



CHAPTER 3: PEDESTRIAN PLANNING

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CHAPTER 3: PEDESTRIAN PLANNING

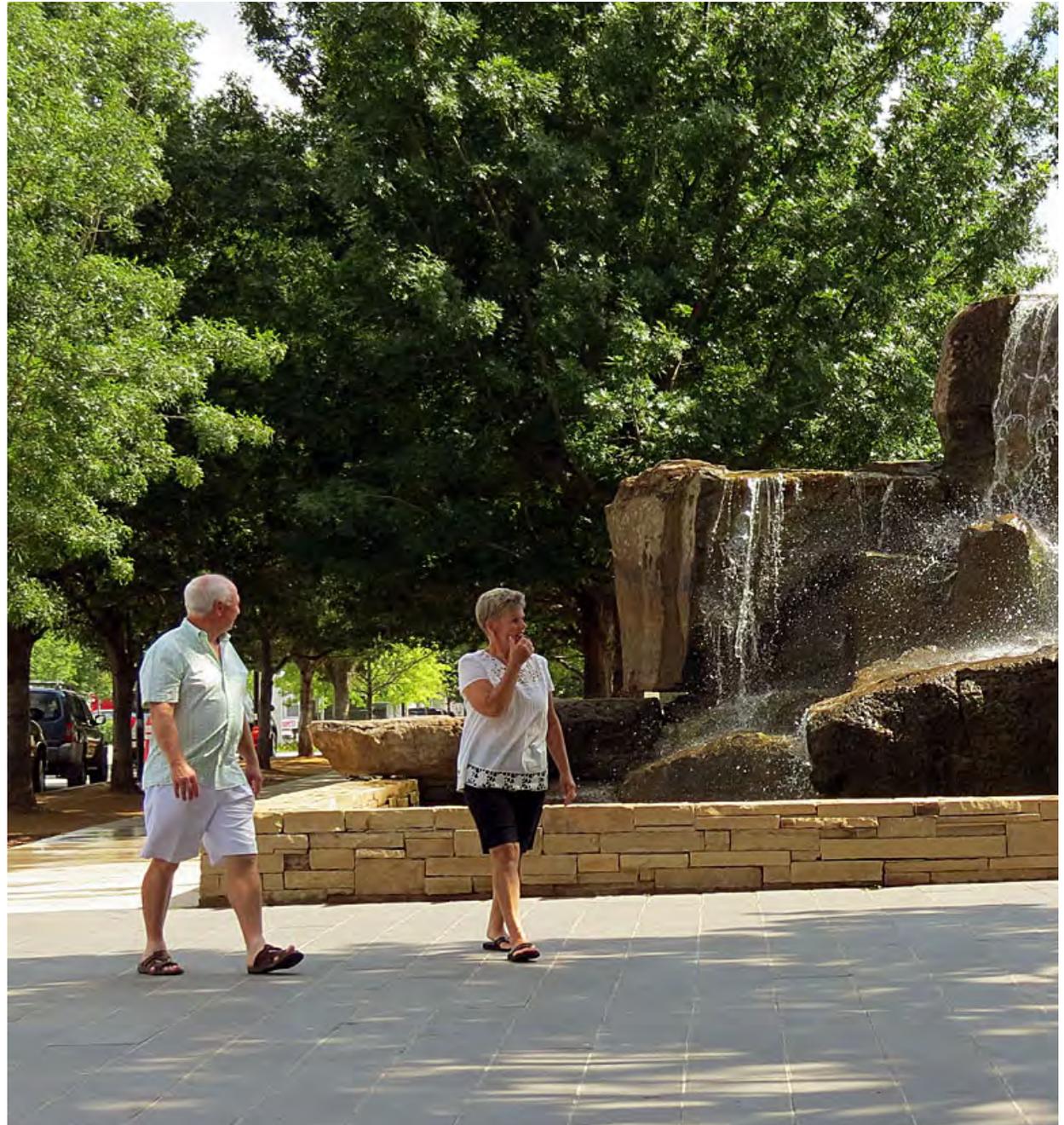
Introduction

The citywide comprehensive plan, **planokc**, describes a vision for Oklahoma City to be a walkable city with a strong pedestrian network that connects people to places they want to go. “Walkability” is a measure of how convenient, easy, and safe an area is for people to walk. A fully walkable area should allow a pedestrian to safely travel along both sides of a street, and safely cross back and forth between the two sides.

The pedestrian plan chapter of **bikewalkokc** serves as a guide to implement the vision of becoming a walkable city. This plan focuses on identifying projects that address the greatest needs of our community with an emphasis on efficient intervention to ensure that scarce resources are utilized to the greatest possible effect. The methodology for identifying priority projects in **bikewalkokc** utilized the following criteria from **planokc**:

1. **Responsive Populations** – Prioritize improvements that serve people without access to a motor vehicle (low to moderate income, elderly, the disabled, etc.) within areas that connect them to the transit system.
2. **Connectivity to Schools and Parks** – Prioritize opportunities to connect the existing sidewalk network to schools and parks.
3. **Connectivity to Existing Networks** – Prioritize opportunities to join existing networks.
4. **Neighborhood Revitalization** – Prioritize improvements in neighborhoods identified for revitalization.
5. **Urban Commercial Districts** – Prioritize improvements in Urban Commercial Districts that need pedestrian connectivity.

With these priorities a highly walkable experience is achievable in Oklahoma City, and as funding becomes available, this plan will provide the guidance for capital improvements far into the future.



EXISTING PEDESTRIAN FACILITIES

When Oklahoma City was first settled in 1889, primary modes of transportation did not include the automobile. Streets were places for pedestrians, bicyclists, horses, and trolleys. Correspondingly, the urban form of the city in its early years was designed to accommodate people on foot. As automobiles became the predominant means of transportation in the first half of the 20th century, far less pedestrian infrastructure was developed within the built environment. As this trend continued over the decades, the pedestrian network that remained deteriorated as it extended outward from the inner city.

By the turn of the 21st century, city leaders, planners, and residents recognized the need for maintaining a healthy pedestrian network, and regretted the loss of valuable pedestrian infrastructure by neglect. In response, the City reinstated requirements for new subdivisions to build sidewalks, both internally and externally along arterial corridors. However, this has created a situation where many of the newer developments in suburban areas of the city are equipped with sidewalks, while large gaps in the sidewalk network exist to connect them to older areas.

In 2009, Oklahoma City residents approved a penny sales tax to construct multiple capital improvements projects through the MAPS 3 program. It included \$39.5 million for the construction of trails, and \$18.1 million for the construction of an additional 60 miles of sidewalks across the community. In 2015, the City began a cost-sharing program with residential property owners called the Sidewalk Repair and Replacement Program, which splits the cost of repairing or replacing dilapidated sidewalks in front of personal property. These actions, as well as other initiatives to improve walkability, have helped implement *planokc*, the City's comprehensive plan, which envisions creating a transportation system that works for everyone, including pedestrians.

Map 3.1 shows the existing sidewalk network.

ASSETS AND CHALLENGES

Oklahoma City has made important strides towards building a more pedestrian-friendly community. These efforts have addressed challenges to walkability, but many challenges still persist, needing continued focus into the future.

Assets

- The majority of the city is laid out on a grid. This provides **good connectivity opportunities** for the pedestrian network.
- **MAPS 3** sidewalk and intersection improvements are filling network gaps.
- Street projects funded in the **2007 GO Bond** automatically included a sidewalk on one side of the street. This has led to many new sidewalks across the city.
- The street and sidewalk network is well-connected in the **downtown, midtown, and uptown** areas. Project 180 has made significant streetscape and pedestrian enhancements in downtown. Many existing streets are walkable and easy to cross in these areas, and minimal improvements are needed to complete the pedestrian network.
- **Standards for constructing new crosswalks** include high visibility continental crosswalk striping and appropriately-placed push buttons for crossing signals.
- A City **residential sidewalk program** allows cost sharing for the City and property owners to repair or replace existing dilapidated sidewalks.
- The City has developed a **pedestrian environment analysis toolkit (PEAT)** that provides recommendations for improvements within defined areas.
- The **City's comprehensive plan, planokc**, highly prioritizes improvements that accommodate pedestrian activity.

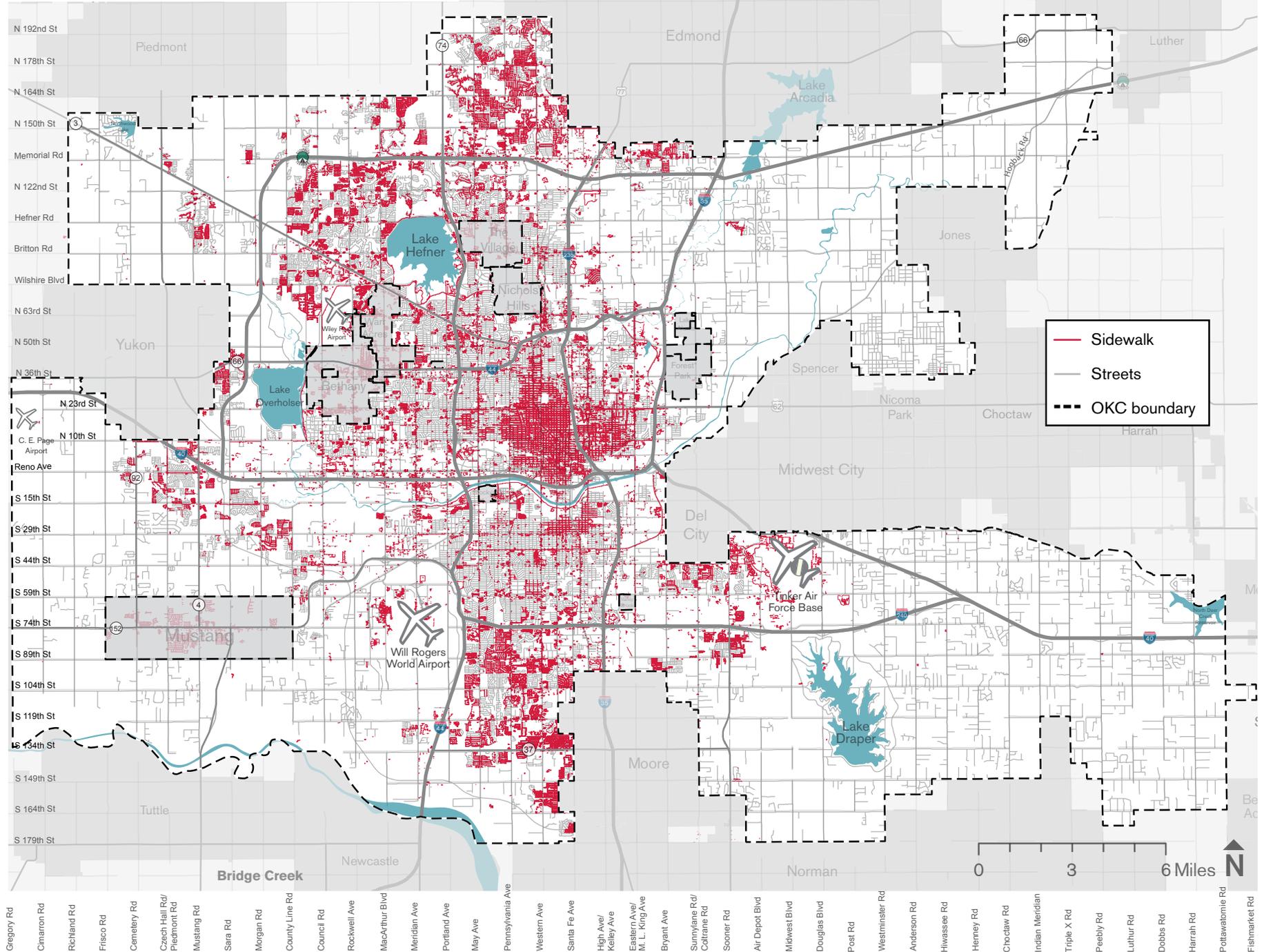
Challenges

- The majority of **development is designed around the automobile**, making it difficult, unsafe, and uninviting for pedestrians.
- **Pedestrian connectivity declines** dramatically beyond the older, "traditional" areas near the city's core.
- Major arterials, interstates, and natural features where safe crossings have not been established act as **barriers for pedestrians**.
- The existing sidewalk system includes **gaps in connectivity** to public transportation, and much is **not ADA-compliant**.



Existing pedestrian wayfinding in downtown Oklahoma City.

MAP 3.1 EXISTING SIDEWALKS



CURRENT SIDEWALK INITIATIVES

Much work has been planned, funded, and completed to fill in gaps in the sidewalk network. Three initiatives in particular have made significant progress in this pursuit. Project 180, MAPS 3, and the 2007 General Obligation Bond have combined to add more than 100 miles of new sidewalks. This section will delve into each of these three initiatives to explain their intent and their impact.

Project 180

Triggered by the construction of the 50-story, \$700M Devon Energy Center, Project 180 is funded with tax-increment financing (TIF) dollars. This project has made many dramatic changes to downtown Oklahoma City, including an upgrade for Myriad Gardens, dozens of streetscape and pedestrian realm enhancements, conversion of streets from one-way to two-way, new energy-efficient street and sidewalk lighting, bicycle lanes, and improved intersections for pedestrians. These improvements have made downtown Oklahoma City a far more walkable place.

One of the key benefits of this initiative is how much the City learned about making streets livable in terms of cost, efficiencies, what materials work well, and designing our public spaces for the people that use them, not just the automobiles that pass through them.



Project 180 street and pedestrian enhancements.

MAPS 3

Oklahoma City has gained national attention for the Metropolitan Area Projects or MAPS initiatives that began in the 1990s, converting an underperforming warehouse district, Bricktown, into what is now the most successful commercial/entertainment district in the state. Now in its third iteration, MAPS 3 includes many enhancements to the downtown area of the city, as well as many other quality of life improvements citywide. The MAPS 3 package included \$18.1 million to build sidewalks across the city. A MAPS 3 Sidewalk Master Plan was created to identify where sidewalks were most needed, and how to best utilize the funds.

The purpose of the MAPS 3 Sidewalk Master Plan was to create “a series of strategically placed sidewalks on arterial streets and near public use facilities within the City of Oklahoma City.” The report looked at 215 miles and identified between 25 to 36 miles of new sidewalks to be constructed. The criteria used for identification and prioritization of sidewalks were:

First Order (in order and weighted):

- Proximity/connectivity to schools
- Desire paths
- Proximity to transit
- Population & employment density
- Pedestrian collisions & fatalities
- Proximity to hospitals, parks, libraries

Second Order:

- Utilities
- Right-of-way
- Connection to existing sidewalk
- Constructability or obstruction congestion

It is anticipated that 60 miles of MAPS sidewalks will be completed by the end of the project. This will help fill in gaps along major arterials, which improves transit accessibility, stimulates commercial districts, and provides residents opportunities for physical activity.

2007 General Obligation Bond

General obligation (GO) bonds are the City’s most important tool to fund major infrastructure projects like streets, bridges, sidewalks and more. They’re funded by property taxes.

Miles of sidewalks have been constructed as a part of the Oklahoma City bond issue from 2007. It is anticipated to generate 275 miles of new sidewalks. This is a significant amount of sidewalks, but every one of these projects was built as part of either a street widening or resurfacing project, which means the sidewalks weren’t necessarily built in areas of greatest pedestrian need.

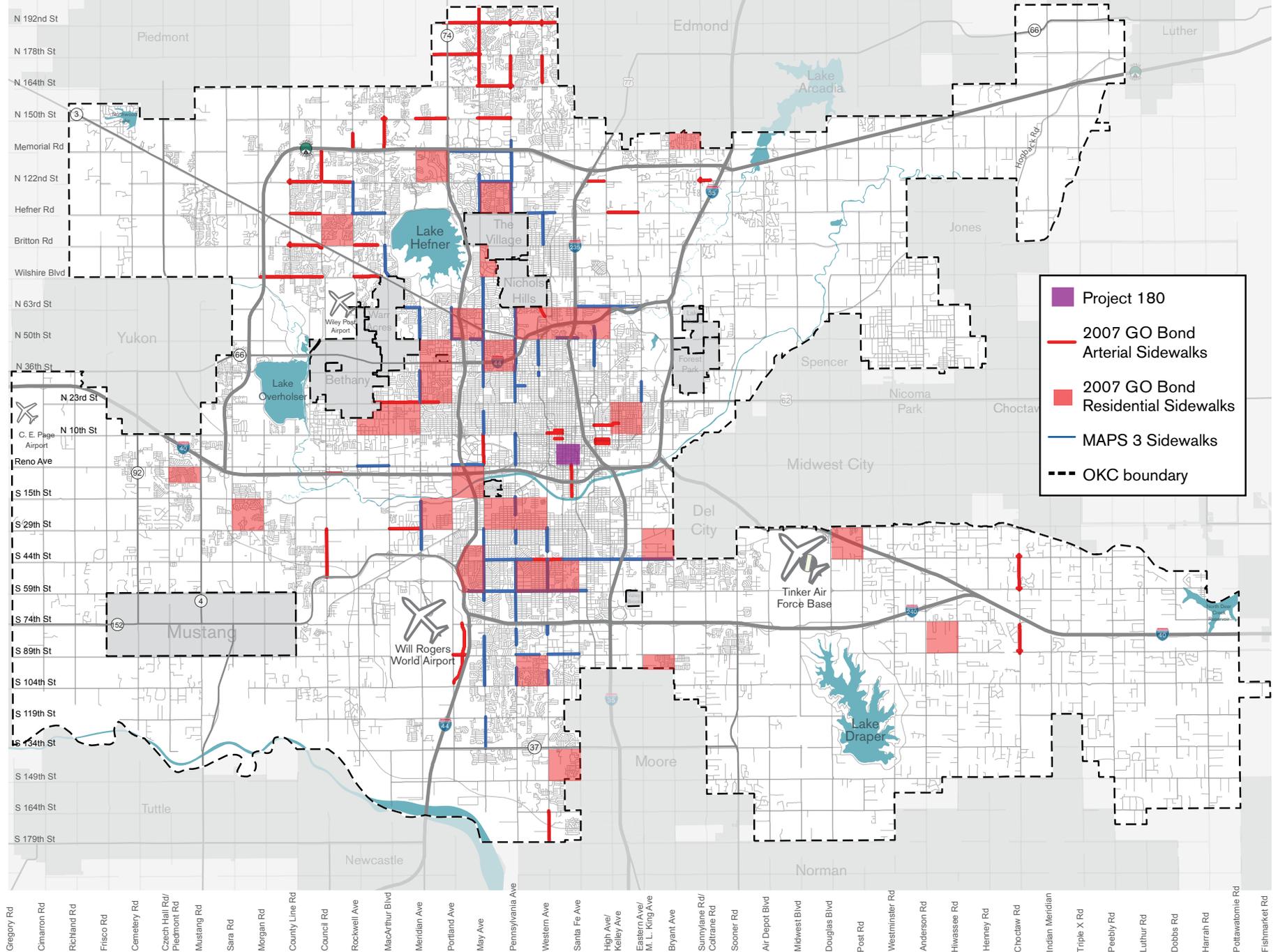
For the 2017 GO Bond election, the City placed a new, stand-alone proposition on the ballot for sidewalks. This allows the City to locate sidewalks where they are most needed. The 2017 bond issue, which was approved by voters, is an opportunity to further improve walkability in Oklahoma City in the most effective way possible. With the completion of bikewalkokc, the City of Oklahoma City is more prepared to address the pedestrian needs of its residents than ever before.

Map 3.2 shows the location of these sidewalk initiatives.

.....
75% of the \$3.6 trillion of outstanding debt issued by cities and states is owned directly or indirectly, usually through a municipal bond fund, by American households.

- Brookings Institute “Building Better Infrastructure with Better Bonds”

MAP 3.2 CURRENT INITIATIVES



Pedestrian Plan

This pedestrian plan targets areas of greatest need and greatest potential to make strategic improvements that can build a truly walkable environment for people who cannot or may not rely on the automobile as the primary means of transportation.

PEDESTRIAN PRIORITY AREAS

The methodology for creating the pedestrian plan is based on the identification of key Pedestrian Priority Areas (PPAs) around the city, including downtown. Ten PPAs were selected through a comprehensive analysis that took into account a variety of criteria, such as land use, public transit, infrastructure conditions, public safety concerns, demographics and more. The plan assesses the individual contexts and conditions within each of the PPAs and downtown, and makes recommendations for improvements to allow pedestrians to safely and efficiently access key destinations, like public transit, schools, and parks.

Process and Analysis: Pages 84-91

Example: Pages 92-95

DOWNTOWN

Downtown Oklahoma City has been changing rapidly over the past two decades, due to improvements from the MAPS program, Project 180, and numerous infill and redevelopment projects in the Central Business District, Deep Deuce neighborhood, Midtown, Automobile Alley, and several other downtown districts. As jobs and residents continue to increase downtown, the pressure to accommodate the varied transportation needs of this population increases. Therefore, it is incumbent on the City of Oklahoma City to provide infrastructure that meets this demand.

The methodology for identifying pedestrian needs within downtown involved the development of a Pedestrian Environment Assessment Toolkit (PEAT) to evaluate intersections and street segments for deficiencies in pedestrian infrastructure. From this, a detailed set

of project lists was developed to capture gaps in the sidewalk network and provide recommendations to create a better pedestrian experience for residents, workers, tourists, and all others.

Process and Analysis: Pages 96-99

TRANSIT STOP PRIORITIZATION

Transit users are obligate pedestrians; therefore, establishing walkable corridors that correspond to transit routes is imperative to achieve higher levels of ridership and rider satisfaction. A well-functioning transit system takes users where they need to go. This means that ADA accessible sidewalks should exist wherever transit users need to walk, bus stops should be in good repair and provide protection from the elements, and users should be able to safely cross the street to access transit stops.

Pedestrian improvements that support the transit network were identified by prioritizing improvements at transit stops that scored highest based on many different criteria. The plan recommends sidewalks to be constructed within one mile of these top-scoring bus stops to facilitate access from surrounding areas.

Process and Example: Pages 100-101

Prioritization List: Appendix P.1

PARKS AND SCHOOLS

Physical activity opportunities and education are two of the most important elements of a healthy and successful community. Many parents would like their children to be able to walk to school, and to utilize nearby schools as community centers, gyms, and safe community gathering and meeting spaces for those who live in proximity to them. The approach of this plan ranked the more than 150 parks and greater than 180 schools in the city to create a prioritization list of pedestrian improvement projects connecting people to these facilities.

Process and Example: Pages 102-105

Prioritization List: Appendix P.2 and P.3

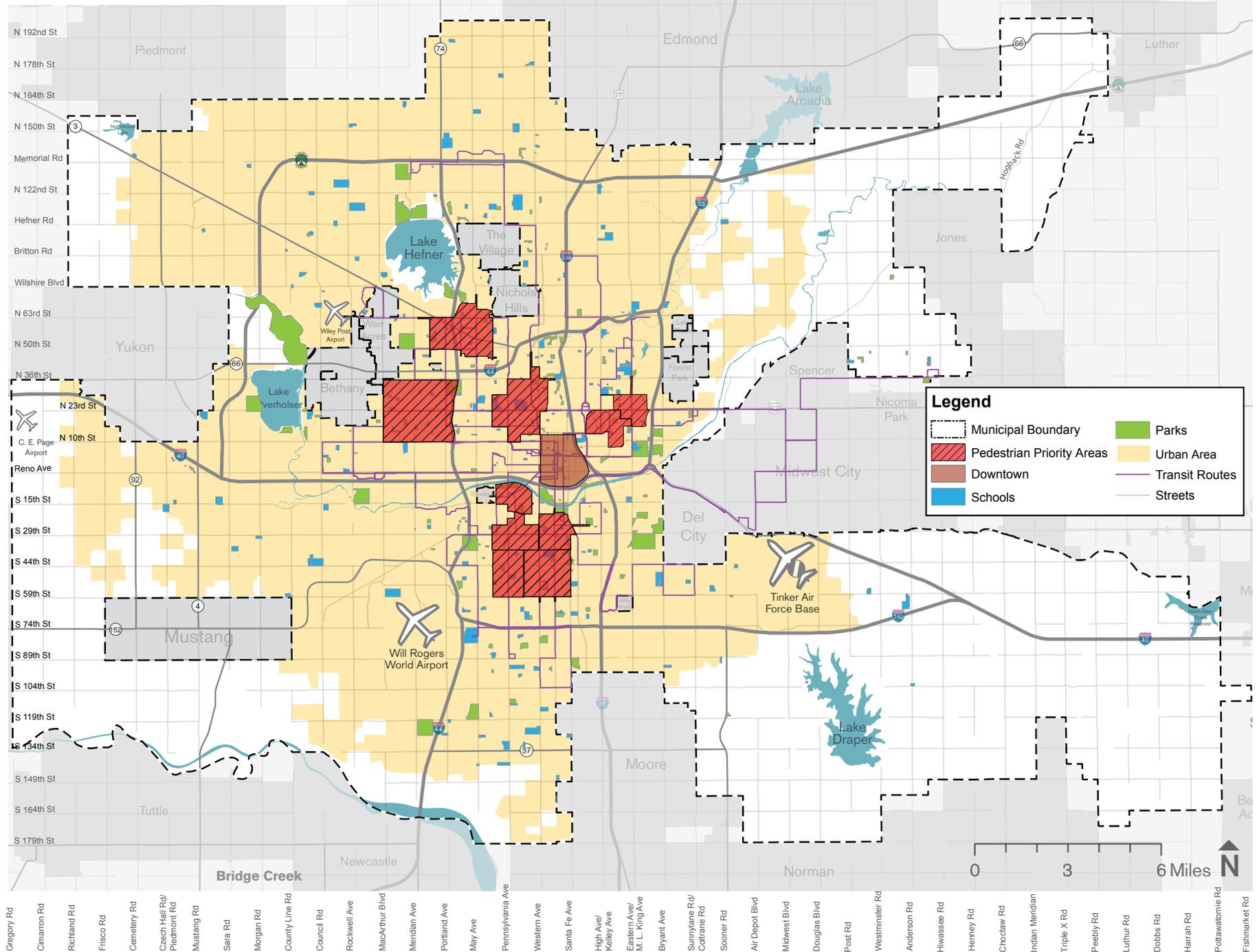
CITYWIDE APPROACH

The remainder of the urbanized area within Oklahoma City has a great need for pedestrian improvements. Due to the sheer size of Oklahoma City and the magnitude of need for pedestrian improvements across the entire 621 sq. mi. area, prioritization is critical for the development of a long-range approach to pedestrian improvement projects. There are four base land-use typology areas (LUTAs) in **okc**: Urban High Intensity, Urban Medium Intensity, Urban Low Intensity, and Rural. This plan excludes the Rural LUTA due to obvious limitations on pedestrian activity as it relates to large, spaced-out properties that are not within any sort of walkable distance of land uses that might generate pedestrian activity. For the remaining base LUTAs, the approach is to break them into quarter-mile areas and rank them using the data from the Pedestrian Priority Areas process to create a prioritization list of future pedestrian improvement strategies.

