



# Fayetteville Comprehensive Pedestrian Plan



**May 2018**

**by:**

**Stantec Consulting Services Inc.**

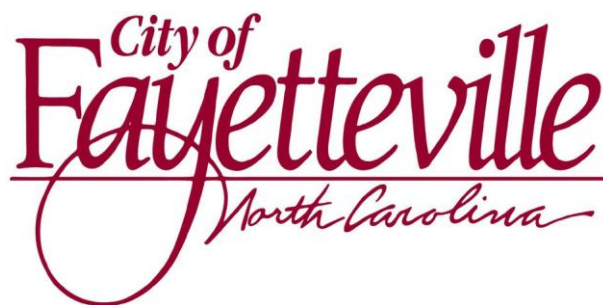
**for:**

**The City of Fayetteville &**

**North Carolina Department of Transportation**







### FAYETTEVILLE, IN BRIEF



● = North Carolina

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Special thanks to those who participated on the Advisory Committee for the Plan. Any mistakes are ours; the best parts are yours.


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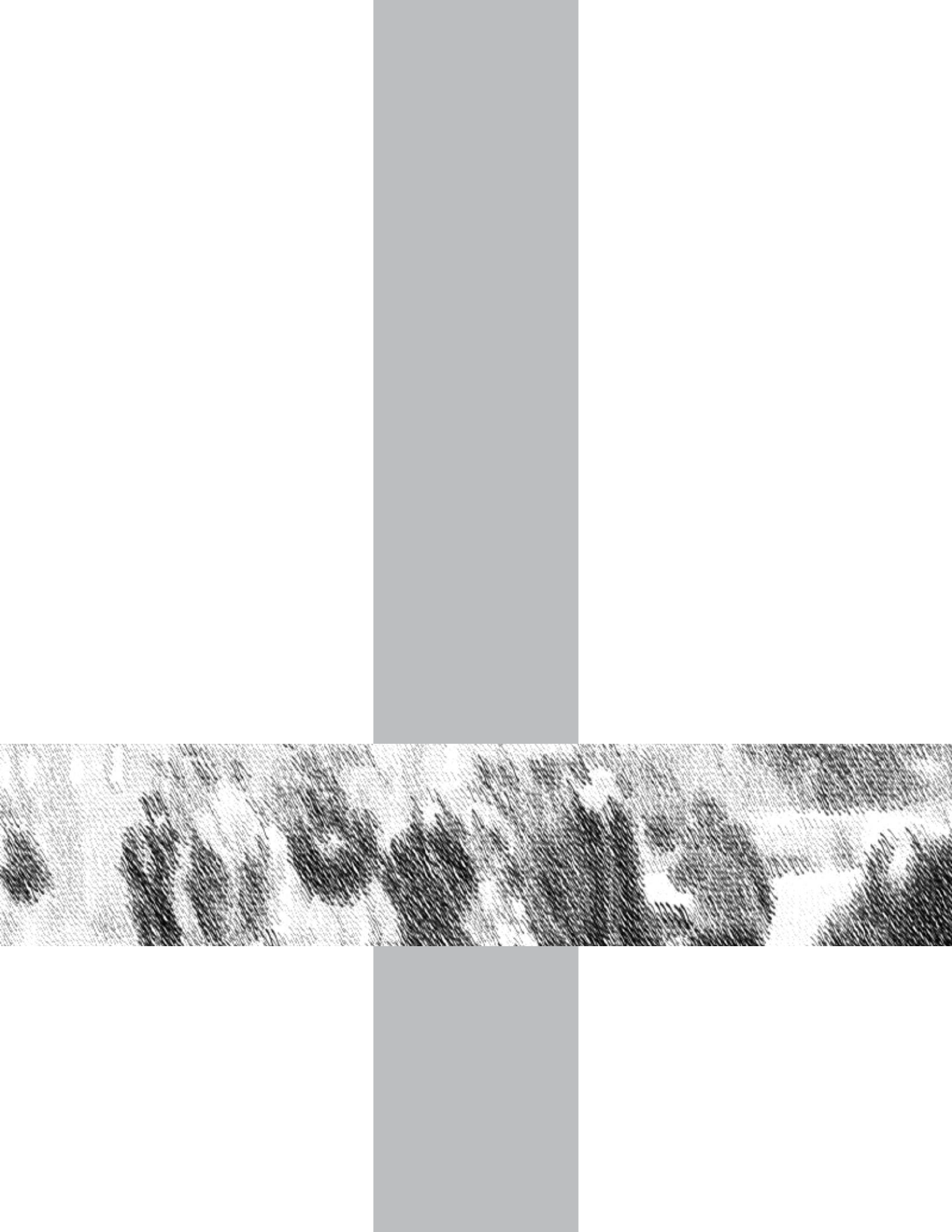




**"Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody."**

— Jane Jacobs, *The Death and Life of Great American Cities*







# Introduction



## Introduction

Today, walking in Fayetteville is a necessary, but sometimes risky, activity for many people. For even more people that would like to walk, it can be challenged by high crash rates, a lack of facilities, maintenance needs, and an auto-centric design that has been in place for decades. But the City has been making important strides, from planning to design elements, to the pedestrian network itself.

## Workflow and Major Findings

The project team considered crash data, traffic volumes, review of past plans, public input, and field reviews to help shape an image of how walking in Fayetteville is done today. Barriers and opportunities for improvements exist in abundance, as they do in every community in North Carolina.

There are unique aspects to what the project team observed, however. First, there are a LOT of people walking in Fayetteville already - the project team noted that even on major roadways walking was being done by many people of all age groups. Second, the city is criss-crossed by these major, five- and six-lane arterials with few, if any, provisions for walking. Lastly, more provisions for walking is accompanied by a need for better aesthetics, maintenance, and other “support systems” that promote walking.





## Background

As growth continues in Fayetteville, more demands are placed on roads. Many residents turn to transportation alternatives to the private car, either through necessity or to avoid the hustle and bustle of traffic backups and the stresses that come with sitting in long delays along local corridors. Public transportation is readily available and used throughout the City. Lack of ramps, sidewalks and crossings make it difficult for users to access many of the transit stops. Fayetteville is looking to improve the pedestrian network in the City so that more residents can utilize walking as a source of transportation. The current Strategic Plan for Fayetteville states goals for the City Council challenging the city to great planning. The goals are: (1) Make Fayetteville a great place to live, work, and recreate with thriving neighborhoods and a high quality of life; (2) Provide a clean and beautiful community with increased green spaces and a plan to complete the Linear Park and Cape Fear River Trails; and (3) Improve mobility and connectivity by investing in sidewalks, trails and bike lanes and target for action to improve pedestrian safety. Fayetteville's leadership is looking to provide a City that can be used by everyone in a safe and convenient manner. Fayetteville hopes the future holds further park development as well as continue the tradition of sponsoring several fundraising marathons and walks. The Pedestrian Plan will define areas where further connectivity is needed to expand park plans and event routes through the City.

## Vision

City staff, steering committee members and citizens expressed ideas and concerns early in the project's development that were molded into a vision statement to guide the Plan.

*Fayetteville would like to improve connectivity to all parts of the City by providing safe and usable pedestrian facilities to its residents and visitors.*

## Plan Goals



### Improve safety for all pedestrians

Reduce crashes and improve the walking environment.



### Improve health, activity and cohesiveness of the community

Provide opportunities to recreate and choose walking for transportation.



### Develop projects according to demand

Ensure the pedestrian network provides access in areas where people live, work, shop and play.

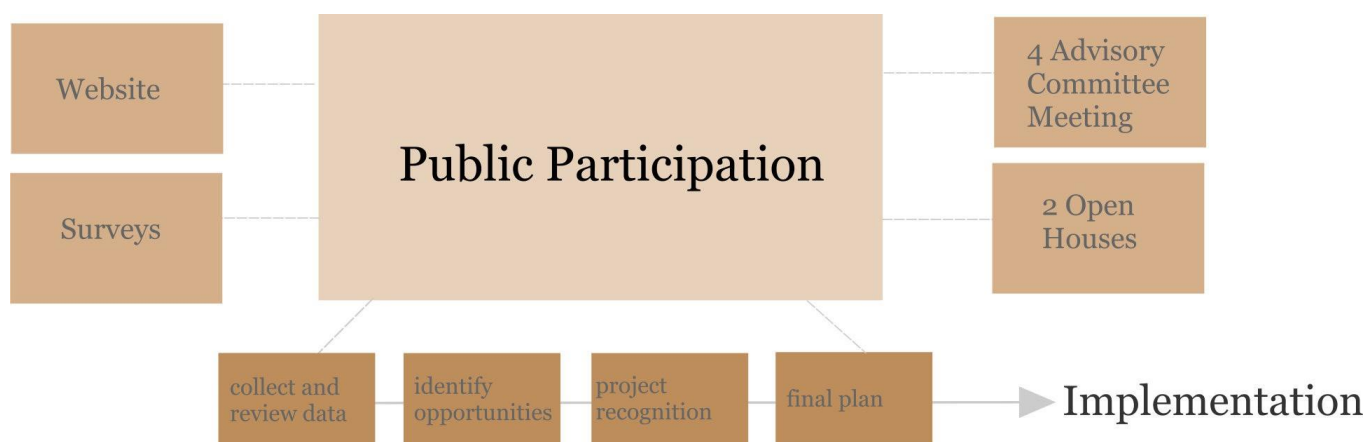


### Improve access to transit

Provide direct networks to transit stops and center.

## Process

The Fayetteville Pedestrian Plan will guide the City, the North Carolina Department of Transportation (NCDOT), and other local and regional partners with a guide for facility development to improve safety and other conditions to improve, encourage, and support walking in Fayetteville. This plan should be used by city staff and the city's external partners-such as NCDOT, Cumberland County Schools, and Fayetteville Area Metropolitan Planning Organization when considering solutions to future transportation projects and development. The process in developing the Plan started in April 2017 with the convening of the first Steering Committee meeting. This meeting was conducted in part to capture the opinions of the local stakeholders about what are important guiding principles for the Plan.



