.58	82.83	93.02	95.70	94.54	88.64	75.87	63.53	53.20
Durango Complex	55.42	59.48	67.27	74.11	82.86	93.38	96.01	95.15	89.34	76.66	64.60	53.84
Central Phoenix	57.96	61.01	67.85	74.98	83.33	93.67	96.06	95.10	89.55	77.66	65.85	56.03

Source: Maricopa County Air Quality Monitoring Stations

Reinvent PHX did a temperature analysis on February 15, 2013 in five locations. Three sites have little or no shade: 20th Street between Roosevelt and Van Buren Streets, and Roosevelt Street between 16th and 18th Streets. The remaining two sites were at Edison Park, one under a tree and the other in an unshaded area of a grassy sports field. At the hottest times of the day, the shade at Edison Park reduced temperatures by as much as 28°F when compared to unshaded sidewalks along busy streets. Even the unshaded grass at Edison Park was enough to reduce temperatures by as much as 10°F, creating a cooler environment for pedestrians and cyclists. Almost 25% of the total land acreage (74 acres) are used as paved surface parking lots, mostly attached to a business, government office, or other institutions. Research shows that paved surfaces can be a strong contributor to pavement warming and this warming has the potential to impact the urban heat island effect in those built environments that experience hot weather and are large enough to generate a heat island (U.S. Department of Transportation, 2017).

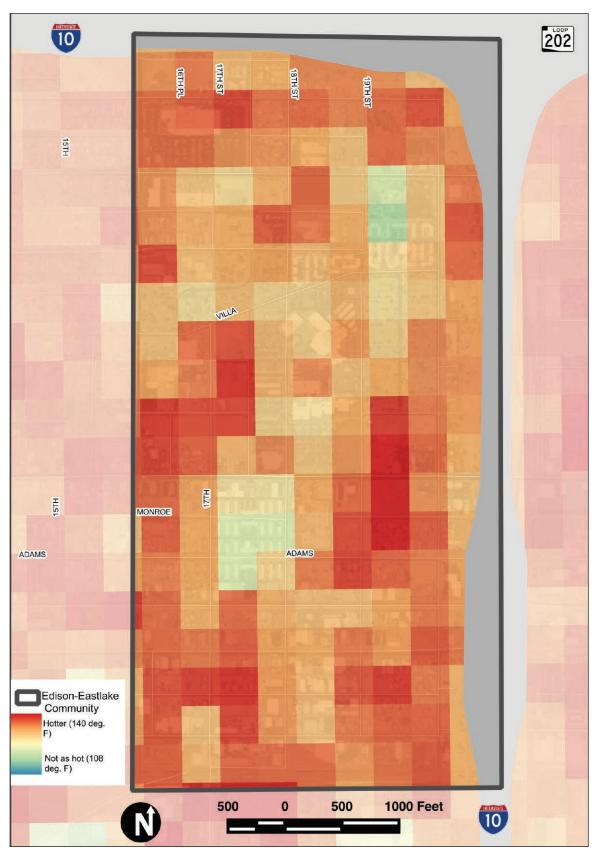
Looking at vegetation and surface temperature maps, the area around Sidney P. Osborn neighborhood has higher surface temperatures and less vegetation which can contribute to greater heat island impact. Hotter areas can also be found around Van Buren and 19th Streets, along Madison Street and 17th Street adjacent to St. Luke's Medical Center where there is a large vacant lot. The coolest area in the neighborhood is at Edison Park that has irrigated grass and shade trees.

FIGURE 11 **VEGETATION INDEX**



Map Source Elements: Esri World Imagery, NASA Modis NVDI / ASU

FIGURE 12 SURFACE TEMPERATURE



Map Source Elements: Esri World Imagery, NASA GISS / ASU

Outdoor Air Quality

Based on 2013 through 2015 PM 10 data, the EPA's Air Quality Index would have designated 38 days as "moderate," three days as "unhealthy for sensitive groups" and one day as "unhealthy." Compared to other areas throughout Maricopa County, the EEC neighborhood is in the middle when it comes to PM 10 levels. Areas closer to the edge of the urban area where there are more dust sources or at low elevations tend to have higher PM 10 levels.

TABLE 10 2013-2015 MARICOPA COUNTY AIR QUALITY DEPARTMENT PM 10 DATA AT SELECT PHOENIX STATIONS

	CENTRAL PHOENIX	WEST PHOENIX	NORTH PHOENIX	SOUTH PHOENIX
Number of observations	1089.0	1092.0	1093.0	1093.0
Maximum concentration	329.2	255.6	200.3	294.6
Minimum concentration	4.0	3.7	2.3	4.5
Mean concentration	31.0	33.6	25.0	35.9
# of days with AQI 51-100 (55-154 ug/m3)	38	97	27	110
# of days with AQI 101-150 (155-254 ug/m3)	3	4	1	5
# of days with AQI 151-200 (255-354 ug/m3)	1	1	0	2
Source: Maricopa County Air Quality Monitoring Station	ons			

The northern and western boundary of the EEC is the I-10 freeway, the main freeway used to get in and out of Phoenix. Additionally, Van Buren Street is a major roadway that also sees heavy commuting during the morning and evening rush hour. With traffic a major contributor to hazardous air pollution, this is concerning for residents in the EEC. One study estimated that 8% of childhood asthma cases in Los Angeles County, California could be partly attributed to living close to a major road (Perez L, 2012). Living near a major road also has been associated with decreased lung function in adults with asthma (Balmes JR, 2009). Increasing the distance from the road to more than 150 meters, or approximately 500 feet, might decrease concentrations of some air pollutants by at least 50% (Karner AA, 2010).



PARTNER SPOTLIGHT: NATURE'S COOLING SYSTEMS PROJECT

The Nature Conservancy's Nature's Cooling Systems Project is funded by Vitalyst Health Foundation and is intended to address heat at the landscape and neighborhood level. Project partners include Maricopa County Department of Public Health, ASU's Urban Resilience to Extremes Sustainability Research Network and the Central Arizona Conservation Alliance. The project approach involves integrating heat mitigation into key tools and plans for use by County planners as well as developing Heat Action Plans (HAP) in three neighborhoods. Neighborhoods were selected based on a variety of criteria to select some of the hottest and least vegetated areas where health is regularly affected by heat. HAPs involve co-designing "cool and resilient" futures with residents, modeling outcomes on thermal comfort and proposing that the HAPs are adopted into redevelopment plans, Village Plans and other City plans for heat mitigation. One of the selected neighborhoods is the Edison-Eastlake neighborhood, where the redevelopment process provides an ideal opportunity to optimize shade, wind paths, cool islands with trees and vegetation, storm water and surface and building materials for a more comfortable and livable community.

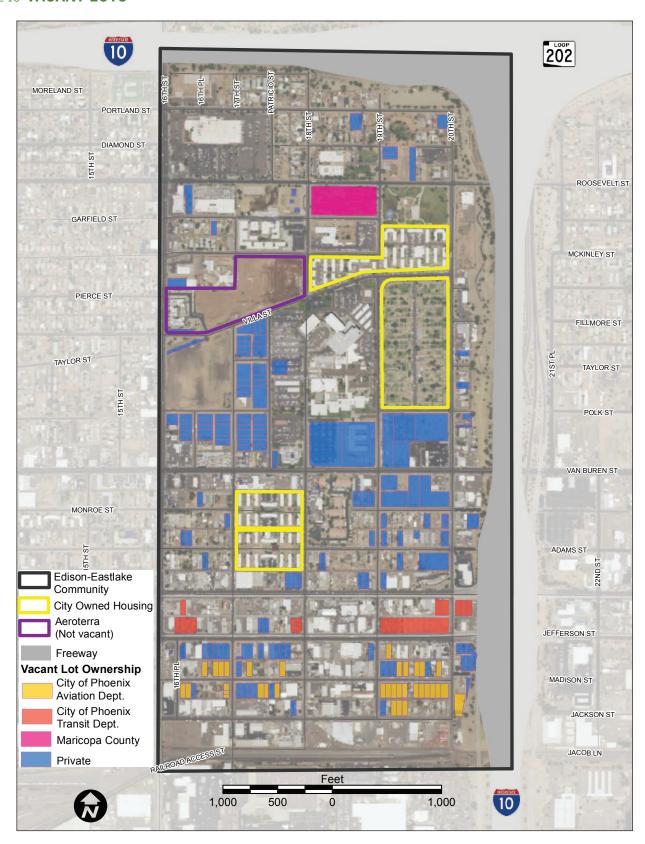
The Nature's Cooling Systems Project intends to provide examples of variation in cooling approaches at the neighborhood scale that should be considered in city- or county-wide resilience plans. Therefore, the project strategically coincides with The Cooler Phoenix project, a cooperative effort between the City of Phoenix and researchers at Arizona State University to provide a suite of evidence based solutions for the urban heat island effect and extreme heat events. A Heat Readiness Toolkit is being developed with the overarching goal of making Phoenix cooler and more comfortable for its residents and visitors. This work will culminate in a "Cooling Plan" that defines specific goals related to heat and its impact on health, well-being and productivity for the city, residents, businesses, institutions and visitors.

Vacant Lots

Currently, approximately 21% of the total land area in the EEC is vacant and encompasses 265 parcels. A portion of this vacancy can be attributed to the overall loss of housing units, due in part to the demolition of homes located in the Phoenix Sky Harbor International Airport flight path in the southern portion of the neighborhood. The City of Phoenix Aviation Department is in the process of developing a plan with community partners and Federal Aviation Authority to activate the vacant lots in this neighborhood. Additionally, there is a large concentration of large vacant parcels surrounding St. Luke's Medical Center that have been held in anticipation of possible expansion of the medical center and/or development of additional medical facilities. Of the vacant lots, 74% are owned by private landowners, 8% by the City of Phoenix Aviation Department, 6% by the City of Phoenix Transit Department, 6% by the Arizona Department of Transportation and 5% by Maricopa County.



FIGURE 13 VACANT LOTS



Map Elements Sources: Maricopa County (2017), City of Phoenix (2017). Basemap sources: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Water Quality

There is a known, federally managed superfund site (Motorola 52nd Street) that impacts a portion of EEC. This is a large area of contaminated groundwater extending from the former Motorola facility and other sources. Because of the size of the site, it has been divided into three areas called Operable Units (OUs) to better manage the cleanup efforts. The EEC is in the OU3 boundary.

There is a known, federally managed superfund site (Motorola 52nd Street) that impacts a portion of EEC.

According to information provided during the Community Information Group Webinar Meeting by the EPA on October 26, 2016, contaminated groundwater in this area is deeper than in other areas of the site. The EPA is responsible for ongoing testing to evaluate any possible vapor intrusion. Vapor intrusion occurs when there is a migration of chemical vapors from the contaminated groundwater through the soil and into buildings or homes in area (Environmental Protection Agency, 2017). The EPA stated that data collected to date indicates that vapor intrusion related to the superfund site has not been detected in OU3.

Evaluating Health Impacts

EEC is home to many residents that are vulnerable to the physical environment they live in, and therefore, an opportunity to create a healthy neighborhood by improving the environmental quality of the community.

The redevelopment has a strong opportunity to mitigate the urban heat island effect in the community, creating a more comfortable environment for residents. Addressing the urban heat island, through housing designs, vegetation and land use could also help address air quality and vacant lot challenges in the neighborhood.

Given the hospital utilization for respiratory conditions in the community, particularly among children, improving exposure to outdoor air quality can greatly impact the health of the community. The assessment suggests proximity to high traffic volume roadways, like the freeway and Van Buren are large contributors to air pollution. The planned repurposing of Van Buren to reduce traffic lanes and traffic volume on the road will contribute positively to those living near the roadway. In addition, the redevelopment of the housing sites can locate residents most vulnerable to air pollution, such as children and seniors, further away from high traffic volume roadways. This could reduce the development of respiratory and cardiac conditions as well as reduce hospitalizations due to respiratory and cardiac events triggered by air pollution.

In the Phoenix area, drinking water is provided primarily though surface water (95%) and limited groundwater (5%) (City of Phoenix, 2017). (City of Phoenix, 2017) The Motorola 52nd Street Superfund site does not appear to be a health threat to the drinking water in the community. Given the absence of data to clearly indicate a vapor intrusion, it is unclear if there is an impact on health. Therefore, there are no recommendations in regards to water quality or the superfund contamination at this time. However, it should be noted that there is an American Standards for Testing and Materials (ASTM) vapor encroachment standard (E2600-10 Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions) that is potentially applicable and useful if consulted prior to new construction or property redevelopment. This approach is believed to be consistent with City of Phoenix Phase I Environmental Site Assessment reports completed for properties in the EEC and will provide additional health protection for residents living in the community.

The assessment suggests proximity to high traffic volume roadways, like the freeway and Van Buren are large contributors to air pollution.

The redevelopment will potentially provide opportunity to activate vacant lots in the community. The City of Phoenix Aviation Department is looking for non-residential uses for the vacant property owned by the department. Greening and beautifying the vacant properties in the community could potentially improve mental health and stress in the community. Depending on how the lot is activated, green infrastructure could also improve the urban heat island effect and potentially address air quality as well.

Recommendations

The following recommendations are prioritized to address all areas of Environmental Quality. However, the top environmental challenge the recommendation seeks to address is named before each recommendation. There are recommendations for policy adoption, infrastructure development and programming support. For best results, policy, infrastructure and programming recommendations should be adopted to maximize the health impact.

Policy

· Urban Heat Island: Comply with the standards established in the Interim Transit Oriented Overlay Districts specifically as it relates to shade.

The standard states that a minimum of 75% of the sidewalk should be shaded. Prioritize shading along Van Buren and 16th Streets where residents access public transportation routes.

Rationale: Increased shading, through trees or shade structures, can provide cooling effects to residents moving through the community.

· Urban Heat Island: Adopt heat mitigation policies and strategies in the redevelopment of the urban form, including prioritizing the use of surfaces and building materials that provide cooling effects. Placement and orientation of buildings should also maximize cooling.

Rationale: A variety of factors, including urban form, surface cover, heat release and climatic conditions interact to create the urban heat island effect. Work with Nature's Cooling Project to identify comprehensive strategies to best address the urban heat island effect in this neighborhood. While all strategies may not be immediately feasible during redevelopment or at the neighborhood scale, barriers to implementing comprehensive strategies should be identified and communicated to local and regional government, decision makers and to those most affected by increasing urban heat.

Infrastructure

· Urban Heat Island and Air Quality: Increase greening and improve landscaping by adding trees, sod and other vegetation throughout the community to help improve the air quality and mitigate the urban heat island effect.

Plants having low water use and low volatile organic compound (VOC) emissions should be selected. Consult with the Nature's Cooling Project and residents to identify the best placement and types of vegetation to use.

Rationale: It is critical to select the right vegetation to maximize shade coverage, allow heat to rise and use minimum water. Native low water-use trees with broad and dense canopies are one possibility, but trees should be selected only after consultation with heat mitigation experts working on the Natures Cooling Project. Some plants naturally emit VOCs which can contribute to poor air quality.

Trees should be selected only after consultation with heat mitigation experts.

A variety of factors, including urban form, surface cover, heat release and climatic conditions interact to create the urban heat island effect.

 Air Quality: Install high efficiency HVAC systems in housing units and community buildings. Advanced air filtration should be installed through air handling units for all sites.

Rationale: HVAC systems provide effective indoor cooling during hot summer months. HVAC systems provide better filtration of air pollutants than current evaporative coolers. Properly ventilated units will reduce constant exposure to traffic-related air pollution and poor air quality.

Vacant Lots: With resident leadership, activate vacant lots for community benefits. This may include, but not limited to, urban agriculture, pop-up parks, green spaces, and art spaces.

(Similar recommendation to Reinvent PHX HIA completed in 2013)

Complete Phase I Environmental Site Assessment on vacant lot prior to use. At a minimum, test soil for lead and arsenic, as these two contaminants are most often seen in our urban environment.

Rationale: Creating spaces on vacant lots for the public to use can address the negative health impact of blight. Residents expressed interest in murals, community gardens and safe places for children to play. Given the superfund site location and other potential environmental hazards, environmental assessments should be completed prior to determining best use for the vacant lot.



Program

• Urban Heat Island: Continue and expand programming for residents to enhance heat coping mechanisms and learn about heat-related illness. Empower residents to share their stories of coping with heat and their visions for improving the conditions.

Rationale: Given the urban heat island impact in the community and the vulnerable population, it is important for residents to be aware of heat-related illness and how to stay healthy during the hot summer months. Providing residents opportunity to discuss and manage the heat in the community will increase the resilience of individuals and the community to stay healthy.

• Urban Heat Island and Air Quality: Provide education to residents on how to best use new energy efficient appliances and HVAC systems.

Rationale: In previous housing redevelopments, residents were used to keeping windows and doors open with evaporative cooling systems. This resulted in increased electric cost from increased demand on the new air conditioning units. Educating residents on how to best operate new appliances and systems will help residents keep energy costs low, reducing HVAC contribution to heat island impact and air pollutants.

• Urban Heat Island and Vacant Lot: Support resident leadership throughout strategies used to address environmental quality. To support green infrastructure, allow residents with landscaping experience opportunity to provide maintenance of common spaces in exchange for housing stipend or community service hours. Support resident leadership to establish community clean-up and other neighborhood beautification efforts. Provide programming support for any activation of vacant lots.