Process: Pages 84-87

Prioritization List: Appendix P.4

MAP 3.3 PEDESTRIAN PLAN



COMPONENT PLANS: Pedestrian Priority Areas

Goal:

“Create walkable areas that connect people to their daily needs.”

Responsive populations:

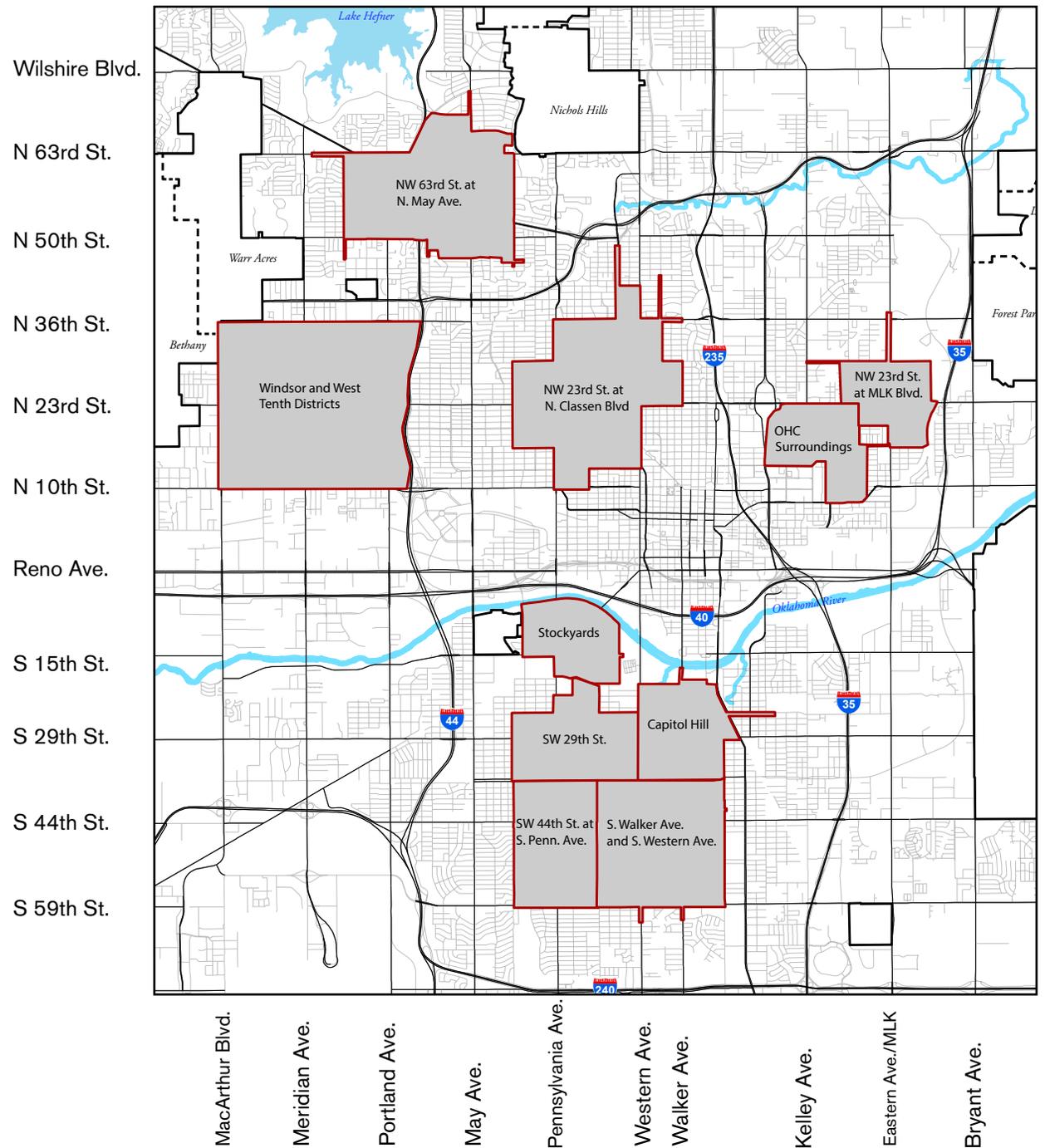
- Households without access to an automobile
- The disabled
- The elderly and the young
- Households in poverty
- Transit riders
- School users
- Park users
- Churchgoers
- Shoppers/Customers

Funding sources:

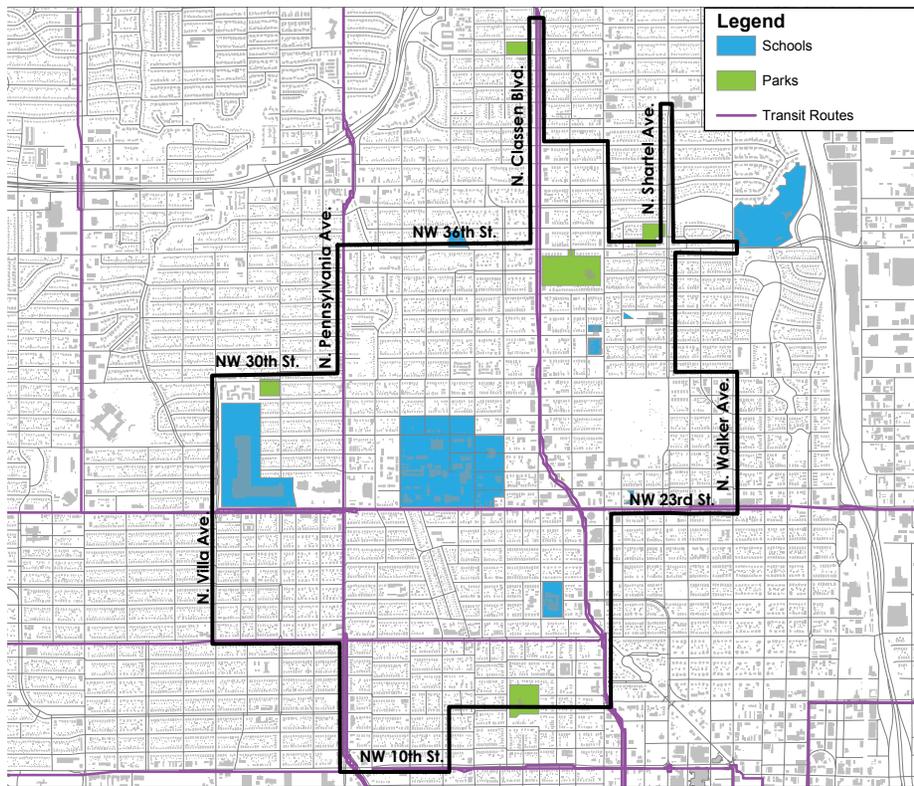
- General obligation bonds
- Sales tax initiatives

JUSTIFICATION

Through a prioritization process, a list of 10 Pedestrian Priority Areas (PPAs) was generated. These areas were selected based on the density of high-scoring intersections from the analysis detailed on pages 26-31. Once identified, the boundaries of the PPAs were determined based on detailed site investigations and strategic approaches to maximize the improvement to walkability that the smallest amount of pedestrian infrastructure improvements could have. The PPAs (in no particular order) are identified by key commercial districts, major intersections, or major corridors, whichever is the most readily identifiable “place” that the PPA boundaries encompass. These are described on pages 69-73.



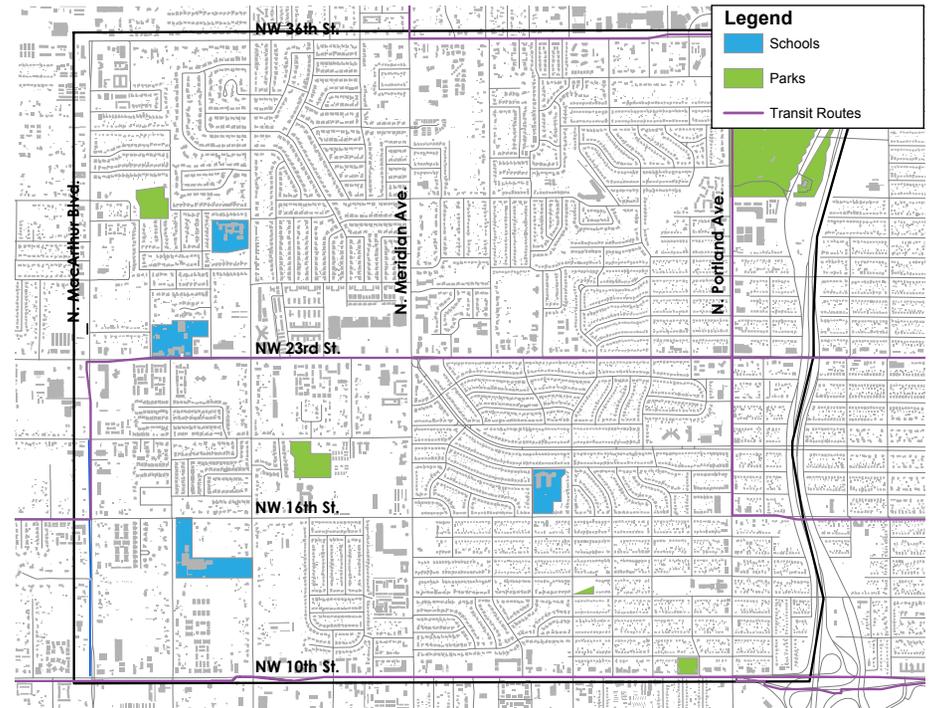
Map 3.4 - Pedestrian Priority Areas



NW 23rd St. at N. Classen Blvd.

Of all the areas analyzed to determine the potential for walkability, the area surrounding the intersection of NW 23rd St. and N. Classen Blvd. shows the greatest potential. This area includes many land uses that generate pedestrian activity, but at present the primary streets have several barriers to safety and walkability. This study area is within close proximity of the downtown area, and could fundamentally change the culture of the inner city toward a more urban lifestyle if made completely walkable. This would provide opportunities for economic development, healthier lifestyles due to active living, and cost savings to those who live and work in the area by lowering the need to own and operate a motor vehicle to access daily needs.

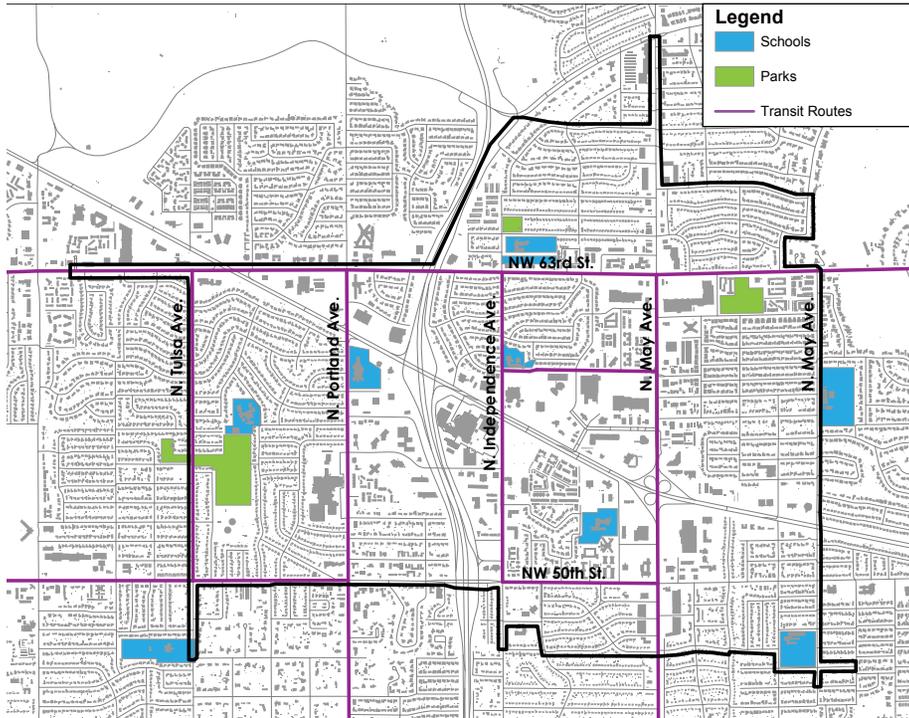
Schools in Area	Parks in Area	Transit Stops in Area
10	7	86



Windsor and West Tenth Districts

A new commercial district has recently been gaining momentum at the intersection of NW 23rd St. and N. Meridian Ave. Property owners, businesses, and residents are becoming organized, and public and private investments are making improvements to surrounding infrastructure. The City of Oklahoma City Planning Department has developed an area plan for the Windsor and WestTen Districts, the goals of which are to improve key places and ensure safe, convenient transportation options to residents. The southwestern quarter of this area is very low income with high rates of “carelessness.” One in four properties in the southwest quarter are either vacant or abandoned, creating gaps in the urban fabric. Attempts to stimulate investment in the area as a whole, and particularly in areas with the greatest need, will help to further the goals of the commercial district in the area.

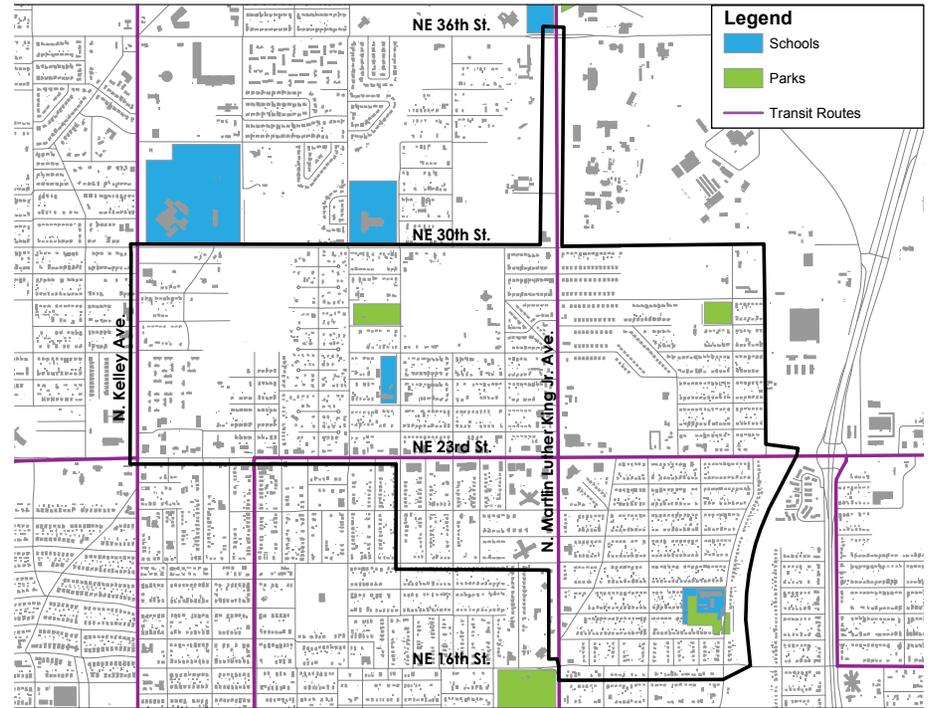
Schools in Area	Parks in Area	Transit Stops in Area
6	8	48



NW 63rd St. at N. May Ave.

This PPA has the most suburban style of development of the 10 areas selected for this plan. Many barriers to walkability exist within in this area, the greatest of which is NW Expressway. The area includes a wealth of retail, commercial, office, and restaurant uses in a relatively small area; however, presently this area is not very walkable. This will improve with the addition of designated MAPS 3 sidewalks within the PPA boundaries. Recommended improvements to walkability are focused on enabling people to safely access the stores and amenities without having to drive between them, whether that be via transit or walking.

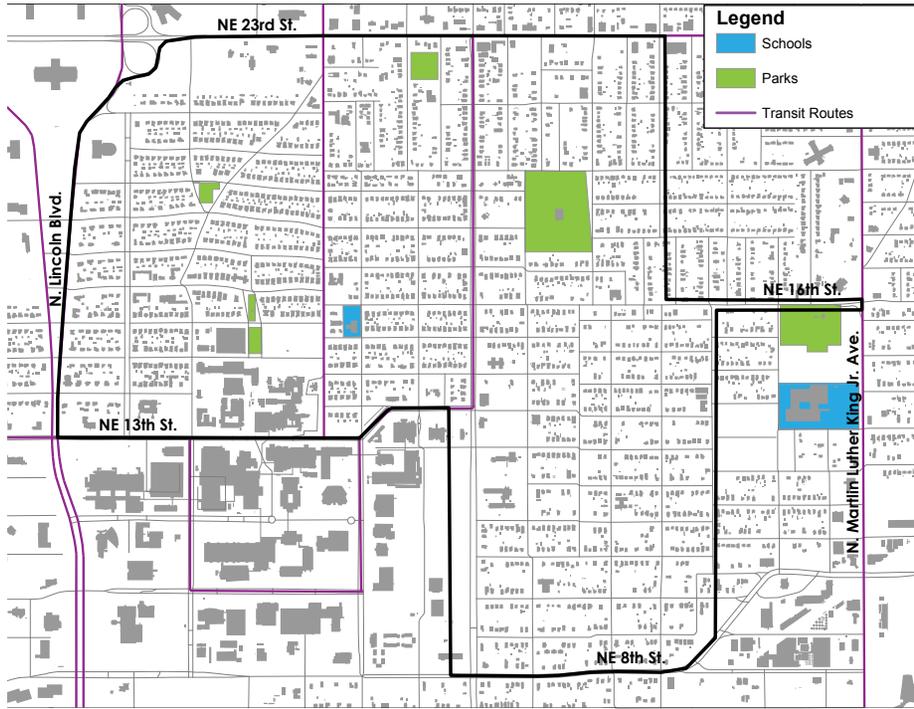
Schools in Area	Parks in Area	Transit Stops in Area
7	4	40



NE 23rd St. at N. MLK Jr. Ave.

The intersection of Martin Luther King Jr. Ave. and NE 23rd St. is one of the busiest intersections on the northeast side of Oklahoma City. This node was selected based upon the high density of land uses in the area that generate pedestrian traffic, as well as the high concentration of residents in the area who live without a motor vehicle. Additionally, this area has higher levels of poverty and disability than any other in the city. These factors indicate a great need for alternative transportation options that are easily accessible.

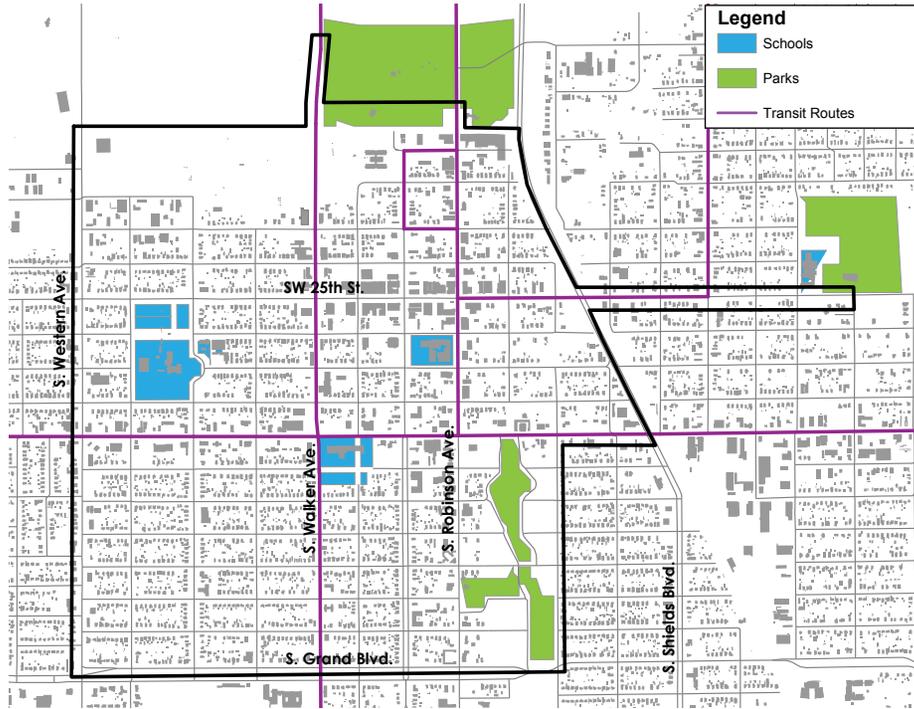
Schools in Area	Parks in Area	Transit Stops in Area
2	4	29



OHC Surroundings

The neighborhoods that surround the Oklahoma Health Center (OHC) include a wide spectrum of income levels, creating a mix of housing opportunities in an area with high potential for walkability. Key assets like the State Capitol facilities, the NE 23rd St. commercial corridor, in addition to thousands of jobs at OHC and the emerging Innovation District, anchored by the new General Electric office complex, amplify the need to fill the gaps in the existing sidewalk network and improve safety at street crossings. Though some neighborhoods in this area are affluent, the neighborhoods east of N. Kelley Ave. are the poorest in all of Oklahoma City. One out of four households in the eastern portion of this area do not have access to a motor vehicle. Providing safe access to transit and the wealth of jobs in the area are key reasons for making pedestrian improvements here.

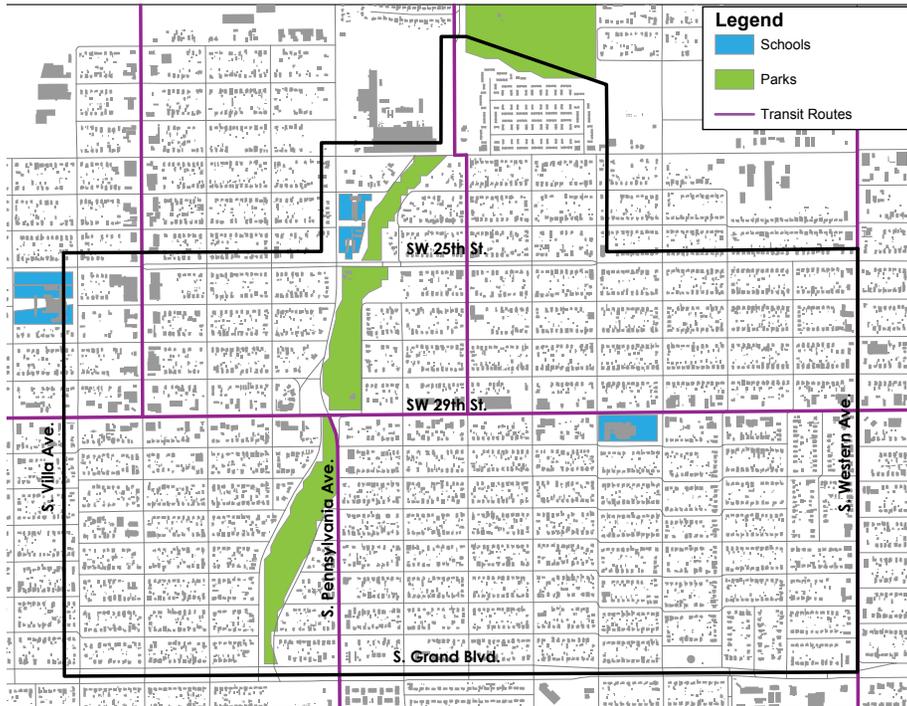
Schools in Area	Parks in Area	Transit Stops in Area
1	6	28



Capitol Hill

The Capitol Hill district just south of the Oklahoma River is one of the best opportunities in the city for future development both in terms of real estate and culture. Rates of “carlessness” are double the average for the city in this area, and median income for the ZIP code that covers this area is 4th lowest in the metropolitan area. Greater than 50% of the population is ethnically Hispanic, and one in five residents are disabled. Filling in gaps in the existing sidewalk network and improving the ability to cross busy roads safely is essential due to the area’s urban nature and the amount of transit opportunities that exist. This PPA can provide access to both the S. Grand Boulevard Trail and the Oklahoma River trails network, arguably making it the best place to access the trails network in Oklahoma City.

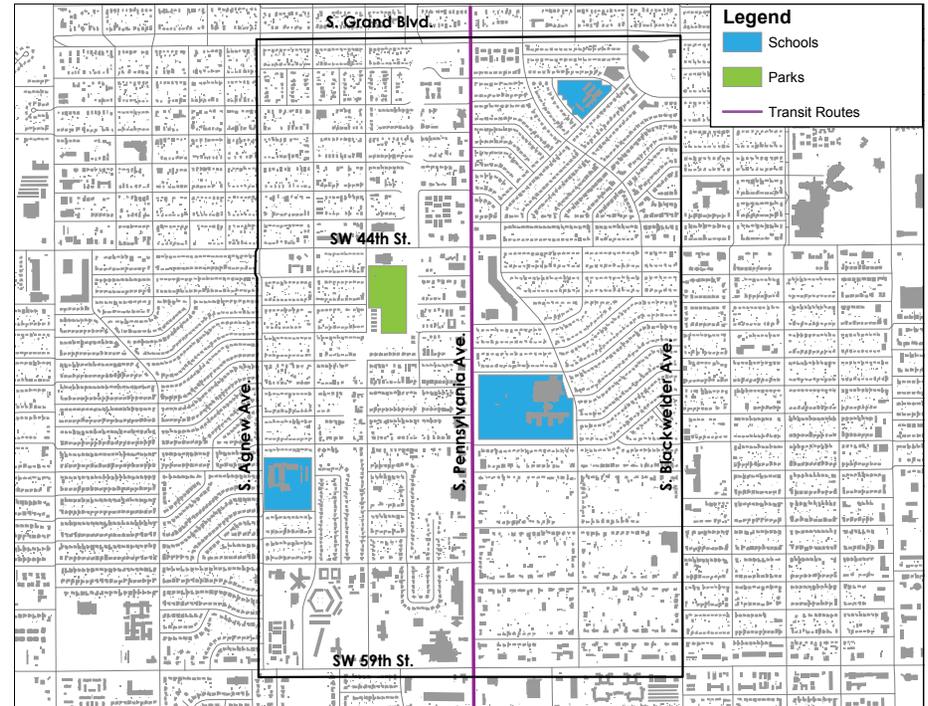
Schools in Area	Parks in Area	Transit Stops in Area
4	4	42



SW 29th St.