## Steering Committee

The project Steering Committee, as listed in the Acknowledgments on page 3, included representatives of the County school administration, city leadership, police, NCDOT, a local non-profit, and Fayetteville Area Metropolitan Planning Organization (FAMPO). The Steering Committee advised the project team on context and content of the Plan throughout the planning process, meeting four times to discuss the goals and objectives, issues, and recommendations that are contained in this Plan.

## Public Involvement

In May 2017 the public engagement period opened for the Plan. A public survey was administered from May to September 2017. The survey gathered information on existing walking behaviors, future needs for walking, and the strengths and weaknesses of the existing pedestrian environment. The survey was offered on-line and in hardcopy formats. The survey was distributed by city staff and Steering Committee members to local citizens. The project team attended Fourth Friday, a local monthly event hosted by the Fayetteville Arts Council in Downtown Fayetteville in June 2017 to offer information about the plan, answer questions, and gather completed surveys from attendees. The first of two public workshops was held in August 2017 at College Lakes Recreation Center to invite locals to learn more about the project and provide comments. Attendees stressed the needs for intersection improvements and the need for sidewalk facilities in areas that currently lack. The second workshop was held February 15, 2018 at the Westover Recreation Center. The project recommendations were displayed for the public to view and offer feedback. The comments received supported more sidewalks for Fayetteville and all were pleased at the efforts Fayetteville was taking to provide safer pedestrian facilities in the city.



# Fayetteville Pedestrian Plan

## Background

Fayetteville was awarded a grant by the North Carolina Department of Transportation in 2016 to complete a City-wide Pedestrian Plan that will guide the planning and implementation of pedestrian improvement projects. The overall goal of a pedestrian plan is to assess current conditions and recommend policies and programs to make walking more desirable. The finished Plan will recognize the crucial role that walking plays in creating an attractive, accessible, safe, and healthy City.

## Timeline

**Phase I**  
Visioning &  
Inventory Analysis

**Phase II**  
Network  
Development &  
Prioritization

**Phase III**  
Implementation &  
Project List

## Goals

- ✓ Create a safe network to make walking easier for everybody.
- ✓ Identify opportunities that are successful and "doable".
- ✓ Create strategies for education, public encouragement, and enforcement to build a more walkable community.
- ✓ Identify priority areas where demand is.

## Get Involved

- ☐ Check website for news, meeting announcements, and plan updates.
- ☐ Take the survey.
- ☐ Show us where the problems using the interactive map tool ([www.walkingfayetteville.com](http://www.walkingfayetteville.com)).
- ☐ Attend the meetings.
- ☐ Spread the word!

*Informational board shared at the Workshop to explain the Plan and process*

*Local citizens at the Public Open House identifying locations that are hazardous to walk*

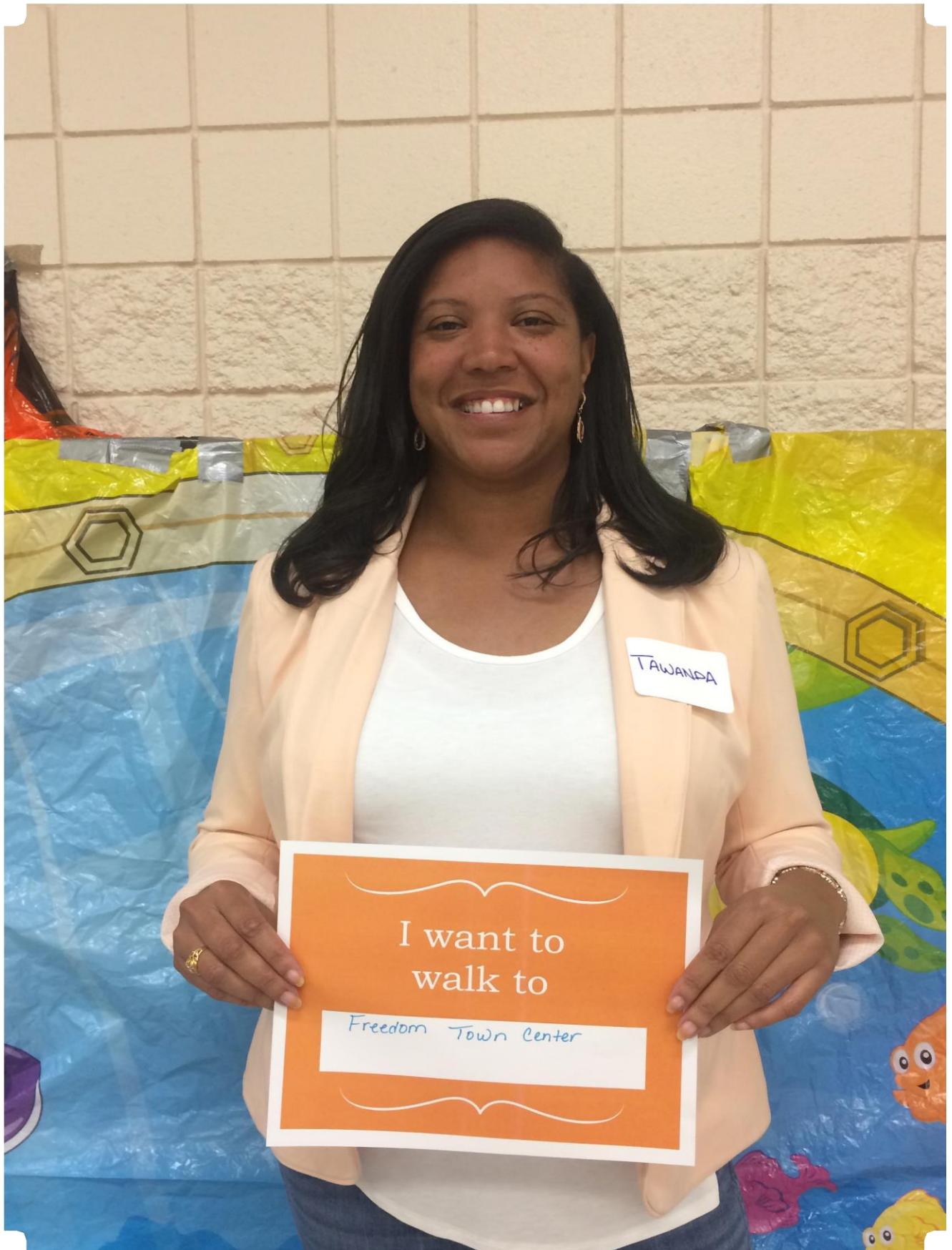


**Tell us how important each factor is when it comes to improving walkability in Fayetteville.**

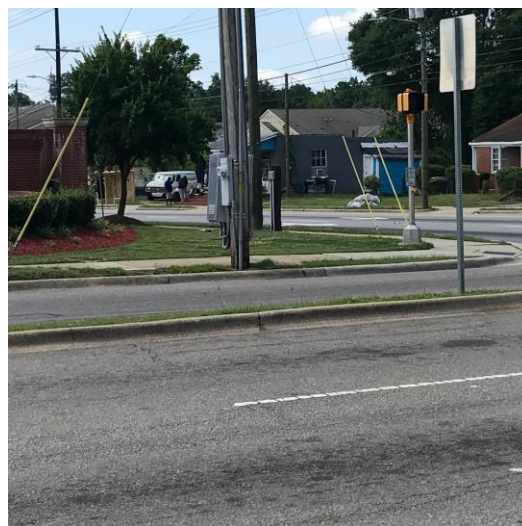
**You have five \$100 bills. Place as many bills in each of the boxes that you feel is the most important to consider when developing and prioritizing projects.**



*Citizens were invited to participate in an activity to spend City dollars and identify factors that should be considered when planning for pedestrian projects.*







## Benefits of Walking

A pedestrian-friendly environment directly contributes to health, economic, environmental, and cultural benefits that impact all of Fayetteville's residents. When more people walk more often, benefits are gained by the individuals and the community where they live. Benefits of active transportation include health and economic benefits as well as reducing the ill effects of traffic congestion, including air pollution and noise. Some benefits of walking include:

- Increased health benefits relevant to maintaining a healthy weight;
- Lower household transportation costs;
- Improved attention for schoolchildren;
- Sense of community and increased social contacts;
- Better air quality;
- Reduced traffic congestion; and
- Improved performance of public transportation through increased pedestrian access to stops.

According to the North Carolina Statewide Pedestrian/Bicycle Plan, investments in infrastructure can significantly improve pedestrian safety. The Statewide Plan cites a 2008 Federal Highway Administration publication that suggests sidewalk installation can result in a 65%-89% reduction in pedestrian crashes.

Walking is the most affordable mode of transportation. The American Automobile Association reports the cost of operating one motor vehicle for one year is \$13,677. Walking is basically free, and can result in savings each year if walking opportunities are available.

Recent studies have been completed regarding economic benefits of improved walkability that go well beyond personal affordability. Benefits include increases in property values, supporting access to local businesses, economic development of new businesses, and job creation. The Pedestrian and Bicycle Information Center of the US Department of Transportation reports, "The 2012 Benchmarking Report on Bicycling and Walking in the U.S. found that bicycling and walking projects create 11-14 jobs per \$1 million spent, compared to just 7 jobs created per \$1 million spent on highway projects." Walkable communities generally have active streets that promote business exchange while providing a safe and efficient way for citizens to travel by walking. Active streets are generally more attractive to businesses, therefore increasing the opportunity for economic development.

Schools and students also benefit from a more walkable community. Improved infrastructure and programs can improve the walking environment for students. Increased numbers of students walking can reduce the transportation costs for buses, while improving their average test scores and reducing the amount of time teachers spend managing student behavior. Several schools in the city have a high amount of students that walk each day. Improved conditions in school areas would reduce transportation dollars for the area school system as fewer bus routes (and buses and drivers) would be needed.

## Plan Importance

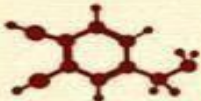
The pedestrian plan is important because it creates a direction for positive change in people's lives by designing better walking environments throughout the city. More walking means access to jobs, schools, and health care; more walking also means lessening the need for health care by creating healthy, outdoor options for every person. The plan will outline projects, programs, and policies to ensure that businesses, citizens, and visitors realize the health, mobility, safety, and economic benefits of walking in Fayetteville.