(Similar recommendation to Reinvent PHX HIA completed in 2013)

Rationale: Residents expressed interest in providing leadership, technical expertise and actual management of landscaping within the community. Using existing skills in exchange or community hours can be beneficial to both the residents and the property management. Providing opportunity for residents to lead efforts can create community ownership and decrease vandalism. It can promote community wellbeing through greening and reduction in blight. This can result in decreased cost of management of the grounds in the community.

Educating residents on how to best operate new appliances and systems will help residents keep energy costs low, reducing HVAC contribution to heat island impact and air pollutants.

SAFE, ACTIVE NEIGHBORHOODS

Why it Matters

The Centers for Disease

Control and Prevention

recommendations for

physical activity for

adults is 150 minutes

of moderate-intensity

and for children and

each day.

physical activity a week

adolescents 60 minutes

Regular physical activity is important to both physical and mental health. It can help control weight, and reduce risk of chronic conditions such as cardiovascular disease, diabetes, and some cancers. It strengthens bones and muscles which prevents falls particularly in older adults. Regular physical activity reduces the risk of depression, help sleep and keep learning, thinking and judgment skills sharp (Centers for Disease Control and Prevention, 2015). The Centers for Disease Control and Prevention recommendations for physical activity for adults is 150 minutes of moderate-intensity physical activity a week and for children and adolescents 60 minutes each day.

Environments that make it easier for people to walk or bike helps increase physical activity as well as making neighborhoods better places to live. Some of the infrastructure include the presence and quality of sidewalks, pedestrian crossings, buffers to moving traffic, traffic volume and speed, shade and street furniture (Centers for Disease Control and Prevention, 2011).

Methodology

Street Audits

In addition to previous methodology discussed, new data was collected to describe the pedestrian experience of the streets in the community. To assess the quality and safety of the street infrastructure, 11 residents conducted walking audits. Using a tool developed by Vitalyst Health Foundation (Attachment C), they focused on primary walking routes either to school, food stores or bus stops. All major arterial streets (Roosevelt, Van Buren, Washington, Jefferson, 20th and 16th Streets) and several internal streets were audited. Street audit findings were compared to Reinvent PHX recommendations to measure any change over time.

Existing Conditions

On the positive side 84% of adults surveyed reported participating in 20 minutes of moderately vigorous activities during the week.

Residents living in the EEC rely on walking and public transportation to move in and out of the community. Walking is the number one mode of transportation identified by residents, with 86% residents surveyed reporting they often or sometimes walk to get to places. School-age children in A.L. Krohn and Frank Luke walk to nearby Edison School, while children in Sidney P. Osborn take buses to various elementary schools. Adolescents in both neighborhoods take public buses to various public and charter high schools.

Residents living in the EEC rely on walking and public transportation to move in and out of the community. Surveys indicate only 58% of residents living in the EEC report have access to a personal vehicle or a ride from someone else. With most residents walking or using public transportation for their primary mode of transportation the need for multimodal access on streets within and around the neighborhood is important.

Walking is the number one mode of transportation identified by residents, with 86% residents surveyed reporting they often or sometimes walk to get to places.

MODE OF TRANSPORTATION	"OFTEN" USED
Walking	45%
Your own car/truck/vehicle	42%
Public transportation – bus	36%
Public transportation – light rail	24%
Ride from someone else	16%
Taxi	9%
Bicycle	7%
Uber or Lyft	2%
GRID Bike	1%

According to the resident survey, 84% of adults reported participating in 20 minutes of moderately vigorous activities during the week. Interviews with residents indicated that while residents are walking in the community, it is often for a purpose, such as getting groceries and accessing public transportation. Leisure-time physical activity, or activity done for recreation, exercise, and health is not commonly cited as the reason for walking in this community.

Safe Streets

Roosevelt Street

Roosevelt Street from 16th to 20th Streets was identified as having significant issues. During a five year period (2011-2015) 48 motor vehicle crashes were reported, including 19 with injuries. It is a busy two-lane street that some children must cross to get to Edison School located on the south side of Roosevelt and residents living in Frank Luke and A.L. Krohn housing must cross to access the grocery store. There are bike lanes and sidewalks on both sides of the street. While the sidewalks are generally in good condition there is no buffer zone between the street and sidewalk except in front of Ranch Market. Residents report inadequate lighting along the entire street and particularly near Edison Park which results in a perceived lack of safety. There is a cross walk at 18th Street. It is a 35 miles per hour speed limit but residents report that cars typically travel much faster.

There is a stop light at the intersection of 16th Street and Roosevelt but the signal light cycle is too short for individuals using strollers, walkers, or wheelchairs to cross safely.

The intersection of 20th and Roosevelt Streets has had 19 motor vehicle crashes with seven injuries. Reinvent PHX recommended installing a traffic light or a four-way stop. To date, the intersection only has stop signs controlling north and south traffic.

The intersection of 20th and Roosevelt Streets has had 19 motor vehicle crashes with seven injuries. Reinvent PHX recommended installing a traffic light or a four-way stop. To date, the intersection only has stop signs controlling north and south traffic.







20th Street

20th Street is another very busy street. It is a two-lane street with parking on both sides of the street between Roosevelt and Van Buren on the west side of the street and between Roosevelt and Polk on the east side of the street. There are bike lanes in place between Roosevelt and Van Buren. The speed limit is 30 miles per hour between Van Buren and Polk and 35 miles per hour between Polk and Roosevelt, the residential area with lots of pedestrians and children. Much like Roosevelt, the speed limit is frequently exceeded and there is no traffic calming. The sidewalks between Roosevelt and Polk are wide and in good condition although there is no buffer on either side of the street. The sidewalks from Polk to Jefferson are absent, narrow and in poor repair. There is a lot of trash and weeds along the street.

McKinley Street

McKinley between 18th and 19th Streets is one route children from Frank Luke and A.L. Krohn use to walk to school. The sidewalk on the south side of the street is well maintained; however, the north side is a different matter. The sidewalk is in poor condition with uneven paving and many cracks. There are weeds and trash along the fencing. The intersection of 18th Street and McKinley is very busy certain times of the day from children going to and from school and residents entering and exiting the neighborhood for work. There is only a two-way stop on McKinley.

18th Street

18th Street south of Van Buren is a narrow street bordered by the Sidney P. Osborn project on the west and used car lots on the east. There is parking on both sides of the street which results in limited visibility when residents exit Monroe and Adams on to 18th Street.

16th Street

16th Street is a very busy arterial street that parents cross when taking their children to Head Start located at 15th Street and Adams. The street lights are at Washington and Van Buren Streets, but most parents cross the street at Adams. Finally, street lighting is generally poor throughout the neighborhood with lights typically on one side of street only and dim. Their findings along with crash data and the status of recommendations from Reinvent PHX are summarized in Table 12.

The City of Phoenix Streets Department is in the second phase of the Van Buren improvement project that will include 16th Street to 24th Street. As described by the City of Phoenix, "The primary focus of the Van Buren Street improvements project is to build off the various initial planning efforts that have been completed thus far and the positive features that exist in the corridor. This project is aimed at improving safety and developing a stronger pedestrian and bicycle environment along Van Buren Street that is accessible to future and existing development and all modes of transportation. The improvements will add bicycle infrastructure (per Phoenix's Bicycle Master Plan) and help create a stronger pedestrian and business-friendly environment (Complete Streets Initiative).

This project is intended to modify the existing roadway configuration to provide buffered bicycle lanes and sidewalk improvements along Van Buren Street between 7th and 24th Streets. The bike lane buffer may be substituted in some areas to allow for on-street parking. Additionally, the current pedestrian access route will be upgraded to incorporate missing sections of sidewalks and construction of accessible curb ramps to meet all

Americans with Disabilities Act (ADA) requirements. Landscape features will be added at certain areas of opportunity along the project. Finally, some street lighting and signal modifications will be included in this project (City of Phoenix, 2017).

Safety and Crime

Community safety emerged as one of the most significant issues. Resident surveys indicated that people using drugs (64%), people selling drugs (55%), shooting and violence (52%) and gangs (49%) were all big problems. Crime data from the City of Phoenix reports a violent crime rate over three times that of the City of Phoenix as a whole (20.4 per 1,000 residents vs. 6.1 per 1,000 residents) and drug offenses over twice the rate (15 per 1,000 residents vs. 5.8 per 1,000 residents). Residents living in the Frank Luke and A.L. Krohn housing describe more safety concerns, gang activity, drug use, and fear of retribution than residents at Sidney P. Osborn. Edison Park, adjacent to the Frank Luke and A.L. Krohn housing is known to residents as a public space that allows negative behavior to occur. This directly impacts the level of security and feelings of safety of those living nearby. City of Phoenix Police Department has a dedicated neighborhood officer that has been working in the community for multiple years. Safety is a top priority for this community and resident interviews revealed various levels of trust with police department and response times.



STREET SEGMENT OR INTERSECTION	REINVENT PHX RECOMMENDATIONS AND STATUS	SAFETY CONCERN	2011-2015 CRASH DATA	RECOMMENDATION
Roosevelt St from 16th to 20th Sts		Highly trafficked street especially in the mornings and evenings Street lighting on north side of street Park VERY dark after sunset	48 Motor Vehicle Collisions (MVC) 16th St – 11 18th St – 9, 8 injuries 19th St – 3, 4 injuries 20th St – 19, 7 injuries	Add traffic calming Increase lighting on street and in park
Intersection of 20th and Roosevelt Sts	Recommended traffic light or four way stop – no change	Stop signs on north/south	19 MVC, 7 injuries	Add traffic light or 4-way stop
Intersection of 16th and Roosevelt Sts		North/south traffic light cycle is too short for individuals in wheel chairs to cross safely	11 MVC, 3 injuries	Increase crossing cycle and pedestrian countdown clock
20th St from Roosevelt to Van Buren Sts	Recommended bike lanes – in place Recommended enforcing no parking zones – in place Recommended traffic calming – no traffic calming	Busy street From Roosevelt to Polk, sidewalks wide and in good repair From Polk to Van Buren, narrow sidewalks, no sidewalks in some areas, lots of trash and weeds Motorcycle club creates loud noises	50 MVC from Roosevelt to Jefferson St 18 MVC at Van Buren and 20th St	Add traffic calming on 20th St Add, repair and widen sidewalks from Polk to Van Buren Sts
20th St from Van Buren to Washington Sts		Narrow sidewalks, none in some areas Bushes, weeds and trash on both sides		Add, widen and repair sidewalks Trim bushes and pick up trash
McKinley and 19th Sts – route to school		North side of street is a narrow street, no speed limit signs, no bike lane, no street lights. About half the sidewalk in poor repair with large cracks, gravel mixed with concrete, little shade. Broken glass and litter on south side of street Better condition, but poor lighting		Repair sidewalk on north side of McKinley Pick up trash Increase lighting
		No crosswalk		
McKinley and 16th St	Recommended installing an enhanced crosswalk or HAWK – not implemented			
19th St from Villa to Van Buren Sts		Sidewalk on west side of street narrow and only wide enough for one person		
18th St from Van Buren to McKinley Sts		McKinley and 18th Sts very busy with vehicles and children walking 18th St goes through hospital parking lot making it unsafe to walk to bus stop at 18th and Van Buren Sts		Install a 4-way stop at McKinley and 18th St

STREET SEGMENT OR INTERSECTION	REINVENT PHX RECOMMENDATIONS AND STATUS	SAFETY CONCERN	2011-2015 CRASH DATA	RECOMMENDATION
Van Buren from 18th to 16th Sts		Stop light at 18th St too short to safely cross Van Buren if using a walker, stroller or wheelchair	MVC 11, 3 injuries (one pedestrian)	Increase crossing cycle and pedestrian countdown clock timing at 18th St crossing Van Buren St
Van Buren from 16th to 18th Sts		Pooled water from a leak on the south side of the street		
16th and Fillmore Sts and 16th and Portland Sts	Recommended increasing crossing cycle and pedestrian countdown clock – not implemented			
16th St between Roosevelt and Jefferson Sts		High traffic street Poor lighting, lots of graffiti, broken glass, trash. Large plants blocking sidewalk Homeless people. Sidewalks in disrepair No buffer between street and sidewalk. Little shading. Vacant buildings and poorly maintained properties		Widen sidewalks, buffers between sidewalk and street Trim trees and shrubs to increase visibility Brighter lighting Repair sidewalks
16th St at Adams St	Recommended installing an enhanced crosswalk or HAWK – not implemented	Pedestrians cross here to get to Booker T. Washington Head Start No crosswalk or other traffic calming		Install an enhanced crosswalk or HAWK
16th St at Monroe St	Recommended installing an enhanced crosswalk or HAWK – not implemented			
16th St and Washington	Signal is too short for pedestrians to safely cross			Increase crossing cycle and pedestrian countdown clock timing
17th St between Washington and Van Buren Sts		People drive carelessly, fast and do not stop for pedestrians Sidewalks on east side of street are not in good condition. There are cracks and holes. Little shade. There is an ongoing yard sale on a property between Monroe and Van Buren Sts There are no stop signs between Washington and Van Buren Sts		Add speed limit signs Install traffic calming Clear debris from sidewalks Repair sidewalks Enforce code violations
Adams and Monroe between 17th and 18th Sts		There is graffiti on south wall of property Car lots on east side of 18th St park cars on street decreasing visibility for traffic coming out of Sidney P. Osborn	MVC, Adams and 18th Sts, 2 with 3 injuries	Increase street lighting Paint mural on south wall of property Restrict parking on east side of 18th St Widen streets Add bike lanes Install traffic calming on 18th St

Evaluating Health Impacts

Communities designed to support physical activity are often called active communities. The Guide to Community Preventive Services recommends three strategies to increase physical activity that are related to walkability — community-scale urban design, street-scale urban design, and improving access to places for physical activity, including providing maps and descriptive information (Centers for Disease Control and Prevention, 2011). Studies show more people bike and walk in communities where improvements have been made to biking and walking conveniences.

Improving the street infrastructure and safety can have a direct and indirect impact on the health of the residents in the neighborhood. Better signage and traffic control can reduce unintentional injuries caused by motor vehicle crashes. Indirectly, improving sidewalks and creating buffers between the sidewalks and street adds safety and improves the aesthetics of the community which, in turn, encourages walking. More people walking in the neighborhood offers opportunities for chance encounters, meeting neighbors and increasing social cohesion, in addition to increased physical activity levels.

The threat of real and perceived levels of violence in this community compromises residents' comfort in the use of Edison Park for recreation, physical activity and social connectedness. It increases the risk of anxiety and depression, especially among girls (White, Bruce, Farrell, & Kliewer, 1998).

Recommendations

The following recommendations are intended to move the EEC to be an active, safe community. There are recommendations for policy adoption, infrastructure development and programming support. For best results, policy, infrastructure and programming recommendations should be adopted to maximize the health impact.

Policy

- · Work together with the City of Phoenix Police Department to use Crime Prevention Through Environmental Design (CPTED) guidelines in the design of the properties, including the enhancements to Edison Park.
 - Rationale: CPTED is a multidisciplinary approach based on the concept that proper design and effective use of the built environment can lead to a reduction in both the incidence and fear of crime while also improving the quality of life. Strategies include landscaping, real and symbolic fencing, lighting, public art, the effect of color, parking lot design, and park design. The redevelopment of this property is an opportunity to create a built environment that provides a deterrent to criminal activity. These strategies include approaches that bring residents out of their homes, creating "eyes on the street" that interferes with criminal activity.
- · Utilize the Active Design Guidelines in the neighborhood and housing redevelopment plan to incorporate multigenerational physical activity opportunities.

(Similar recommendation to Reinvent PHX HIA completed in 2013)

Rationale: The active design guidelines outline urban design strategies for creating neighborhoods, streets, and outdoor spaces that encourage walking, bicycling, and active transportation and recreation in communities for all ages.

The threat of real and perceived levels of violence in this community compromises residents' comfort in the use of Edison Park for recreation, physical activity and social connectedness.

Infrastructure

• Implement specific street recommendations outlined in Table 12. Priority should be given to Roosevelt Street, the intersection of 20th and Roosevelt Streets, 20th Street, the intersection of 18th and Van Buren Streets, and 18th Street.

(Similar recommendation to Reinvent PHX HIA completed in 2013)

Rationale: Adopting these recommendations have the potential to reduce motor vehicle crashes and unintended injuries creating a safer environment for pedestrian and bicyclists.

Work with the City of Phoenix Department of Transportation to design open space and pathways to assure connectivity to Van Buren Street and to the light rail from housing sites.

Include trees and other shade structures in the design of sidewalks and open spaces as outlined in the Environmental Quality section.

Rationale: The Van Buren Street improvement project will create a safer, more walkable street that will allow residents better access to downtown resources. Creating safe access from the neighborhood will increase the use.

Program

• Support resident leaders to form walking clubs in housing areas.

Rationale: Residents expressed interest in walking clubs and fitness trails. There are many benefits to walking clubs. There is little to no cost involved — a pair of walking shoes. Walking with a neighbor helps the individual to stay active. Walking in pairs or groups provides some safety which is very important in this neighborhood. Finally, it is a strategy for crime prevention. When residents in a community walk more there are "eyes on the street" which inherently discourages crime and vandalism.

· Support programs and resident leadership to address the crime in the community. This includes supporting the community action program or the creation of one or more Block Watches. Also providing regular, organized recreation programs in Edison Park and enforce Edison Park hours with active police monitoring at night.