SW 29th St. is one of the most important corridors on the south side of Oklahoma City for several reasons. As a commercial and retail hot spot, thousands of people drive, bike, and walk to and from the area. The corridor has become a defined district and a central location for the Hispanic community in Oklahoma City. Unfortunately, sidewalks and safe crossings are lacking. Rates of “carelessness” are high, and household incomes are well below the average for the city. These factors, in addition to high rates of disabled individuals, make it imperative to provide safe and accessible crossings to support the needs of the area’s residents and visitors.

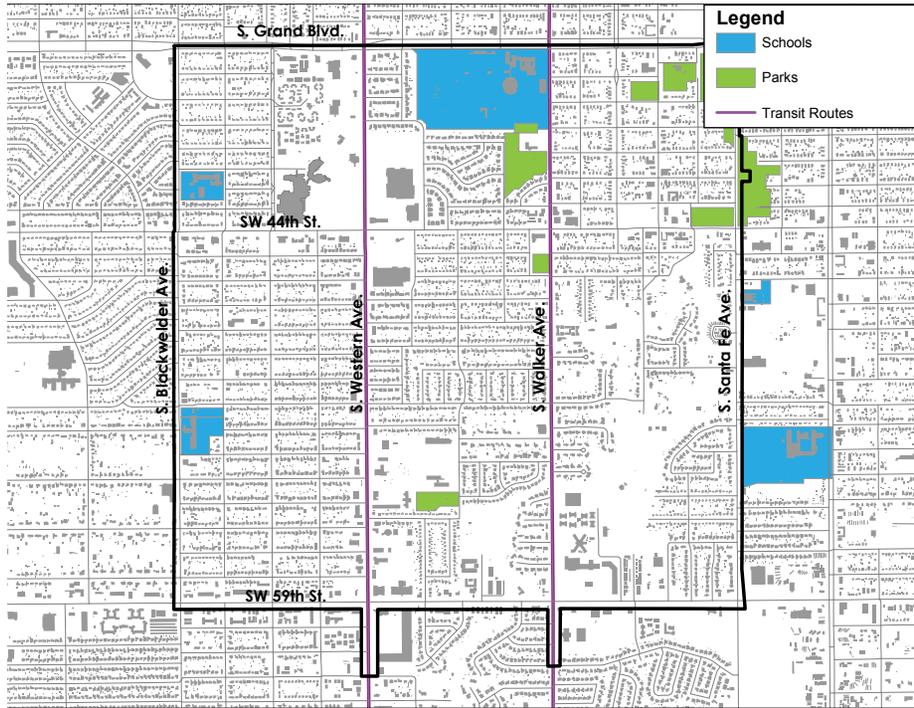
Schools in Area	Parks in Area	Transit Stops in Area
2	1	28



SW 44th St. at S. Pennsylvania Ave.

The south side of Oklahoma City north of the I-240 corridor has excellent connectivity in its street grid. Thousands of households live within the boundary of this PPA, centered around the intersection of SW 44th St. and S. Pennsylvania Ave. Greater than 50% of the population in this area is Hispanic in ethnicity, and household income is lower here than in nearly any other part of the city. The area includes great opportunities to better connect the community to key features like the S. Grand Boulevard Trail, several schools, commercial areas, libraries and more. Creating a walkable community in this area will require taking advantage of streets that traverse the drainage channel that carries Brock Creek’s flows.

Schools in Area	Parks in Area	Transit Stops in Area
3	1	14



S. Walker Ave. and S. Western Ave. Corridors

The S. Western Ave. and S. Walker Ave. corridors act as a double spine for the southside from the Oklahoma River, all the way down to the I-240 corridor. Between S. Grand Blvd. and SW 59th St. in particular, a diversity of land uses and a great deal of residential property create conditions well-suited for a walkable community. Presently, however, the sidewalk network is sorely lacking. The population in the area is very diverse with large numbers of White, Hispanic, and Native American households. “Carlessness” is more than double the rate of the city as a whole, and many transit routes criss-cross the PPA. All of these factors, plus the high rate of disability among the population in the area, emphasize the great need for improvements to the sidewalk network and safe crossings of major arterial streets.

Schools in Area	Parks in Area	Transit Stops in Area
3	4	32



Stockyards City

Stockyard City has excellent street connectivity, but lacks a complete sidewalk network beyond the primary commercial district areas along Exchange Ave. and S. Agnew Ave. The area’s close proximity to the river gives it great potential to connect pedestrians and cyclists to the river trails network. Additionally, there are three bridges across the river in close proximity, which presently are not well-connected by sidewalks. The residents in the local ZIP code have much lower incomes than other areas in the city, and 1 in 10 do not have access to a motor vehicle, reinforcing the importance of providing alternative transportation options for those who live there in addition to strengthening the network for visitors to the commercial district.

Schools in Area	Parks in Area	Transit Stops in Area
1	3	13

COMPONENT PLANS: Downtown

Goal:

“Make downtown a more accessible place to visit, work, shop, and live.”

Responsive populations:

- Downtown residents
- Downtown employees
- Tourists
- Developers
- Shoppers/Consumers
- Transit riders
- Special event attendees

Funding sources:

- General obligation bonds
- Sales tax initiatives
- Tax Increment Financing allocations
- Federal funds

JUSTIFICATION

Downtown demands the highest possible level of walkability in order to be successful as the city’s center of commerce and visitation with the highest level of residential density.

Several efforts have begun to improve walkability in parts of downtown, such as Project 180, which has converted streets from 4-lane one-way streets to two-way streets with improved pedestrian spaces. In order to capitalize on the improvements that have been made over the last decade, it is important to understand what areas of downtown are in particular need of improvement, as well as to know what steps need to be taken to raise the whole area to the level of walkability afforded to pedestrians in the Project 180 area.

DOWNTOWN PLAN

The downtown area is made up of several smaller districts including:

- Central Business District;
- Midtown;
- Automobile Alley;
- Bricktown;
- Deep Deuce;
- Film Row;
- SOSA (South of St. Anthony);
- Core to Shore; and
- all of the spaces between them.

Closing gaps in the sidewalk network, both in terms of existing infrastructure and the quality thereof, will help create a walkable community where residents and visitors can choose to walk between these districts rather than drive. Additionally, the success of the future downtown streetcar depends on a surrounding pedestrian network that is complete, accessible, and inviting. The plan recommends filling in the gaps in the sidewalk network, and identifies needed improvements related to the pedestrian experience. This experience includes safe crossings, lighting, shade, and more.



The Oklahoma City Streetcar will be complete in 2018, and will benefit from a strong pedestrian realm.

PEAT ASSESSMENT RESULTS

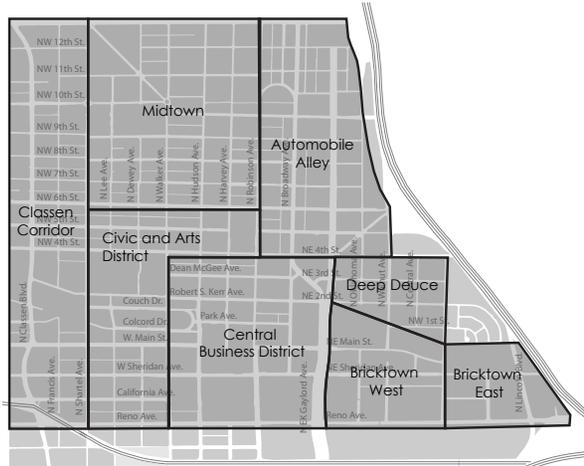
To better understand the results of the downtown Pedestrian Environment Assessment Toolkit (PEAT) assessment, the study area was broken into eight sub-areas that have distinctly different character. Study at this scale allowed area-based projects to be identified. Figure 3.1 shows the overall percentage PEAT score out of 100%, and also includes strategies identified in the analysis that would raise the PEAT score, thereby improving walkability.

Two sub-areas had an average score of “Good” - the Central Business District and Bricktown West. These areas have been the focus of a great deal of public investment with the intention of making them more vibrant and walkable, and the results are noticeable, though work still needs to be done. Intersections and segments within the Classen Corridor and Bricktown East sub-areas scored the lowest, indicating that these two areas need the greatest amount of work to become walkable. Fortunately, a great deal of private development has begun to occur in these two areas, and infrastructure put in place as a part of these developments will increase the corresponding PEAT scores.

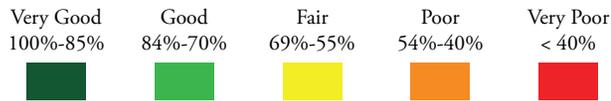
Every sub-area showed a need for pedestrian-scale lighting consistent with that installed in the Project 180 area. With the knowledge that poor visibility is one of the leading causes of pedestrian fatalities, it is clear that this should be a priority within the most walkable area in the city. Other factors that contributed to a lower PEAT score for all of the sub-areas include: a need for shade trees, a need for two-directional curb ramps, a need for new and repainted crosswalks, a need for additional sidewalk width in tight areas, and a need for seating.

The bulleted recommendations on the following page are listed in order of highest priority for each of the sub-areas. The percentage scores are a combination of all of the PEAT criteria. See page 90 for a detailed description of the PEAT process.

Figure 3.1 PEAT Assessment Results



Downtown Sub-Areas for PEAT Assessment



Central Business District	<i>Intersections Score</i>	<ul style="list-style-type: none"> Update ADA ramps to two directional ramps per corner. Add missing crosswalks, and repaint faded ones.
	79%	
	<i>Segments Score</i>	<ul style="list-style-type: none"> Increase amount of public seating. Add pedestrian-scale lighting. Increase sidewalk width in tight locations.
	72%	

Bricktown West	<i>Intersections Score</i>	<ul style="list-style-type: none"> Increase lighting at intersections. Remove all obstructions to pedestrians. Update ADA ramps to two directional ramps per corner.
	72%	
	<i>Segments Score</i>	<ul style="list-style-type: none"> Increase amount of public seating. Add pedestrian-scale lighting. Increase sidewalk width in tight locations. Remove sidewalk obstructions. Add street trees.
	76%	

Automobile Alley	<i>Intersections Score</i>	<ul style="list-style-type: none"> Update ADA ramps to two directional ramps per corner. Add missing crosswalks, and repaint faded ones. Increase lighting at intersections.
	71%	
	<i>Segments Score</i>	<ul style="list-style-type: none"> Add street trees. Increase amount of public seating. Increase sidewalk width in tight locations. Add trash cans. Remove sidewalk obstructions.
	66%	

Civic and Arts District	<i>Intersections Score</i>	<ul style="list-style-type: none"> Update ADA ramps to two directional ramps per corner. Add missing crosswalks, and repaint faded ones. Increase lighting at intersections.
	71%	
	<i>Segments Score</i>	<ul style="list-style-type: none"> Increase amount of public seating. Increase sidewalk width in tight locations. Add pedestrian-scale lighting. Add street trees.
	63%	

Deep Deuce	<i>Intersections Score</i>	<ul style="list-style-type: none"> Update ADA ramps to two directional ramps per corner. Add safe crossings at uncontrolled intersections. Add missing crosswalks, and repaint faded ones. Increase lighting at intersections.
	59%	
	<i>Segments Score</i>	<ul style="list-style-type: none"> Increase amount of public seating. Increase sidewalk width in tight locations. Add pedestrian-scale lighting.
	75%	

Midtown	<i>Intersections Score</i>	<ul style="list-style-type: none"> Increase lighting at intersections. Add missing crosswalks, and repaint faded ones. Add safe crossings at uncontrolled intersections. Update ADA ramps to two directional ramps per corner.
	65%	
	<i>Segments Score</i>	<ul style="list-style-type: none"> Increase amount of public seating. Add pedestrian-scale lighting. Increase sidewalk width in tight locations. Add street trees.
	60%	

Classen Corridor	<i>Intersection Score</i>	<ul style="list-style-type: none"> Increase lighting at intersections. Add missing crosswalks, and repaint faded ones. Add safe crossings at uncontrolled intersections. Update ADA ramps to two directional ramps per corner.
	59%	
	<i>Segments Score</i>	<ul style="list-style-type: none"> Increase amount of public seating. Add pedestrian-scale lighting. Add street trees. Increase sidewalk width in tight locations. Remove existing obstructions. Fill in gaps in the sidewalk network.
	53%	

Bricktown East	<i>Intersections Score</i>	<ul style="list-style-type: none"> Update ADA ramps to two directional ramps per corner. Add missing crosswalks, and repaint faded ones. Add safe crossings at uncontrolled intersections. Remove obstructions. Close the gaps in the sidewalk network. Increase lighting at intersections.
	32%	
	<i>Segments Score</i>	<ul style="list-style-type: none"> Increase amount of public seating. Increase sidewalk width in tight locations. Fill in gaps in the sidewalk network. Add street trees. Add pedestrian-scale lighting. Remove sidewalk obstructions. Add trash cans.
	42%	

COMPONENT PLANS: Access to Transit

Goal:

“Make the pedestrian component of transit ridership convenient, safe, and dignified.”

Responsive populations:

- Households without access to an automobile
- Households in poverty
- The elderly and the young
- General transit riders
- Potential transit riders

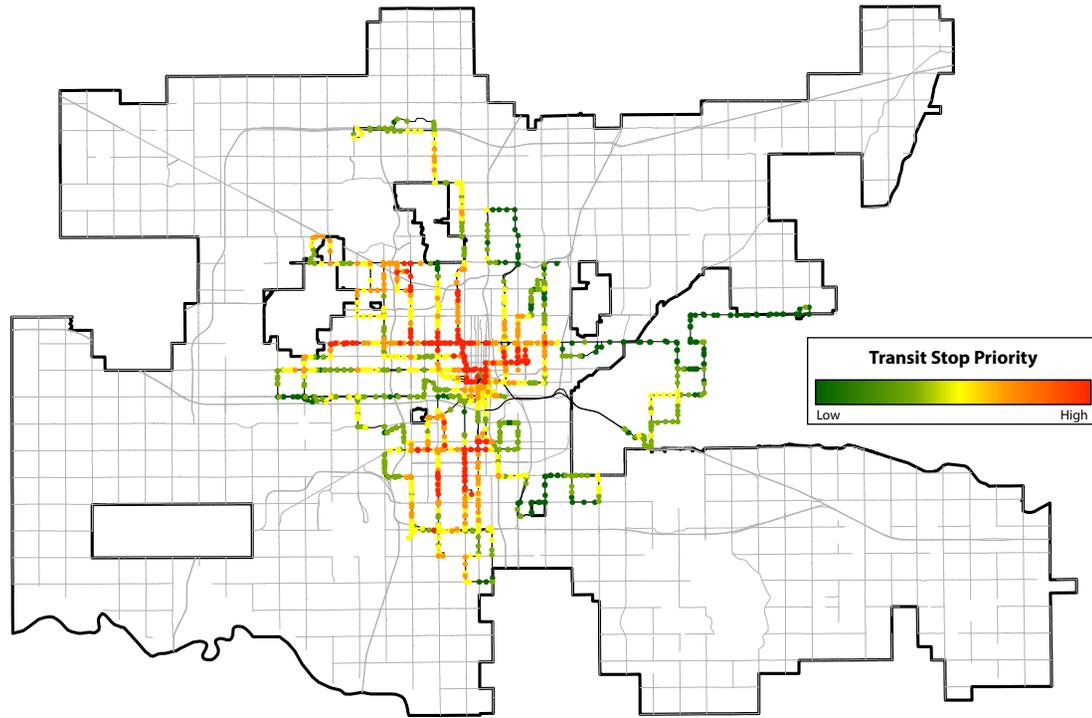
Funding sources:

- General obligation bonds
- Sales tax initiatives
- Tax Increment Financing allocations
- Federal funds

JUSTIFICATION

Transit routes and stops need sufficient pedestrian infrastructure in order to be best utilized. When transit stops are disconnected from pedestrian infrastructure, riders are placed at higher risk of collision with automobiles, those with disabilities are limited in their ability to utilize the transit system, and people who do not currently use public transit are less likely to choose to do so because it is more difficult to use. With this in mind, public transit routes and stops were primary criteria in the Pedestrian Priority Areas (PPAs). 509 transit stops have been addressed through in-depth sidewalk and intersection planning in each of the PPAs. This accounts for 37.7% of the 1,350 transit stop locations in the EMBARK bus system.

Map 3.5 - Transit Stop Prioritization Score



TRANSIT STOP PRIORITIZATION

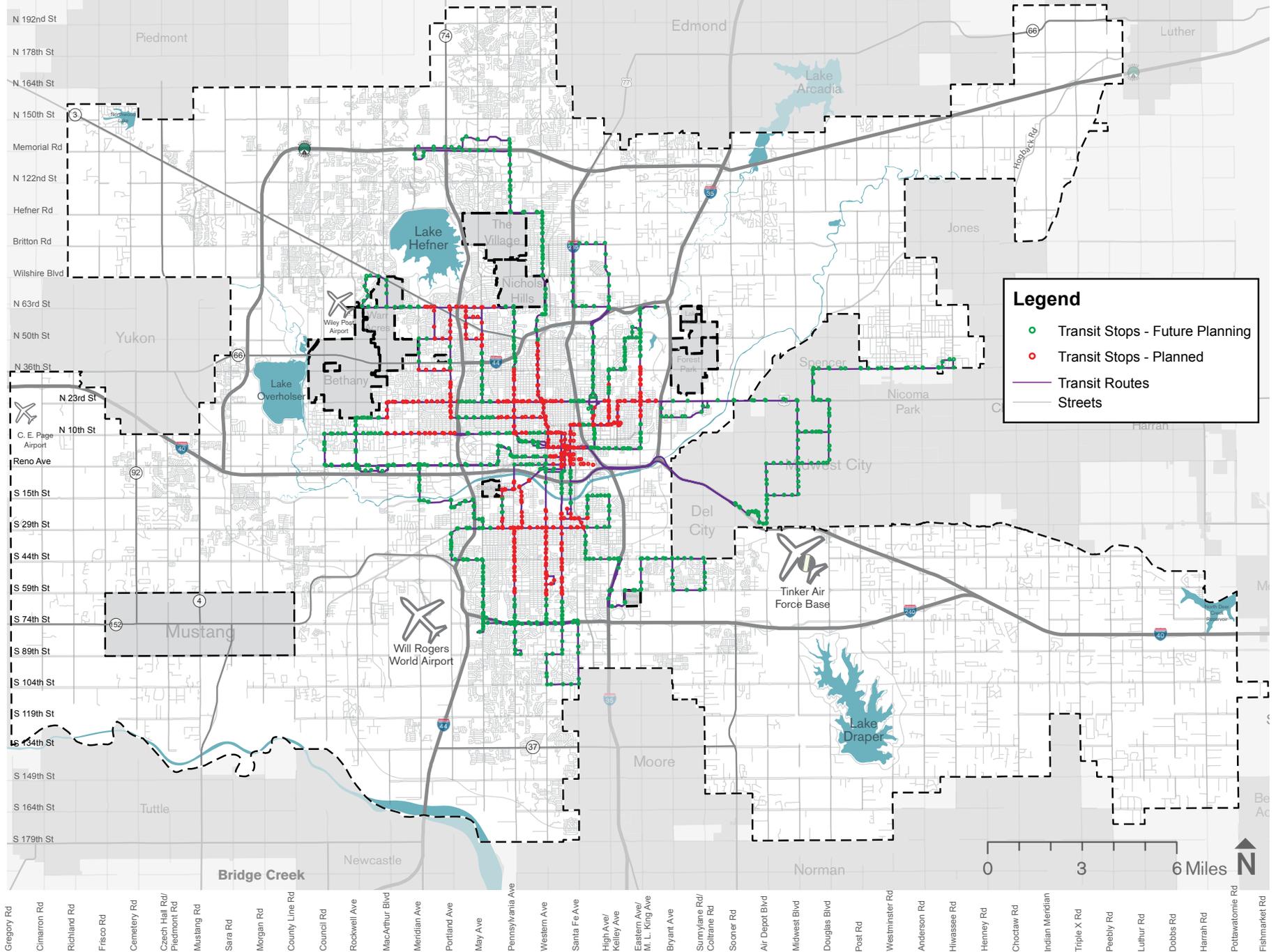
Beyond the 509 stops already addressed in the PPAs, the remaining 841 stops in the system have been prioritized for improvements by using a score generated from a number of criteria. Those criteria include:

1. Boarding and alighting
2. Population density
3. Employment density
4. Activity density
5. Proximity to supermarkets and grocery stores
6. Proximity to healthcare facilities
7. Proximity to parks
8. Proximity to trails
9. Proximity to schools and colleges
10. Proximity to government facilities
11. Proximity to multi-family residential

Each transit stop location was ranked based on these criteria, which together illustrate the significance and potential of each of the stops to be as useful to riders as possible. See Appendix P.1 for the complete ranked list of transit stops.

Map 3.5 shows the scoring of each of the transit stops in the EMBARK system. The stops in red represent the highest priority for pedestrian improvements based on the previously mentioned criteria. These hot spots are primarily located within the PPAs, adding further justification to the PPA selection process (see pages 68-73). Map 3.6 shows the locations of the 509 stops already addressed in this plan, and the similarity to the high priority stops in Map 3.5 is apparent.

MAP 3.6 TRANSIT STOPS IN PEDESTRIAN PRIORITY AREAS (PPA)



COMPONENT PLANS: Access to Schools

Goal:

“Create a safer environment for children and families to walk to neighborhood schools.”

Responsive populations:

- Children
- Families
- School faculty and staff
- Neighborhood residents

Funding sources:

- General obligation bonds
- Sales tax initiatives
- Safe Routes to Schools funding
- Transportation Alternatives Program (TAP)

JUSTIFICATION

Children and families should be able to walk to and from neighborhood schools on safe, convenient, and comfortable facilities. A walkable area around a school provides many benefits, such as less dangerous traffic around schools, more options for physical activity for children, and improved use of the school’s athletic facilities by all neighboring residents.

The PPA plans and downtown plan address 50 of the 206 schools in the city. Each of the remaining 156 schools have been prioritized according to the following methodology.

SCHOOL PRIORITIZATION PROCESS

Schools are prioritized for pedestrian improvements using the following process:

- Step 1:** Identify all existing schools within the city limits of Oklahoma City.
- Step 2:** Group the schools based on the likelihood of students walking to the school.
 1. Elementary and Middle Schools
 2. High Schools
 3. Charter Schools, Magnet Schools, and Private Schools
 4. Colleges, Technical Schools
- Step 3:** Create ¼-mile, ½-mile, and 1-mile buffers from school sites using the street network.
- Step 4:** Rank schools by the number of households within the buffer distances.
- Step 5:** Use this list as the prioritization strategy for pedestrian improvements near schools.
- Step 6:** Those schools that fall into a pedestrian priority area are excluded since they have already been identified.

Using this approach, projects can be identified that improve walkability to public schools, and can be used to form the basis of a Safe Routes to School plan for Oklahoma City. Table 3.1 includes the top 20 highest ranking schools based on the process described above. See Appendix P.2 for a complete ranking of schools in Oklahoma City.

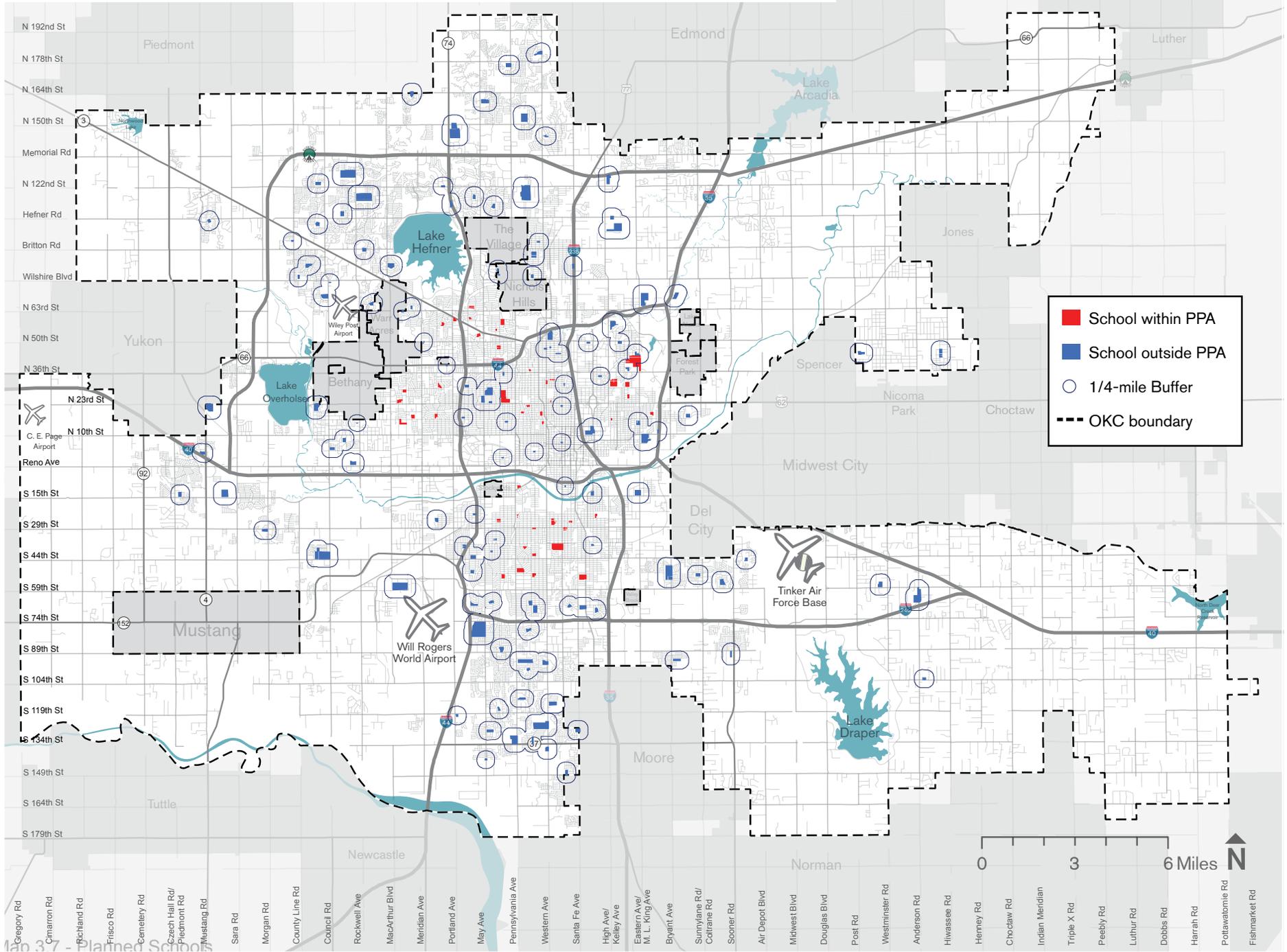
Table 3.1 School Prioritization

Rank	Schools
1	Fairview ES
2	Sequoyah ES
3	Cleveland ES
4	Hawthorne ES
5	Prairie Queen ES
6	Hillcrest ES
7	Stand Watie ES
8	Briarwood ES
9	Van Buren ES
10	Arthur ES
11	Northridge ES
12	Linwood ES
13	Madison ES
14	Kingsgate ES
15	Adams ES
16	Highland Park ES
17	James L Dennis ES
18	Stonegate ES
19	Angie Debo ES
20	Britton ES



Special safety features are often included in pedestrian improvements near sensitive uses like schools and parks.