# WALK


YOUR WAY TO BETTER HEALTH


## ANATOMY OF WALKING



**BOOSTS ENDORPHIN**  
EASING STRESS, TENSION, ANGER, FATIGUE,  
AND CONFUSION IN TEN MINUTES


**LIMITS SICKNESS**  
BY HALVING ODDS OF  
CATCHING A COLD






**WORKS ARM &  
SHOULDER MUSCLES**


**BUILDS BONE MASS**  
REDUCING RISK OF OSTEOPOROSIS






**STRENGTHENS LEGS**  
INCLUDING QUADRICEPS,  
HIP FLEXORS, AND HAMSTRINGS


**BURNS MORE FAT**  
THAN JOGGING






**REDUCES**  
GLAUCOMA RISK


**HALVES**  
ALZHEIMER'S DISEASE  
RISK OVER BY FIVE YEARS






**IMPROVES BLOOD PRESSURE**  
BY FIVE POINTS


**ENGAGES**  
AB MUSCLES





**LIMITS COLON CANCER**  
BY 31% FOR WOMEN

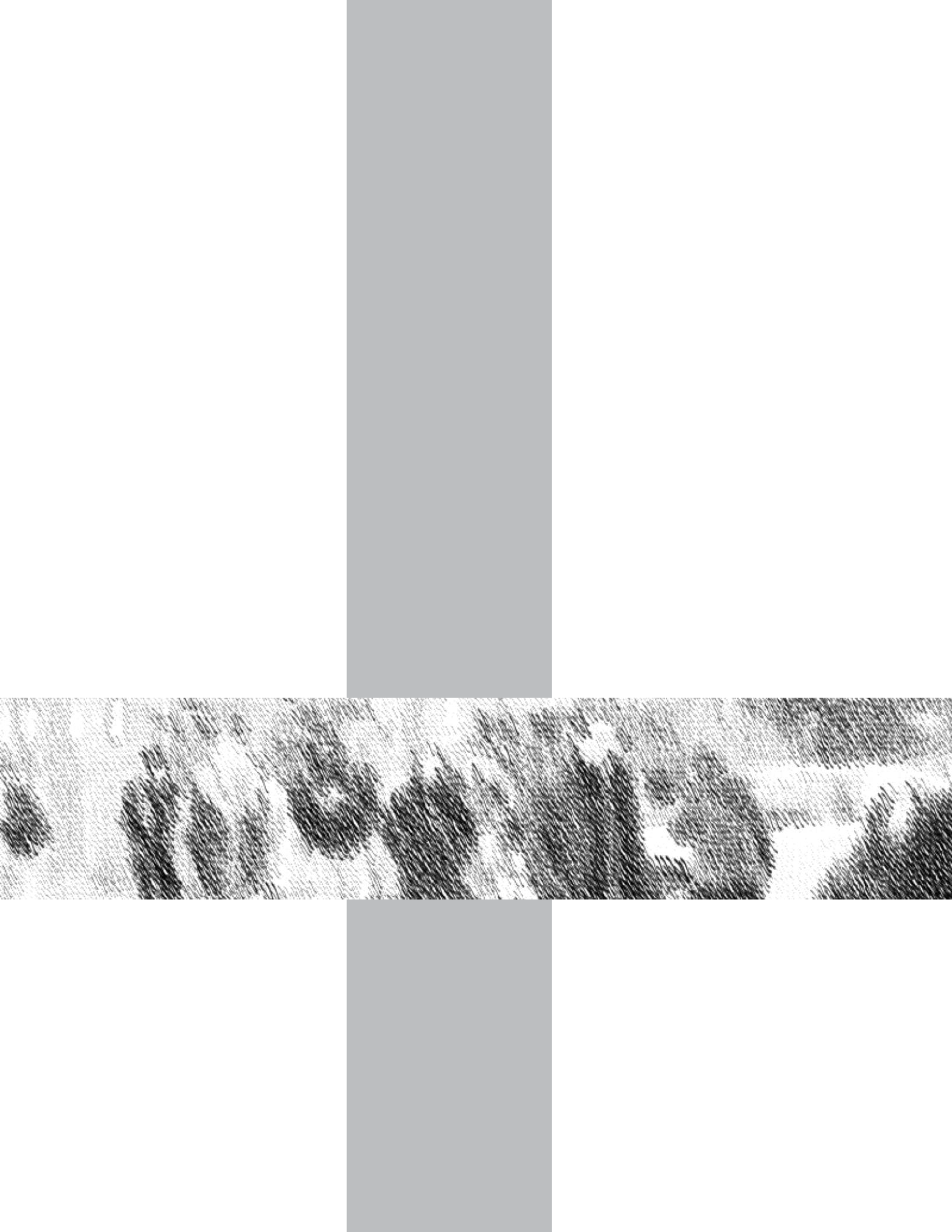
**IMPROVES BALANCE**  
PREVENTING FALLS



**COMPREHENSIVE**  
Prosthetics & Orthotics

ONLY 30 MINUTES A DAY,  
5 TIMES A WEEK CAN MAKE YOU  
HEALTHIER AND HAPPIER.





**Existing Conditions**



## Existing Analysis

Fayetteville is located in Cumberland County and home to Fort Bragg, a large U.S. Army installation northwest of the city.

The future for Fayetteville is bright, with a new resident entering the City in 2019. The Houston Astros Minor League Baseball team will move into its new constructed stadium in the downtown area. This new attraction is sure to bring lots of visitors to an already established and well visited destination City. The stadium joins local attractions as the Airborne and Special Operations Museum, historical downtown Markethouse, Cape Fear Botanical Gardens, Cape Fear Regional Theatre, local restaurants and many unique shops.

Currently there are 1,202 centerline miles of roads and 283 miles of sidewalk in the City (roughly 1:5 ratio). A tour of the city reveals many intersections are currently signalized but lack pedestrian signals and/or crosswalks, sidewalk gaps are present along corridors, and many high-traffic corridors lack sidewalks altogether. Recently the City has completed several projects to improve pedestrian safety including:

1. New sidewalk on Cliffdale Rd from Glensford Drive to McPherson Church Road, includes pedestrian signals and crosswalks at Cliffdale Rd@ McPherson Church Rd,
2. New sidewalk on Cain Rd from Bragg Blvd to Pamalee Dr, and
3. New sidewalk on Rosehill Rd from Country Club Dr to Hickory Hill Rd, includes pedestrian signals and crosswalks at Chadwick Rd.



*Johnson St & Bragg Blvd - Worn paths are evident that people are walking in the area.*

Several projects are programmed for near-term construction These include new sidewalk on Rosehill Rd (from Country Club Rd to Ramsey St), Owen Dr (from Eastern Blvd to All American Expressway), Skibo Rd (at Louise St from Raeford Rd to Richwood Ct), Helen St (from Country Club Rd to Ramsey St), 71st School Road (from Autumn Care to Raeford Rd), Sycamore Dairy Rd (from Thorngate Dr to 3833 Sycamore Dairy Rd), NC 24 (from Racepath St to Dunn Rd), Santa Fe Drive (Yadkin Rd to AAE bridge, Morganton Rd (Skibo Rd to Glensford Dr), Yadkin Rd (from Skibo Rd to Fort Bragg), Bragg Blvd (The Villagio to NC 295), NC 59 (from City Limits to Sumac Cir), Robeson St (Fairway Drive to Humphrey Lane).

Below is a list of currently planned projects by NCDOT from the 2018-2027 Statewide Transportation Improvement Plan (STIP). Current trail projects in development by the City's Parks and Recreation Department are Cape Fear River Trail (Seg C), Filter Plant Dr to Rowan St Bridge, and Fayetteville-Big Cross Creek Greenway.

### Fayetteville Outer Loop

I-2519CB All American Freeway to Cliffdale Road,  
U-2519CA Cliffdale Road to US 401,  
U-2519BA/U-2519BB US 401 to Raeford Rd,  
U-2519AA/U-2519AB Camden Rd to I-95.

### Other Areas

U-4403 US 401 (Ramsey St) Martin Luther King Jr Freeway to I-295 Widen to Multi-Lanes  
U-4405 US 401 (Raeford Rd) Hampton Oaks Dr to Fairway Dr Access Management Improvements  
U-5930 NC 24 (N Bragg Blvd) Manchester Rd Construct Interchange  
U-6001 NC 59 (South Main St) Shipman Rd to Parkton Rd Widen to Three Lanes  
U-4444 NC 210 (Murchison Rd) Fayetteville Outer Loop to NC 24 Widen to Six Lanes  
U-2810 Camden Rd NC59 to Owen Dr Widen to Multi-Lanes  
U-3422 Camden Rd Fayetteville Outer Loop to NC 59 Widen to Multi-Lanes  
U-6051 Camden Rd Rockfish Rd to Fayetteville Outer Loop Widen to Four-Lane, Divided with Sidewalks  
U-5798 Gillis Hill Road Raeford Rd to Lindsay Rd Widen to Multi-Lane

U-4709 Rockfish Rd Golfview Rd to NC 59 Widen to Multi Lanes  
 U-6072 Rockfish Rd Strickland Bridge Rd to Golfview Rd Widen to Multi-Lanes  
 U-2809 Legion Rd Owen Dr to Cameron Rd Widen to Multi-Lanes  
 U-4404 Cliffdale Rd McPhearson Church Rd to Morganton Rd Widen to Multi-Lanes  
 U-3424 Bunce Rd Raeford Rd to Cliffdale Rd Widen to Multi-Lanes  
 U-5101 Shaw Rd US 401 to NC 210 Widen Roadway/Construct Part on New Location  
 U-4422 Glensford Rd US 401 to Cliffdale Rd Widen to Four Lane Divided/Construct Part on New Location  
 U-5605 Odell Rd Ft Bragg Boundary to NC 24 Widen to Multi-Lanes  
 U-6073 Fisher Rd Strickland Rd to Bingham Drive Widen to Multi-Lanes

Ft Bragg heavily influences the City's demographics. Over 39,000 considered the military installation home in 2010. These residents travel, shop, and play throughout the City of Fayetteville, and many do not have a vehicle during their tenure. Alternative modes of travel are important to those that do not have access to a car, and the roadways around Ft Bragg are not accommodating to walkers or bikers. Reilly Rd, All American Fwy, Bragg Blvd, and Murchison Rd are a few corridors that are frequented to get on and off Post. These roads are heavily traveled, consist of 5-8 travel lanes, and lack pedestrian facilities. This pattern is repeated across much of the city.