(Similar recommendation to Reinvent PHX HIA completed in 2013)

Rationale: These recommendations all address the crime issue, particularly in the Frank Luke and A.L. Krohn area, Edison Park seems to be the hub of the criminal activities. These recommendations would create more "eyes on the park." Like "eyes on the street," it will discourage crime and vandalism. Resident feedback indicated that it was critical to enforce park hours since much of the negative activity is later at night.

Walking clubs are a strategy for crime prevention. When residents in a community walk more there are "eyes on the street" which inherently discourages crime and vandalism.

MONITORING AND EVALUATION

The monitoring and evaluation phase of an HIA, seeks to evaluate whether the HIA achieved its stated goals. Evaluations not only inform the impact of the HIA but also gather lessons learned to shape future HIAs. While funding is limited in implementing a long-term outcome evaluation of this HIA, monitoring of short- and mediumterm impacts and effectiveness of process are possible.

The recommendations of this HIA should be monitored to evaluate the impact of the HIA on the City's Transformation Plan and redevelopment of the EEC. When possible changes in short, medium and long-term health impacts as outlined in the pathway diagram (Figure 1) should be included in progress monitoring. The following are questions that should be considered to evaluate the impact of the HIA:

- 1) Is there evidence that decision makers used health information in their final decision?
- 2) Were the recommendations adopted in the Transformation Plan?
- 3) Were the recommendations implemented in the redevelopment of the EEC?
- 4) Did the HIA contribute to changes that reduced health inequities and inequities in the social and environmental determinants of health.

The monitoring and evaluation should also gather information about the effectiveness of the HIA process, including how the decision making process was informed, any new capacity built among partners to consider health in future housing and mixed-income planning decisions, and any new partnerships established as a result of the HIA. Key questions to be considered to evaluate the process of this HIA are:

- 1) Did the HIA Advisory Committee include all relevant stakeholders? How did HIA Advisory Committee contribute to the HIA?
- 2) What capacity was built for future HIA work in the City of Phoenix and other organizations?
- 3) Is there evidence that the community has a better understanding of the health needs in the EEC? Did the HIA process built the capacity and ability of communities facing health inequities to engage in future HIAs and in decision making more generally?
- 4) Have new partnerships formed because of the HIA?

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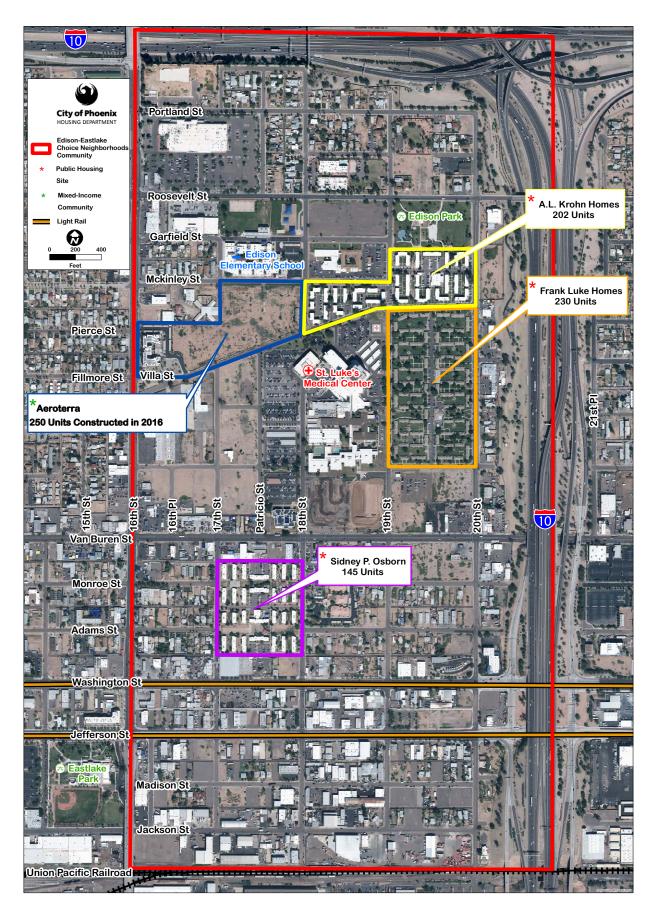
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APPENDIX A: EDISON EASTLAKE CHOICE NEIGHBORHOODS COMMUNITY



APPENDIX B: RESIDENT LEADERSHIP COUNCIL MEMBERS

The following is a list of residents from the Resident Leadership Council (RLC) who served as the HIA advisory council. These residents gave their time, expertise and grounded the findings and recommendations in this HIA report.

Resident Leadership Council Members:

Laura Felix	Francisca Labate	Jose Perea
Aaron Gipson	Beatriz Martinez	Teresa Perea
Paula Gipson	Lorena Mendez	Beatriz Rivera
Geraldine Harris	Flor Moreno	Roberto Sandoval
Imelda Hartley	Martha Ortiz	Emma Villanueva



From left: Jose Perea, Roberto Sandoval, Lorena Martinez, Eva Olivas (Phoenix Revitalization Corporation), Martha Ortiz, Jessica Bueno (Phoenix Revitalization Corporation), Laura Felix, Imelda Hartley, Teresa Parea, Geraldine Harris

APPENDIX C: SHORT-FORM CORNER STORE AUDIT TOOL

Short-form Corner store Audit Tool (SCAT)

Rater ID	Store ID	Date	Start time		End time		
In-store version							
Look for the presence of each of the following items:							
1. Skim or 1% r	milk (unflavored)		5. Ground meat				
Yes	No		Yes	No			
2. 5 or more different types of fresh fruits			6. Refrigeration or ground meat	containing	g fresh fruits, vegetables,		
Yes	No		Yes	No	N/A		
3. 5 or more different type of fresh vegetables 7. Does the store have WIC signs?					C signs?		
Yes	No		Yes	No			
4. Frozen vegetables (any type) Without sauce, salt, or sugar							
Yes	No						
		Yes: 1 point	No: 0 points				
	Total score Scoring: 7 total points possible						
Notes							

^{1.} Milk: Any size unflavored skim or 1% cow's milk

^{2.} Fresh fruit types: Must be a distinct fruit to count as a "type" (e.g., all apples count as 1 type, regardless of number of different varieties). Do not count lemons or limes.

^{3.} Fresh vegetable types: Must be a distinct vegetable to count as a "type" (e.g., all onions count as 1 type, regardless of number of different varieties). Do count potatoes and onions.

 $[\]textbf{4. Frozen vegetables}: \textit{Cannot} \text{ have any added ingredients such as salt, sugar, or sauces}.$

^{5.} Ground meat: Any type, including beef, turkey, or chicken

^{6.} Refrigeration: Must contain fresh fruits or vegetables, or ground meat. Do not include refrigeration for beverages only.

^{7.} WIC signs: Signs on door, windows, near cash registers, and/or on shelves indicating that WIC vouchers are accepted.

APPENDIX D: WALKING AUDIT TOOL

Street Audit Report

Tips for Using the Street Audit Report

- Please think about your personal safety when conducting this audit, such as: don't go alone; be alert to potential danger; and don't go at night.
- Depending upon the weather, you may want to take some water and a hat, or use sunscreen. You may be outside for over an hour, so please take measures to keep yourself healthy.
- Pay attention to the street and your walk. You may have been on this street many times before, but look at your street again with extra attention to details.
- You may need to switch between sections or pages as you complete your street audit. Please review and be familiar with all of the sections and questions before you begin.
- We encourage you to take pictures of the street and to help us understand the condition of the street. Throughout the audit, we have included a camera icon as a reminder. Please make notes on this audit about the photos you have taken.



Section A: Street Information

My Name:	
Date (m/d/yr):/	Day of the Week:
Street Name (example: Oak Street):	
Cross Streets (example: 3 rd Avenue and 12 ^{tl}	^h Avenue):
Approximate Temperature:°F	Weather: □Clear □Partly Cloudy □Rainy
Start Time:: □AM □PM	End Time: : □AM □PM
Street Audit	Page 1 of 8

Section B: Street, Cars and Drivers

This section asks for general information about the street, its surroundings and its drivers.

As you answer questions, please keep the following definitions in mind:

Good condition: looks clean and maintained; for example, minimal rust or graffiti

For most of your walk, how many lanes are available for traffic? <i>Do not count the turning lane</i> .
Do you see a posted speed limit sign ? \(\textstyle \text{No} \) \(\textstyle \text{Yes} \) If yes What is the posted speed limit ? If there are different speeds along your walk, please list all
What kind of neighborhood do you see on either side of this street? <i>Check all that apply.</i> □Houses or apartments □Businesses □Institutions, like a school or hospital □Industrial, for example a warehouse □Vacant land □Parks □Abandoned buildings □Highway or Interstate road, such as I-10
Do you see any bus or light rail stops along your walk? □No □Yes If yes How many? bus stops light rail stops What kind of amenities do you see at the stops? Check all that apply. □Bench or other seating □Covered shelter □Trash can □Public art Were the amenities at the bus or light rail stop in good condition ? □All or most in good condition □About half □None or few in good condition Did you see anyone waiting for a bus or light rail train? □No □Yes If yes About how many people? Would you feel safe waiting for a bus or light rail train right now? □No □Yes □I don't know If no why?
Do you see any bike routes or lanes ? <i>Check all that you see.</i> □ None □ Marked lane □ Designated route sign □ Share the road signs

Street Audit Page 2 of 8

□Stop sign □Traffic light □Other:	□Speed bump □Painted or marked cross walk □Yield sign □Other:
Not stopping for peo Driving faster than t Speeding up to make Other dangerous dri	te any drivers doing the following: ople crossing the street? □Yes, a lot □Yes, a little □None at all he speed limit? □Yes, a lot □Yes, a little □None at all e it through a yellow light? □Yes, a lot □Yes, a little □None at all ving habits? □Yes, a lot □Yes, a little □None at all se describe: □
	lights or lamps? □No □Yes of the street could be lit? □less than 25% □25% to 75%
entire route on both sides of will need to walk the entire the street, and then 12 th Av	Section C: Sidewalks uestions about sidewalks along this street. You will need to walk the of the street. For example, if you are reporting on Oak Street, you route from 3 rd Avenue to 12 th Avenue on the north side (<i>Side 1</i>) of enue to 3 rd Avenue on the south side (<i>Side 2</i>) of the street. It is action about both sides of the street.
	lease keep the following definitions in mind: ks clean and maintained; for example, not much litter and no cracks ace

<u>Side One</u>	
Which side of th	e street are you walking on? □North □South □East □West □I don't know
	the street have a sidewalk ? □Yes, all or most of this side has a sidewalk None of this side has a sidewalk
☐Other:	here do people walk? In the grass or dirt along the street On the street If there is no sidewalk, please skip the following questions Side Two.
What is the side ☐Other:	valk made of? <i>Check all that you see.</i> □Concrete □Asphalt □Gravel □Dirt □
	good condition ? □Yes, all or most of this side in good condition □About this side is in good condition
	" between the sidewalk and the street, such as a grassy or dirt patch, trees or II or most of this side has a buffer □About half □None of this side has a
bushes? □Yes, buffer Are there major <i>see</i> . □Trees	
bushes? \(\text{Yes,} \) buffer Are there major see. \(\text{Trees} \) cracks, bumps o About how wide \(\text{QOnly one adul} \)	Ill or most of this side has a buffer □About half □None of this side has a obstacles blocking the sidewalk making it difficult to use? Check all that you □Large plants, weeds or bushes □Utility or telephone poles □Large holes □Other: is the sidewalk for most of your walk? can walk on the sidewalk □Two adults can walk side-by-side on the sidewalk in walk side-by-side on the sidewalk □Four or more adults can walk side-by-

Street Audit Page 4 of 8

Side Two	
Which side of the street are you walking on? □North □South □East □West □I don't know	
Does this side of the street have a sidewalk ? □Yes, all or most of this side has a sidewalk □About half □None of this side has a sidewalk If no Where do people walk? □In the grass or dirt along the street □On the street □Other: If there is no sidewalk, please skip the following questions and go to Section D .	
What is the sidewalk made of? <i>Check all that you see.</i> □Concrete or asphalt □Gravel □Dirt □Other:	
Is the sidewalk in good condition ? Yes, all or most of this side in good condition About half None of this side is in good condition	
Is there a "buffer" between the sidewalk and the street, such as a grassy or dirt patch, trees or bushes? ☐Yes, all or most of this side has a buffer ☐About half ☐None of this side has a buffer	
Are there major obstacles blocking the sidewalk making it difficult to use? <i>Check all that you see</i> . □Trees □Large plants, weeds or bushes □Utility or telephone poles □Large cracks, bumps or holes □Other:	
About how wide is the sidewalk for most of your walk? Only one adult can walk on the sidewalk Two adults can walk side-by-side on the sidewalk Four or more adults can walk side-by-side on the sidewalk on the sidewalk	
If the sun was directly overhead, how much of this sidewalk would be shaded ? □less than 25% □25 to 75% □more than 75%	

Street Audit Page 5 of 8

Section D: Appearance and Safety

Ô

This section will ask about the safety and appearance of the street. As you answer questions, please keep the following definitions in mind:

Good condition: looks clean and maintained; for example, minimal rust or graffiti

Do you see any of the following **safety or appearance concerns** along your walk? Check all that you see.



	I don't see any of this.	I see a little of this.	I see a moderate amount of this.	I see a lot of this.	
Poor lighting, for					
example, absent or					
limited lighting					
Graffiti					
Vandalism					
Broken glass					
Excessive litter					
Heavy traffic					
Excessive noise, for					
example, noticeable					
sounds that are	_			_	
unpleasant or annoying					
Vacant buildings or lots,					
or undesirable uses, for					
example, abandoned				_	
houses or a liquor store					
Poorly maintained					
properties, for example,					
tall weeds in yard or	_			_	
broken windows					
Lack of eyes on the					
street, such as absence		П			
of people, no houses or	_	J		J	
store fronts					

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	I don't see any of this.	I see a little of this.	I see a moderate amount of this.	I see a lot of this.
Evidence of threatening persons or behaviors, such as gangs, or alcohol or drug use				
Animal waste				
Undesirable odors, such as garbage or sewer				
Stray or unleashed dogs				
Other:				
Other:				
If there were condition Trash cans (don't condition If there were overflowing Shade structures, I for there were the conditions of the c	ingne sidewalkne street bike lane unt the ones are benches, weAbout half count the ones are trash cans, agAbout half ike awnings or e shade struction.		s) lition? □All or most pod condition pps) ng with trash? □A erflowing cod condition? □A	III or most

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Did you feel safe during	your walk? □No □Yes		
	why you feel unsafe.		
hat can be done to m	ake this street safer for people who	walk?	
vou have other observ	vations or comments about this stre	et. please describe them.	
you have outer observ		es, preuse describe mem	
Thank you for ye	our help! Please check that you have	filled out the entire report.	
Thank you for yo	our help! Please check that you have	filled out the entire report.	
Thank you for yo	our help! Please check that you have	filled out the entire report.	
Thank you for ye	our help! Please check that you have	filled out the entire report.	
Thank you for yo	our help! Please check that you have	filled out the entire report.	