MAP 3.7 SCHOOLS IN PEDESTRIAN PRIORITY AREAS (PPA)



COMPONENT PLANS: Access to Parks

Goal:

“Create opportunities for physical activity by connecting people to neighborhood parks.”

Responsive populations:

- Children
- Families
- Neighborhood residents

Funding sources:

- General obligation bonds
- Sales tax initiatives
- Parks and Recreation Department
- Transportation Alternatives Program (TAP)

JUSTIFICATION

Oklahoma City has high rates of chronic illnesses such as diabetes and obesity. These diseases are linked to a lack of physical activity; therefore, providing residents with safe and convenient access to their closest neighborhood park may help improve health outcomes.

The PPA plans and downtown plan already address 45 of the 155 parks in the city. Each of the remaining 110 parks have been prioritized according to the following methodology.

PARK PRIORITIZATION PROCESS

Parks are prioritized for pedestrian improvements using the following process:

- Step 1:** Identify all existing parks within the city limits of Oklahoma City.
- Step 2:** Create ¼-mile, ½-mile, and 1-mile buffers using the street network.
- Step 3:** Rank parks by the number of households within the buffer distances.
- Step 4:** Use this list as the prioritization strategy for pedestrian improvements for parks.
- Step 5:** Those parks that fall into a pedestrian priority area are excluded since they have already been identified.

Using this approach, projects can be identified to improve pedestrian access to all of the parks in the city as funding becomes available. Table 3.2 includes the top 20 highest ranking parks based on the process described above. See Appendix P.3 for a complete ranking of parks in Oklahoma City.

Table 3.2 Parks Prioritization

Rank	Parks
1	Woodson Park
2	Dolese Youth Park
3	Sellers Park
4	Siler Park
5	Oliver Park
6	Denniston Park
7	Girvin Park
8	Wayman’s Park
9	Reed Park
10	Pied Piper Park
11	Bluff Creek Park (West)
12	Edgemere Park
13	Britton Park
14	Mike Dover Park
15	Smitty Park
16	Earlywine Park
17	Syl Goldman Park
18	May Park
19	Quail Creek Park
20	Douglas Park

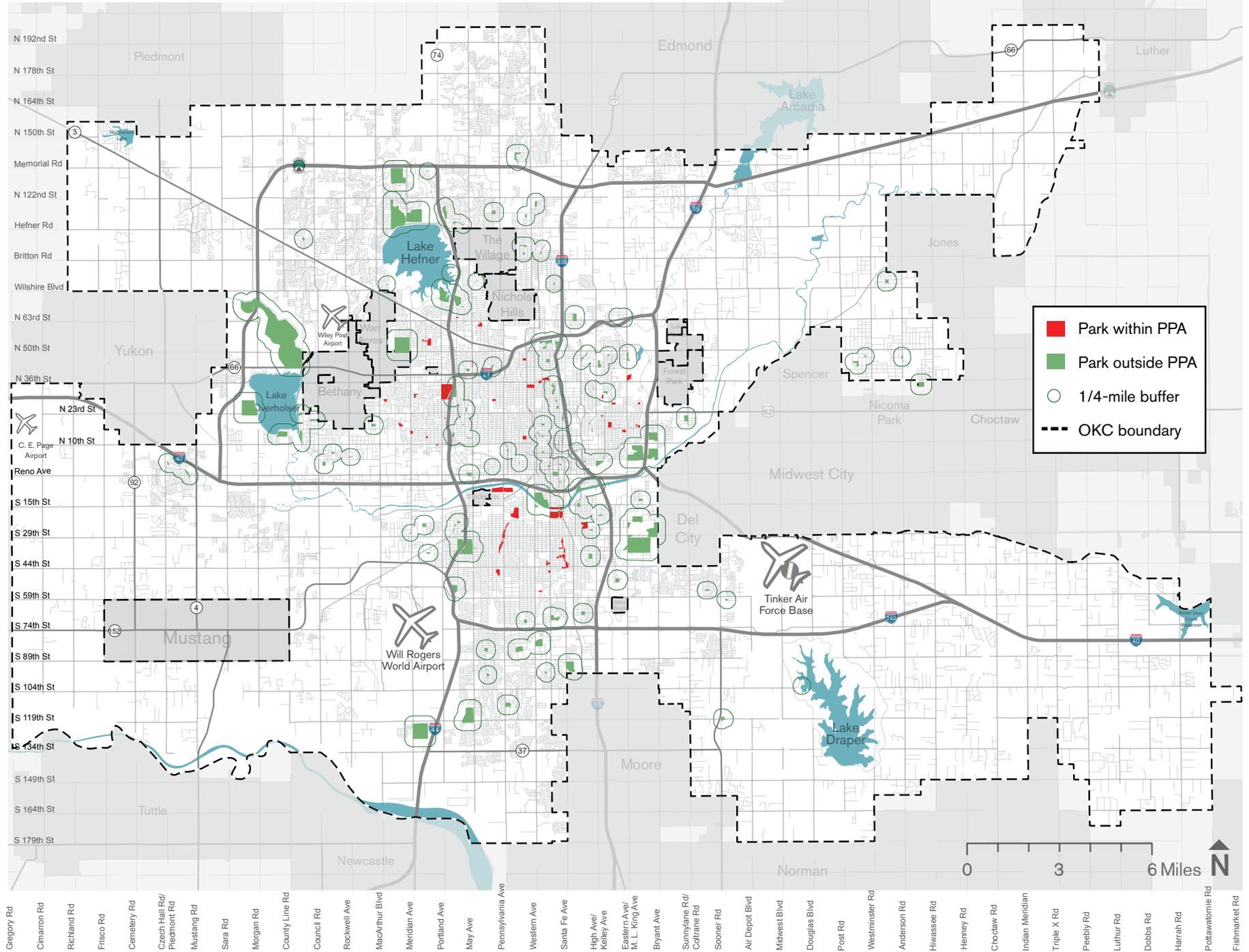


Parks with equipment that facilitates physical activity are an asset for all age groups.



Connecting people to nature has been shown to reduce negative mental and physical health outcomes.

MAP 3.8 PARKS IN PEDESTRIAN PRIORITY AREAS (PPA)



COMPONENT PLANS: Citywide Approach

Goal:

“Create a prioritization framework to guide future pedestrian planning in Oklahoma City.”

Responsive populations:

- Children
- Families
- Neighborhood residents

Funding sources

- General obligation bonds
- Sales tax initiatives
- Parks and Recreation Department
- Transportation Alternatives Program (TAP)

JUSTIFICATION

While the preceding sections of this pedestrian plan address the populations and places that have the greatest need for pedestrian improvements, many other areas fall below the level of highest priority. This section explains the approach to prioritize the remaining urban areas in Oklahoma City.

URBAN VS. RURAL

Presently in Oklahoma City, sidewalks are not required for subdivisions with lots greater than one acre (Oklahoma City Municipal Code 59-12100G). Presumably, this language was intended to alleviate the cost per residential unit that sidewalks in large-lot, non-urban developments incur; however, this language does not account for the shape of a given 1+ acre parcel. For example, long but narrow lots, while potentially dense along roads, may not receive sidewalks. Regardless of this example, the intent is to make a distinction between areas of the city that should be walkable, and those where walkability is not a priority because of low residential density and rural character.

In a city of 621 sq. mi. the distinction between urban and rural character allows for prioritization of areas that have higher residential densities and long-range planning goals of increased walkability. Excluding rural areas from the process by focusing on planOKC’s land-use typology area of Urban Low Intensity reduces the total area for pedestrian planning by 46% to an area of 333 sq. mi.

QUARTER-SECTION AREA

The Urban Low Intensity area of Oklahoma City is still a relatively large area. In fact, 333 sq. mi. is larger than all but the 19 largest cities in the United States -- larger than New York City, San Diego, Austin, or Charlotte. Therefore, a smaller modular unit was required to prioritize projects within this 333 sq. mi. The township and range system utilized in Oklahoma and other states by the Public Land Survey System (PLSS) dices the city into a 1 square mile grid separated by section-line roads. This regular layout is ideal for comparing one area to another, but the square mile size is often too large to account for dramatic changes in land use that occur at half-section line roads, which are 1/2 mile between each of the primary section line roads. A 1/2-mile distance corresponds with about a 10-minute walk, and is a commonly used distance for estimating how far the average person is willing to walk. Therefore, splitting each 1 square mile section into four 1/4-square mile areas gives a grid by which to compare different areas of the city at a more walkable scale.

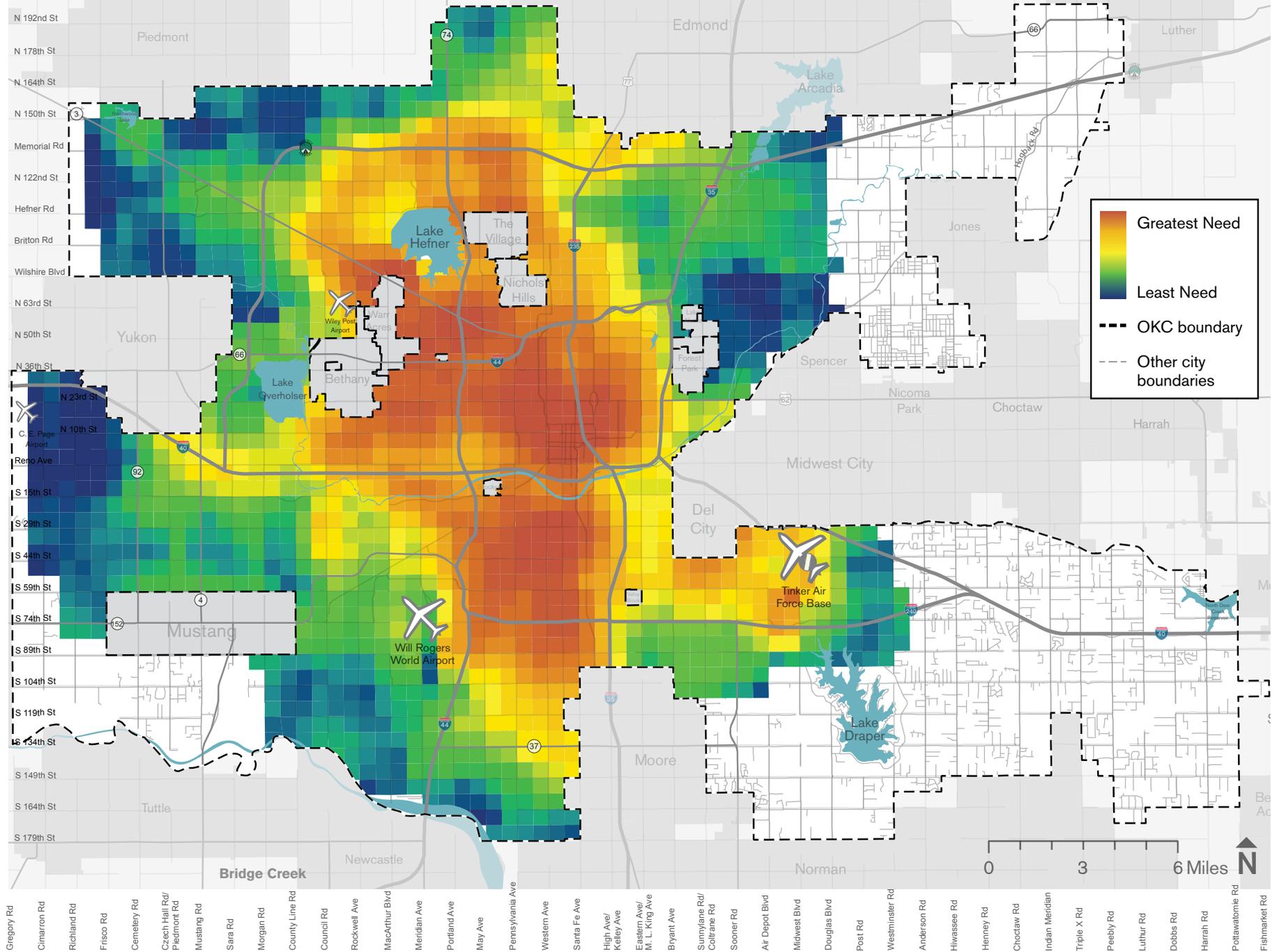
PRIORITIZATION STRATEGY

The same prioritization strategy used to determine the PPAs was utilized to differentiate among the 1,829 individual quarter sections that fall within the urban area of the city. To do this, all of the intersection points with their associated prioritization score (based on intersection design, intersection pedestrian demand, and demographics) were averaged within their corresponding quarter section. This assigns a single value to each quarter section, thereby creating a prioritization list based on scores from highest to lowest. See Appendix P.4 for the full list of quarter sections in order of priority for pedestrian improvements.

IMPROVEMENT APPROACH

In areas where overlap exists between the quarter sections and specially planned areas, such as the PPAs, downtown, transit stops, parks, and schools, the area within the quarter section that is not a part of the specially planned area is a lower priority for improvement. However, after the PPAs have been implemented, this map of quarter sections should be utilized to determine where to begin planning the next Pedestrian Priority Areas. In the meantime, parks, schools, and transit stops should be improved following the prioritized lists associated with each. Over the next few decades, this approach will improve walkability around the places people want to go, and the gaps between these areas will begin to be filled out as well.

MAP 3.9 PEDESTRIAN NEEDS ANALYSIS



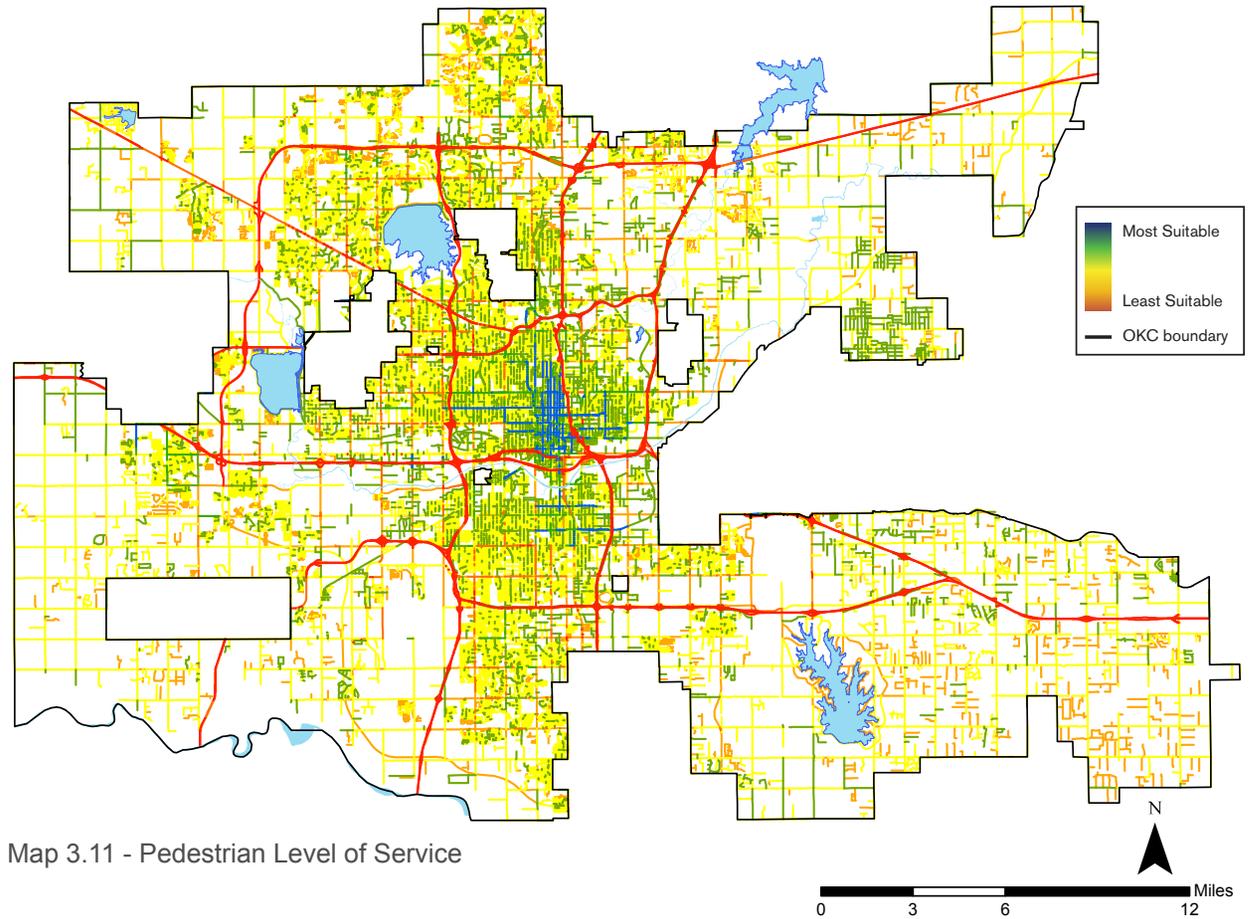
Pedestrian Analysis

Effective planning begins with analysis, and in a city as large as Oklahoma City, data analysis is crucial to focus in on priority areas. In order to analyze and understand pedestrian conditions on every roadway segment in Oklahoma City (43,907 segments), several models were created that examine and score them all. The scores provide the existing conditions for pedestrians along those segments. The following sections provide an explanation of each model, the results, and the meaningfulness of the results.

PEDESTRIAN LEVEL OF SERVICE

The Pedestrian Level of Service (PLOS) model takes into account multiple variables to provide a score of walking comfort, safety, and accessibility along every roadway segment in Oklahoma City. The score is helpful in identifying important roadways that are not currently suitable for safe, comfortable walking. Additionally, PLOS shows areas with strong pedestrian walkability that are separated by short stretches of unsafe or impassable segments. The following variables were included in the analysis:

- **Sidewalk** – The basic component of a walkable roadway. Roadway segments were scored based on whether the segment had a sidewalk present on one, both, or no sides.
- **Sidewalk Buffer** – A grass or landscaped space between the road and the sidewalk adds to comfort and safety of walking. Segments were scored on the presence or absence of a sidewalk buffer.
- **Number of Driveways** – High numbers of driveways along a roadway reduces the safety and comfort of walking. Roadway segments with less than 15 driveways per quarter mile received a higher score than those with more than 15.
- **Roadway Speed** – Speed impacts safety, comfort, and ease of crossing. Roadway segments received scores based on speeds ranging from less than 25mph to above 45mph.



Map 3.11 - Pedestrian Level of Service

- **Number of Lanes** – The number of vehicular travel lanes affects safety and street “crossability” Streets with fewer lanes received a higher score.

Map 3.11 shows the PLOS for Oklahoma City. The map shows streets on a graduated color scale from blue to red. Blue represents a high PLOS score, meaning the segment is potentially comfortable, safe, and accessible. A low score means sidewalks may not be present, and travel speeds, the number of lanes, and the number of driveways are high, or a combination of factors.

General observations of the analysis show section line roads (e.g. major and minor arterials) are consistently low scoring. This is problematic as transportation connectivity is poorer in more suburban areas, where

pedestrians have little choice but to use arterials for mobility. The inner core of the city has the highest density of high-scoring road segments, indicating that improvements made to facilities in these areas will be more cost effective, and are likely to improve walkability where people desire to walk.

In more suburban areas of the city, the proliferation of low-scoring segments indicates that the attributes of the transportation network are not well-suited to accommodate needs of pedestrians. Improvements in these areas impact fewer households per dollar spent due to lower levels of residential density. Efficiency is found in the most urban areas of the city, making these areas a top priority. This is consistent with planOKC's focus on redevelopment and revitalization in the urban core.

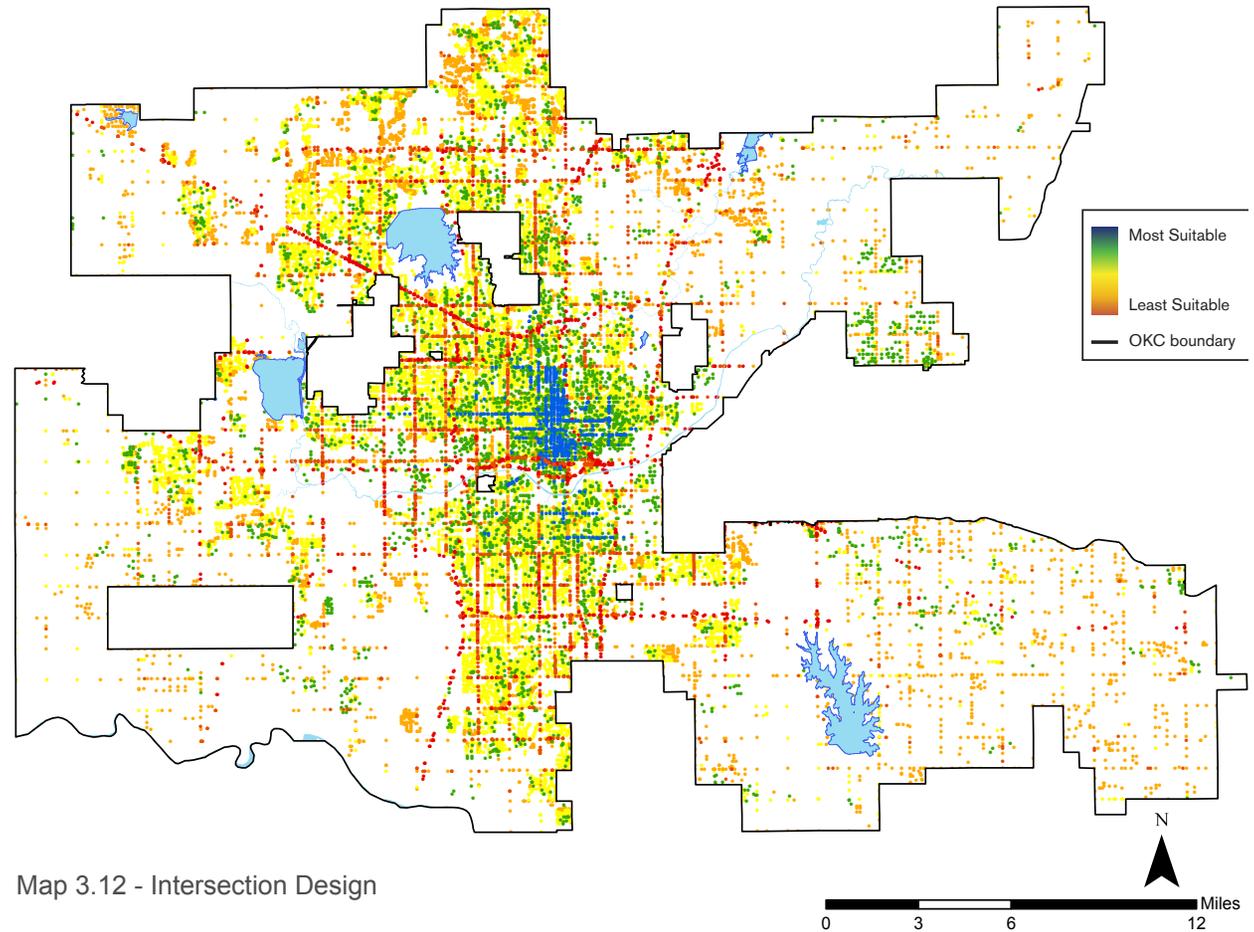
INTERSECTION ANALYSIS

Intersection Design

An integral component of pedestrian mobility is the ability to cross streets safely. This analysis generates a score to identify intersections in need of pedestrian infrastructure improvements. The results indicate the likely amount of investment needed to improve pedestrian infrastructure to a level that provides all of the necessary safety precautions that the City is capable of providing. The intersection design score took into account the following variables:

- **Signals** – A higher score was assigned to intersections that have signals. Signals are important along major and minor arterials because these roadways typically form barriers for mobility.
- **Crosswalks** – Many intersections exist without marked crosswalks. Marked crosswalks are important for identifying the pedestrian space and communicating to vehicles the space is for pedestrians. Intersections with crosswalks received a higher score than those with no crosswalk.
- **Ramps** – ADA-compliant ramps are necessary for people with disabilities. Intersections containing ADA-compliant ramps received a higher design score.
- **Collisions** – Ten years of pedestrian and bicycle collision data was analyzed to determine those intersections that have safety issues. Intersections with fewer collisions received higher scores.
- **Speed** – Intersections with low speed streets received a higher design score than those with high speeds.
- **Lanes** – More lanes means a greater distance for pedestrians to cross. Streets with fewer lanes received higher scores.