The Fayetteville Area System of Transit (FAST) operates public transportation in Fayetteville. FAST operates 19 routes, including a route to Ft Bragg, and is responsible for close to 600 bus stops. Many people rely on the bus as a primary source of transportation. Many stops in Fayetteville include shelters and seats but many are just a sign. Many stops are located along busy roads with no available sidewalk to wait on. Bus riders should feel comfortable approaching and waiting at a bus stop. Sidewalks, lighting and shade are a few things that provide comfort for transit users and contributes to an increase in ridership as well.

Fayetteville is home to over 43 elementary, middle and high schools. Many of the schools are located on large, multi-lane, pedestrian-unfriendly roads. Sidewalks are lacking in many areas including the vicinity of 71st High School. Worn paths are evident along 71st School Road from the school to the large neighborhoods to the north. This area, along with many others, would benefit from improved walking conditions for children, parents, and teachers.



*Worn path 71st School Rd at 71st High School*



*Bonanza Dr in front of Ponderosa Elementary School.*



*FAST Bus Stop - Rosehill Rd*



*Transit Rider on Murchison Rd*



Continuing education students make up a large portion of the walkers in Fayetteville. Methodist College, Fayetteville State University, and Fayetteville Technical College are located in the city and have a combined enrollment of more than 21,000 students. College students are known for lacking easy access to a car and walking long distances to school and between classes. Walking can be challenging, especially when the trip is delayed due to high traffic volumes and lack of crossing facilities. These delays can impact timely arrivals to classes and meetings, but also foster a mentality that favors taking greater risks. School materials including electronic devices and books are a necessity, but can also be very heavy. Delays and longer trips can impact a student's health and well-being carrying the extra weight. It is important to understand the route demand around schools and properly plan for those areas to reduce the stress on students.



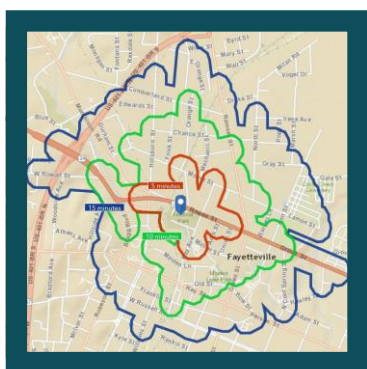
*Railroad crossing near FSU.*



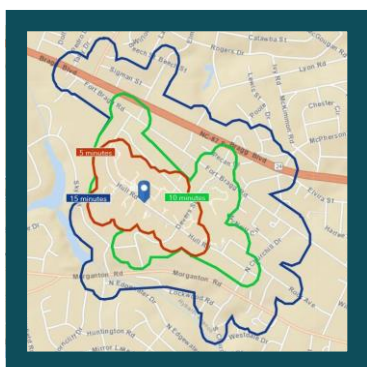
*Ramsey St in front of Methodist University*

Fayetteville is physically large, encompassing 145 square miles. Pedestrians are often seen walking along most roads in the city, including the major roadways. Heavy pedestrian activity was witnessed during a site visit along Pamalee Drive, Murchison Road, Cliffdale Rd, and Bragg Boulevard, among others. Many of these roads have been or are currently being studied to improve traffic, pedestrian, and bicycle transportation.

The following are examples of several high-profile areas in the city, but are also emblematic of the kinds of problems that are frequently found across the city. Five-, ten-, and thirty-minute walk “bands” are shown on the adjacent maps in red, green, and blue bands, respectively.



*Estimated Walk Times in Downtown Fayetteville*



*Estimated Walk Times near FTCC*



*Estimated Walk Times near Cross Creek Mall*

## **Downtown**

**Issues:** Popularity creates demand for high-quality infrastructure

The downtown area is a principle walking activity center, and full of history which can be seen in the architecture of the buildings, brick streets and the Market House. Residents and visitors flock to downtown to dine, shop, and enjoy downtown events. Also located here is the Amtrak station and the newly constructed Transit Center. Currently under construction is the future home to the Houston Astros Minor League Baseball team very close to the Airborne and Special Operations Museum on Murchison Road. As the downtown area grows in popularity, the need for pedestrian facilities increases.

## **Fayetteville Technical Community College**

**Issues:** Large student enrollment creates demand for pedestrian infrastructure

Fayetteville Technical Community College serves over 40,000 students in 2017. Campus amenities are spread over a large area that is not conducive to pedestrian activity. This area is not just home to the college, but to Honeycutt Park and the Kiwanis Recreation Center. Students and residents frequent the facilities for quick breaks, recreation and community functions. Many of the crossings along Fort Bragg Rd lack safe crossing facilities including crosswalks and signals. College enrollment tends to increase each school year. As the growth continues the demand for proper infrastructure increases to keep the community safe.

## **Cross Creek Mall Area**

**Issues:** Shopping Center surrounded by traffic and wide, fast roadways

The Cross Creek Mall area is a large shopping center on Skibo Road, packed with many retail stores and restaurants. Walking in this area is extremely difficult due to the lack of facilities and the extremely high amounts of traffic. A majority of the intersections have dual turning lanes as well as through lanes. Traffic conflicts and minimal crossing assistance pose often contributes to crashes, which are frequent here. Fatalities like the one that occurred on August 17 also happen. Many sidewalks are present along the surrounding roadways, but facilities are lacking at intersections and smaller, connecting roads that can provide alternate access from larger corridors like Skibo Rd and Morganton Rd.



The following photo inventory provides an account of the scene in Fayetteville in regards to pedestrian infrastructure. Walking conditions are variable. Lack of sidewalks, deteriorated sidewalks, accessibility issues, crossing deficiencies and lack of comfortable walking conditions are seen along many roads. Other areas include wide sidewalks with tree coverage to provide a comfortable walking experience as well as accessibility ramps at bus stops. As new development is occurring so are new facilities. Developers are often responsible for including amenities for walkers when developing building residential and commercial areas. NCDOT in cooperation with the City is also improving conditions in the area. Cliffdale Road endured renovations that included medians, curb cuts, ramps, sidewalks and medians.




# Fayetteville at a glance.....

A tour around the City revealed many different scenarios. From **bad** to **good**, below are common themes in Fayetteville.



*Worn path near Seventy First High School indicates high pedestrian use area.*



*Accessibility ramps leading to the roadway with no safe crossing option or direction.*



*Pedestrian signal is available with no ramps, sidewalks or cross walk*



*Tree shade can provide a more comfortable trip for pedestrians.*




*Median cuts are accessible for users but crossing area lacks crosswalk and/or signals.*



*Signs, ramps and crossings available near Terry Sanford High School*



*Ramps and sidewalk available for transit users along Ramsey St*



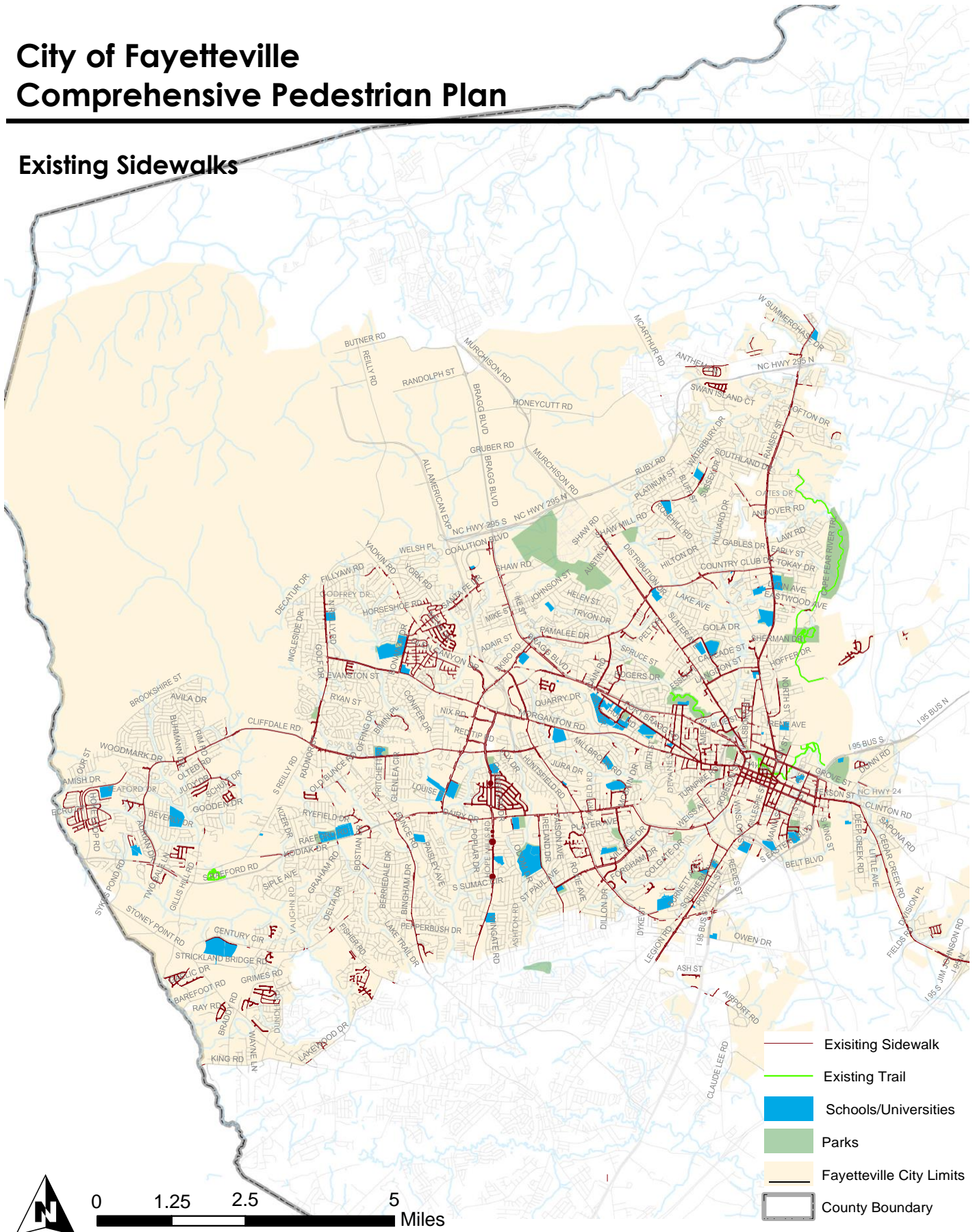
*A larger separation between the road and sidewalk provides a feel of safety for pedestrians making walking experience more pleasurable.*