CHOICE NEIGHBORHOOD INITIATIVE

HEALTH IMPACT ASSESSMENT



111 W MONROE SUITE 720 PHOENIX, AZ 85003

602.256.0015 LISCPHOENIX.ORG



2929 N CENTRAL AVE SUITE 1550 PHOENIX, AZ 85012

602.385.6500 VITALYSTHEALTH.ORG

Edison-Eastlake Community Health Impact Assessment Crosswalk with One Vision Plan

	Health Impact Assessment Strategy	One Vison Plan
	Policy	
s	Adopt management policies and practices that prioritize inclusive resident leadership and utilize resident assets.	Connect Us - neighborhood organizations, Block Watch, Community Action Teams
it.	Infrastructure	
Commun	Create a community of opportunity by prioritizing healthy child development from birth through college entry through infrastructure development and high quality services for children and youth.	Lift Up - Onsite child care/Head Start, park expansion
Resilient	Ensure equitable distribution of community infrastructure, facilities and programming on both the north and south side of Van Buren Street.	Connect Us - pedestrian improvements, traffic calming, Complete Streets, bike lane enhancements
힏	Program	
Thriving and Resilient Communities	Partner with community organizations and allocate resources to provide ongoing trainings and programming on facilitation, mediation, restorative justice and leadership development to all residents to support community participation and engagement.	Connect Us - neighborhood organizations, community-wide events, community centers, Community Action Teams Lift Up - service coordination, workshops and seminars
	Support both formal and informal family support programming to strengthen caregiver/parenting skills and families.	Lift Up - parent supports, kith and kin care, informational workshops, satellite public library
	Policy	
	Promote Urban Agriculture through zoning. Urban Agriculture includes community gardens, urban farms, farmers markets, community supported agriculture, and mobile produce vendors.	Embrace - Urban Farm Lift Up - community gardens
	Encourage the development of Farmers Market by adopting supportive policies and practices.	Embrace - Vacant lot redevelopment, new business attraction Lift Up - Edison Park Activity Hub
	Infrastructure	
	Create a small business development initiative, Healthy Corner Store Initiative, to improve access to healthy and affordable food.	Embrace - City economic development programs, new business attraction
Food	Determine the market potential for an additional full-scale grocery store as a long-term strategy to create a community of choice.	Embrace - new business attraction
윤	Program	
	Work with a community-based organization to develop a community garden association lead by residents, including youth.	Embrace - Urban Farm Lift Up - community gardens, youth leadership development
	Partner with residents to determine specific food preparation, food storage, and other nutrition education classes to offer at each housing site. Allow residents to lead classes when appropriate and bring partner organizations onsite to offer free classes to all residents.	Lift Up - Community Health Workers, healthy cooking and nutrition programs
	Work with the local Walmart (36th Street & Thomas Road), Fry's (30th Street & Thomas Road) and Ranch Market (16th Street & Roosevelt Street) to introduce free shuttle buses for residents of EEC.	Connect Us - neighborhood organizations, Community Action Teams Embrace - Edison-Eastlake Business Alliance

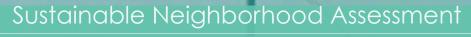
Edison-Eastlake Community Health Impact Assessment Crosswalk with One Vision Plan

	Health Impact Assessment Strategy	One Vison Plan
	Policy	
	Urban Heat Island	
	Comply with the standards established in the Interim Transit Oriented Overlay Districts specifically as it relates to shade.	Connect Us - new or redesigned bus shelters
	Adopt heat mitigation policies and strategies in the redevelopment of the urban form, including prioritizing the use of surfaces and building materials that provide cooling effects. Placement and orientation of buildings should also maximize cooling.	Connect Us - Complete Streets, new or redesigned bus shelters Lift Up - park expansion, Nature's Cooling System project, carbon forest
	Infrastructure	
	Urban Heat Island and Air Quality	
	Increase greening and improve landscaping by adding trees, sod and other vegetation throughout the community to help improve the air quality and mitigate the urban heat island effect.	Connect Us - Complete Streets, new or redesigned bus shelters Lift Up - park expansion, Nature's Cooling System project, carbon forest
	Air Quality	
	Install high efficiency HVAC systems in the housing units and community buildings. Advanced air filtration should be installed through air handling units for all sites.	Connect Us - energy-efficient design features
Jen	Vacant Lots	
Environment	With resident leadership, activate vacant lots for community benefits. This may include, but not limited to, urban agriculture, pop-up parks, green	Embrace - vacant lot redevelopment, new business attraction, Urban Farm
	spaces, and art spaces.	Lift Up - park expansion, carbon forest
	Program	
	Urban Heat Island	
	Continue and expand programming for residents to enhance heat coping mechanism and learn about heat-related illness. Empower residents to share their stories of coping with heat and their visions for improving the	Lift Up - park expansion, Nature's Cooling System project, workshops and seminars
	conditions.	
	Urban Heat Island and Air Quality	
	Provide education to residents on how to best use of new energy efficient appliances and HVAC systems.	Lift Up - workshops and seminars
	Urban Heat Island, Air Quality and Vacant Lots	
	Support resident leadership throughout strategies used to address environmental quality. To support green infrastructure, allow residents with landscaping experience opportunity to provide maintenance of	Connect Us - Zero Waste program Embrace - neighborhood clean-ups, trash/recycling receptacles, Neighborhood Strategic Action Plan, Abatement Lien program, home
	common spaces in exchange for housing stipend or community service hours. Support resident leadership to establish community clean-up and other neighborhood beautification efforts. Provide programming support	rehabilitation programs
	for any activation of vacant lots.	
	Policy	
Safe, Active Communities	Work together with the City of Phoenix Police Department to use Crime Prevention Through Environmental Design (CPTED) guidelines in the design of the properties, including the enhancements to Edison Park.	Connect Us - reconnection of sites to street grid, housing orientation to provide "eyes on the street" Lift Up - park expansion and reconfiguration, Edison Park Activity Hub
	Utilize the Active Design Guidelines in the neighborhood and housing redevelopment plan to incorporate multigenerational physical activity opportunities.	Connect Us - reconnection of sites to street grid Lift Up - park expansion
	Infrastructure	
	Implement specific street recommendations found in Table 12 of the full HIA report. Priority should be given to Roosevelt Street, the intersection of 20th and Roosevelt Streets, 20th Street, the intersection of 18th and Van	Connect Us - pedestrian improvements, traffic calming, Complete Streets, bike lane enhancements
	Buren Streets, and 18th Street.	Constitution and additional and a second sec
	Work with the City of Phoenix Department of Transportation to design open space and pathways to assure connectivity to Van Buren Street and the light rail from housing sites.	Connect Us - pedestrian improvements, traffic calming, Complete Streets, bike lane enhancements Lift Up - park expansion and reconfiguration
S	Program	-77 -7 Farrenbander and recombination
	Support resident leaders to form walking clubs in housing areas.	Lift Up - walking clubs
	Support programs and resident leadership to address the crime in the	Connect Us - neighborhood organizations, Block Watch, Community
	community. This includes supporting the community action program or the creation of one or more Block Watches. Providing regular, organized recreation programs in Edison Park and enforce Edison Park hours with active police monitoring at night.	Action Teams, community-wide events Lift Up - Edison Park Activity Hub, out-of-school time opportunities at Edison Park









Through the Sustainable Neighborhood Assessment Tool developed by Global Green USA, public officials and local government staff are using the LEED for Neighborhood Development (LEED-ND) rating system to determine ways for future development in their communities to achieve high levels of environmental, economic, and social sustainability. LEED-ND integrates the principles of smart growth, walkable urbanism and green building into the first national rating system for neighborhood design. In Phoenix, Global Green used the tool as a means to evaluate existing conditions and plans for the Eastlake-Garfield District, in order to identify opportunities to augment current revitalization efforts and develop recommendations to increase the neighborhood's overall level of sustainability.

Assessment Team + Funding

Global Green USA
Tim Bevins | Krista Frank
Raimi + Associate
Aaron Welch
US Green Building Council
Robyn Eason

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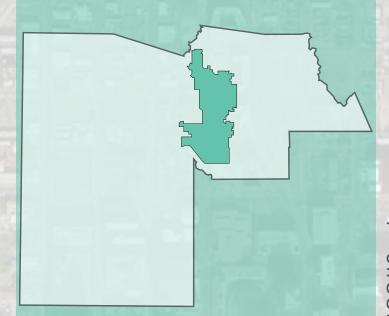
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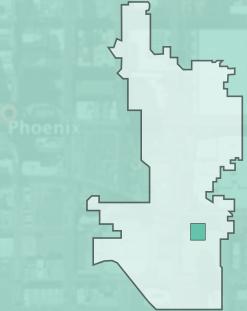
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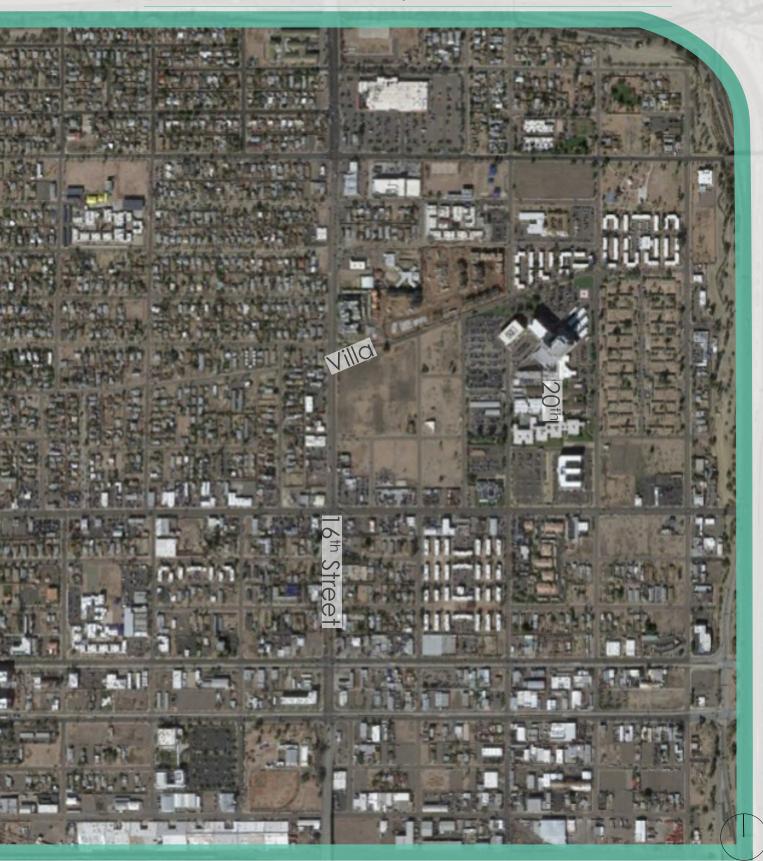






Eastlake-Garfield TOD District

Study Area



-10

Sustainable Neighborhood Assessment Process

The goal of the Sustainable Neighborhood Assessment process is to identify topical and physical focus areas where policy or planning changes can promote sustainable urban neighborhoods over the short and long term. These interventions can improve the neighborhood's day-to-day sustainability as well as increase its resilience during future weather events and conditions. Some of the defining characteristics of a sustainable neighborhood include focusing development in previously developed areas with high transit connectivity, avoiding building on habitat, agricultural land or wetlands, an urban form that encourages walking and cycling, access to nearby food and services, and energy and water efficiency in both buildings and infrastructure. To define these focus areas, Global Green USA and its team members utilize the Sustainable Neighborhood Assessment Tool, which is based on the LEED for Neighborhood Development (LEED-ND) criteria and checklist.

Prior to visiting the assessment area, the team conducted a review of existing planning documents, code requirements, maps, and stakeholder priorities. An initial assessment was then completed, with the credits in each of the three LEED-ND categories (Smart Location & Linkages, Neighborhood Pattern & Design, and Green Infrastructure & Building) marked as "achieved," "not achieved," "unknown," or "not applicable." Each credit is further ranked for the degree that it correlates to regional or local policy priorities, regulatory support, technical feasibility, market support, and stakeholder input. This analysis is described in more detail beginning on page 18.

This initial assessment serves as the point of departure for the Global Green team's three-day site visit and evaluation. During the visit, the team walks each block of the target neighborhood, photographs examples of positive qualities and areas for improvement, and conducts a series of meetings with targeted stakeholders, City staff, and representatives of relevant public agencies. Throughout the process, the preliminary checklist is edited and refined to incorporate the team's visual observations and contextual issues raised by stakeholders. The initial findings of the evaluation are grouped into broad categories noted on the following pages. The final augmented checklist for the Eastlake-Garfield TOD District (District) can be found on pages 18-21.

The assessment process then enables the team to identify a series of recommendations based on LEED-ND credits to augment and increase the neighborhood's long-term sustainability. Recommendations cover policy, planning, and land use and infrastructure changes which aim to realize a more resilient and sustainable future for the neighborhood. Some recommendations can be implemented fairly quickly, while others will require long-term collaboration among public agencies, local institutions, and private sector partners, as well as multiple sources of funding.

Neighborhood Assets



1. Strong faith-based community and resources 2. Nearby Valley Metro light rail station 3. Well-established arts programming 4. Active recreation opportunities 5. Public investment in new affordable housing

Neighborhood Background

The District, located just east of Downtown Phoenix, is a historically disadvantaged area of the city, hampered by high levels of poverty, acres of potential brownfields, aging infrastructure, and a declining retail and commercial environment. The District is comprised of three neighborhoods: 1) Eastlake Park; 2) Garfield and 3) Edison. The District is home to a diverse community of residents with a demonstrated history of civic engagement, that have been instrumental to recent planning efforts. The District has a high concentration of city-owned public housing, some dating back to the 1940's and 60's. The study area, bound to the north and east by Interstate 10, 7th street to the west, and the Union Pacific Railroad to the south, is entering a new era of investment and revitalization as significant local planning efforts, federal funds, and the introduction of the Valley Metro light rail system coalesce with the potential for meaningful and impactful change.

The housing stock of the District is characterized by a mixture of modest singlefamily homes, small apartment buildings, and publicly owned multi-family housing structures. Defunct industrial and commercial lots are woven throughout the District, though primarily concentrated along its southern boundary and arterials. With over 80 acres of potential brownfields, large parcels of land held in speculation, and shuttered businesses, an atmosphere of underinvestment permeates throughout the District. Despite these challenges, the City of Phoenix has made significant strides in recent years to improve economic, environmental, and equitable conditions in the District. Some of the major objectives of these efforts are to improve living conditions, housing stock, business, and recreational opportunities throughout. New investments include the construction of the 250-unit mixed income Aeroterra (a HUD HOPE VI revitalization project), a comprehensive planning vision titled Reinvent PHX, upcoming streetscape improvements along Van Buren Street, a planning study for a new Valley Metro light rail station on 16th street, the recently adopted Walkable Urban Code (which seeks to increase density and improve walkability along transit corridors), and the recently awarded Choice Neighborhoods Planning and Action Grant from the US Department of Housing and Urban Development.

This investment of funds and attention from local and federal sources signals a catalytic moment for the District, as it is poised to grow into a more walkable, transit accessible, and economically prosperous portion of the city. As these investments are made, it is critical to maintain and expand the District's affordable housing stock, while making targeted efforts to improve livability concerns such as providing more shading opportunities and encouraging needed retail amenities like grocery stores to establish a presence in the area.

Neighborhood Challenges



1. Wide boulevards with few pedestrian / cyclist amenities 2. Empty lots non-residentially zoned 3. Few retail options 4. Large unbuilt parcels 5. Aging public housing stock

Recommendation Approach and Strategy

Recent planning efforts and investments by City agencies have signaled a new era of focused community improvements in the District. Historically undervalued and underserved, the District has faced decades of challenaina market conditions, crime, and countless closures of retail and commercial establishments, underscoring the critical need to shift from planning to the implementation of these visionary plans. While many of the recommendations found in this document as well as other planning exercises will require many years to be fully realized, other more immediate actions can take place in the interim. When considering more immediate interventions, the City should seek to implement as many overlapping and mutually supportive strategies found in the Eastlake-Garfield District section of the ReinventPHX policy plan, environmental goals in Sustain PHX, and planning documents resulting from US Department of Housing and Urban Development grants in the area. This will ensure that any resulting Choice Neighborhoods planning efforts builds upon and benefits from the strong work already completed, while building trust and good faith with the community and demonstrating progress towards the implementation of more long-term goals. Suggested efforts include basic capital improvements such as water fountains in parks, better and more connected pedestrian linkages (sidewalks, crosswalks, safe routes to schools, etc.) frequent litter / debris pick-up, and circulator connections to light-rail (particularly for the elderly and disabled).

The recommendations presented over the following pages were developed through careful study of regional and local planning documents, City staff and stakeholder interviews, and a thorough on-the-ground analysis of community characteristics. Each of the resulting recommendations has been informed by best practices as identified by LEED-ND and has been produced with specific attention given to long-term sustainability and resilience. Four key overarching themes guide the specific recommendations found within this document: 1) Affordable Housing, 2) Complete Community, 3) Infill Development, and 4) Neighborhood Fabric. Affordable Housing aims to protect existing affordable housing in the District while seeking opportunities to introduce new units. Primary objectives include building new affordable units tied to the Area Median Income, and striving to develop a diversity of housing types so that residents may continue to live in the community as economic and household conditions change. Complete Community addresses calls by residents to attract and retain desired retail, commercial, and recreational uses to the District. Infill Development focuses on solutions to the abundance of large and small parcels dotting the neighborhood. Neighborhood Fabric highlights the many opportunities to articulate the built environment such that it prioritizes the needs of people as new projects occur. Architectural, landscape, and urban design interventions such as consistent delineation of building facades with ample set-backs to accommodate outdoor uses, street trees, and lighting can work in concert to create a welcoming environment for residents to interact with one another and their surroundings.

Recommendations

SOUTH TOUCH

Affordable Housing

With a median household income of \$17,991 and an unemployment rate of 11%, the District is a historically disadvantaged community in need of permanent, stable, affordable housing. District residents spend more than 20% of their income on transportation and 6% - 9% on energy, which is likely due to the prevalence of driving commutes and lack of weatherization in homes. Indeed, many public housing units are concentrated in the newly-defined Edison-Eastlake Choice Neighborhoods Community (EEC), but the demand outstrips the supply, and much of this housing stock is outdated and in disrepair. In recent years, the City's Housing Department has made major inroads towards addressing this deficit, namely with the Aeroterra revitalization project, but challenges remain. The City received a Choice Neighborhoods Planning and Action Grant for the EEC from the US Department of Housing and Urban Development, which has the potential to yield further affordable housing gains in the District.

Throughout the Sustainable Neighborhood Assessment- in stakeholder interviews, discussions on the street, and at the community workshop- the evaluation team regularly heard calls for increasing affordable housing options within the District. Building upon the success of the Housing Department, other housing opportunities present themselves that can help alleviate this need such as encouraging the creation of a diverse array of housing types- from granny flats to 3 bedroom apartments- and working with the faith-based institutions that own land in the District to develop these lots into affordable housing. LEED-ND provides additional guidance with Pattern and Design (NPD) credit 4, Mixed-Income Diverse Communities, which promotes equitable neighborhoods by encouraging a spectrum of housing types and affordable units.