Map 3.12 shows the results of the analysis incorporating the variables of the intersection design score. Here, like the PLOS map, we see that the inner core of the city is more well-suited for pedestrians than the suburbs, and



Map 3.12 - Intersection Design

major arterials are especially low scoring. Pedestrian infrastructure improvements in the low-scoring areas are likely to be more expensive than in high-scoring areas, due to the fact that they need improvements to several of the variables, while the high-scoring areas may only need small changes.

This map also illustrates the way that the major arterials in Oklahoma City can be barriers to pedestrians. The vast majority of pedestrian collisions that result in injury or death occur on major arterials. There are numerous conflict points at the intersection of major arterials, which will require a high level of pedestrian infrastructure investment not often seen in the metro area. Pedestrian refuge islands, leading pedestrian intervals, signal phasing patterns to reduce conflicts,

signage, and clearly defined crosswalks are only some of the approaches taken by other municipalities and transportation departments around the country.

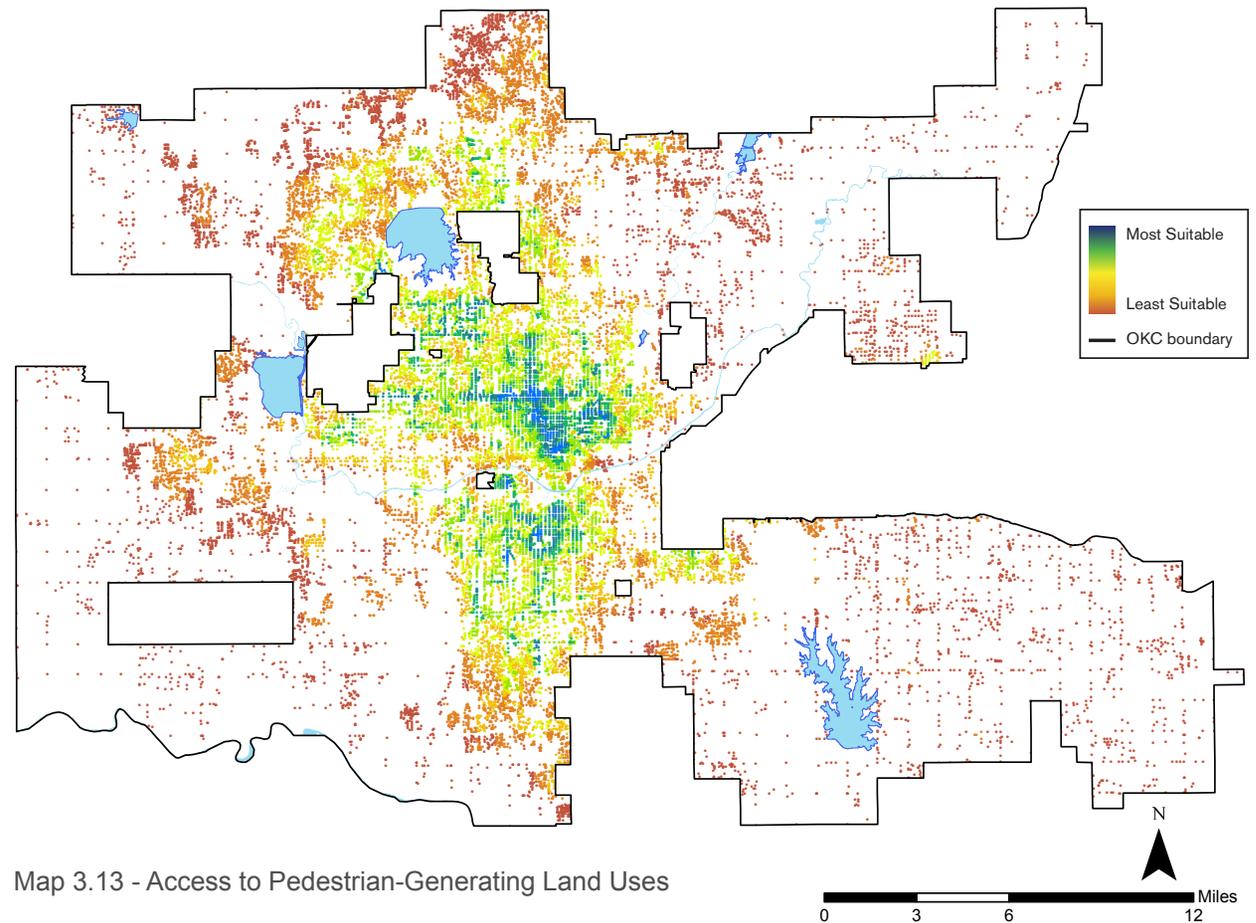
Pedestrian refuge islands, leading pedestrian intervals, signal phasing patterns to reduce conflicts, signage, and clearly defined crosswalks are only some of the approaches taken by other municipalities and transportation departments around the country.

INTERSECTION ANALYSIS

Pedestrian Demand Generation

In order to prioritize pedestrian improvements across the city, it was important to look at land uses and other factors that generate pedestrian activity. A score was assigned to every intersection based on the proximity of pedestrian-generating land uses within a ¼-mile distance. These include:

- Transit stops – There are more than 1,300 bus stops in Oklahoma City.
- Schools – There are 206 schools in Oklahoma City.
- Parks – Points of access into parks (rather than general park locations) were used, since it is possible to live adjacent to a park but still be a long distance from an entrance to the park.
- Trails – Points of access were used for all of the existing trails.
- Supermarkets – Supermarkets were found in the InfoUSA national business registration data.
- Grocery stores – Grocery stores were separated from supermarkets because they are not full-service, and fill a different role than supermarkets.
- Healthcare facilities – This includes all medical facilities in the city, such as hospitals, doctors, dentists, etc.
- Government facilities – Government facilities are the primary location criteria for ADA improvements according to the standards laid out in the Americans with Disabilities Act. This includes federal, state, and local facilities.
- Multi-Family housing – High-density housing is more likely to generate high levels of pedestrian activity than single-family housing. This category includes apartments and multi-unit housing (i.e. duplexes, triplexes, etc.)
- Population Density – Points from a raster heat map were extracted at every intersection to determine the population density value.



Map 3.13 - Access to Pedestrian-Generating Land Uses

- Employment Density – Points from a raster heat map were extracted at every intersection to determine the employment density value.
- Activity Density – Points from a raster heat map were extracted at every intersection to determine the activity density value. Activity density is an aggregate measure of where people live, work, and play.

would provide the greatest opportunity for creating truly walkable areas. Scores tend to decrease further from the city center and closer to the city limits. The lower density and relative distance to pedestrian-generating land uses causes these areas to be scored lower than those in the inner city.

Scores were generated for all of the previous criteria at each intersection and then summed to get a total “Demand Score.” Map 3.13 illustrates that the areas of the city with the highest amount of pedestrian-generating land uses and conditions are primarily in the inner city, indicating that improvements in these areas

INTERSECTION ANALYSIS

Intersection Design/Demand/ Demographics

The next step in the process was to take all of the previous analysis and form it into an equation that would generate an overall score of priority for all of the intersections in the city. To accomplish this, the Pedestrian Level of Service (PLOS) score was combined with the aforementioned “Intersection Design” score (see Maps 3.11 and 3.12). This new combined PLOS and Design score could then be incorporated with the Demand Score (see Map 3.13); the intent being to evaluate which intersections had the highest proximity to pedestrian-generating land uses, and are in need of design improvements. The equation used was:

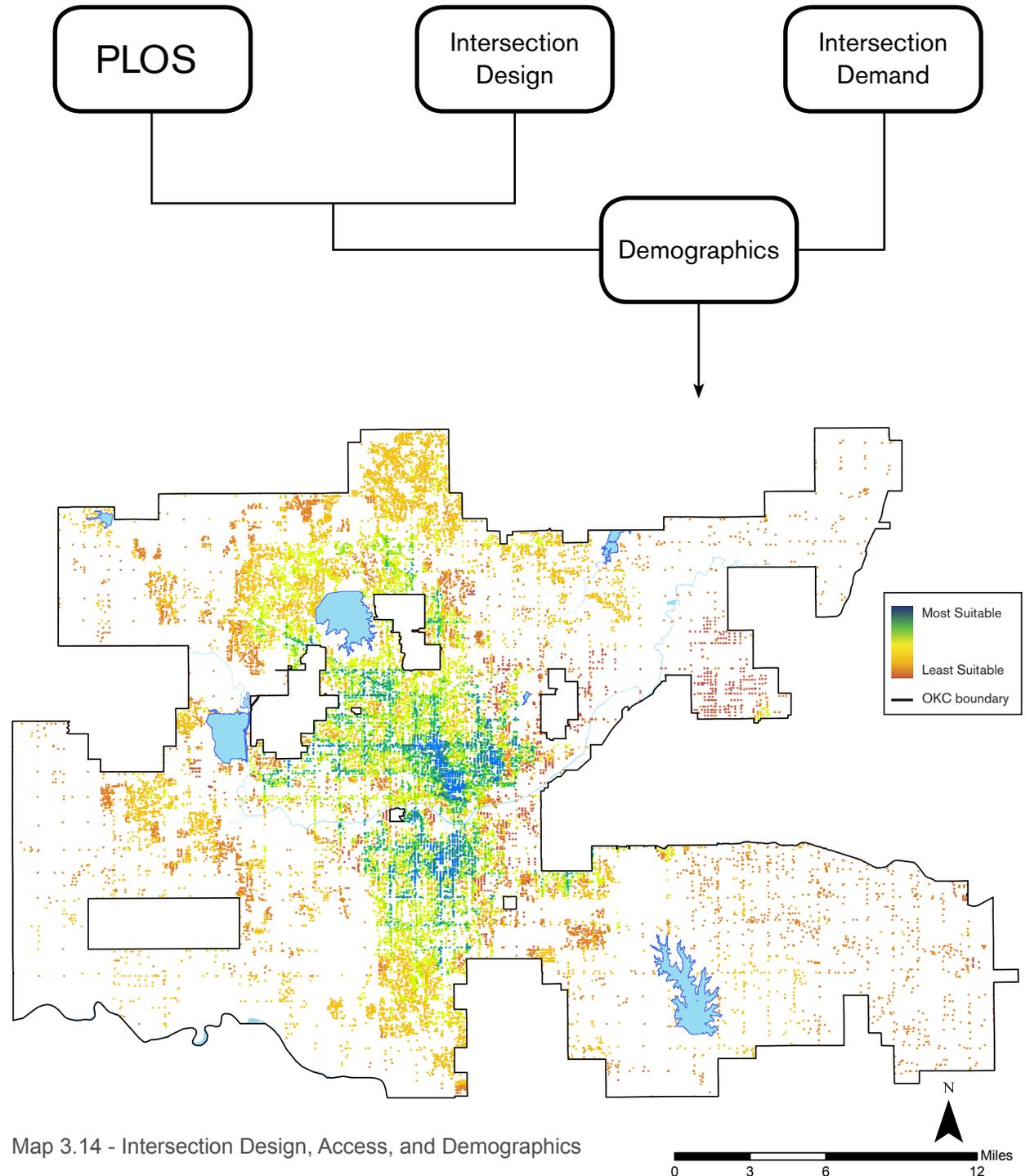
$$(2 * \text{Demand}) - ((\text{PLOS} + \text{Design}) / 2) = \text{Priority Score}$$

This means an intersection near a lot of pedestrian-generating land uses that does not have much pedestrian infrastructure is the highest priority.

The result of this equation was then balanced by Demographics to ensure an equitable distribution of improvements that focuses on the needs of the people who rely on being a pedestrian the most. These include:

1. Those without access to a motor vehicle
2. Those in poverty
3. Those with a disability
4. Historically underserved populations

All of this analysis identified hot spots across that city that led to the selection of 10 high-priority areas within which to plan improvements for the pedestrian realm. Based on these areas this plan lays out the methodology for conducting pedestrian planning. Each of these 10 areas were analyzed in detail resulting in project lists for sidewalk and intersection improvements. The bicycle and pedestrian planner should continue this planning strategy into the future for areas of the city that did not reach as high of a priority.



Map 3.14 - Intersection Design, Access, and Demographics

COLLISION ANALYSIS

One of the largest barriers to walkability is the unavoidable interaction between pedestrians and motorists on city streets. On average, more than 100 collisions between motorists and pedestrians occur each year in Oklahoma City. Ten or more of those collisions result in a pedestrian fatality (ODOT Safe-T). While many of these collisions are due to human error, a major contributor to this problem is the lack of adequate pedestrian infrastructure. Pedestrians are twice as likely to be killed on streets that lack sidewalks, and 94% of pedestrian fatalities occur on streets with speed limits of 30 mph or higher (Oklahoma Health Impact Assessment p. 118). In order to combat these preventable deaths in our community there must be sufficient pedestrian infrastructure, especially in areas that have already seen numerous tragic collisions.

Pedestrian collision data from the Safe-T database administered through ODOT and the Oklahoma Highway Safety Office, in partnership with law enforcement agencies around the state, allows for a variety of interpretations of the pedestrian collision situation in our city. For example, though pedestrian trips only account for roughly 2% of all trips made in Oklahoma City, nearly 15% of transportation-related

fatalities are pedestrians, and 28% of these collisions are hit-and-runs. These statistics are due to the lack of pedestrian infrastructure, high-speed corridors with few crossings and dim lighting, and insufficient pedestrian access to public transit, making it not only inconvenient to live in Oklahoma City without a motor vehicle, but also potentially dangerous.

Table 3.3 shows trends that demonstrate the major causes of pedestrian-vehicle collisions. Year-round, pedestrian collisions increase in the afternoon as rush hour begins. This corresponds with an overall increase in all automobile collisions; however, though motor vehicle collisions slow down as rush hour ends, pedestrian collisions continue to stay high until late in the evening. Why is this? In addition to increased traffic volume, the most dangerous thing for pedestrians is poor visibility. Pedestrian collisions are highest in hours where the sun has set or is setting. Darkness as well as sharp sun angles that impede driver visibility makes it difficult for pedestrians to be seen, reducing the likelihood that drivers will react before colliding with a pedestrian. This is particularly bad in the winter months when the combination of Daylight Saving Time, shorter days, the tendency for winter clothing to be dark colors, and sharp sun angles during commute times create a perfect storm for pedestrian collisions.

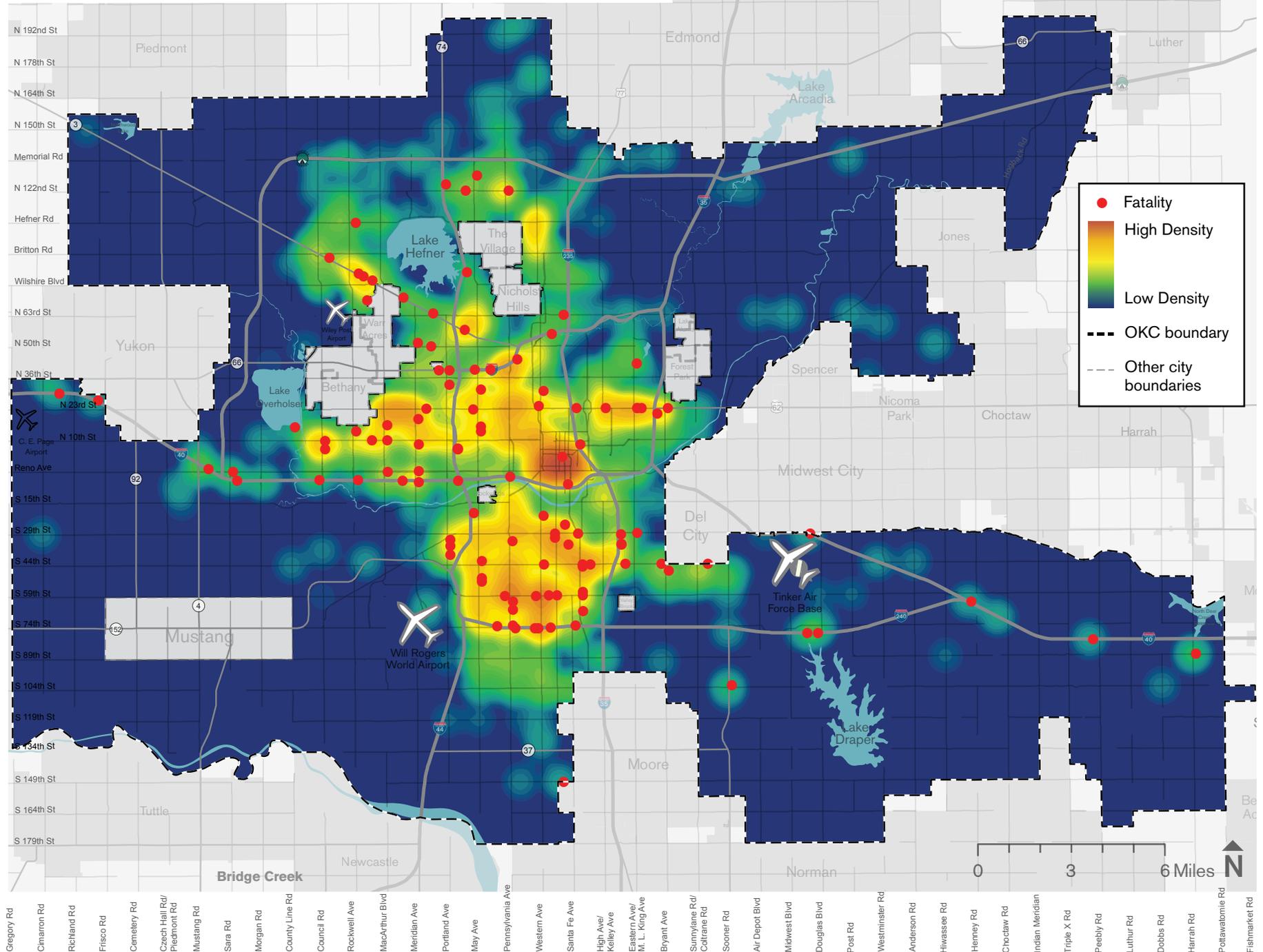
Many approaches can be taken to remedy these problems, such as an increased focus on the installation of pedestrian-scaled lighting (which will increase safety and the *perception* of safety), campaigns to educate drivers and pedestrians on the most dangerous times of year and how to prevent tragedy, and traffic-demand management strategies that decrease the congestion of rush hour during the winter months when the sun is setting. Such improvements will increase safety and economic performance, as the majority of high-collision areas correspond with the inner loop of Oklahoma City, which is home to the vast majority of commercial districts and local businesses. If these places are made more walkable, commerce will function more smoothly.

Table 3.3 - Pedestrian Collisions by Month by Hour of the Day 2003-2015

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
January	5	3	1	3	1	0	3	6	1	2	4	3	0	5	5	9	5	7	18	6	3	7	4	0
February	4	3	4	1	0	3	2	2	1	0	2	3	5	1	4	8	9	7	7	12	10	5	4	6
March	7	1	3	0	1	0	3	1	2	3	3	3	8	1	6	7	5	9	8	9	18	10	12	4
April	5	4	1	0	1	0	1	2	3	1	2	2	3	4	11	13	8	9	6	8	5	10	8	6
May	7	6	4	1	1	1	0	4	3	4	1	5	4	2	5	11	10	6	8	8	3	8	7	7
June	6	5	1	3	2	1	1	1	5	1	4	1	6	8	6	5	3	8	8	4	5	8	3	8
July	5	4	3	4	1	2	1	1	0	3	1	2	2	5	7	7	0	8	2	3	2	11	8	6
August	8	3	3	3	1	1	3	4	4	5	3	4	3	7	7	10	4	3	8	5	10	9	10	5
September	8	4	2	1	1	6	3	12	7	3	2	4	6	2	6	9	9	10	4	12	17	8	7	3
October	5	5	3	1	0	0	6	12	4	2	3	2	4	5	7	12	15	6	8	14	12	11	6	5
November	3	1	2	0	0	1	6	4	0	1	2	4	1	0	6	8	9	15	19	11	7	8	1	6
December	2	3	1	1	0	0	2	4	2	0	4	3	4	3	5	6	11	10	22	10	11	4	5	5

- Time of Sunset

MAP 3.15 PEDESTRIAN COLLISIONS (2003-2015)



Tools and Strategies

PEDESTRIAN ENVIRONMENT ASSESSMENT TOOLKIT (PEAT)

The Planning Department created a set of tools to evaluate pedestrian infrastructure at intersections and street segments between intersections. The toolkit is referred to as the Pedestrian Environment Assessment Toolkit (PEAT) for intersections and street segments.

The *intersection* tool looks at 7 elements of pedestrian infrastructure, including:

1. Street lighting
2. Sidewalk connections
3. Obstructions
4. Pedestrian signalization
5. Crosswalks
6. Traffic control devices
7. ADA-accessible curb ramps

A score is generated from the tool based on the results of the questions related to the above topics. This score allows for a comparison of intersections in an area, and the individual questions illuminate the needs at a given intersection.

The *street segment* tool evaluates 11 elements of pedestrian infrastructure, including:

1. Number of vehicular travel lanes
2. Posted speed limit
3. Traffic calming features
4. Sidewalk continuity
5. Sidewalk width
6. Sidewalk obstructions
7. Street trees
8. Curb cuts
9. Public seating
10. Litter
11. Sidewalk lighting

Similar to the intersection tool, the street segment tool generates a score based on the results of the questions in each of the eleven topics. This allows for comparative analysis of different street segments, but also serves to generate project ideas for entire streets. For example, a PEAT analysis conducted on a street for several blocks may reveal a lack of street trees, garbage cans, or lighting on that corridor. These tools help us identify multiple components to improving walkability beyond simply putting in sidewalks. Walkability includes many other elements, and in particular, the downtown area has higher requirements for sufficient pedestrian infrastructure to include all of the criteria of the PEAT.

The data gathered for the downtown area is the result of a partnership with the University of Central Oklahoma Environmental Health class, and the University of Oklahoma College of Public Health

This is the intersection of (Primary) and (Secondary).
(The street you will walk down) (The street you will cross)

1. Intersection Lighting (# of streetlights):
0-4 = 4 points, 5-6 = 3 points, 7-8 = 2 points, 9-10 = 1 point, 11+ = 0 points

2. # of Sidewalks Entering Intersection:
Up to 4 points: 1 point for A-2, 0.5 points for A-1, B-2, B-1, C-2, C-1, D-2, D-1

3. Corner is free of obstructions:
0-2 = 2 points, 3-4 = 1 point, 5-6 = 0 points

4. PEDESTRIAN SIGNALS

	is there a signal?	Push button well located?*
A to B	<input type="checkbox"/>	<input type="checkbox"/>
A to D	<input type="checkbox"/>	<input type="checkbox"/>
B to A	<input type="checkbox"/>	<input type="checkbox"/>
B to C	<input type="checkbox"/>	<input type="checkbox"/>
C to B	<input type="checkbox"/>	<input type="checkbox"/>
C to D	<input type="checkbox"/>	<input type="checkbox"/>
D to C	<input type="checkbox"/>	<input type="checkbox"/>
D to A	<input type="checkbox"/>	<input type="checkbox"/>

5. Crosswalks:
If 1, 2, 3, or 4, then 1 point; If 5, then 0 points. Multiply by 1 for Like New, 0.5 for Faded < 50%, 0.25 for Faded > 50%

CONTINENTAL	PARALLEL	PAVERS	OTHER	NONE
<input type="checkbox"/>				

A to B = **Quality:** Like New Faded < 50% Faded > 50%
B to C = **Quality:** Like New Faded < 50% Faded > 50%
C to D = **Quality:** Like New Faded < 50% Faded > 50%
D to A = **Quality:** Like New Faded < 50% Faded > 50%

6. TRAFFIC CONTROL

	Traffic Signal	Stop Sign	Yield Sign	Roundabout	None
I	<input type="checkbox"/>				
II	<input type="checkbox"/>				
III	<input type="checkbox"/>				
IV	<input type="checkbox"/>				

7. CURB RAMP

	2 Ramps	1 Ramp - corner	No ramps
A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

WALKABILITY SCORE

INPUT SCORES FOR EACH NUMBERED QUESTION: 1. _____ + 2. _____ + 3. _____ + 4. _____ + 5. _____ + 6. _____ + 7. _____ = _____

Figure 3.2 - PEAT Intersection Tool

Environmental Health class, where students broke into teams and went into the field to evaluate every intersection and street segment in the downtown area. The Core to Shore area south of Reno Ave. was excluded because a great deal of new development will be occurring over the next several years. A large percentage of that development is funded by MAPS 3 and includes the Core to Shore Park, the Convention Center and future hotel, and the Modern Streetcar maintenance facility. When development and construction activity in this area has subsided, a PEAT analysis should be conducted for this area. Another area that was not evaluated is the rail corridor between N. Broadway Ave. and N. Oklahoma Ave. There are many changes going into effect in this area with the completed railroad “quiet zone”. When those upgrades are complete, a PEAT analysis should extend to this area.

This street is (Primary) between (Street 1) and (Street 2).