Figure 1  
Existing Sidewalks

# City of Fayetteville Comprehensive Pedestrian Plan

## Existing Sidewalks

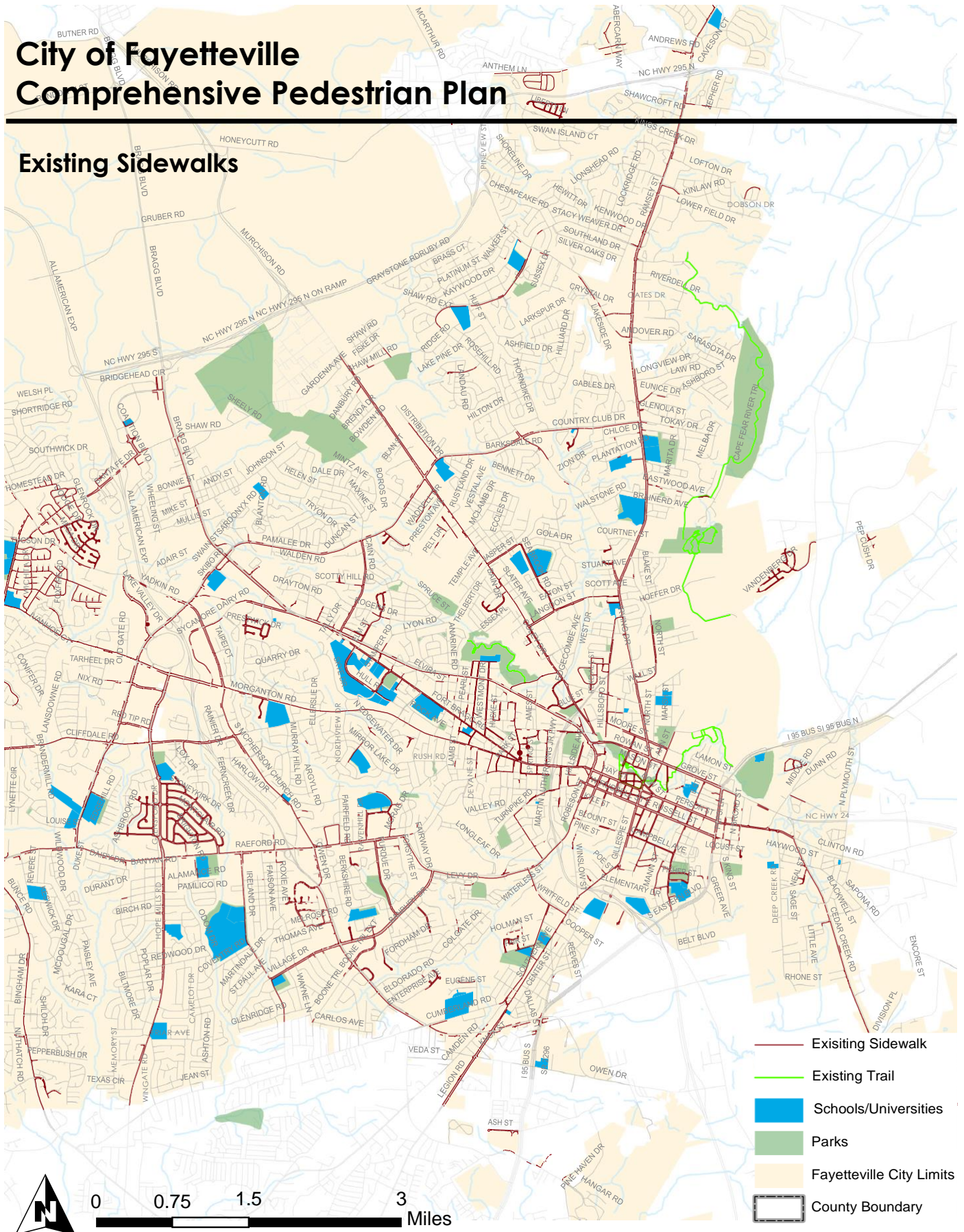




(Closer look)

# City of Fayetteville Comprehensive Pedestrian Plan

## Existing Sidewalks

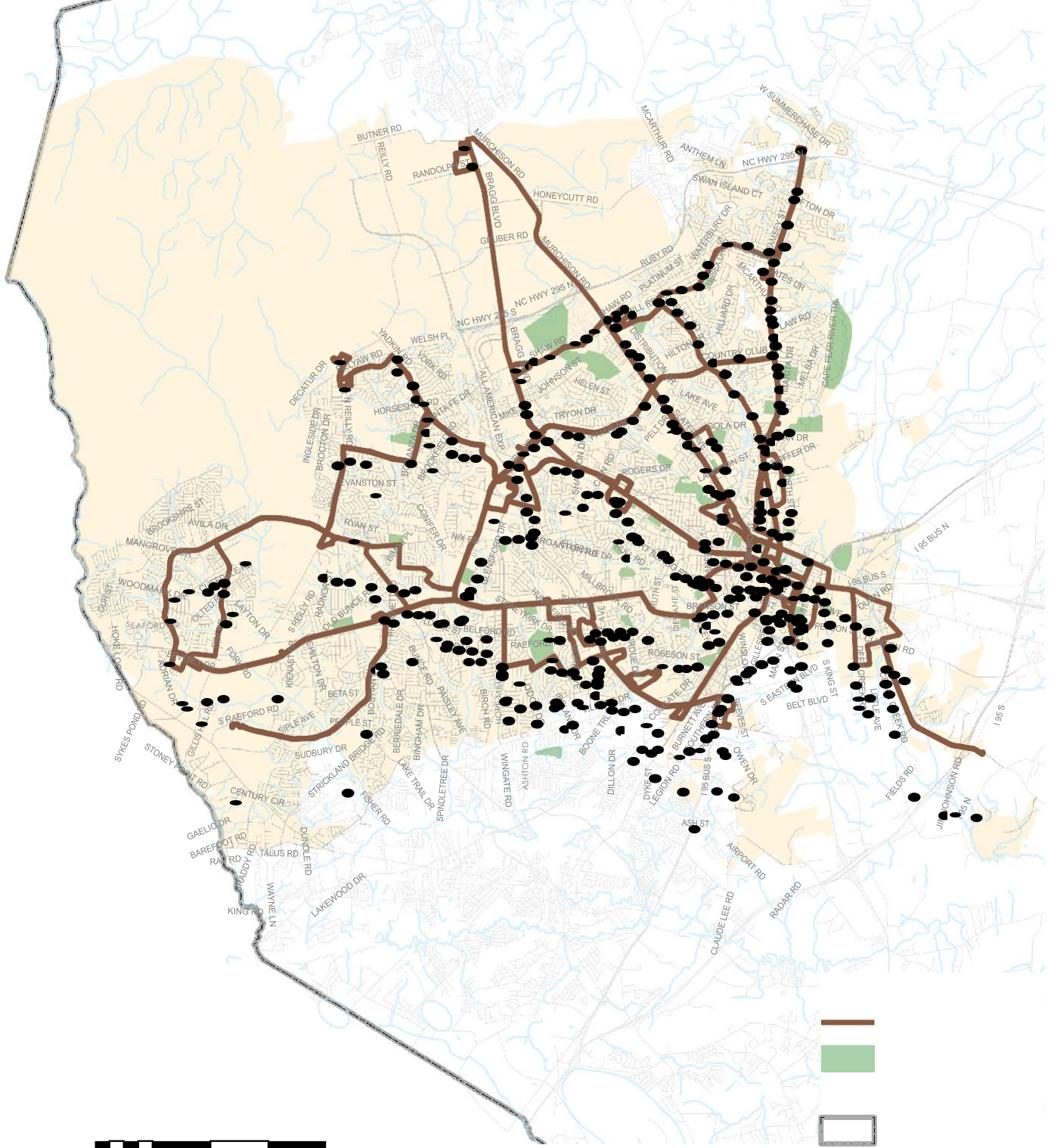




**Figure 2**  
Existing Transit Route and Stops



# City of Fayetteville Comprehensive Pedestrian Plan

## Existing Transit Routes and Stops





0 0.5 1 2 3 4  
Miles

- Bus Stops
- Bus Routes **27**
- Parks
-  Fayetteville City Limits
-  County Boundary









## Demographics

Fayetteville has experienced a large growth rate in population over the last 15 years. 2013-2015 brought a slight decline in population but since the population has began to rise. The area is home to many large and small employers and several Colleges and Universities.

Nearly 20 percent of the population is living below the federal poverty line (itself a very low bar: federal assistance programs like food stamps and free-and-reduced lunch use 130% to 185% of the federal poverty threshold) and without access to a vehicle. Also considering the 38 percent of the population enrolled as college students, transit may be the only opportunity to travel to school and work for many of the population. The Fayetteville Area System of Transit (FAST) offers vast routes and stops citywide. It is important to ensure safe access to buses, as well as adequate provisions (shelters, benches) are available to those that chose or need to use transit options.

Demographic analysis can help define the population characteristics within Fayetteville that use, or would like to use, the pedestrian system. Lack of car ownership, commuting patterns, and poverty status are indicators of community needs and can project demand for a well-connected walkway system. A demographic analysis was completed by the City of Fayetteville using the 2010 US Census Bureau information as well as the 2015 American Community Survey (ACS). Key population facts include the following (refer also to Table 1).