Existing public housing in the District

Action Items

- 1. Public Housing and Affordable Units: Preserve and increase affordable housing options in the District to help combat gentrification and maintain community cohesion and diversity. The City should explore opportunities to incentivize developers to provide units priced up to 60% and 80% of the Area Median Income in exchange for development bonuses. Continued reinvestment in existing public housing structures should pursue energy and water efficiency standards.
- 2. Diversity of Housing Types: In order to promote a socially equitable District, provide a wide spectrum of housing types, including single-family homes, 1, 2, and 3 bedroom apartments, and granny flats. This diversity will accommodate residents at different stages of life, income levels, and family sizes ensuring that residents can stay within the District as circumstances change.
- 3. Faith-Based Property Owners: Encourage local churches to develop and maintain affordable housing on their property and parking lots. There is a particular opportunity for this near the 12th street light rail station, which could serve future residents of affordable housing.



Aeroterra will add 250 mixedincome units to the District

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Complete Community

Completing daily errands such as grocery shopping, dropping kids off at daycare, going to the bank, and buying clothing is a challenging and sometimes impossible task as the District's retail areas are largely characterized by shuttered storefronts, fast food restaurants, and liquor stores. As the SNA team spoke with community members, many raised the issue that they lacked walkable access to basic services, and were unable to complete these tasks within their own neighborhood. In addition to basic services like those described above, the community outreach meeting also revealed a desire for more active and civic space in the neighborhood.

While the district is indeed characterized by vacant storefronts and undeveloped lots, the energy created by the Housing Department's efforts in the District, along with the new light rail and planned improvements to Van Buren Street have set the stage for new opportunities to work with local businesses and developers within the District. Focused efforts to attract retail uses to the District will also help spur local job creation, a critical element to the District's long-term economic sustainability. Neighborhood Pattern and Design (NPD) credit 3, Mixed-Use Neighborhood Centers, encourages the clustering of uses within a quarter-mile walk distance of area residents. Smart Location and Linkage (SLL) credit 5, Housing and Jobs Proximity encourages a balanced community through the generation of jobs within a half-mile of housing units. Green Infrastructure and Building (GIB) credit 5, Existing Building Reuse recognizes the value and embodied energy found in existing buildings and seeks to encourage their reuse through retrofitting structures to meet the needs of new uses.



Many businesses in the District are successful and beloved, though more are needed

2

Action Items

- Community Benefits: Create a clear list of desired community benefits such as
 affordable housing, parks, pedestrian improvements, additional shade structures
 and street trees, and grocery stores or other retail that can be included as
 part of future development projects. Encourage Transit Oriented Development
 along Washington and Jefferson streets, as identified in ReinventPHX.
- 2. **Retail Corridors:** Seek to establish new successful retail uses along key corridors in coordination with current street and transit improvements such as along Van Buren with the upcoming street re-design and beautification, and along Washington and Jefferson streets with the establishment of light rail and associated TOD uses. Job centers outside of downtown could also be a strong and reliable driver of reverse-commute ridership for the Valley Metro light rail system.
- 3. Adaptive Reuse and Historic Preservation: Successful examples of adaptive reuse throughout the District demonstrate the marketability of this approach, which can yield community retail and housing needs in shorter time-scales than new construction. The introduction of a Historic Preservation Overlay Zone in the Garfield Neighborhood encouraged renovation rather than demolition, and in turn helped preserve the neighborhood's charm and character. A similar strategy could be explored in remaining areas of the District to deliver a similar boost.



Undeveloped lots in the District are poised for redevelopment 3

Infill Development

The District is characterized by about 84 acres of vacant land. Many of these lots are relatively small, while St. Luke's Medical Center owns much of the larger parcels for possible future expansions. Complicating development efforts, as the result of industrial dumping in the 1960's and 70's by a Motorola semiconductor plant, the majority of these vacant lots are potential brownfields. Despite these circumstances, however, great infill development potential exists within the District that the City and private development community can focus on prioritizing.

Infill development within the District should be focused on ensuring that new uses contribute positively to the character of the District, including compatibility with low- and middle-density historic fabric in the Garfield neighborhood. Consider reviewing infill standards in the Garfield neighborhood to ensure that future infill is of a scale and character that will cultivate and improve the neighborhood's historic qualities. Within the Edison neighborhood, given the uncertainty surrounding St. Luke's Medical Center's possible campus expansion plans, the City should prepare for a variety of potential development scenarios while moving forward with positive community development in the Choice Neighborhoods area around the hospital and recognizing the impact any expansions may have on employment for nearby residents.

The area around the railyard can be a great opportunity for a healthfield or food production area. Investigating possibilities of food manufacturing, farming, or installing some kind of job center would serve as a community win-win. Despite the desire of community members for housing at these locations- unlikely due to FAA restrictions- having a land use that is a community benefit may still be well-received as long as affordable housing needs are addressed elsewhere and is in a format that serves the community.

Smart Location and Linkage (SLL) credit 1, Preferred Locations, credit 2, Brownfield Redevelopment, and credit 5, Housing and Jobs Proximity all encourage infill development, recognizing its potential to deliver meaningful neighborhood change.



New infill development along the light rail corridor should be prioritized

Action Items

- 1. Large Parcels: The development of several large vacant parcels in the District stands to set the tone and vision for future developments throughout the area. Consider potential land swaps or sales between St. Luke's Medical Center and the City or other nearby property owners to assemble viable development parcels and/or fund affordable housing development citywide. As the City's Housing Department completes the Aeroterra development and focuses on other city-owned parcels in the District, redevelopment and retrofit efforts can also improve streetscape and walkability conditions through the implementation of the Walkable Urban Code and the policies of the ReinventPHX TOD policy plans.
- 2. Special Uses: The District is home to many undeveloped small lots, which can be leveraged for their potential to temporarily host innovative ideas that promote visions for the district put forth by residents such as urban farms, pop-up marts, medical clinics, and recreational spaces. The City's Brownfields to Healthfields initiative is a great example of how these lots can be activated with publicly beneficial interim uses that help demonstrate the District's potential while a site makes its way thorough the entitlement process for a more permanent use.

Explore the concept of a "Health District" that increases interaction between local hospitals and the neighborhood to promote healthy lifestyles and services. In a related strategy, seek to leverage and integrate with the Community Health Needs Assessment process now required by the federal Affordable Care Act, which requires hospitals receiving federal funding and tax breaks to study and provide community benefits for local disadvantaged communities. These efforts could include St. Luke's as well as Banner Good Samaritan Medical Center, the cluster of university medical uses and teaching facilities at 7th and Van Buren streets, or other local hospitals with an interest in investing in low-income communities.

Encourage new job uses, research and development, or other creative non-residential uses south of Washington and Jefferson streets near the railyard. Jobs centers outside of downtown are also a strong and reliable driver of reverse-commute ridership for the light rail system.

3. FAA Lots: The City's Aviation Department acquired land through its buy-back program, and is now seeking to re-introduce positive new uses for these vacant parcels that are mutually compatible with the City's, FAA's, and neighborhood's goals, such as parks and gardens, food production, and other community spaces. This strategy will help address the "missing teeth" condition these lots contribute to near the railyard while dealing with the realities of the FAA development restrictions.

4

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Neighborhood Fabric

The District is in need of human-scaled urban design improvements to facilitate walking and cycling, and improve the area's aesthetic. Through the steady accumulation of improvements to the neighborhood fabric such as street trees, sidewalk improvements, and bicycle lanes or cycle tracks, the City can transform the District into a more comfortable and welcoming area for people to live and work that supports transportation across a variety of platforms. The City can work to ensure implementation of existing walkability requirements and guidelines from the Walkable Urban Code, and the ReinventPHX TOD policy plans to give more focused attention and respect to walking and cycling as viable forms of transportation, which is of particular importance in disadvantaged communities with residents that may lack access to private vehicles.

LEED-ND credits in the Neighborhood Pattern and Design (NPD) category focus heavily on the creation of communities that facilitate and encourage walking, cycling, and transit use- the core elements of Human Scale Design. NPD prerequisite 1 and credit 1, both named Walkable Streets, promote the creation of a walkable environment through a 1:3 building height to street width ratio, requiring building frontages to face public spaces, minimizing curb cuts in sidewalks, and street designs that are safe for pedestrians and cyclists. NPD prerequisite 2, Compact Development, contributes to this vision by providing the requisite number of people to activate a public space by requiring a minimum of 12 dwelling units an acre or a .8 floor area ratio. Again, prioritizing pedestrian experience over vehicles, NPD credit 5, Reduced Parking Footprint, places parking lots at the rear or side of new non-residential buildings and multi-unit residential or mixed-use buildings. NPD credit 14, Tree-Lined and Shaded Streets further contributes to a welcoming urban realm through the introduction of street trees at an average interval of 40 feet or less.



Fixed shade structures are an effective strategy where trees are not appropriate

Action Items

1. Shade: Incorporate context-sensitive tree planting guidance as stipulated in the landscape standards chapter of the Walkable Urban Code (Section 1309) into any short-term neighborhood improvements resulting from a Choice Neighborhoods Planning Grant, and other public realm improvements throughout the District.

Where trees are impractical or unsuitable, consider the installation of permanent fixed structures, especially along pedestrian corridors and at transit stops to provide relief from the sun. When utilizing fixed shade structures, follow Crime Prevention Through Environmental Design (CPTED) principles to address community safety concerns.

2. Walking and Biking: The recently adopted Walkable Urban code provides urban design standards in line with LEED-ND, and should serve as a foundational document for any development discussions within the District.

Several north-south streets (12th and 16th) and east-west streets (Van Buren and Fillmore) have potential to be retrofitted to accommodate pedestrians and cyclists in a safe, comfortable manner, yielding a more equitable distribution of travel options. Consider the incorporation of covered bicycle storage lockers at Valley Metro light rail stops to facilitate and encourage multi-modal transportation and support transit enhancements through the District as the Transportation 2050 plan is implemented.

3. Streetscape Improvements: Ensure that a physical form that promotes walkability is prioritized in future planning documents, development plans, development agreements and engineering improvements throughout the District. Given the neighborhood's challenges with heat, consistent application of street trees in accordance with the Walkable Urban Code can help address walkability issues while simultaneously improving the overall aesthetics of the District.

Continue and expand the City's existing practice of encouraging and requiring aggressive stormwater management best practices such as infiltration, onstreet swales, and retention of stormwater on private development parcels. This reduces the downstream impacts of erosion and water pollution while contributing to Phoenix's long-term water supply and aquifer re-charge goals. Seek to integrate these "green streets" strategies into future streetscape improvements such as upcoming re-design of Van Buren Street as well as throughout the EEC in creating its Neighborhood Transformation Plan.

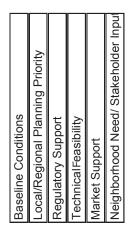
Consider encouraging or requiring surface parking lots to be located behind any new structures in order to provide continuous facades and minimize sidewalk intrusions along the curb, yielding a more consistent urban realm oriented towards pedestrians rather than vehicles.

The Sustainable Neighborhood Assessment tool includes an annotated LEED-ND checklist created by Global Green. It is a key component of the process used to document and compare the assessment area against the LEED-ND prerequisites and credits. Each credit within the three credit categories (Smart Location & Linkage, Neighborhood Pattern & Design, and Green Infrastructure & Building) is marked as "achieved," "not achieved," "unknown," or "not applicable" under baseline conditions. Additional analysis has been done based on local planning policy, regulatory support, technical feasibility, market support and stakeholder input. The preliminary checklist analysis was edited after site visits, stakeholder meetings, and conversations with city staff. This information was then translated into an overall assessment of sustainable neighborhood performance.

Based on the in-field assessment, planning document review, various stakeholder meetings, the Global Green team estimated which LEED-ND credits were "Likely," "Possible with Effort," "Unlikely" to be achieved, or "Not Applicable," considering existing conditions, technical feasibility, policy readiness, financial burden, and applicability to neighborhood conditions. The bar graph summary identifies the overall level of sustainable neighborhood performance for the District. Many credits fall into the "Likely" category, and of the remaining credits, a significant percentage fall within the "Possible with Effort" category, which shows the large potential for improving the sustainability of the neighborhood, specifically by pursuing the high-priority recommendations described in this report.

The summary table below shows the numeric values extrapolated from the percentage of credits identified as "Achievable" below. The recommendations listed in the previous pages are largely a response to LEED-ND criteria which achieving was identified as "Possible with Effort" by the assessment team. While these values do not correlate exactly to specific LEED-ND points, they provide an estimate of the neighborhood's potential level of future achievement. It should be noted that this is a rough measure of performance and not an exact representation of the neighborhood's level of possible certification. It should also be noted that all the prerequisites must be achieved if certification will be pursued. While recognizing these constraints, the categories generated through the assessment serve as a useful metric for estimating formal LEED-ND certification. Given the presumption that all those designated as "Achievable" would be met, providing a baseline point tally of 42 points, yielding a likely rating of silver from the USGBC. If those listed as "Possible with Effort", are aggressively pursued and achieved, affording an additional 32 points, the District may be able to earn a gold designation.

	Total	Achievable with Current Conditions	Possible with Effort
Smart Location And Linkage	27	10	6
Neighborhood Pattern and Design	44	22	17
Green Building and Infrastructure	29	11	9
	100	42	32
<u>LEED-ND Certification Thresholds:</u> Certified: 40-49 Silve	r: 50-59	Gold: 60-79 PI	atinum: 80+



Eastlake-Garfield District, Phoenix, AZ

Legend				
V	Achieved			
?	Unknown			
X	Not Achieved			
_	Does not exist/ NA			
	Explicit support/ no technical issues			
	Lack of explicit support/ minor technical issues			
	Opposition/ signficant technical issues			
	Not Applicable			

	Sm	nart Location & Linkage	Points					
	P 1	Smart Location	Required					
→	P 2	Imperiled Species and Ecological Communities Conservation	Required					
_	P 3	Wetland and Water Body Conservation	Required					
_	P 4	Agricultural Land Conservation	Required					
	P 5	Floodplain Avoidance	Required					
✓	C 1	Preferred Locations						
✓	C 2	Brownfield Remediation						
?	C 3	Access to Quality Transit						
X	C 4	Bicycle Network						
X	C 4	Bicycle Storage						
X	C 5	Housing and Jobs Proximity						
	C 6	Steep Slope Protection						
	C 7	Site Design for Habitat or Wetland and Water Body Conservation						
X	C 8	Restoration of Habitat or Wetlands and Water Bodies	Restoration of Habitat or Wetlands and Water Bodies					
	C 9	Long-Term Conservation Management of Habitat or Wetlands and Water Bodies						
36%		22% 10% 32%						

<u>Smart Location and Linkage</u>

Smart Location and Linkage focuses primarily on existing site conditions to ensure that developments are not located in floodplains, on steep slopes or cause damage to ecological communities or local water bodies.

Baseline Conditions Local/Regional Planning Priority Regulatory Support TechnicaFeasibility Market Support Neighborhood Need/ Stakeholder Input

Eastlake-Garfield District, Phoenix, AZ

	Legend					
>	Achieved					
?	Unknown					
×	Not Achieved					
_	Does not exist/ NA					
	Explicit support/ no technical issues					
	Lack of explicit support/ minor technical issues					
	Opposition/ signficant technical issues					
	Not Applicable					

	Ne	ghborhood Pattern & Design			
→	P 1	Walkable Streets- Functional Entries		Re	quired
~	P 1	Walkable Streets- Building Height to Street Centerlin	e Ratio	Re	quired
~	P 1	Walkable Streets-Continuous Sidewalks		Re	quired
✓	P 1	Walkable Streets-Garage and Service Bays		Re	quired
~	P 2	Compact Development		Re	quired
✓	Р3	Connected and Open Community		Re	quired
X	C 1a	Walkable Streets : Facades and Entries			
X	C 1b	Walkable Streets: Ground-Level Use and Parking			
X	C 1c	Walkable Streets: Design Speeds for Safe Ped and B	Sicycle Trave		
✓	C 1d	Walkable Streets: Sidewalk Intrusions			
X	C 2	Compact Development			
X	С3	Mixed-Use Neighborhoods			
~	C 4	Diversity of Housing Types			
✓	C 4	Affordable Housing			
X	C 5	Reduced Parking Footprint			
X	C 6	Connected and Open Community			
X	C 7	Transit Facilities			
X	C 8	Transportation Demand Management			
X	C 9	Access to Civic and Public Space			
X	C 10	Access to Recreation Facilities			
✓	C 11	Visitability and Universal Design			
✓	C 12	Community Outreach and Involvement			
X	C 13	Local Food Production			
X	C 14	Tree-Lined and Shaded Streetscapes			
~	C 15	Neighborhood Schools			
4	9%	38%		9%	3%

Neighborhood Pattern and Design

Neighborhood Pattern and Design aims to influence the physical layout and design of the community to yield walkable neighborhoods with a variety of land use types.

Baseline Conditions Local/Regional Planning Priority Regulatory Support TechnicalFeasibility Market Support Neighborhood Need/ Stakeholder Inpu	Eastlake-Garfield District, Phoenix, AZ Legend ✓ Achieved ? Unknown X Not Achieved _ Does not exist/ NA Explicit support/ no technical issues Lack of explicit support/ minor technical issues Opposition/ signficant technical issues Not Applicable	
	Green Infrastructure & Buildings	
X	P1 Certified Green Building	Required
→	P 2 Minimum Building Energy Performance	Required
✓	P 3 Indoor Water Use Reduction	Required
✓	P 4 Construction Activity Pollution Prevention	Required
X	C 1 Certified Green Buildings	
X	C 2 Optimize Building Energy Performance	
X	C 3 Indoor Water Use Reduction	
X	C 4 Outdoor Water Use Reduction	
✓	C 5 Building Reuse	
✓	C 6 Historic Resource Preservation and Adaptive Use	
	C 7 Minimized Site Disturbance	
Y	C 8 Rainwater Management	
X	C9 Heat Island Reduction	
X	C 10 Solar Orientation	
X	C 11 Renewable Energy Production C 12 District Heating and Cooling	
✓	C 13 Infrastructure Energy Efficiency	
X	C 14 Wastewater Management	
X	C 15 Recycled and Reused Infrastructure	
X	C 16 Solid Waste Management	
×	C 17 Light Pollution Reduction	
36%	32% 19%	13%

Green Infrastructure and Buildings

Green Infrastructure and Buildings seeks to optimize individual buildings and surrounding infrastructure systems to reduce their energy and water consumption and associated emissions.