1. Number of Vehicular Travel Lanes:
Points: 2 lanes = 6, 3 lanes = 5, 4 lanes = 4, 5 lanes = 3, 6+ lanes = 0

2. Posted Speed Limit:
Points: 20-29 = 3, 30-39 = 2, 40-49 = 1, 50+ = 0

3. Traffic Calming Features:
1 point for each, up to 4 points

4. Continuous Sidewalk:
Yes = 4 points, No = 0 points

5. Sidewalk Width:
-1 = 1 point, 0 = 2 points, 1 = 3 points, 2 = 4 points

6. Large Sidewalk Obstructions:
None = 4 points, Temporary = 2 points, Permanent = 0 points

7. Trees:
None = 0 points, Sporadically Lined = 2 points, Continuously Lined = 4 points

8. Curb Cuts:
-1 = 1 point, 0 = 2 points, 1 = 3 points, 2 = 4 points

9. Public Seating:
Yes = 4 points, No = 0 points

10. Litter: (collect no if there is only a little)
Yes = 0 points, No = 4 points

11. Sidewalk Lighting:
None = 0 points, Sporadically Lined = 2 points, Continuously Lined = 4 points

INPUT SCORES FOR EACH NUMBERED QUESTION: 1. _____ + 2. _____ + 3. _____ = _____
4. _____ + 5. _____ + 6. _____ + 7. _____ + 8. _____ + 9. _____ + 10. _____ + 11. _____ = _____
4. _____ + 5. _____ + 6. _____ + 7. _____ + 8. _____ + 9. _____ + 10. _____ + 11. _____ = _____

Sum of the three totals above = **WALKABILITY SCORE** / 76

Figure 3.3 - PEAT Street Segment Tool

PEDESTRIAN PRIORITY AREAS IMPROVEMENTS STRATEGY

For the 10 Pedestrian Priority Areas that were identified, improvements are recommended to be implemented in two phases. The first phase intends to improve primary streets by filling in gaps in the sidewalk network, making improvements to existing intersections, as well as finding new intersections that should be safe pedestrian crossings. The second phase then connects neighborhoods to the first phase improvements.

Costs have been limited per PPA to keep them within a reasonable range for funding, and a unit cost of \$65 per linear foot of sidewalk (in 2017 dollars) was provided by the Public Works Department. This value reflects the knowledge gained through the implementation of the MAPS 3 Sidewalk Master Plan. This unit cost reflects

an average cost for sidewalk construction; however, cost per linear foot can range from \$60 to \$75 based on constraints such as topography, utility relocation, the number of driveways along a project alignment, or the need to construct retaining walls.

Sidewalk improvements are shown on both sides of a street. Though a sidewalk on one side of the street is better than no sidewalks, it does not achieve the goal of walkability. Walkability includes the ability to safely and conveniently walk along a sidewalk and be able to cross the street to the adjacent sidewalk. With that in mind, the following plan, NW 23rd St. at N. Classen Blvd., is an example of plans that have been made for each of the 10 Pedestrian Priority Areas.

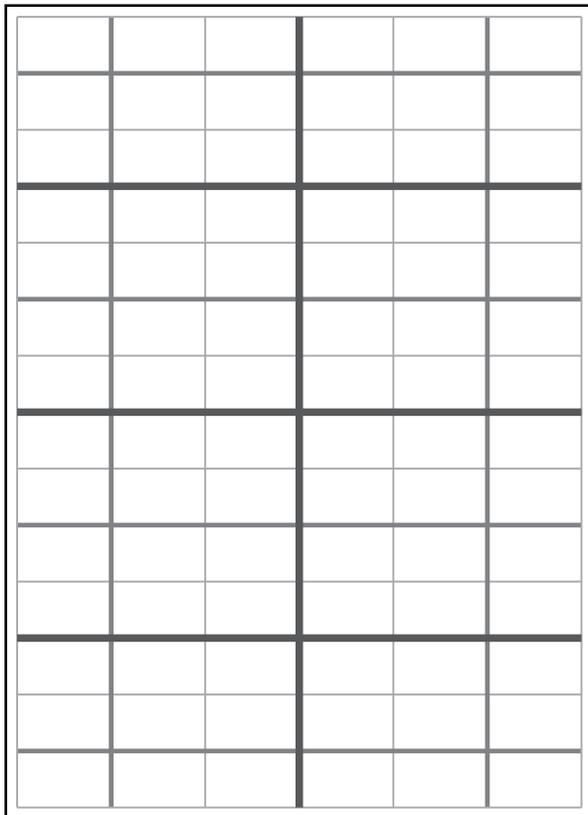
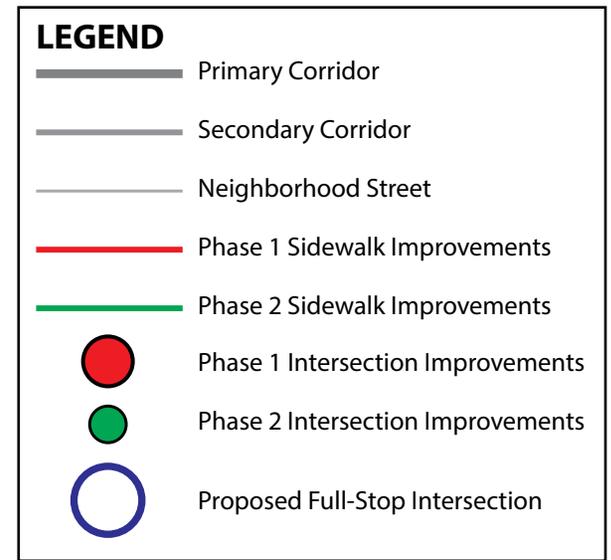


Figure 3.4 - Typical Street Grid Hierarchy

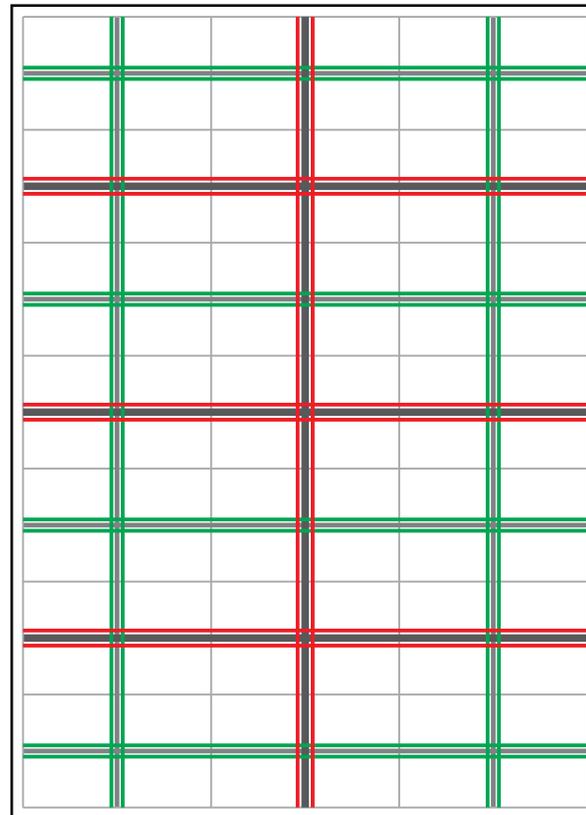


Figure 3.5 - Sidewalk Phasing Approach

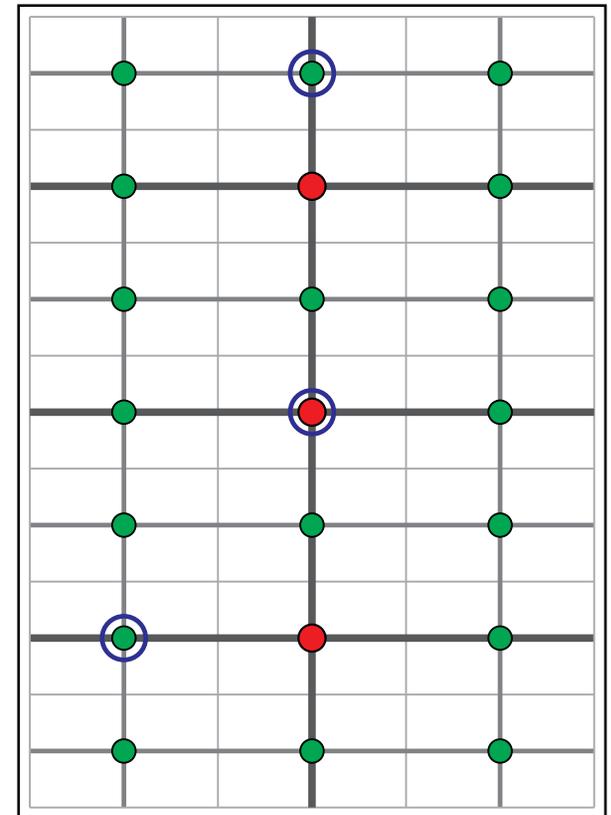
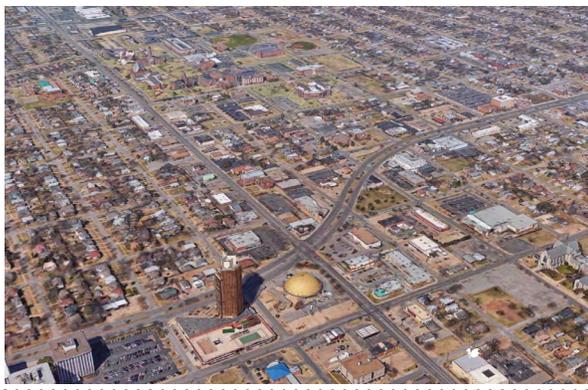


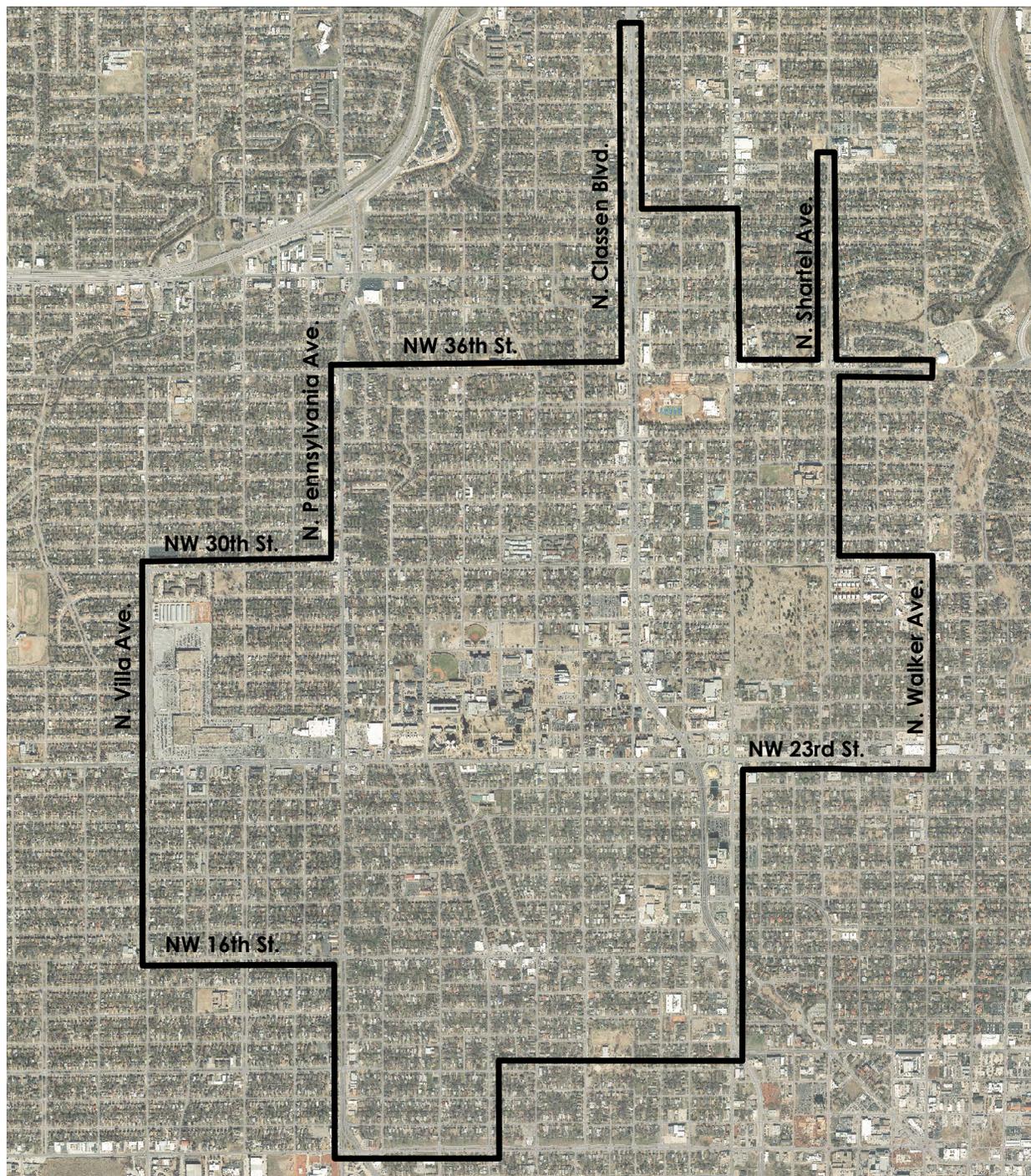
Figure 3.6 - Safe Crossings Phasing Approach

EXAMPLE PPA PLAN: NW 23rd St. at N. Classen Blvd.

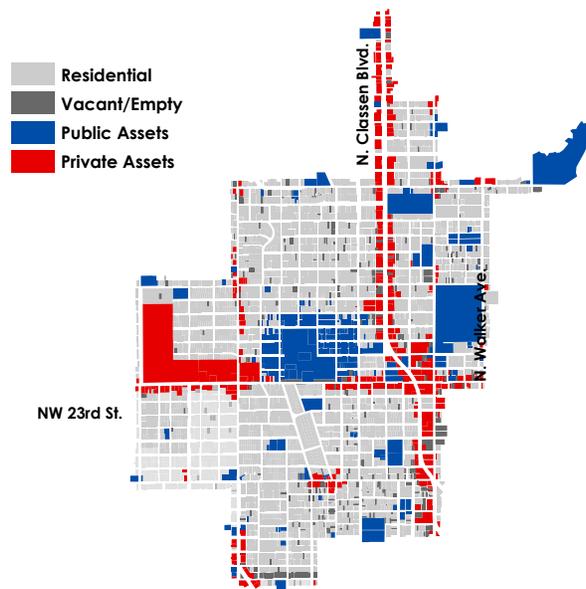
Of all the areas of the city analyzed to determine the potential for walkability, the area surrounding the intersection of NW 23rd St. and N. Classen Blvd. shows the greatest level of potential. This area includes a great number of land uses that generate pedestrian activity, but also many barriers to safety and walkability. Expanding safe convenient pedestrian access to this area provides opportunities for economic development, healthier lifestyles due to active living, and cost savings to those who live and work nearby by lowering the need to own and operate a motor vehicle to get to daily needs. Because of its close proximity to downtown and bolstered by a growing culture of the inner city toward a more urban lifestyle, this area should be a high priority for investments that will be effectively utilized and will realize numerous benefits.



Above: Aerial view of N Classen Blvd. and NW 23rd St.



Map 3.16 - NW 23rd St. at N. Classen Blvd. PPA

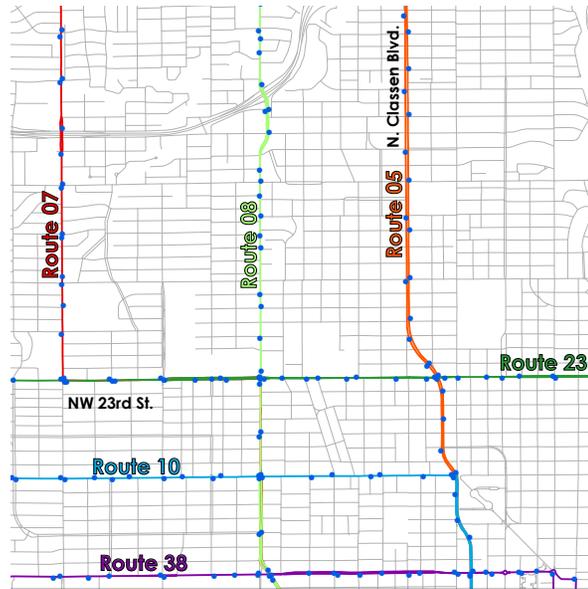


Map 3.17 - PPA Land Use

LAND USE

61.6% of the land use in this area is occupied residential, making up the largest land use type in the PPA. Public assets (education, government, recreation, churches, etc.) make up 18.5% of the land uses in this area - most of which are located in the OCU campus, Fairlawn Cemetery, and the large Trinity School property on NW 36th St. Private assets (retail, commercial, office, mixed use, etc.) make up 14.7% of the land uses in this PPA. These assets are primarily located along the N. Classen Blvd. corridor and the NW 23rd St. corridor. The Shepherd Mall parcel, though split between public and private assets, is quite large, and is out of scale with the rest of the private assets in the PPA. Only 5.2% of land is vacant or empty in this PPA. The Classen-Ten-Penn neighborhood has the highest density of vacant land.

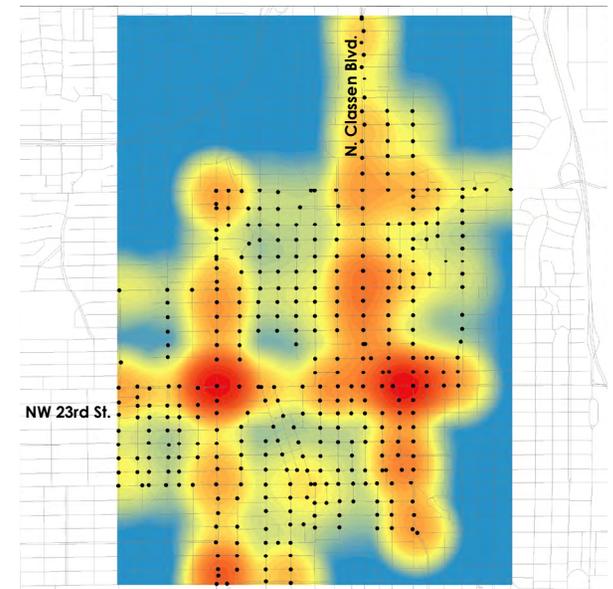
Considering the density of pedestrian-generating land uses that flank both sides of N. Classen Blvd. and NW 23rd St., ensuring safe crossing of the street and closing the gaps between existing crossings is of the utmost importance in order to create a walkable environment.



Map 3.18 - PPA Transit Routes

TRANSIT

Six transit routes traverse this area: Routes 5, 7, 8, 10, 23, and 38. These routes are aligned with N. Classen Blvd., N. Pennsylvania Ave., NW 10th St., and NW 16th St. Along these routes are 83 separate bus stops, evenly distributed along the primary roads. The stops with the highest rates of bus riders either boarding or alighting are located at the intersection of NW 23rd St. and N. Classen Blvd. as well as the intersection of NW 23rd St. and N. Pennsylvania Ave. Routes 5 and 23 have the highest ridership in the entire transit system, making this PPA one of the busiest transit regions in the city. This highlights the importance of filling in the gaps in the sidewalk network and increasing safety and accessibility with regard to crossing the major streets in the area.



Map 3.19 - PPA Collision Analysis

COLLISIONS

The intersection of NW 23rd St. and N. Classen Blvd., as well as the intersection of NW 23rd St. and N. Pennsylvania Ave. have the highest rates and most dangerous instances of motor vehicle collisions, making it essential to consider their design for the sake of pedestrians. The intersection of NW 10th St. at N. Pennsylvania Ave. is also a hot spot with regard to the number and severity of collisions. The arterial corridors of N. Classen Blvd., N. Pennsylvania Ave., and NW 23rd St. all present challenges to safety for pedestrians, cyclists, and drivers alike.

Between the years of 2003 and 2015, reports indicate that 71 pedestrians and 42 cyclists were struck by motor vehicles. Only one pedestrian fatality occurred during the same time period, though severe injury was common. 10 of the 71 pedestrian collisions occurred at the intersection of NW 23rd St. and N. Pennsylvania Ave., which is widely known to be a dangerous intersection.

PROPOSED SIDEWALKS

Of primary concern in this PPA is filling in gaps in the sidewalk network on primary streets: NW 23rd St., N. Classen Blvd., NW 36th St., and N. Pennsylvania Ave. Additionally, connecting key resources, such as the Asian District, the Plaza District, OCU, Memorial Park, the Western Avenue district, and the Uptown 23rd district, is a high priority. These phase 1 improvements have the added benefit of completing the sidewalk network along transit corridors, making transit a more viable option, and expanding accessibility for those with disabilities.

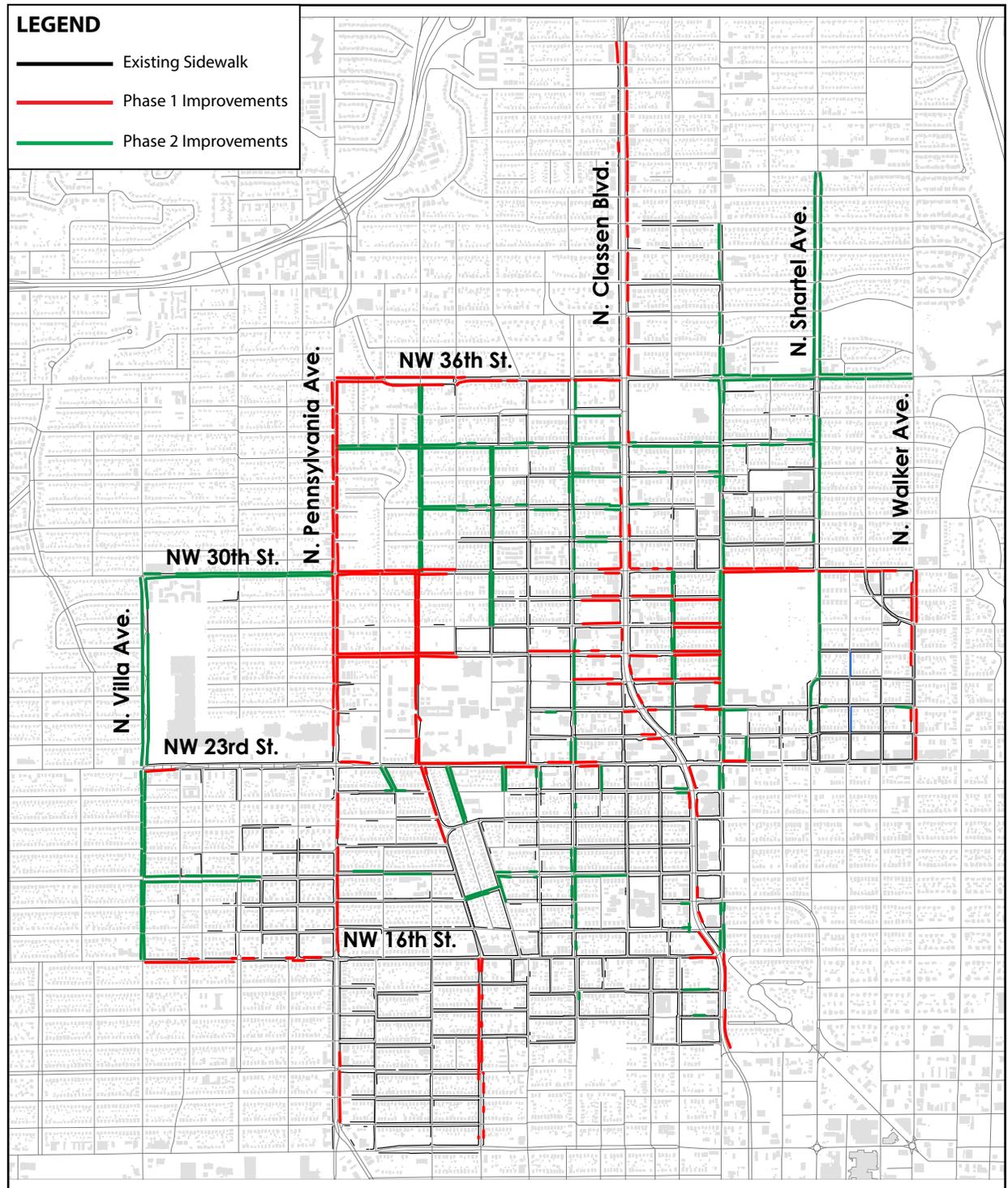
The phase 2 sidewalks continue this trend, adding sidewalks along N. Villa Ave., N. Western Ave., and N. Shartel Ave., as well as creating a grid where most homes are no more than a block away from the sidewalk network. Phase 2 also facilitates access to the primary corridors.

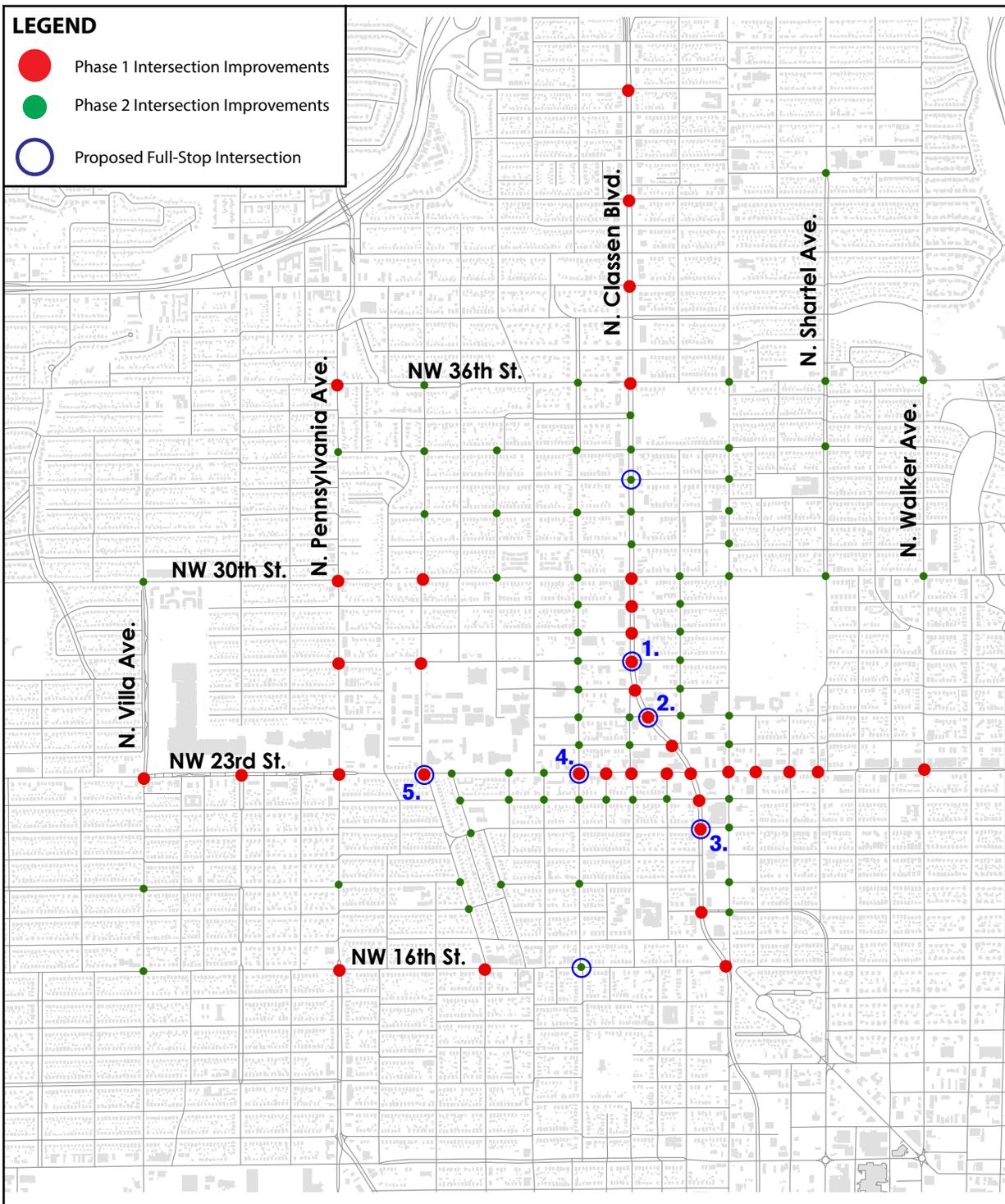
39% of the streets in this PPA have existing sidewalks. If phase 1 is implemented, 49% of the streets will have sidewalks. Phase 2 implementation would lead to 62% of the streets having sidewalks.