- 16% of the population is under 18.
- 18% of the population is living below the poverty level.
- 5% of the population reported commuting by walking or biking.
- 16% of the population commutes less than 10 minutes daily to work.
- 17% of the population is enrolled in a local school (K-12).
- 38% of the adult population is enrolled in a local college/university.
- 2% of households reported not having a vehicle available for use.
- 21% of the population is over the age of 55.

**Over 18% of Fayetteville's population lives below the federal poverty threshold; many of these families lack any, or any reliable, access to a private automobile.**

Table 1  
Demographics

Demographic	Estimate	% of Total
Total Population	200,564	100%
Minority Population	101,179	50.4%

Population Living Below Poverty Line

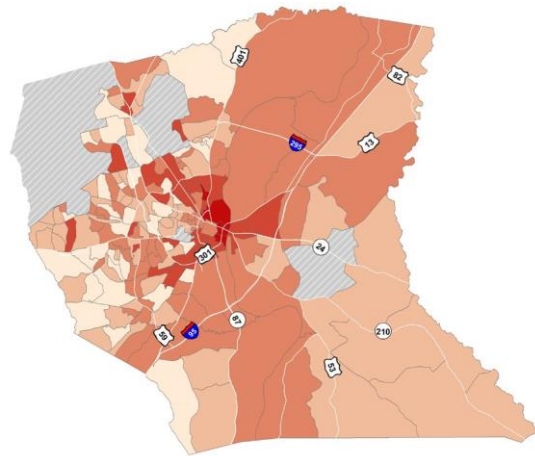
Fayetteville	35,516	18.4%
Cumberland County	56,805	17.5%
North Carolina	1.56 million	15.4%

Median Household Income per Year

Fayetteville	\$43,630	N/A
Cumberland County	\$44,171	N/A
North Carolina	\$46,693	N/A

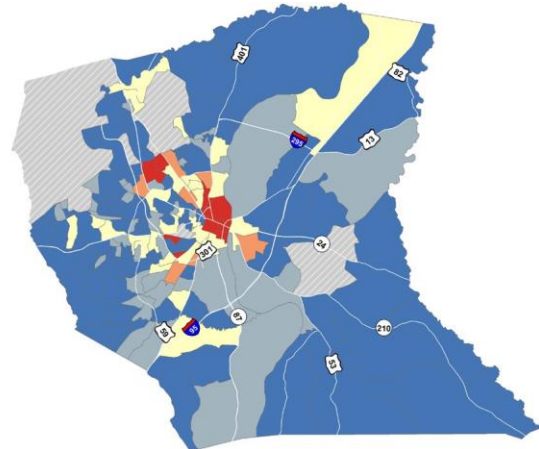






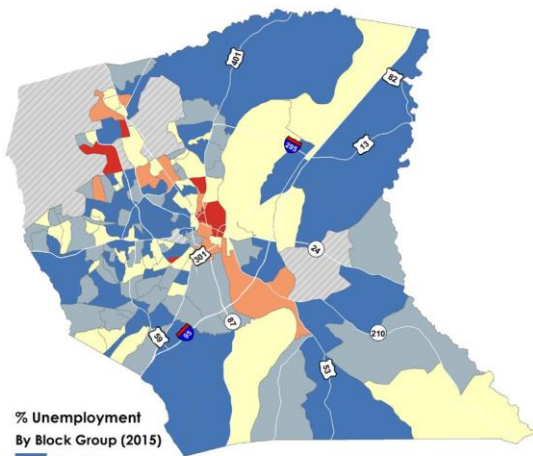
**% Households with Income < 15,000  
By Block Group (2015)**

- 0% - 6%
- 7% - 13%
- 14% - 24%
- 25% - 43%
- 44% - 73%
- No population data



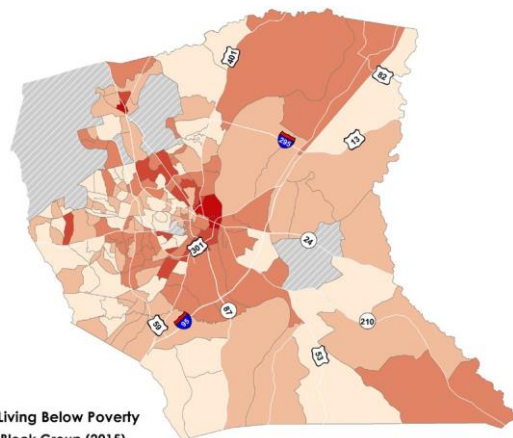
**% of Households with No Vehicle  
By Block Group**

- 0% - 5%
- 6% - 10%
- 11% - 20%
- 21% - 30%
- 31% - 50%
- No population data



**% Unemployment  
By Block Group (2015)**

- 0% - 10%
- 11% - 15%
- 16% - 25%
- 26% - 35%
- 36% - 65%
- No population data



**% Living Below Poverty  
By Block Group (2015)**

- 0% - 10%
- 11% - 19%
- 20% - 32%
- 33% - 50%
- 51% - 77%
- No population data

**Figure 3**  
Demographics

## Crashes

A pedestrian crash analysis is useful as an indicator of the pedestrian-friendliness of a community, and can also provide information on key locations or educational outreach areas where improvements could be made to enhance safety. A crash analysis can often indicate popular walking routes, and sometimes illustrate conflict areas between pedestrians and cyclists. The North Carolina Department of Transportation provided data for pedestrian crashes from 2004-2015. It is important to note that not all crashes are reported to the Police.

Figure 3 on the next page displays the locality of the reported crashes. From 2007 to 2014, there were 957 crashes reported in Fayetteville.

Thirty-one percent (31%) of Fayetteville's crashes occurred while the pedestrian was attempting to cross a street. These facts could indicate that one of Fayetteville's strongest needs is to make safety improvements at intersections, such as pedestrian signalization, crosswalk improvements, traffic calming, and/or signage. The data defines that pedestrians are not necessarily crossing within an intersection. This could be linked to less than desirable crossing facilities at intersections and/or the distance between intersection is so great that a walker is crossing mid-block to save energy and time. Large roadways with a lack of pedestrian facilities including refuges are a common theme throughout the city. Less than ten (10) percent of the crashes occurred while the pedestrian was walking along a corridor. Many of the reported locations lack sidewalks. A reduction in travel lanes on roadways, improved crossings, and a better sidewalk network can greatly reduce crash incidences in the future. The recommendations in this Plan take into account the locations and known details of the crashes.



**May 22, 2017**  
**Pedestrian Fatality- Owen Drive**

**July 21, 2017**  
**Pedestrian Injury- Raeford Rd**

**July 29, 2017**  
**Pedestrian Fatality - Cumberland Rd**



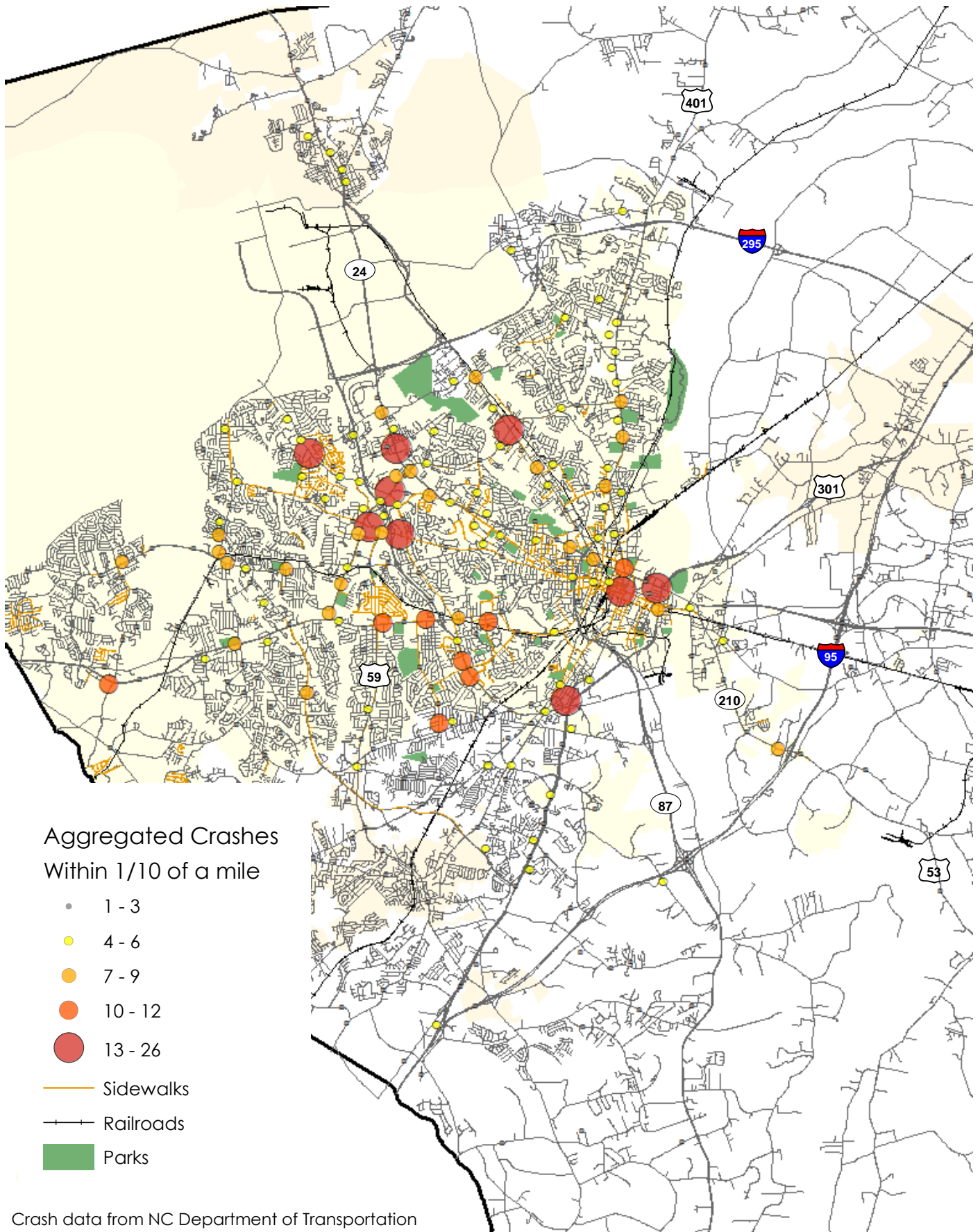
*Stacey Weaver Dr & Ramsey Street.  
Pedestrian attempting to cross Stacey  
Weaver Drive with no marked crossing.*



*B Street & Grove St Intersection. Pedes-  
trian upgrades were recently added to  
the area in response to the high rate of  
crashes.*



Figure 4.  
Crash Locations



## Safety Measures

Facilities such as sidewalks, crosswalks, traffic signals, and pedestrian signals can influence pedestrian safety. The Federal Highway Administration Crash Modification Factor Clearinghouse ([www.cmfclearinghouse.org](http://www.cmfclearinghouse.org)) maintains a database of Crash Modification Factors (CMF) to help guide transportation professionals with alternative treatments for roadways. The CMF studies results of crash types, severity, roadway type, and countermeasures put in place for prevention of crashes. Understanding how countermeasures are working in known situations allows agencies to focus efforts and funding on proven successful treatments and could potentially save a lot of lives.