Appendix

A. LEED for Neighborhood Development Credit Categories

Smart Location and Linkage [SLL]:

SLL focuses on preserving the environmental characteristics inherent to the site such as water body and steep slope protection and influencing development patterns to reduce sprawl and automobile dependence. Credits in this category encourage locating new developments near city centers with robust public transportation options and sites that have been previously developed or are immediately adjacent to existing development.

Neighborhood Pattern and Design [NPD]:

NPD influences the physical layout and design of the community in question through minimum thresholds for density, internal and external connectivity, and characteristics of a walkable community such as continuous sidewalks or building frontages that face public streets. Credits in this category reward projects that have nearby civic, educational and recreational facilities, limited surface parking and have transportation facilities complete with maps and bicycle racks.

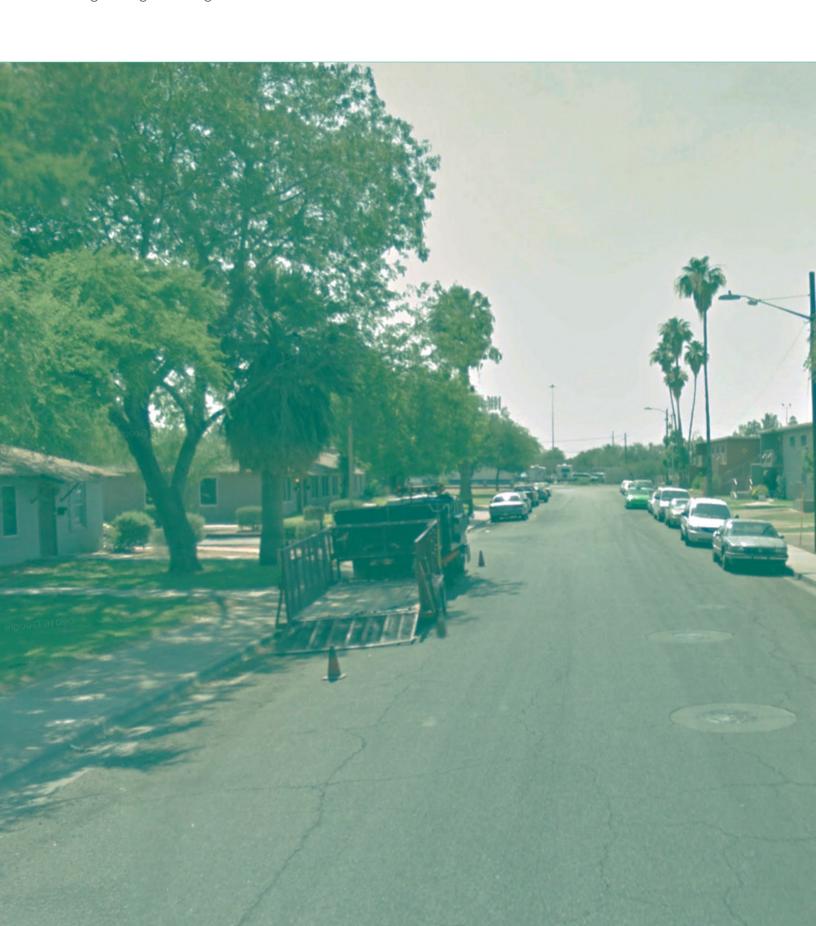
Green Infrastructure and Buildings [GIB]:

GIB emphasizes the importance of the optimized performance of structural systems and city infrastructure through minimum building energy and water efficiency, water-efficient landscaping and on-site renewable energy production. Credits in this category promote the adaptive reuse of existing buildings, on-site stormwater management, recycled content in infrastructure such as roadbeds and energy efficient traffic lights, street lights and water pumps.

For more information, please visit www.usgbc.org

Global Green USA

Green Urbanism Program 2218 Main Street 2nd Floor Santa Monica, CA 90405 www.globalgreen.org









LEED v4 for Neighborhood Development Plan Project Checklist

Project Name: Edison-Eastlake Project - Luke & Krohn site
Date: Initial pre-design evaluation (3/27/17 - 3/28/17

es ?	No				Yes	?	No			
5 4	9	Smart	Location & Linkage	28	11	11	9	Green	Infrastructure & Buildings	31
′		Prereq	Smart Location	Required	Υ			Prereq	Certified Green Building	Required
?		Prereq	Imperiled Species and Ecological Communities	Required	Υ			Prereq	Minimum Building Energy Performance	Required
′		Prereq	Wetland and Water Body Conservation	Required	Υ			Prereq	Indoor Water Use Reduction	Required
′		Prereq	Agricultural Land Conservation	Required	Υ			Prereq	Construction Activity Pollution Prevention	Required
′		Prereq	Floodplain Avoidance	Required		2	3	Credit	Certified Green Buildings	5
3	2	Credit	Preferred Locations	10	1	1		Credit	Optimize Building Energy Performance	2
2		Credit	Brownfield Remediation	2	1			Credit	Indoor Water Use Reduction	1
2 1	4	Credit	Access to Quality Transit	7	1		1	Credit	Outdoor Water Use Reduction	2
1		Credit	Bicycle Facilities	2			1	Credit	Building Reuse	1
3		Credit	Housing and Jobs Proximity	3			2	Credit	Historic Resource Preservation and Adaptive Reuse	2
	1	Credit	Steep Slope Protection	1	1			Credit	Minimized Site Disturbance	1
		Credit	Site Design for Habitat or Wetland and Water Body Conservation	1	1	2	1	Credit	Rainwater Management	4
	1	Credit	Restoration of Habitat or Wetlands and Water Bodies	1	1			Credit	Heat Island Reduction	1
	1	Credit	Long-Term Conservation Management of Habitat or Wetlands and Water Bodies	1		1		Credit	Solar Orientation	1
					1	1	1	Credit	Renewable Energy Production	3
5 6	8	Neighb	orhood Pattern & Design	41		2		Credit	District Heating and Cooling	2
,		Prereq	Walkable Streets	Required	1			Credit	Infrastructure Energy Efficiency	1
		Prereq	Compact Development	Required		2		Credit	Wastewater Management	2
		Prereq	Connected and Open Community	Required	1			Credit	Recycled and Reused Infrastructure	1
	2	Credit	Walkable Streets	9	1			Credit	Solid Waste Management	1
1	2	Credit	Compact Development	6	1			Credit	Light Pollution Reduction	1
1	1	Credit	Mixed-Use Neighborhoods	4						
5	1	Credit	Housing Types and Affordability	7	1	5	0	Innov	ation & Design Process	6
1		Credit	Reduced Parking Footprint	1		5		Credit	Innovation	5
		Credit	Connected and Open Community	2	1			Credit	LEED® Accredited Professional	1
	1	Credit	Transit Facilities	1						
1	1	Credit	Transportation Demand Management	2	4	0	0	Regio	nal Priority Credits	4
		Credit	Access to Civic & Public Space	1	1			Credit	Regional Priority Credit: GIBc Heat Island Reduction	1
1		Credit	Access to Recreation Facilities	1	1			Credit	Regional Priority Credit: GIBc Indoor Water Use Reduction	1
		Credit	Visitability and Universal Design	1	1			Credit	Regional Priority Credit: NPDc Walkable Streets	1
		Credit	Community Outreach and Involvement	2	1			Credit	Regional Priority Credit: NPDc Housing Types and Affordability	1
1		Credit	Local Food Production	1						
		Credit	Tree-Lined and Shaded Streetscapes	2	56	26	26	DDO I	ECT TOTALS (Certification estimates)	110
2		Ciedit	rice Ellica and Onadea Officelocapes		30	20 1	20	FNUJ	ECT TOTALS (Certification estimates)	110



LEED v4 for Neighborhood Development Plan Project Checklist

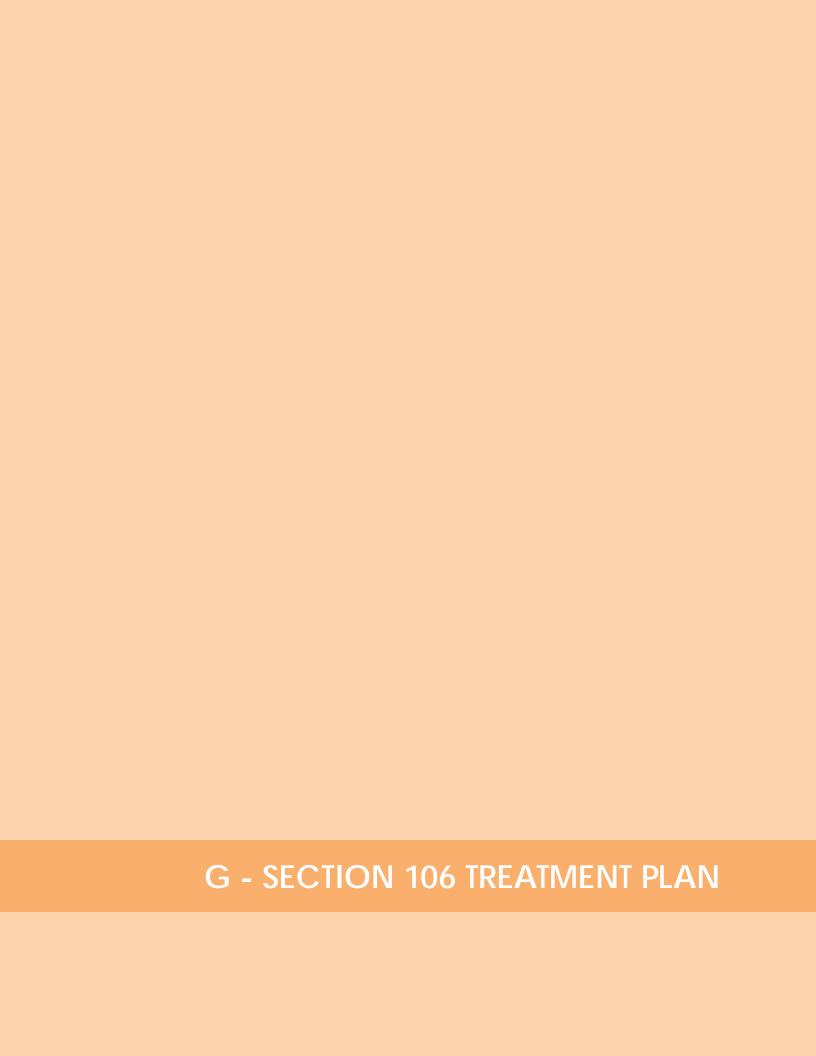
Neighborhood Schools

Project Name: Edison-Eastlake Project - Sidney P Osborn Site Date: Initial pre-design evaluation (3/27/17 - 3/28/17

Certified: 40-49 points, Silver: 50-59 points, Gold: 60-79 points, Platinum: 80+ points

Yes	?	No				Yes	?	No			
15	4	9	Smart	Location & Linkage	28	11	9	11	Greer	n Infrastructure & Buildings	31
Υ			Prereq	Smart Location	Required	Υ			Prereq	Certified Green Building	Required
	?		Prereq	Imperiled Species and Ecological Communities	Required	Υ			Prereq	Minimum Building Energy Performance	Required
Υ			Prereq	Wetland and Water Body Conservation	Required	Υ			Prereq	Indoor Water Use Reduction	Required
Υ			Prereq	Agricultural Land Conservation	Required	Υ			Prereq	Construction Activity Pollution Prevention	Required
Υ			Prereq	Floodplain Avoidance	Required		2	3	Credit	Certified Green Buildings	5
8		2	Credit	Preferred Locations	10	1	1		Credit	Optimize Building Energy Performance	2
	2		Credit	Brownfield Remediation	2	1			Credit	Indoor Water Use Reduction	1
2	1	4	Credit	Access to Quality Transit	7	1		1	Credit	Outdoor Water Use Reduction	2
1	1		Credit	Bicycle Facilities	2			1	Credit	Building Reuse	1
3			Credit	Housing and Jobs Proximity	3			2	Credit	Historic Resource Preservation and Adaptive Reuse	2
		1	Credit	Steep Slope Protection	1	1			Credit	Minimized Site Disturbance	1
1			Credit	Site Design for Habitat or Wetland and Water Body Conservation	1	1	2	1	Credit	Rainwater Management	4
		1	Credit	Restoration of Habitat or Wetlands and Water Bodies	1	1			Credit	Heat Island Reduction	1
		1	Credit	Long-Term Conservation Management of Habitat or Wetlands and Water	1		1		Credit	Solar Orientation	1
				Bodies		1	1	1	Credit	Renewable Energy Production	3
27	5	7	Noighb	orhood Pattern & Design	41		_	2	Credit	District Heating and Cooling	3
Y	3	-	Prereq	Walkable Streets	Required	1			Credit	Infrastructure Energy Efficiency	4
Y			Prereq	Compact Development	Required		2		Credit	Wastewater Management	1
Y			Prereq	Connected and Open Community	Required	1	2		Credit	Recycled and Reused Infrastructure	1
7		2	Credit	Walkable Streets	9	1			Credit	Solid Waste Management	1
4	1	1	Credit	Compact Development	6	1			Credit	Light Pollution Reduction	1
2	1	1	Credit	Mixed-Use Neighborhoods	4				Orean	Light 1 Ollution (Ceduction	
6	÷	1	Credit	Housing Types and Affordability	7	1	5	0	Innov	vation & Design Process	6
_	1	•	Credit	Reduced Parking Footprint	,		5	U	Credit	Innovation	5
	<u> </u>		Credit	Connected and Open Community	2	1	5		Credit	LEED® Accredited Professional	1
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_	'		Credit	Local Food Production	1		00	07	DD.6-	IFOT TOTAL O. (O. willing the proof in a contract of the contr	140
2			Credit	Tree-Lined and Shaded Streetscapes	2	58	23	27	PROJ	JECT TOTALS (Certification estimates)	110







City of Phoenix

PLANNING AND DEVELOPMENT DEPARTMENT HISTORIC PRESERVATION OFFICE

DATE:

January 12, 2018

TO:

Cindy Stotler, Housing Department Director

FROM:

Michelle Dodds, AICP, Historic Preservation Officer

Laurene Montero, City Archaeologist

PREPARED BY:

Liz Wilson, Historic Preservation Planner

Laurene Montero, City Archaeologist

CC:

Kathryn Leonard, State Historic Preservation Officer

SUBJECT:

Treatment Plan for Section 106 Compliance, Edison-Eastlake

Choice Neighborhoods Planning and Action Grant, Phoenix, AZ

Federally Funded Housing Rehabilitation Project

Section 106 Compliance

The City of Phoenix Housing Department (Housing) received a U.S. Department of Housing and Urban Development (HUD) Choice Neighborhoods (CN) Planning and Action grant of \$1.5 million in June 2016 for the Edison-Eastlake Community (EEC). The EEC is located between the I-10 freeway on the north and the Union Pacific Railroad to the south, 16th Street to the west and the I-10 freeway on the east. Please see the location map attached. Due to the federal funding and proposed activities, the project is an undertaking subject to compliance with Section 106 of the National Historic Preservation Act of 1966 (as amended).

The Planning Grant of \$500,000 was used to create a comprehensive Neighborhood Transformation Plan for the EEC which includes the proposed demolition and redevelopment of three public housing sites – Frank Luke Homes built in 1941, Sidney P. Osborn constructed in 1960, and A.L. Krohn completed in 1964. These developments have been recommended eligible for listing on the National Register of Historic Places (NRHP). With the exception of a quadrangle of buildings at the A.L.Krohn site that will be preserved (described below), the plan proposes to replace 577 units of aged, obsolete public housing at the three sites with 1,011 units of mixed-income housing within the EEC that will also include a recently acquired 3.8-acre strategic vacant parcel. A housing location map is attached.

The remaining Action Activity Grant of \$1,000,000 will be used to leverage and finance innovative community and economic development activities that will help kick start neighborhood change. Specific action activities have yet to be determined or approved by HUD.

Use of Programmatic Agreement

In lieu of the regular Section 106 process, the City of Phoenix (City) has executed a Programmatic Agreement (PA) with the State Historic Preservation Office (SHPO) and the Advisory Council on Historic Preservation that allows the City to use a streamlined, alternative Section 106 compliance process for HUD funded projects and to review and comment on HUD undertakings in a manner consistent with the comments SHPO would offer. The City is the entity responsible for compliance with Section 106 on behalf of HUD pursuant to the PA and HUD regulations.