Map 3.20 (right) - N Classen Blvd. and NW 23rd St. PPA Proposed Sidewalks

Map 3.21 (opposite) - N Classen Blvd. and NW 23rd St. PPA Intersection Improvements

Phase	Length
Existing	57.7 mi
1	11.2 mi
2	15.1 mi





PROPOSED INTERSECTION IMPROVEMENTS

This plan calls for 31 intersections to be improved (addition of pedestrian infrastructure elements) as a part of Phase 1 improvements, including 5 new full-stop intersections. Phase 2 calls for an additional 66 intersections to be improved, with an additional 2 full-stop intersections. Phase 1 full-stop improvements are as follows:

North Classen Boulevard

1. NW 27th St. - This location is one of two proposed full-stop intersections in the Asian District. This street flanks the north side of Oklahoma City University and already has some of the best streetscaping and crosswalks in the city.
2. NW 25th St. - This location is one of two proposed full-stop intersections in the Asian District. This street flanks the south side of Fairlawn Cemetery, as well as Military Park, which has recently been completely rebuilt. This stop, in conjunction with the stop at NW 27th St., will allow for full realization of the investments made to pedestrian infrastructure in the Asian District.
3. NW 21st St. - This location reduces the gap between safe pedestrian crossings from 5 blocks to 3, and delineates the southern end of the district.

Northwest 23rd Street

4. N. McKinley Ave. - This location aligns with the eastern boundary of OCU, reduces distance between safe pedestrian crossings, and aligns with a bicycle project identified in the bike plan.
5. N. Kentucky Ave. - This location provides a full-stop intersection on the west boundary of OCU, increasing walkability for students and residents.

Downtown Assessment

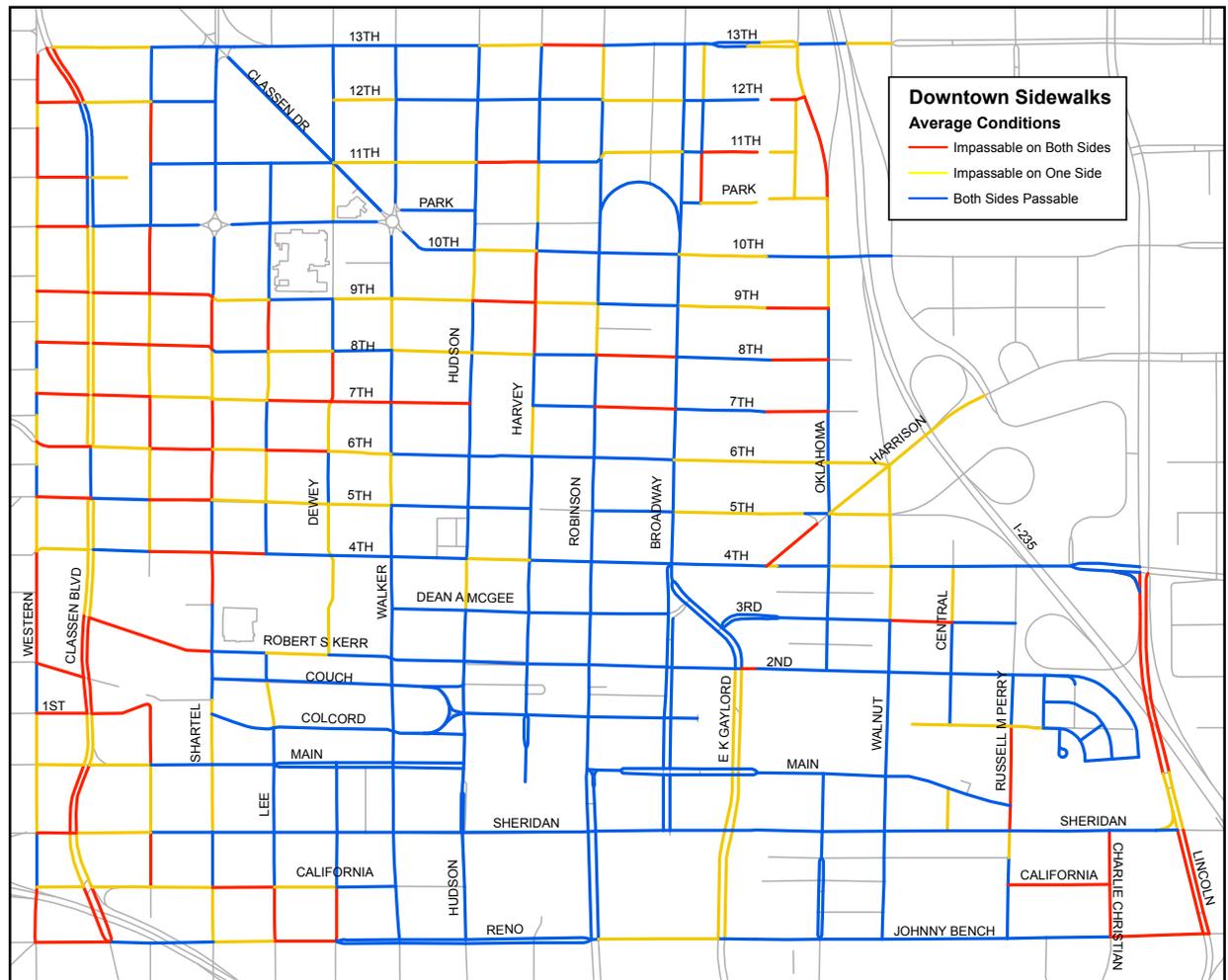
Downtown, being the center of commerce and visitation, and having the highest level of residential density, demands the highest possible level of walkability in order to be successful.

Several efforts have begun to address the urban form of the downtown area, including Project 180, which has converted streets from 4-lane one-ways to two-way streets with improved pedestrian spaces. In order to capitalize on the improvements that have been made over the last decade, it is important to understand what areas of the downtown are in particular need of improvement, as well as to know what steps need to be taken to raise the whole area to the level of walkability afforded to pedestrians in the Project 180 area.

The downtown area is made up of several smaller districts including:

- Central Business District;
- Midtown;
- Automobile Alley;
- Bricktown;
- Deep Deuce;
- Film Row;
- SOSA;
- Core to Shore; and
- all of the spaces between these districts.

Closing gaps in the sidewalk network, both in terms of existing infrastructure and the quality thereof, will help create a walkable community where residents and visitors can choose to walk between these districts rather than drive. Additionally, ensuring that the downtown streetcar has a surrounding pedestrian network that is complete, accessible, and inviting is essential for the success of that system.



Map 3.22 - Downtown Sidewalk Accessibility

ACCESSIBILITY STUDY

The first step of the downtown assessment was to evaluate all street segments in the downtown area, looking at both sides of the street to evaluate the quality of the pedestrian realm. The first pass evaluated whether the existing pedestrian facilities were continuous and provided accessibility to those with disabilities.

Map 3.21 shows the results of this evaluation.

This process reveals deficiencies in the downtown pedestrian realm, particularly in the western half, between N. Shartel Ave. and N. Western Ave. Not all areas of the downtown need to be at the same high level of pedestrian infrastructure, but at a minimum ADA-compliant sidewalks should be located throughout so that downtown is usable by everyone. This map in conjunction with detailed site investigation can be used to generate pedestrian improvement projects for the entirety of downtown.

PEAT ASSESSMENT DOWNTOWN INTERSECTIONS

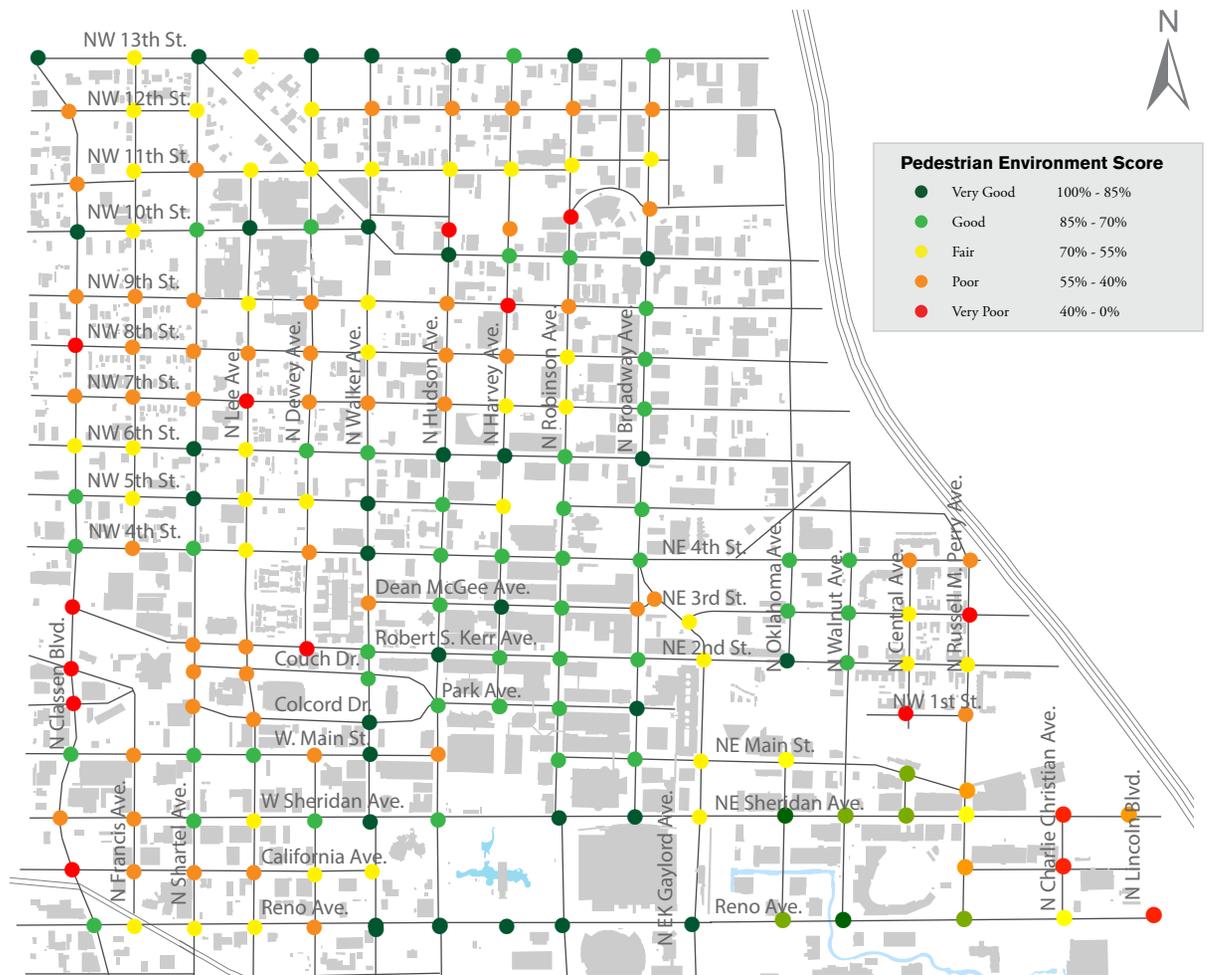
This map shows the downtown intersections surveyed using the PEAT assessment tool. Average conditions are symbolized according to the total score of each intersection, ranging from “very poor” to “very good.” Deficiencies can be seen in several areas between N Shartel Ave. and N Classen Blvd., as well as in Midtown between NW 10th St. and NW 13th St. and between NW 6th St. and NW 10th St.

The most satisfactory intersection conditions exist within the Central Business District and the area around the Myriad Gardens, spanning primarily from Reno Ave. to NW 6th St. and from Walker Ave. to Broadway Ave. This is due to Project 180’s major investment to improve walkability in the downtown area.

Downtown intersection improvements, especially those along the N. Classen Blvd. corridor, are recommended to be prioritized for funding through the 2017 General Obligation Bond. The work that has been completed at the intersections of NW 4th St., NW 5th St., and NW 6th St., where they intersect with N. Classen Blvd. are good examples of how intersections along the corridor should be designed. However, even with all of these capital improvements, crossing N. Classen Blvd. at these locations is still dangerous because of traffic making turns through the crosswalk during the pedestrian signal phase. Creating a separate pedestrian phase that is activated by pedestrians when they push the pedestrian signal button would ensure that pedestrians are safe when crossing this high speed, high volume major arterial.

Meeting the basic needs of pedestrians will lead to a more functional downtown; however, context must be considered in addition to the individual infrastructural elements of the downtown intersections.

Right: Example crosswalk styles on downtown intersections.



Map 3.24 - Downtown PEAT Intersection Assessment



PEAT ASSESSMENT DOWNTOWN SEGMENTS

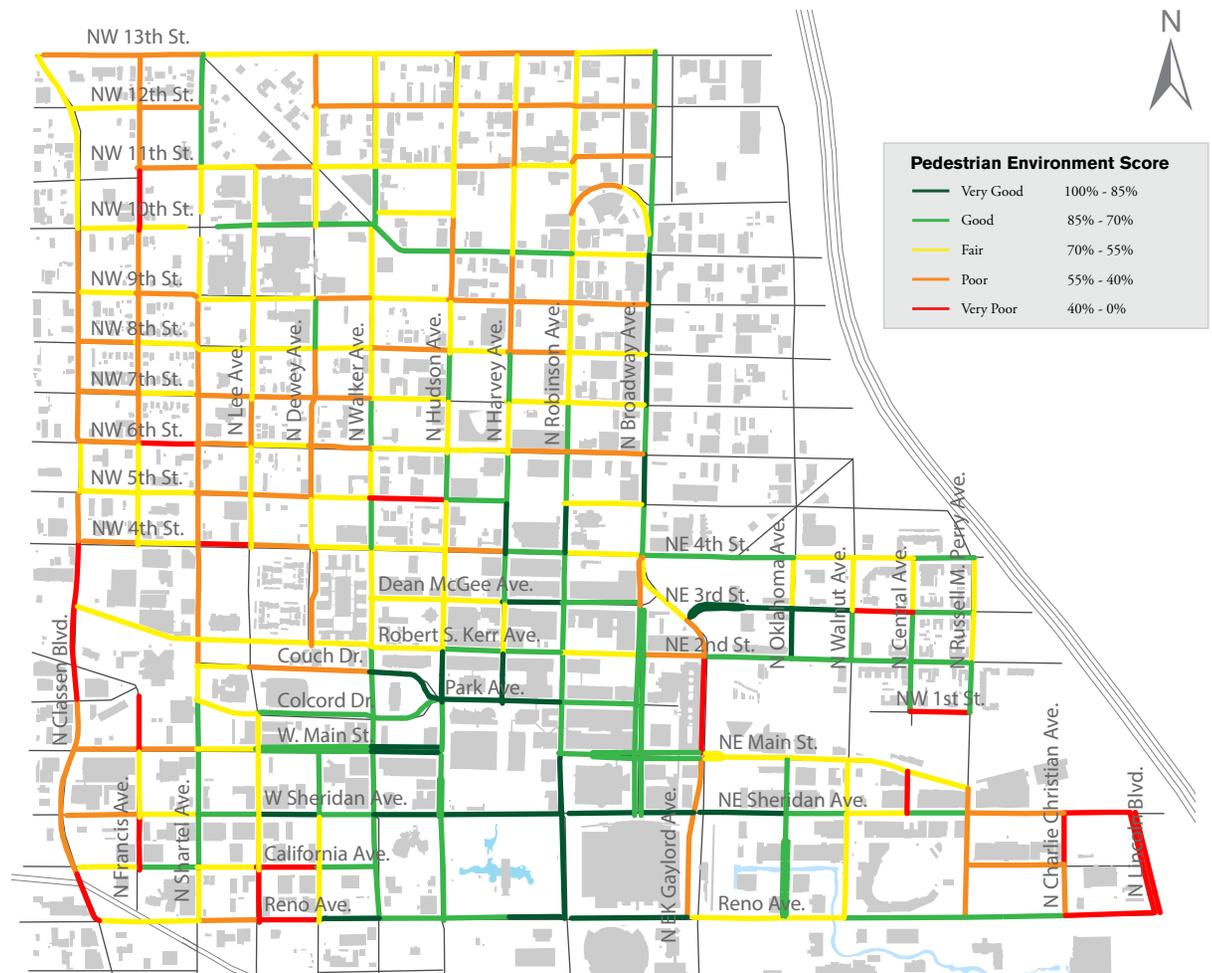
This map shows the street segments of downtown rated using the PEAT process in a similar way to the intersections on the previous page. Here we see similar trends:

N. Classen Blvd. and the western half of the downtown area score lower than the Central Business District, Deep Deuce, and West Bricktown.

NW 4th St., NW 5th St., NW 6th St., NW 7th St., NW 8th St., and NW 9th St. all score poorly, creating a gulf between the Downtown and Midtown areas.

Reno Ave. is inconsistent in its pedestrian environment, with N. Lee Ave. being a divider between segments that score “Very Good” and “Very Bad”. This distinction is obvious when traveling through this intersection, and makes the downtown appear disjointed or incomplete.

N. EK Gaylord Blvd. is anomolous in the Central Business District/West Bricktown area, as it scores “Poor” and “Very Poor”, creating a potential hazard to pedestrians passing back and forth between the two areas. Notably, there are far fewer places to visit on N. EK Gaylord when compared to the other streets in this area.



Map 3.25 - Downtown PEAT Sidewalk Segment Assessment

.....
Finally, in their quest to become more sustainable, cities need to remember that, for the typical pedestrian, the most mundane storefront is still more interesting than the most luxuriant landscape.
 - Jeff Speck, “Walkable City: How Downtown Can Save America, One Step at a Time



Transit Access Example

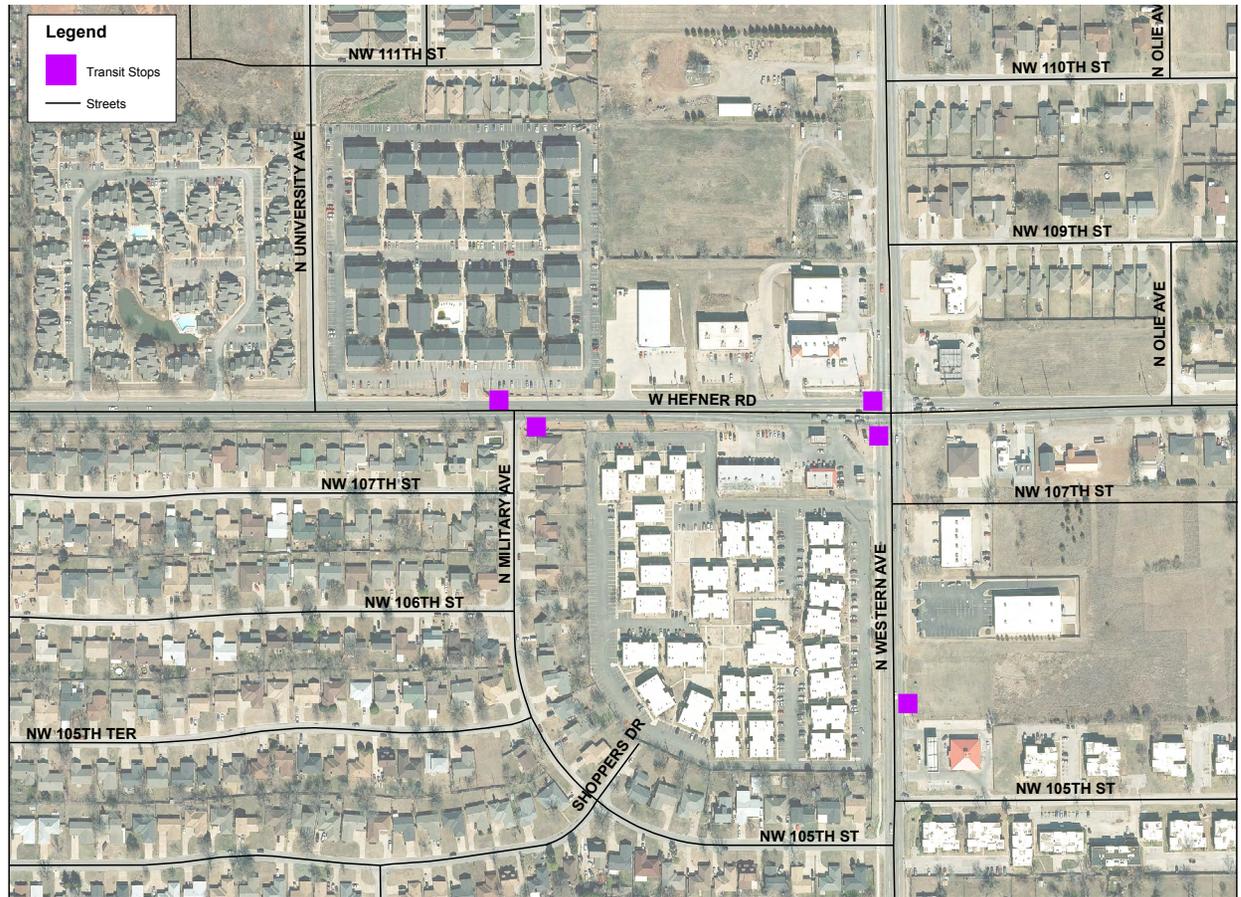
N WESTERN AVE. & NW HEFNER RD.

A hot spot of transit activity exists at the intersection of N. Western Ave. and W. Hefner Rd. Six transit stops service more than 150 transit boardings and alightings per day.

Four large apartment complexes are within close proximity to the intersection, while retail, commercial, and office uses inhabit the lots surrounding the intersection of N. Western Ave. and W. Hefner Rd. The four apartment complexes house 715 residential units and thousands of residents. Presently few sidewalks are in the area; however, a MAPS 3 sidewalk is constructed on the west side of N. Western Ave. south of the intersection with W. Hefner Rd., and three businesses have sidewalks along their street frontage.

Presently, a great deal of undeveloped land is in close proximity to the intersection, though new developments have occurred within recent years. Improving access to these sites could stimulate development, providing goods and services to the local residents, and generating sales tax revenue for City services.

By filling in the gaps in the sidewalk network, not only would the numerous residents in this area be better and more safely connected to the EMBARK transit system, but they would also have increased access to useful retail establishments like the grocery store, daycare, salon, and restaurants that surround the intersection of N. Western Ave. and W. Hefner Rd.



Map 3.26 - N. Western Ave. at W. Hefner Rd. - Transit Stops

Improvement Strategy

For those transit stops not inside the boundary of this PPA, the suggested approach is to plan for one mile of sidewalk improvements around the stops. If stops are located at an intersection without existing sidewalks in any direction, the approach would be to apply sidewalks equally in each direction, or to the nearest logical terminus, on both sides of the street, around 1/8th of a mile in each direction (see Figure 3.6).