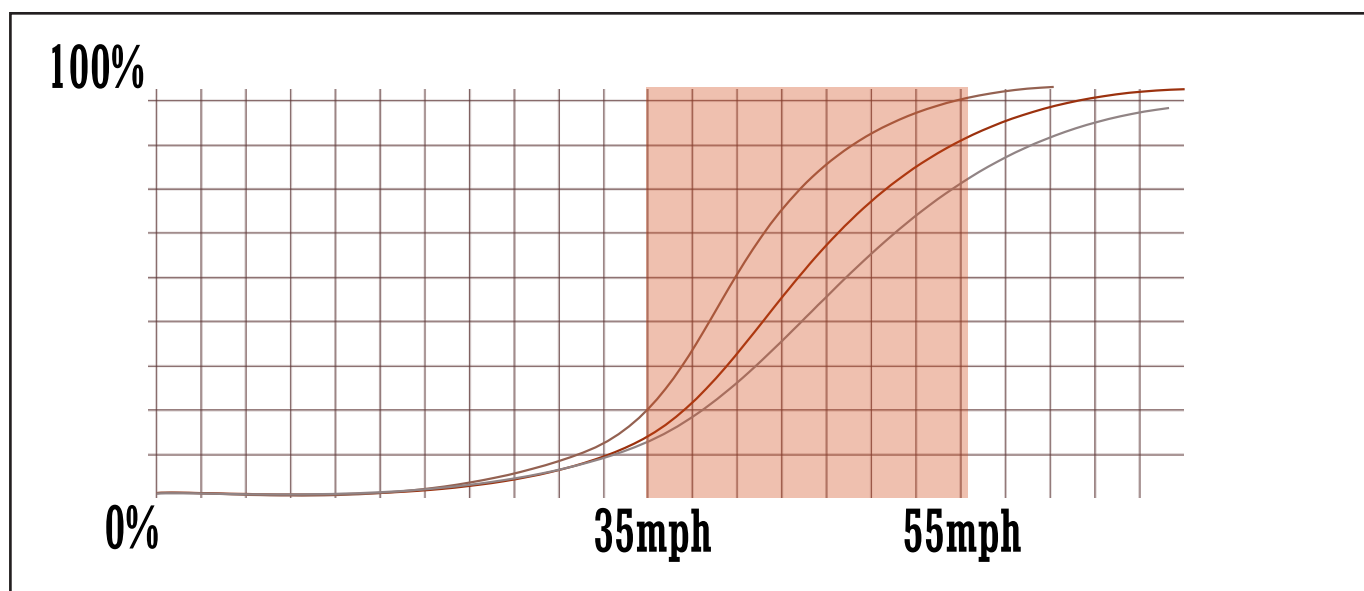


### How can I use the CMF Clearinghouse?

Visit the CMF Clearinghouse at [www.CMFClearinghouse.org](http://www.CMFClearinghouse.org) to:

- Learn more about CMFs
- Identify potential countermeasures
- Obtain the expected effectiveness of countermeasures
- Compare alternative treatments
- Get information on trainings related to CMFs
- Find resources on cost-benefit analysis

Federal Highway Administration  
[www.cmfclearinghouse.org/collateral/CMF\\_brochure.pdf](http://www.cmfclearinghouse.org/collateral/CMF_brochure.pdf)



Percent Chance of Fatality from Head-On Collision with Pedestrian-Car Crash



## Fayetteville Walks and Bikes

2011

FAMPO / Stewart Engineering

### Description

The Fayetteville Area Metropolitan Planning Organization (FAMPO) Bicycle & Pedestrian Connectivity Study is a comprehensive analysis of opportunities, barriers, and deficiencies in the bicycle and pedestrian transportation network within Cumberland County and the FAMPO Study Area, which includes Cumberland and parts of Hoke and Harnett counties.

The goal of the Connectivity Study was to identify and prioritize existing and proposed routes, facilities, improvements, and issues which will establish a safe and effective bicycle and pedestrian network. Recommendations for both routes and intersections included such features as bicycle lanes, sidewalks, multi-use trails, crosswalks, pedestrian signals, signage, and barriers aimed at discouraging crossings of the area's busier roadways.

### INTERSECTIONS WITH THIS PLAN

The plan contains hundreds of detailed recommendations that have to be compared against existing conditions that, for places within the city, will be considered for treatments in this planning process. Noteworthy is the assessment of mid-block crossings at major arterials as a source of crashes for pedestrians.

Second, the plan describes points of connectivity for cross-boundary projects like greenways.

## past plans

In order to understand where we are going, we must first understand where we've been.

This section of the plan is dedicated to exploring the past plans and other efforts of the City of Fayetteville and its partnering agencies that further the principle objectives of this plan: to better the walking environment and support the environmental, health, economic, and mobility goals of Fayetteville.

Each plan is briefly described and includes the key features of the plan that intersect with the Walking Fayetteville Plan.

North Fayetteville Area Plan (2002)

Murchison Road Corridor Plan (2008)

Ramsey Street Corridor Plan (2009)

Raeford Road Corridor Plan (2010)

Fayetteville Walks & Bikes (2011)

NC Statewide Pedestrian and Bicycling Plan (2013)

FAMPO Pedestrian Element of LRTP (2014)

Greater Haymount Area Plan (2017)



## NC Statewide Pedestrian and Bicycling Plan

2013  
NCDOT

### DESCRIPTION

In 2013 the North Carolina Department of Transportation developed a statewide bicycle and pedestrian plan. The recommendations in the Plan were developed with input citizens across the state, various disciplines and agencies across the state.

The overall goal of the Plan is to improving walking and bicycling for NC communities. Recommendations include programs that agencies can use to improve walkability.

### INTERSECTIONS WITH THIS PLAN

The Plan outlines many program recommendations for agencies to use in developing efforts to make a community more walkable. The recommendations in this Plan will be considered and compared to the needs in Fayetteville and included in the report.



7 Programming for Health, Safety, & Active Living

## FAMPO Pedestrian Element of LRTP

2014  
Fayetteville Area MPO

### DESCRIPTION

The Fayetteville Area Metropolitan Planning Organization (FAMPO) completed the 2040 Long Range Transportation Plan identifying transportation improvements for the FAMPO area. The plan identifies opportunities, barriers and deficiencies in the pedestrian network and identifies improvements that will enhance the network.

The proposed network in the Plan will reach 608 neighborhoods, 82 schools and 77 parks. Within 1/2 miles of each proposed network will reach more than 268,000 FAMPO area residents.

### INTERSECTIONS WITH THIS PLAN

The Plan identifies corridors in need of sidewalk facilities as well as crossing improvement needs. The recommendations in this Plan will be considered and compared to the needs in Fayetteville and included in the report.



### North Fayetteville Area Plan

2002

Cumberland County/Fayetteville City

#### DESCRIPTION

Covering more than 9,200 acres with 40% inside the then-City limits, this plan is one of several area plans prepared jointly by the city and Cumberland County. Transportation is only one part of the Plan, which also addresses parks / recreation, appearances, utilities, and private development / land use,

#### INTERSECTIONS WITH THIS PLAN

Images and visual appearances along streets are important, as are sign controls, in part to enhance economic viability. Several transportation objectives were spelled out in the Plan, including:

- Develop a network of pedestrian facilities such as sidewalks, nature trails, greenways, bicycle trails, etc. to link neighborhoods, schools, recreation, governmental and cultural facilities, shopping, etc.,
- Support ordinances that will require sidewalks on both sides of the street for new developments,
- Plan and build bike trails/pedestrian walks to provide safe passage over and/or under major thoroughfares, to include the Outer Loop, and
- Design all new bridges to include pedestrian walkways.

Andrews Road, McArthur Road, and Stacey Weaver Drive/Rosehill Road were recommended for widening/sidewalks, and several other streets (e.g., Ramsey Street, Law Road, and Honeycutt Road) were recommended for sidewalks on one or both sides of the street.

### Land Use and Economic Development Plan: Murchison Road Corridor

2008

Land Design, Inc.

#### DESCRIPTION

The purpose of this Plan was primarily to increase economic investment in over 4,000 acres of land. Housing affordability, impacts from the expansion of staff and mission of Fort Bragg, and a need to improve aesthetics and gateways were also important justifications for the five-month planning process.

Objectives relevant to the current study:

- Address real and perceived crime,
- Create green linkages, and
- Promote denser, mixed-use development (produces more and better walking environments).

#### INTERSECTIONS WITH THIS PLAN

The Plan discusses a number of distinct "frameworks" for connectivity, employment, land use densities, and other design characteristics. The Plan references both high-activity centers and nine catalyst sites, both of which will depend on improved pedestrian connectivity. The Plan is generally supportive of pedestrian / sidewalk improvements, including along Murchison Road and in the vicinity of FSU. However, there are not specific pedestrian projects called out in the Plan.





## Greater Haymount Area Plan

2017

Urban Land Institute (ULI)

### DESCRIPTION

The Urban Land Institute was tasked by the City of Fayetteville to study what measures the City can take to connect the proposed new Civil War History Center to the Haymount business district.