The PA allows the City to follow the procedures specified in the PA without formal SHPO coordination. The City is responsible for identifying historic properties within the EEC project's area of potential effects (APE) and determining project activity "effects" on NRHP eligibility, developing and implementing an acceptable treatment plan to avoid, minimize and mitigate any adverse effects to historic properties to the extent feasible as determined in coordination with the Phoenix Historic Preservation Office (CHPO) and the Phoenix Office of the City Archaeologist (CAO). The City therefore agrees to develop and implement and to cause their contractors and successors in interest to implement and adhere to a treatment plan for the EEC-CN undertaking that delineates measures to avoid, minimize, or mitigate adverse effects to historic properties, as presently contemplated and as hereafter modified.

Historic Properties

Working in collaboration with the CHPO, Housing procured a qualified historic preservation consultant to conduct a survey within the EEC project APE to identify historic properties eligible for listing on the NRHP. The survey evaluated the significance and integrity of above-ground properties built before 1977 (*Edison-Eastlake Community Historic Building Inventory*, October 2017, EcoPlan Associates, Inc., Mesa, Arizona). Single-family residential properties were excluded from the survey since they will not be affected by the EEC transformation plan. The attached EEC Eligible Historic Property Map shows the 27 NRHP eligible properties identified in the October 2017 survey and previous surveys, which includes 23 individual buildings and four historic districts. The three public housing sites proposed for demolition were previously recommended eligible for listing on the NRHP based on their innovative design and role in the history of public housing in Phoenix (*Public Housing in Phoenix: 1940-1970, Historic Context and Documentation, December 2012, EcoPlan Associates, Inc., Mesa, Arizona*).

Also within the boundaries of the APE are two prehistoric Hohokam sites – AZ T:12:1 (ASM) and AZ T:12:62 (ASM). AZ T:12:1 (ASM), also known as La Ciudad, was previously determined eligible for listing on the NRHP. AZ T:12:1 (ASM) was a major habitation village that was occupied from ca. AD 650-1450 and once contained a platform mound, multiple compounds, ball courts, cemeteries, canals, and numerous trash mounds. Recent archaeological excavations at AZ T:12:1 (ASM) indicate that the village extends beyond its previously recorded boundaries. AZ T:12:62 (ASM), also known as Dutch Canal Ruin, was a Hohokam agricultural site characterized by small scattered habitation loci and irrigation canals. AZ T:12:62 (ASM), eligible for listing on the NRHP, was occupied between A.D. 650 and 1450, with an apparent hiatus between A.D. 1050 and 1300.

Historic Properties Treatment Plan

Per the requirements of the PA, Housing has coordinated with the CHPO and the CAO to mitigate adverse effects related to the proposed demolition of three NRHP-eligible historic public housing properties and two significant archaeological sites within the APE. As additional EEC-CN grant activities are determined their effects on historic properties will be evaluated and addressed in subsequent modifications to this treatment plan.

The treatment plan includes all the following as specified by the CHPO and CAO under the Phoenix PA:

1. Partial preservation and protection of three public housing sites representing the three eras of low-income housing development built by the Phoenix Public Housing Authority (PHA). As mitigation for the adverse effect that would result from complete demolition of Frank Luke AZ 1-2, Sydney P. Osborn AZ 1-7B, and most of the A.L. Krohn AZ 1-8B public housing sites within the EEC-CN project area, the City will preserve and protect building quads that are representative of the three PHA public housing development eras. One preserved site will be within the EEC-CN project area at the A.L. Krohn AZ 1-8B site, and the other two will be located outside the project area, at Matthew Henson AZ 1-3 and Marcos de Niza Addition AZ 1-5. See mitigation map attached.

The PHA constructed eleven public housing communities during three eras of public housing development in the 1940s, 1950s, and 1960s with a total of 1,488 low-income housing units; all developments were designed by prominent Arizona architects, Lescher & Mahoney. The first three developments, Marcos de Niza AZ1-1, Frank Luke, AZ1-2, and Matthew Henson AZ1-3, were constructed in 1941. In 1952 the PHA completed Matthew Henson Addition AZ1-4, Marcos de Niza Addition AZ1-5, and Frank Luke Addition AZ1-6. Five additional developments were built in the early 1960s – Sydney P. Osborn AZ1-7A and AZ1-7B in 1960, A.L. Krohn AZ1-8A1 and AZ1-8A2 in 1962, and A.L. Krohn AZ1-8B completed in 1964. Five of the eleven sites have been totally or partially demolished as part of prior City redevelopment projects and three additional sites are proposed for total or partial demolition with the current EEC-CN project.

A. Partial preservation and protection of Matthew Henson Homes AZ 1-3 (built 1941). In 2003 the City demolished most of Matthew Henson Homes AZ 1-3, as well as Matthew Henson Addition AZ1-4 (1952) and Sidney P. Osborn AZ 1-7A (built 1960). However, five buildings and one courtyard from the original 1941 development were retained at the southwest corner of Sherman Street and 7th Avenue as partial mitigation for the demolitions. The property is owned by the Phoenix Parks and Recreation Department (Parks) and is outside the EEC project area. Housing and CHPO shall coordinate with Parks to record a 30-year Declaration of Restrictive Covenants on the extant Matthew Henson Homes buildings and related courtyard as partial mitigation of the adverse effect resulting from demolitions within the EEC-CN project area. Per the terms of the Declaration, exterior changes shall be reviewed by the CHPO and shall follow the Secretary of Interior Standards for the Treatment of Historic Properties.

Matthew Henson is significant for its association with social history, African American ethnic heritage, community planning and development, and architecture. The significance and important characteristics of Matthew Henson are described in the December 2003 Logan-Simpson Design Inc. report, *Matthew Henson Housing Project Historic Property Documentation*, and the October 2012 EcoPlan Associates, Inc. report, *Public Housing in Phoenix: 1940-1970, Historic Context and Documentation*, both available in the CHPO and summarized as follows:

Matthew Henson was one of the first three public housing projects constructed in 1941 by the PHA. The new homes were well-built and provided a step up for many African American families, becoming a focal point for the small but vibrant Black community in Phoenix and produced a nurturing environment for nascent politicians, civil rights workers, and community activists during the long struggle for civil rights.

The site plan was characterized by a repetitive courtyard concept. The complex utilized several city blocks to create a "superblock" development. The site mixed duplex and four-plex apartment units arranged in a serpentine pattern that allowed access to a front entry courtyard and back service courtyard. The buildings were built in a simplified Ranch style, relatively new to the Phoenix area at the time. The single-story buildings had a rectangular plan and were simple and economical – reflective of the low costs mandated by the federal housing program. They were constructed with brick exterior walls – the only PHA development that utilized this material – and originally had wood double-hung windows and clay barrel tile roofs. They had rectangular attic vents projecting from the roof ridges that were unique to the 1941 developments, which are still present.



Matthew Henson Homes AZ 1-3, extant buildings and courtyard (EcoPlan Associates, Inc. 2012)



Preserved quad (blue) at the original Matthew Henson AZ 1-3 site (red) (EcoPlan Associates, Inc. 2012)

B. Partial preservation and protection of Marcos de Niza Addition AZ 1-5 (built 1952). This public housing site is located between Pima and Mohave Streets, from 1st Avenue to 3rd Drive, outside of the EEC-CN project area. It is the only public housing community that remains from the second era of PHA development (built in 1952) following demolition of the Matthew Henson Addition in 2003 and demolition of Frank Luke Addition in 2011 (one building was preserved at Frank Luke Addition). Housing's future development plans will likely include proposed demolition of Marcos de Niza Addition AZ 1-5 as well as the initial Marcos de Niza AZ 1-1 development built in 1941.

Therefore, to partially mitigate the proposed demolitions of NRHP-eligible public housing sites in the current EEC-CN project area and ensure preservation of a representative example of the public housing built by PHA in 1952, Housing shall commit to preserving a quad of buildings and courtyard as part of a future redevelopment project at Marcos de Niza Addition AZ 1-5. The specific quad shall be identified in future planning efforts for the redevelopment. Housing shall also record a 30-year Declaration of Restrictive Covenants once a specific quad is identified for preservation.

Marcos de Niza Addition is important for its association with social history, community planning and development, and architecture. Its significance and character-defining features are discussed in the October 2012 EcoPlan Associates, Inc. report, *Public Housing in Phoenix: 1940-1970, Historic Context and Documentation*, and summarized as follows:

The Marcos de Niza Addition development was like the first group of public housing communities in terms of density, site planning, and design. The development plan combined the superblock concept with a continuation of city blocks. On-street parking was mostly provided with parking lines carved out of the street blocks. The repeating one-story buildings were arranged in courtyard configurations, characterized by grassy front and rear service yards and small recreational areas that created a park-like setting. The buildings were constructed with concrete block exterior walls, in a Ranch style with simple detailing that reflected the cost constraints of public housing development. Subtle distinctions between buildings were provided with variations in front entry treatments. The original steel double-hung windows and concrete barrel tile roofs have been replaced.



Marcos de Niza Addition AZ 1-5 buildings with common areas (EcoPlan Associates, Inc. 2012)



Marcos de Niza Addition AZ 1-5 site (EcoPlan Associates, Inc. 2012)

C. Partial preservation and protection of A. L. Krohn AZ 1-8B (built 1964). Housing shall preserve and adaptively reuse a portion of the A. L. Krohn AZ 1-8B site, which reflects the third era of public housing development by the PHA. It is located within the EEC-CN project area at the northwest corner of 19th and Villa Streets. Preservation shall include four buildings that will be converted from residential use to a new Family Education Center. Part of the space currently utilized for parking and rear service yards behind the buildings will be used for a new community garden. The city shall record a Declaration of Restrictive Covenants to ensure preservation of the buildings for a minimum of 30 years. Exterior alterations to the buildings and site shall be reviewed by the CHPO and shall follow the Secretary of the Interior Standards for the Treatment of Historic Properties. The quad proposed for preservation is depicted as site 13 on the attached map, Conceptual Site Plan North of Van Buren Parcels.

A.L. Krohn AZ 1-5 is also important for its association with social history, community planning and development, and architecture. The historic significance and character-defining features of the Krohn site are described in the October 2012 EcoPlan Associates, Inc. report, *Public Housing in Phoenix: 1940-1970, Historic Context and Documentation*, summarized and paraphrased as follows:

A.L. Krohn AZ1-8B, built in 1964, was the last public housing development in Phoenix constructed under the direction of the PHA. The project was built on the site of the war-time Duppa Villa housing development and reflected one of the main goals in public housing development at the time, that of "equivalent elimination," intended to replace substandard housing. Proximity to schools, access to city services, and public

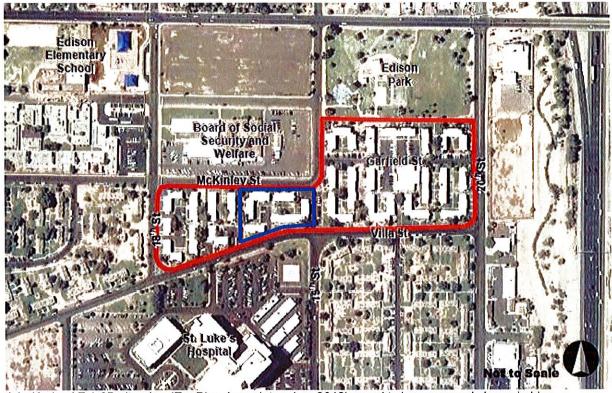
availability of transportation for residents were additional requirements at the time of site selection. Unique to this housing project in Phoenix was the inclusion of housing for the elderly.

In its layout and architecture, the Krohn homes were representative of the third era of public housing development in Phoenix, constructed in the 1960s. The site layout reflected modernist principles, with a hierarchy of uses and spaces. The two-story walk-up concrete block buildings in a park-like setting reflected the form, scale, density and materials typical of other 1960s PHA developments. The site plan incorporated principles of the superblock concept, which discouraged through traffic. Parking courts were included throughout the complex to accommodate the increasing number of automobiles. With a layout based on the courtyard concept, the concrete block buildings were placed so front façades faced the streets and view of the rear service yards and parking lots was diminished from the exterior. Something unique to this complex was the construction of screen walls enclosing service yards to limit undesirable view of these areas. This is the only extant modernist public housing project in Phoenix with a fully developed courtyard system.

Buildings were designed with a more modernist language than earlier housing projects in Phoenix, with flat roofs, clean volumes and planes. Although the approach to site and building design reflects the need for low development cost mandated by the federal housing program, elements such as stone veneers at unit entrances, extruded concrete blocks in some exterior walls and the screen walls at service yards give the project an almost private character as opposed to the more institutional atmosphere of earlier projects.



A.L. Krohn AZ 1-8B building with stone veneer and patterned block (EcoPlan Associates, Inc. 2012)



A.L. Krohn AZ 1-8B site plan (EcoPlan Associates, Inc. 2012); quad to be preserved shown in blue

- 2. Historical Interpretation/Monument Marker. A historical interpretative monument marker, at least 3' by 4' in size, shall be developed and installed on the preserved quad at the A.L. Krohn AZ 1-8B site. It shall provide interpretative information regarding the history and significance of the A.L. Krohn development. The location and design of the monument shall be coordinated with and approved by the CHPO, developed as part of the design phase, and completed as part of final construction on the site.
- 3. Archaeological Monitoring, Testing, and Phased Data Recovery.

 Archaeological monitoring, boundary testing, and phased data recovery will be sequenced to align with the project phases proposed for the redevelopment of the public housing sites. For each phase of the redevelopment project, the archaeological monitoring will occur during demolition with archaeological boundary and/or data testing and Phase II data recovery occurring after demolition work has been completed. Monitoring, testing, and data recovery will be conducted in areas of proposed impacts within the boundaries of AZ T:12:1 and AZ T:12:62 (ASM) and within a surrounding 250-foot buffer zone of these sites. Archaeological work will follow the *General Historic Properties Treatment Plan for Archaeological Projects Within the Boundaries of the City of Phoenix*, (Montero et. al 2008) and will require preparation of an addendum treatment plan to address specific project impacts. CAO will oversee all archaeological work, which will be conducted by qualified archaeologists under the supervision of a principal investigator who meets *the Secretary of the Interior's*

Professional Qualifications Standards for Archeology.

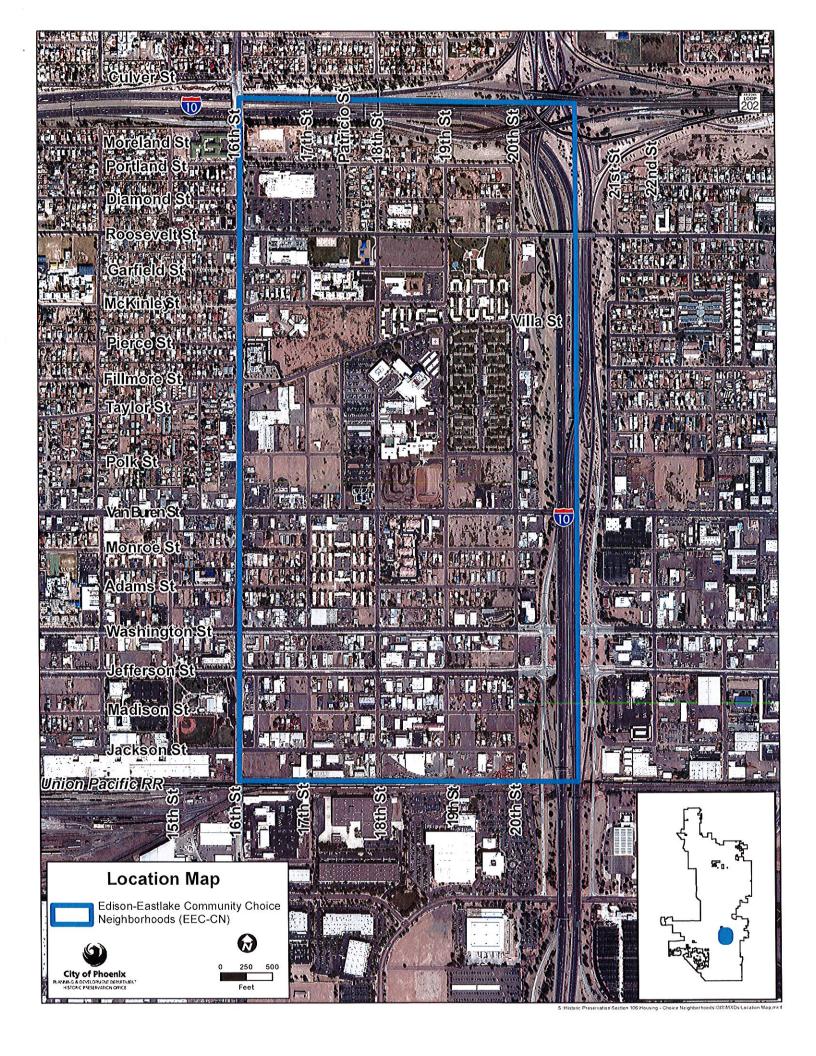
4. Treatment Plan to Bind Contractors and Successors. The City may dispose of all or portions of the EEC-CN site in connection with its phased redevelopment. The City agrees to contractually obligate its contractors and successors to comply with and implement the treatment plan, and the City Historic Preservation Officer and the City Archaeologist agree that the City's successors may rely upon this agreement to establish compliance with Section 106 of the National Historic Preservation Act. If the City does dispose of all or portions of the EEC-CN site, the CHPO and the CAO will be consulted to ensure that the site's Section 106 obligations are met.