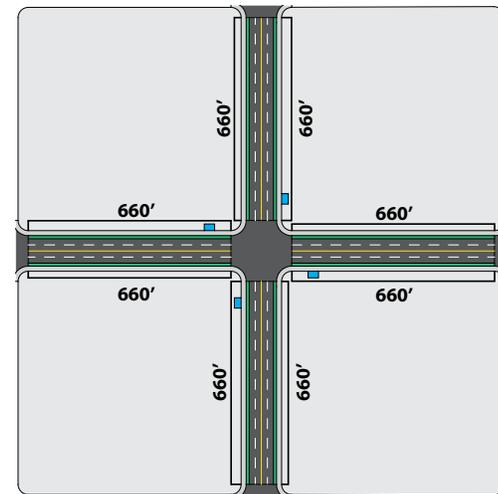


Figure 3.6 - Sidewalks connecting to bus stop

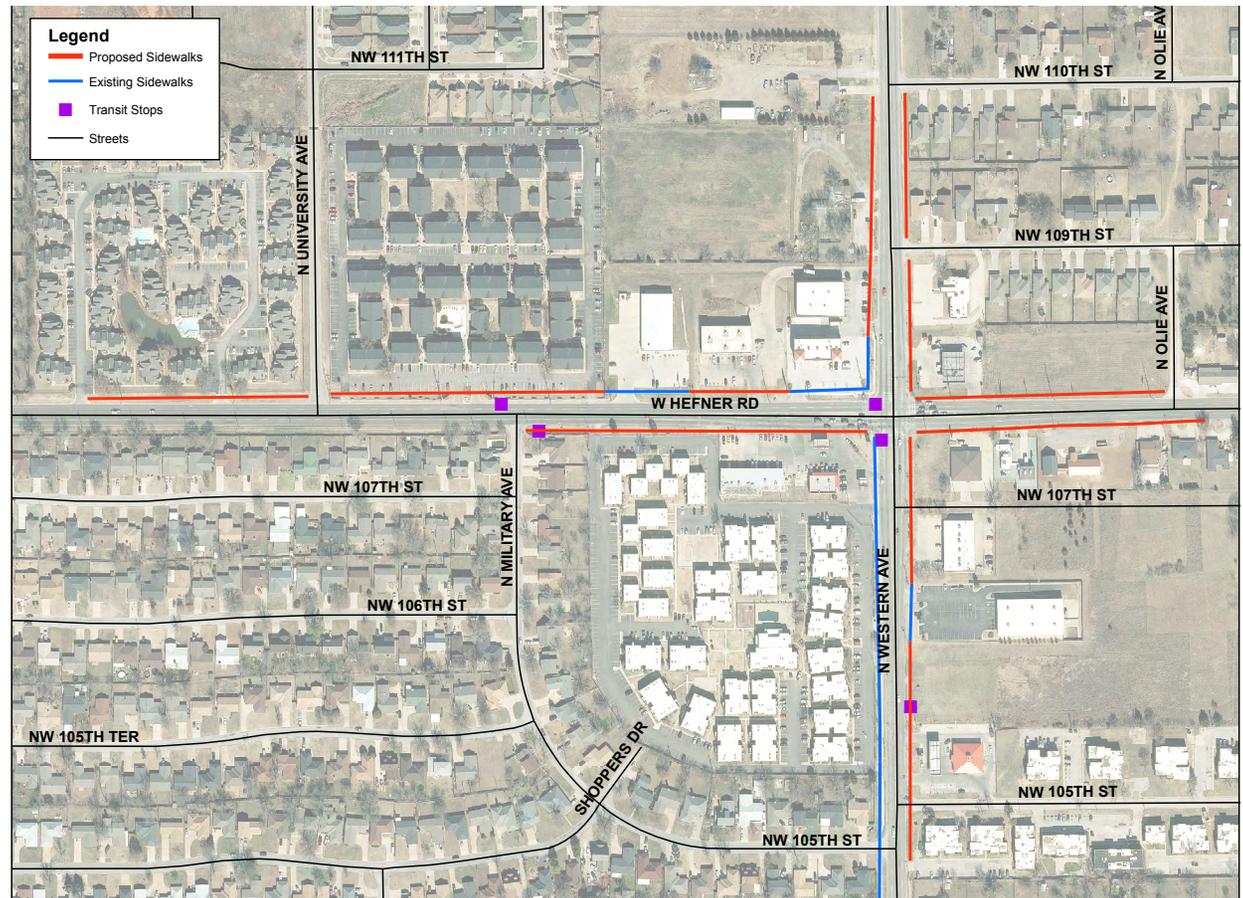


RECOMMENDATIONS

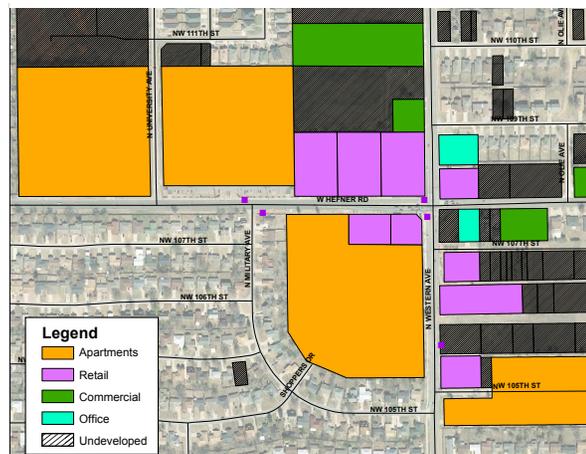
Based on the finding in the site investigation, the following recommendations will lead to a more walkable environment for transit riders in and around the intersection of N. Western Ave. and W. Hefner Rd. (see Map 3.26).

1. Connecting the two apartment complexes on the north side of W. Hefner Rd. to the intersection by filling in the gaps in the sidewalks will increase safety for and accessibility.
2. Adding sidewalks along N. Western Ave. north of the intersection with W. Hefner Rd. will provide a safer connection to the transit stops in the area for the single-family neighborhoods to the northwest.
3. Adding sidewalks along W. Hefner Rd. east of the intersection will connect the existing retail, commercial, and office land uses. Additionally, it could stimulate the development of the undeveloped parcels along this stretch of road.
4. Completing the sidewalk network on N. Western Ave. south of the intersection will connect another apartment complex, and will capitalize on the improvements completed during the MAPS 3 sidewalk project.
5. Safe crossings for transit users should be introduced in two locations.
 - a. The intersection of N. Military Ave. with W. Hefner Rd.
 - b. The intersection of NW 105th St. and N. Western Ave.

By making these changes thousands of local residents will be better connected to their surrounding land uses, as well as the Embark transit system, which will facilitate non-motorized travel across the city (Map 3.27).



Map 3.27 - Sidewalk Plan for N. Western Ave. at W. Hefner Rd.



Map 3.27 - Parcels Within a 1/4-mile Walk

Equal access to public transportation is as important to the U.S. economy as equal access to public education.
 - Association of Pedestrian and Bicycle Professionals

School Access Example

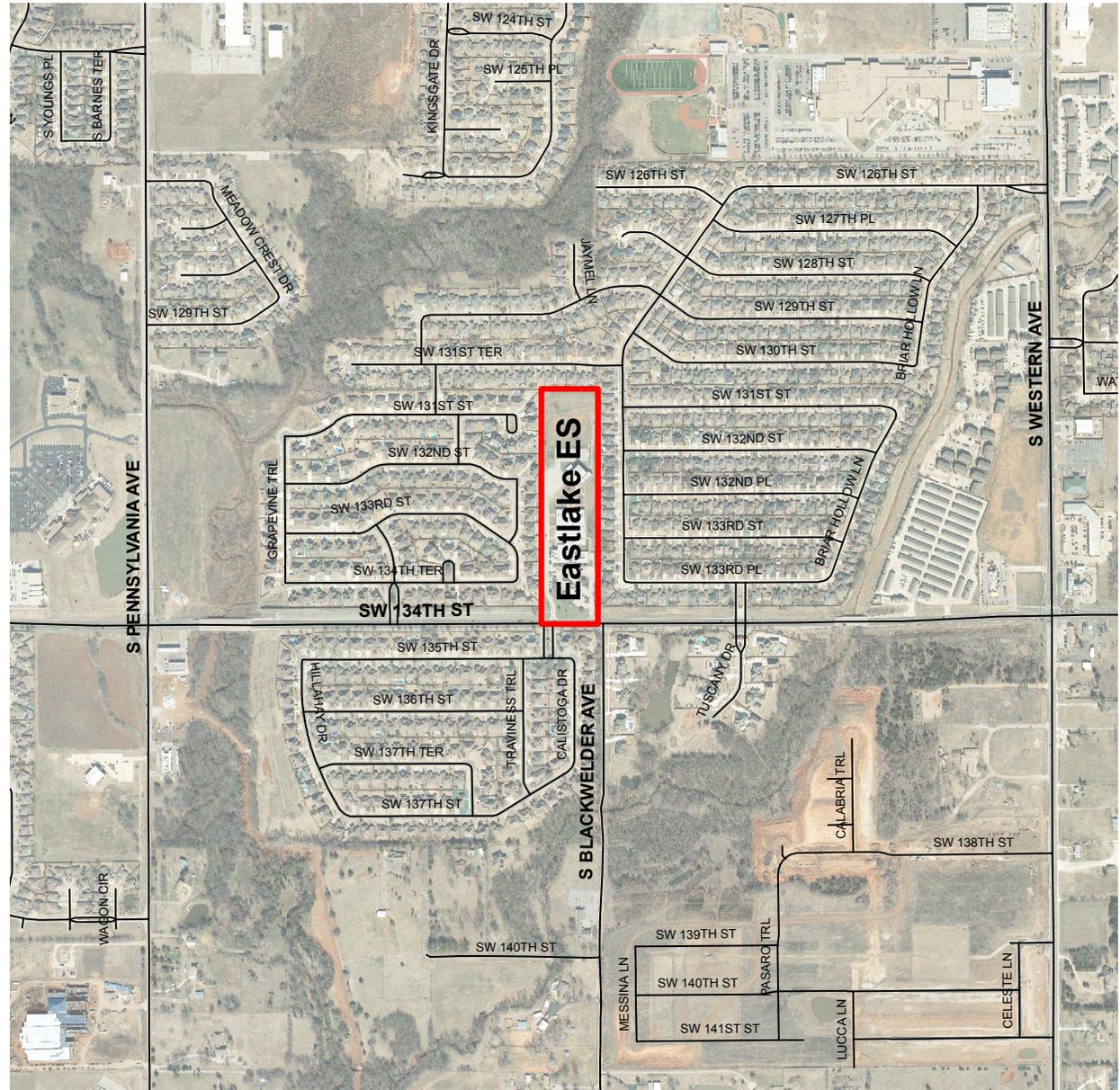
EASTLAKE ES

Eastlake Elementary School is located at 1301 SW 134th St in far south Oklahoma City. It is situated halfway between S. Pennsylvania Ave. and S. Western Ave. on the north side of SW 134th St., surrounded by single-family residential subdivisions, some of which are located across SW 134th St. (see Map 3.28). The site investigation resulted in the following findings:

1. No sidewalk connections exist on SW 134th St. from the surrounding neighborhoods.
2. All of the subdivisions that surround the school have fully built sidewalk networks as required by ordinance; however, these networks are not connected to each other or any surrounding land uses as the sidewalks stop abruptly at the neighborhood entry points.
3. Eastlake Elementary School has two pedestrian access points:
 - a. A cut-through on the west side of the school between two single-family homes; and
 - b. A cut-through on the northeast corner of the school between two single-family homes.
4. The subdivision entrances on the north side of SW 134th St. are each located 800' or more from the school entrance, which could cause many children to have to exit the subdivision in order to get to SW 134th St. to access the school.
5. The subdivision across from the school entrance on Calistoga Dr. does not have a safe crossing for children who attend Eastlake Elementary to walk to school.

A community can be a good community to raise a child, but is it also a good community [in which] to be a child?

- Brian Williams, 1994



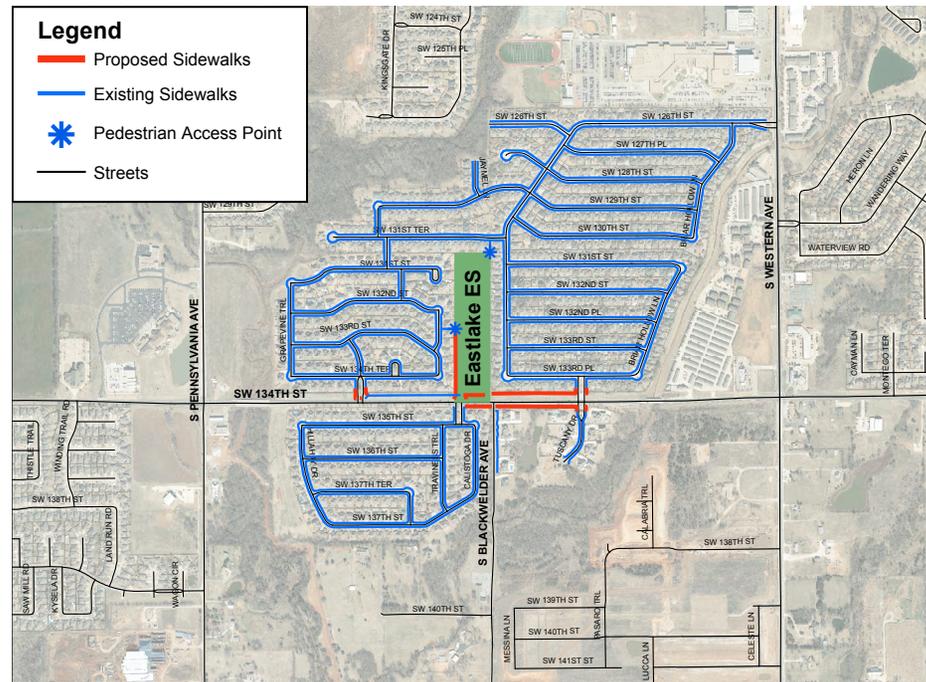
Map 3.28 - Eastlake ES Aerial

RECOMMENDATIONS

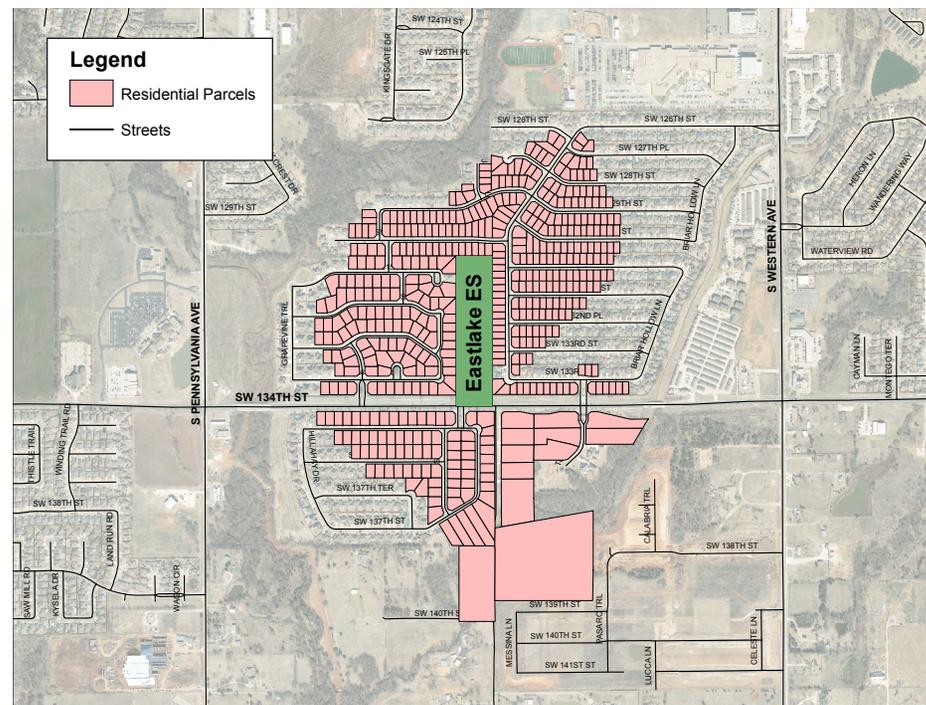
Based on these findings, the following recommendations will lead to a more walkable environment for people attempting to access Eastlake Elementary School (see Map 3.29).

1. Due to the distance between the neighborhood entrances on the north side of SW 134th St. and Eastlake Elementary, in conjunction with the two pedestrian access points to the school, adding sidewalks on SW 134th does not provide a significant increase in the number of homes within a ¼-mile walk on a sidewalk. However, adding sidewalks on SW 134th St. between Vintage Farms Rd. and Briar Hollow Dr. adds clarity for pedestrians in the neighborhoods that may not be aware of the somewhat hidden cut-throughs to the elementary school.
2. A traffic signal, crosswalks, and other pedestrian improvements could be introduced at the school entrance. This will allow for safe crossings for children from the subdivision across SW 134th St. to the school. These improvements will also make it safer for parents and teachers who are driving to and from the school, who may be at risk of collision because of a lack of dedicated phasing to turn left or right onto SW 134th St.

By making these changes, an entire neighborhood will gain safe pedestrian access to Eastlake Elementary School, as well as two smaller subdivisions, totaling more than 150 homes (Map 3.30).



Map 3.29 - Sidewalk Plan for Eastlake ES



Map 3.30 - Parcels Within a 1/4-mile Walk

Park Access Example

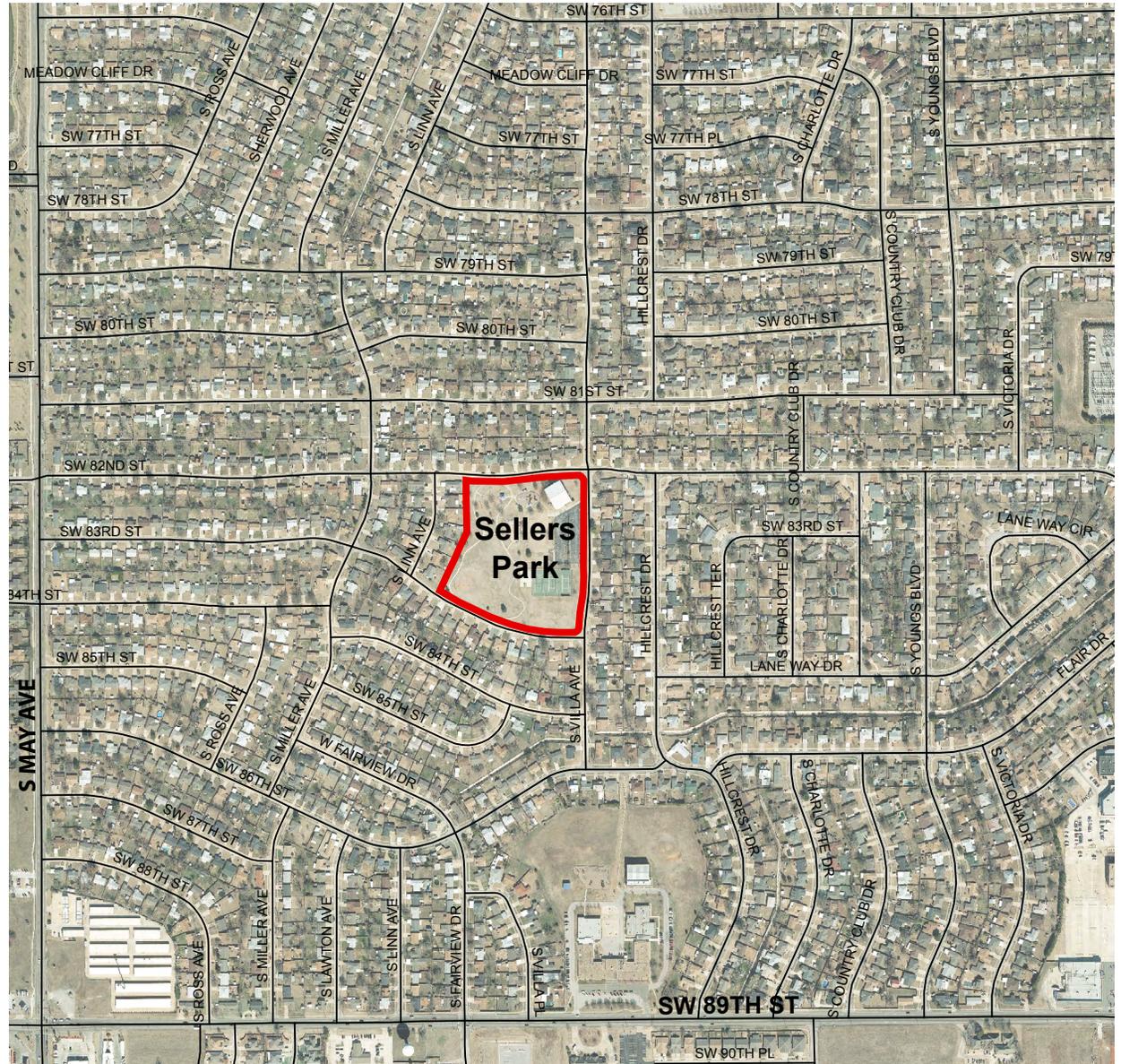
SELLERS PARK

Sellers Park is an example of a park that needs pedestrian improvements to connect neighborhoods to the park. Sellers Park is on the south side of Oklahoma City, at the corner of S. Villa Ave. and SW 82nd St. The park is surrounded by single-family residential and is near Fairview Elementary School. The investigation of the site resulted in the following findings:

1. No sidewalks exist on the perimeter of the park, nor are there sidewalks across the street of the roads that flank the park.
2. The residential areas south and east of the park have ample sidewalks.
3. An opportunity exists to connect large numbers of residential parcels with a minimal amount of sidewalks connecting to nearby existing sidewalks that lead to the park.
4. Residential areas to the north and west of the park do not have existing sidewalks, meaning that improvements to the sidewalk network will require a complete build-out.

Just as water, sewer, and public safety are considered essential public services, parks are vitally important to establishing and maintaining the quality of life in a community, ensuring the health of families and youth, and contributing to the economic and environmental well-being of a community.

- NRPA, Why Parks and Recreation are Essential Services, 2010



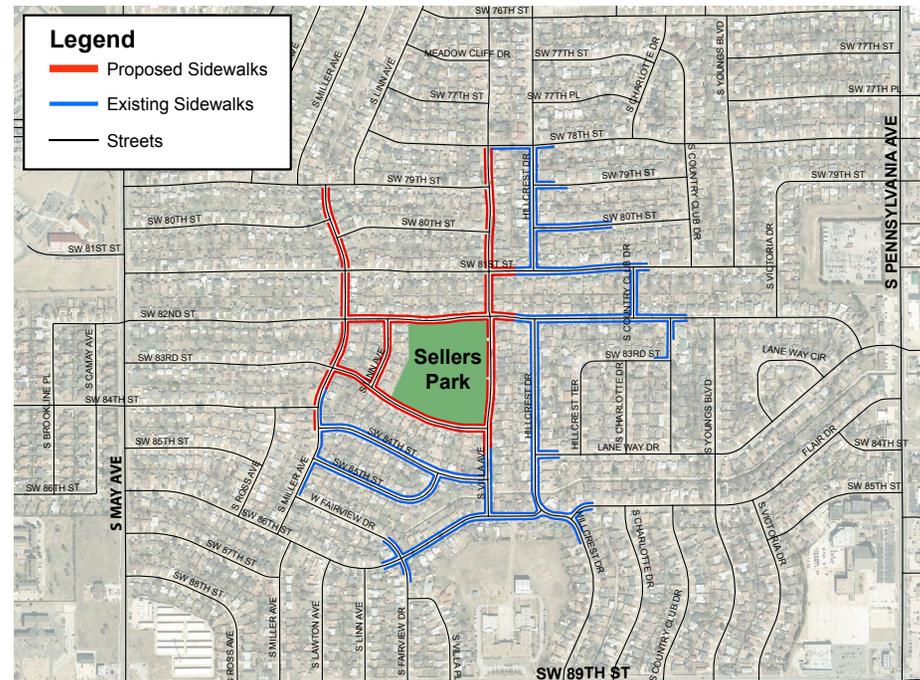
Map 3.31 - Selllers Park Aerial

RECOMMENDATIONS

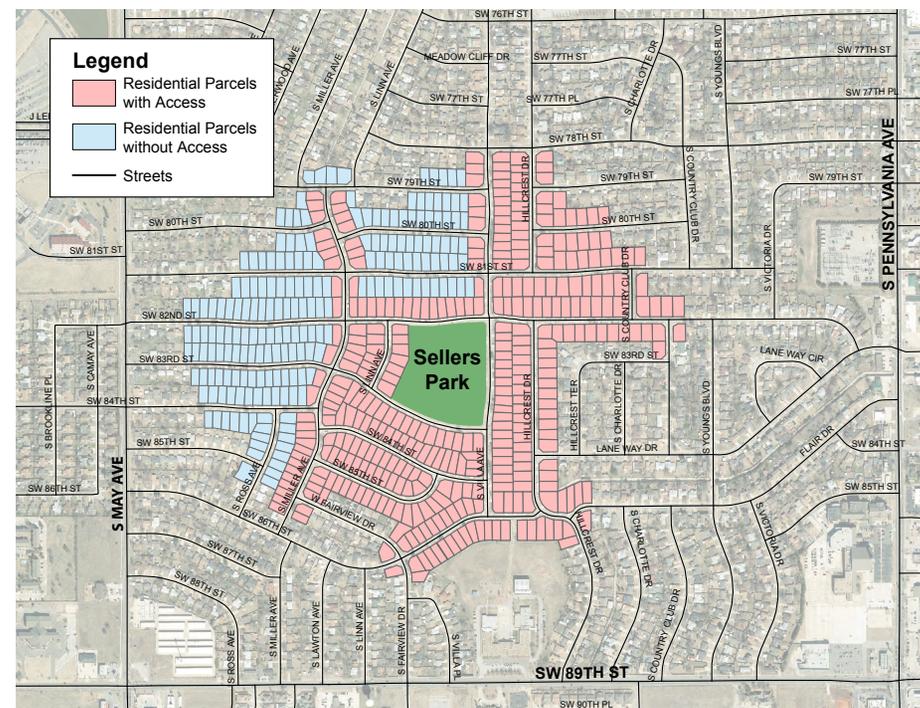
Based on these findings, the following recommendations will lead to a more walkable neighborhood that has a significant increase in the number of homes with sidewalk access to Sellers Park (see Map 3.32):

1. Construct new sidewalks on S. Villa Ave. at the southeast corner of the park to connect with the existing sidewalks on S. Villa Ave. between SW 83rd St. and SW 84th St.
2. Construct new sidewalks on SW 82nd St. at the northeast corner of the park to connect with the existing sidewalks on SW 82nd St. between S. Villa Ave. and N. Hillcrest Ave.
3. Add sidewalks on both sides of the road on S. Villa Ave. from SW 78th St. and SW 83rd St. and ensure accessibility to the east side of Sellers Park.
4. Add sidewalks on both sides of the road on S. Miller Ave. from SW 79th St. and SW 84th St. to connect to existing sidewalks to the south.
5. Add sidewalks on both sides of the road on SW 82nd St. between S. Miller Ave. and S. Villa Ave. and ensure accessibility to the north side of Sellers Park.
6. Add sidewalks on both sides of the road on SW 83rd St. between S. Miller Ave. and S. Villa Ave. and ensure accessibility to the south side of Sellers Park.
7. Add sidewalks on both sides of the road on S. Linn Ave. from SW 82nd St. and SW 83rd St.

By making these improvements to the neighborhood that surrounds Sellers Park, the number of homes with direct sidewalk access will increase from zero to 362 homes, and will serve 65% of homes within a ¼-mile trip of the park. Map 3.33 shows that after improvements are installed, the parcels in pink will have a less than 5-minute walk to the park with direct sidewalk access to and from their homes. Those in blue will not have direct sidewalk access.



Map 3.32 - Sidewalk Plan for Sellers Park



Map 3.33 - Parcels Within a 1/4-mile Walk