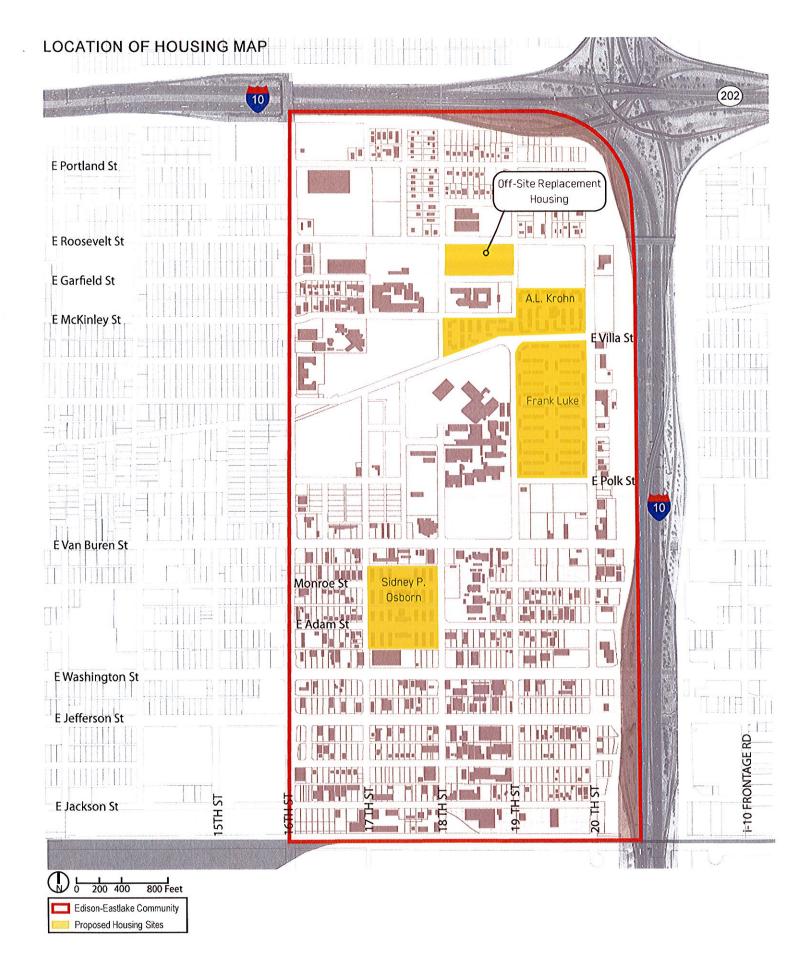
Section 106 Compliance

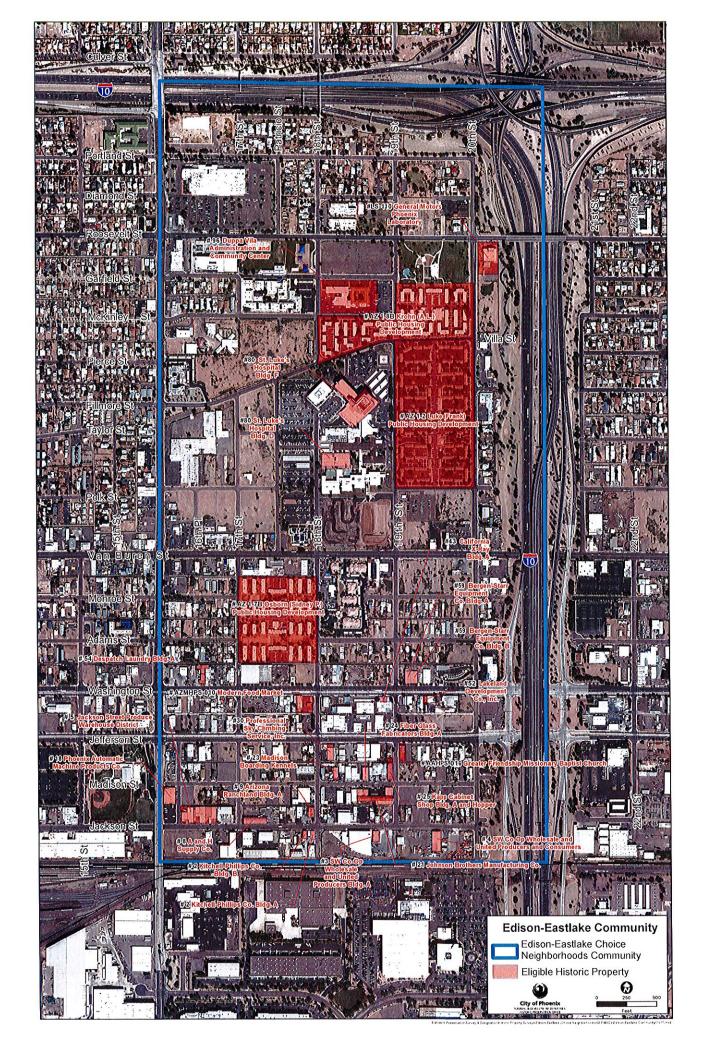
Laurene Montero, City Archaeologist

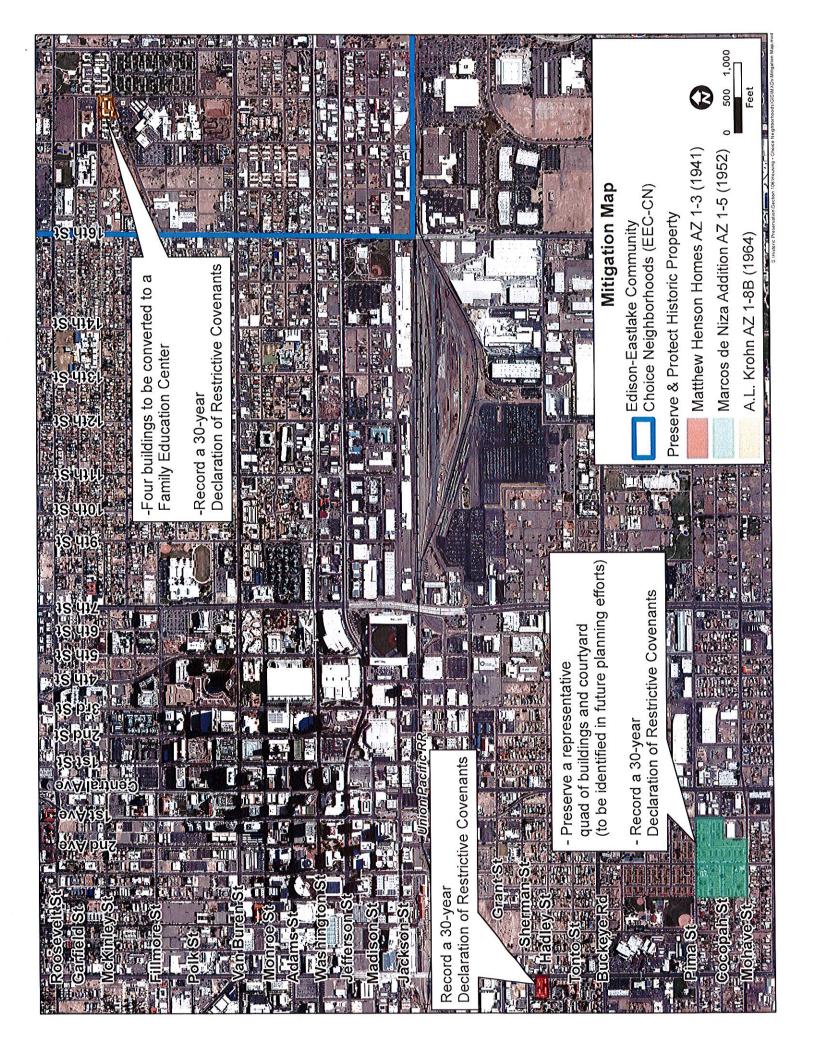
By meeting the above delineated measures, the federally-assisted redevelopment of the EEC-CN site conforms with the PA and Section 106 of the National Historic Preservation Act. Signature below evidences agreement to complete the abovedelineated measures to ensure project compliance with Section 106 of the National Historic Preservation Act.

	1/16/18
Cindy Stotler, Housing Director	Date
Milulle Broads	1/16/18
Michelle Dodds, Historic Preservation Officer	Date
Laurence In to	1/16/2018
Laurene Montero, City Archaeologist	Date '









CONCEPTUAL SITE PLAN NORTH OF VAN BUREN PARCELS



LEGEND

(1) Courtyard Apartments (3-4 stories)



- 2 Public Plaza with Gateway Art / Shade Feature
- (3) Courtyard Villas (2-3 stories)



- 4 Edison Park
- 5 Sports Field
- **6** Sports Courts
- (7) Skate Park

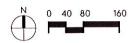
- 8 Pool
- Edison Park Expansion
- (10) Ramada / Shade Structure
- Rowhomes (2-3 stories)
- (12) New GR:D Bike Station
- family Education Center (Adaptive Reuse)
- (14) New Linear Park
- (15) Stormwater Runnel
- (16) Edison Park Activity Hub
- (17) Playground
- (18) New Neighborhood Slow Street

- (19) New Street
- Courtyard Apartments with ground floor live-work units (3 stories)
- (21) Fitness Stations
- (22) Walking Path / Trail
- (23) Community Garden
- 24 Tot Lot

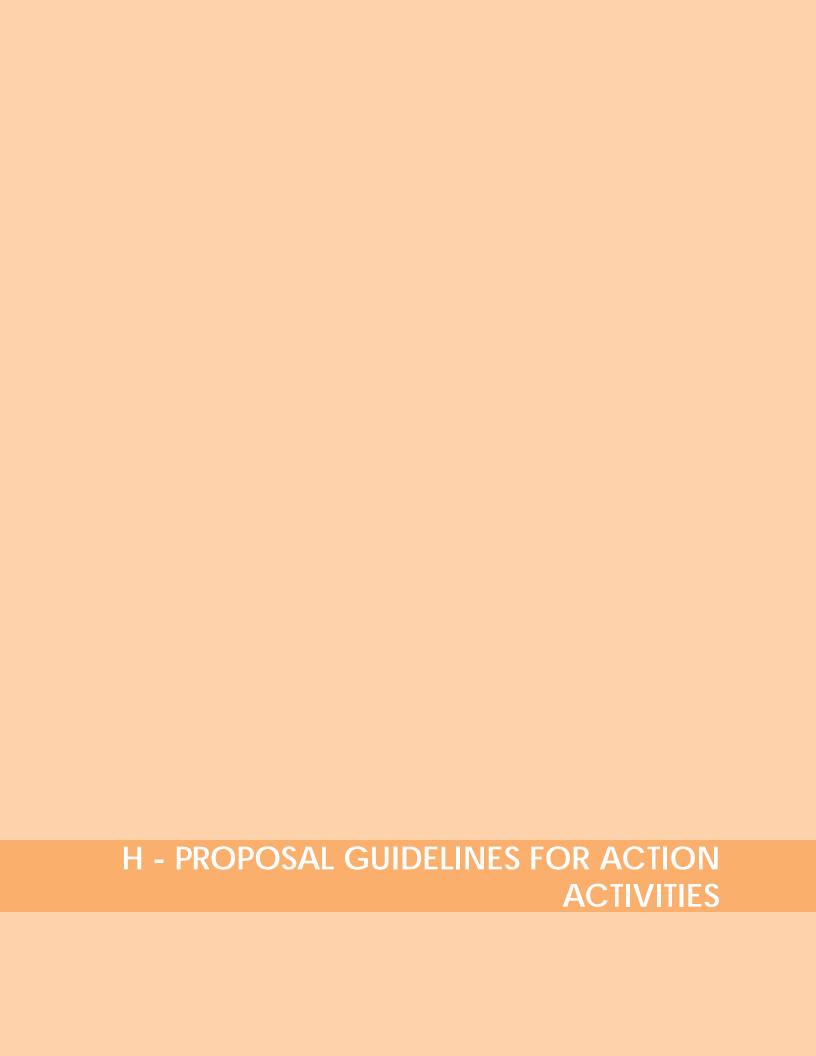


KEY

Photovoltaic Panels







Edison-Eastlake Community Choice Neighborhoods Proposal Guidelines for Action Activities Final

Introduction

In 2016, the City of Phoenix applied for and was awarded a \$1.5 million Choice Neighborhoods (CN) Planning and Action Grant for the Edison-Eastlake Community (EEC). The pursuit of a CN grant was one of the strategies identified in the Eastlake-Garfield TOD Policy Plan that was funded by a 2012 \$2.9 million Sustainable Communities grant awarded to the City by the U.S. Department of Housing and Urban Development (HUD) to develop plans to achieve the full transformative potential of light rail. The Eastlake-Garfield TOD Policy Plan, which includes the Edison-Eastlake Community (EEC), was adopted in 2015 and provides a long-term vision for the district.

Of the \$1.5 million CN grant, \$500,000 is for planning activities, and \$1 million is reserved for to-bedetermined HUD-approved Action Activities. These guidelines are intended to assist the Action Teams (Neighborhood, People and Housing) and Resident Leadership Council (RLC) with identifying and proposing specific Action Activities in the EEC that further the community's goals for the neighborhood to be funded with the \$1 million.

Definition of Action Activities

Per HUD, Action Activities are *physical improvement, community development, and economic development projects* that enhance and accelerate the transformation of the neighborhood and can be completed by June 28, 2019. Funds should be used for innovative solutions to neighborhood challenges. Action Activities are limited to:

- Reclaiming and recycling vacant property community gardens, pocket parks, farmers markets
 or land banking with maintenance
- Beautification, placemaking and community arts projects creative signage for neighborhood branding, murals and sculptures, specialty streetscaping, garden tool loan programs
- Homeowner and business façade improvement programs
- Neighborhood broadband/WiFi
- Fresh food initiatives farmers markets, mobile fresh food vendors
- Gap financing for economic development projects

Note: If another use outside the six areas above is identified, the City of Phoenix will, at its discretion, work with HUD to consider whether that use is allowable based on the justification provided.

Action Activities funding **cannot** be used for:

- Non-physical uses supportive services, staffing and marketing
- Basic infrastructure or substitute for basic municipal services
- Redevelopment of targeted public housing including acquisition, relocation, demolition and remediation, rehabilitation, or construction
- Administrative costs associated with the Action Activity

Action Activities Criteria and Scorecard

The CN Steering Committee will assess each submitted Action Activity on the extent to which it aligns with the goals of Edison-Eastlake and moves the community closer to its preferred future. For each proposed Action Activity, the Steering Committee will use the following criteria:

Factor	Points	
Targets a priority need(s) identified by the community	10	
More points for activities that address multiple needs in the community		
Leverages other activities/investments in the community		
More points for activities that build on or supports other planned or on-going investments (e.g. Van Buren Complete Streets, Edison Park improvements, enhanced public bus service, new Aeroterra Community Center)		
Enhances the connection between Luke-Krohn and Sidney P Osborn More points for activities that can be equitably used by residents from both communities or leads to strengthened physical connection between both sites	5	
Attracts additional private or public investment More points for activities that will help position the community to better attract future investment	5	
Sustainable and not negatively impacted by future redevelopment More points for activities that are permanent in nature and will not be demolished when redevelopment of the public housing sites occurs or when other physical improvements are made in the neighborhood		
Resident involvement in implementation More points for activities that demonstrate a higher level of resident involvement/participation in the implementation of the activity		
Cohesiveness of the proposal and likelihood of success More points for activities that offer a holistic approach that addresses multiple community needs and will have the intended impact		
Total Points	50	

Action Activities Timeframe

July 17, 2017	Proposal Guidelines for Action Activities issued		
September 15, 2017	Proposals due		
September 29, 2017	Comments on Proposals provided		
October 13, 2017	Revised Proposals due		
October 28, 2017	Draft Proposal of Action Activities Submitted to HUD		
November/December 2017	Revisions to Submitted Action Activities as needed		
December 28, 2017	Final Proposal of Action Activities Submitted to HUD		
June 28, 2018 (or earlier)	Initiation of Approved Action Activities		
June 28, 2019	Completion of Approved Action Activities		

Proposal Format and Submission Requirements (Please limit proposals to 3 pages in length)

1. Overview of Action Activity

- a. Describe the activity
- b. Discuss what priority need(s) the activity addresses. Sources that can be used to identify priority needs include the Existing Conditions Report, results from the resident and employee surveys, community meeting summaries, Health Impact Assessment findings and recommendations, housing market study, retail market study, and Edison Park charrette.
- c. How does this activity relate to and/or build upon other investments/activities in the neighborhood
- d. What impacts will this activity have as it relates to the goals of the Transformation Plan (e.g. on residents, businesses, community capacity, social cohesion, additional investment, neighborhood confidence)
- e. What outcomes are expected and what metrics will be used to measure success of the activity

2. Administration

- a. Who is responsible for implementing/overseeing the activity
- b. What is their capacity/experience in implementing the activity

3. Schedule

- a. Provide a schedule with milestones for this activity
- b. Discuss if there are any challenges to this activity being completed by the required time frame (e.g. environmental and/or historic review, site control)

4. Sources and Uses

- a. Provide an overall budget for this activity including breakdown between administrative and physical costs
- b. Specify sources of funds including Choice Neighborhoods and other funds to carry out the activity (*Note: CN funds cannot be used for administrative costs*)
- c. Discuss how the project will be sustained after completion
- d. Identify if the project will generate program income (*Note: Per HUD guidelines, there are restrictions on the use of any program income generated from the activity*)