The Plan was developed in accordance from City leaders and interviews with local stakeholders. Components of the Plan include:

- Transportation and pedestrian infrastructure
- Various methods to connect cultural amenities
- Build opportunities to enhance the economic/market development of the area.

### INTERSECTIONS WITH THIS PLAN

Recommendations in the Plan include enhanced pedestrian connectivity from Haymount in to downtown. The Plan identifies areas for wide sidewalks, street trees, mid block crossings and on-street parking. All of the identified opportunities will enhance the walking experience while maintaining the context, character and history of the Haymount community.

## Ramsey Street Corridor Plan

2008

LandDesign, Inc.

### DESCRIPTION

The plan for Ramsey Street covered 2,200 acres and 6.5 miles of mostly urban arterial corridor. The Plan speaks to six "Primary Corridor Zones" centered on sections of the corridor and main landmarks, such as Methodist University.

Community feedback, and much of the study content, was focused on commercial interests and activities, although suggestions for both multi- and single-family residential developments take place further away from Ramsey Street. Land development recommendations and practices often featured increased densities and creating more walk-friendly environments.

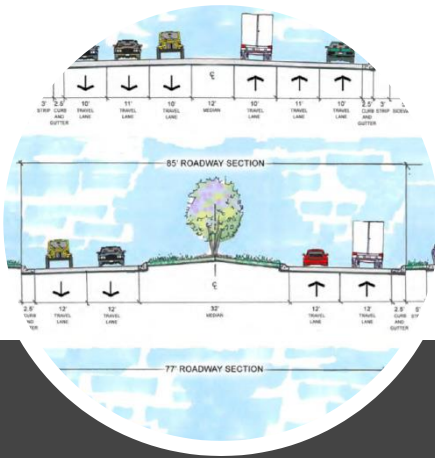
### INTERSECTIONS WITH THIS PLAN

The Ramsey Street Plan includes recommendations that are indirectly supportive of pedestrian activity, notable lighting, streetscaping / landscaping, signage and street furniture.

An implementation section (beginning on page 28) makes several pedestrian-specific recommendations, although not identifying locations:

- Pedestrian connections across Ramsey Street and in the vicinity of the school administration complex;
- Corridor beautification; and
- Creating design standards for parking, building characteristics, signage, etc. that enhance the walking environment throughout the corridor.





## Raeform Road Corridor Plan

2010

Fayetteville Area MPO

### DESCRIPTION

The corridor described in this Plan covers Hampton Oaks Drive to Robeson Street, and was intended to suggest safety and mobility improvements will enhancing the vitality of the corridor. The roadway was cited as being one of the most dangerous and most congested in the community (over 2,500 crashes in a five-year period). Pedestrian crossing issues, including at schools and involving high-speed traffic, were identified in the context section of the report. Improved pedestrian and bicycle paths were noted as concerns, although congestion relief and appearance ranked as more important. Complete Streets are mentioned, including buffering pedestrians from high-speed traffic and creating continuous pedestrian pathways.

### INTERSECTIONS WITH THIS PLAN

Both short-term and long-term sidewalk recommendations are included in the Plan. While some sidewalk has been constructed, most remains unfinished including in front of 71<sup>st</sup> and Aumen Elementary school. Improvements to three crosswalks, and adding eight new crosswalk treatments, are also identified. Typical cross-sections proposed for Raeform Road indicate 5'-6' sidewalks with 3'-5' grass swales separating the outside travel lanes and pedestrian zones.

## Summary of Past Plans

Several themes emerge from the review of past plans.

**Aesthetics Matter.** All of the plans contain specific mention of street trees, lighting, furniture, signage, and other elements associated with an improved public appearance.

**Safety is Central.** Repeatedly, these plans cite the safety of pedestrians crossing and walking along major highway corridors, frequently recommending improvements to crosswalks, signalization, and speed /access controls to reduce pedestrian (and automobile) crash rates and severity.

**Improving Opportunity.** Creating job opportunities and strengthening local business environments were central in some, and mentioned in all, of the plans reviewed.

**Creating Better, More Diverse Land Uses.** Similar to economics, creating more viable commercial corridors was coupled with recommendations for mixed-use developments. Supporting actions, like creating form-based development codes and financing specific improvements to facilitate reinvestment, were also pointed out in more than one planning document.

**Regulatory Changes.** Almost all of the plans suggested making some degree of changes to the zoning and other regulatory ordinances, from applying overlay zoning structures to parking requirements. The City's ordinances are reviewed on the following pages.

# policies

Local policies and plans can heavily influence the walkability of a community, and often shape the pedestrian environment, sometimes even without the intent of doing so. Creating strong policies and plans that help to actively create good walking conditions will mean a more balanced future transportation network and a shared private/public burden for providing that benefit. Policy amendments and planning activities can often be achieved at a low-cost to a municipality while resulting in substantial outcomes, and could help Fayetteville make notable progress in developing a more walkable environment. During the development of the Pedestrian Plan, several pedestrian-friendly policy and program recommendations specific to Fayetteville were identified and discussed. Recommendations for all such policy and plan development are included on page 87.



## Unified Development Ordinances/Code of Ordinances

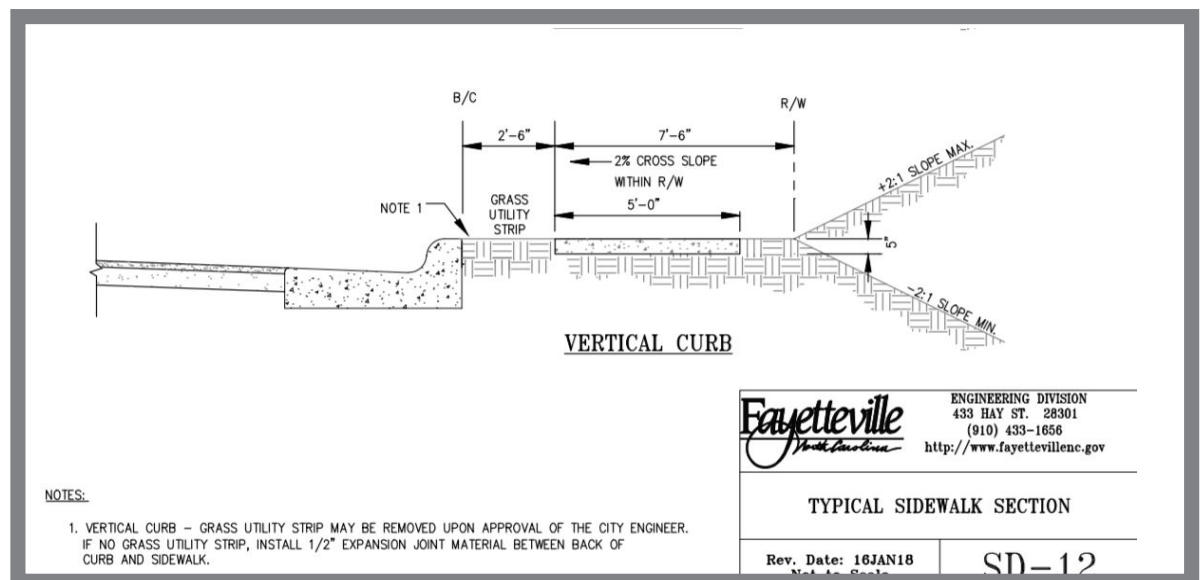
A city adopts and modifies its ordinances under the regulatory powers granted by the State of North Carolina to guide development, identify the appropriate uses for land in the municipal boundary and surrounding extra-territorial jurisdiction (ETJ), and provide guidance on appropriate actions for its citizens to protect their health and well-being. At the time this Plan was prepared, the City was undergoing a thorough review and update of the Unified Development Ordinance (UDO).

Important considerations for pedestrians in the Fayetteville Code of Ordinances include the following:

- Street and thoroughfare lighting ordinance - Sec-24-341
- Driveways-Permit to construct required - Sec-24-101b
- Sidewalk installed in subdivision requirements - 30-6.A.3
- Block Design - Mid Block Access - 30-5.F.5.c
- Alternative Parking Plan - Off-Site Parking for Nonresidential Uses - Pedestrian Way-30-5.A.8d.1
- Off-Street Circulation - Pedestrian Pathways - 30-5.A.11.f
- Exterior Lighting - 30-5.E.1.c
- Off-Street Circulation - Street Pedestrian Connectivity Required -30-5.F.4.f.4
- Design Standards - 30-5: Sidewalk development standards (30-5.F.9)
- Design Standards - 30-5: Off-street pedestrian circulation routes from public street to entrance of retail or community establishment (30-5.J.8)

## City Specification Manual

The City specification manual details minimum requirements for street development. Details include sidewalk and separations widths, curb and ramp specifications as well as many other standards that are required for City street development.



City Specification Manual - Typical Sidewalk Section



## Concerns and Needs

Public input played critical roles in the development of the Fayetteville Pedestrian Plan. All the comments and feedback received during public outreach activities of the Plan were used to develop the project, program, and policy recommendations outlined in the Plan. The Pedestrian Plan survey was distributed in hardcopy format by Steering Committee members and City staff to transit users and at City Hall. The survey was also available online. Informational handouts regarding the online survey were distributed by City Hall and College Lakes Community Center. Notification of the project and survey were also shared on the City's website, local television station, and a local radio program. The survey was also available at the August 2017 Open House, as well as online from May 2017 through September 2017. This effort generated 605 total responses. Full results of the Pedestrian Plan survey can be found on the following pages.

The survey revealed 88% of the respondents have chosen to not walk somewhere in the city due to lack of sidewalks, unsafe crossings and/or high traffic volumes and speeds. Nearly 50% of the respondents are walking to school, work, bus stops and for shopping needs. The results from the public survey are listed in Figures 4 and 5.

When asked about the level of comfort or security residents feel about walking in Fayetteville, most indicated that they felt most comfortable in their own neighborhoods (47%). Fifty-five (55%) of respondents feel comfortable walking downtown. Local intersections and school areas were considered the least favorable areas to walk at or near. These indicators give the idea of where issues are in relation to walking in Fayetteville and where special attention is needed to enhance the walking experience.

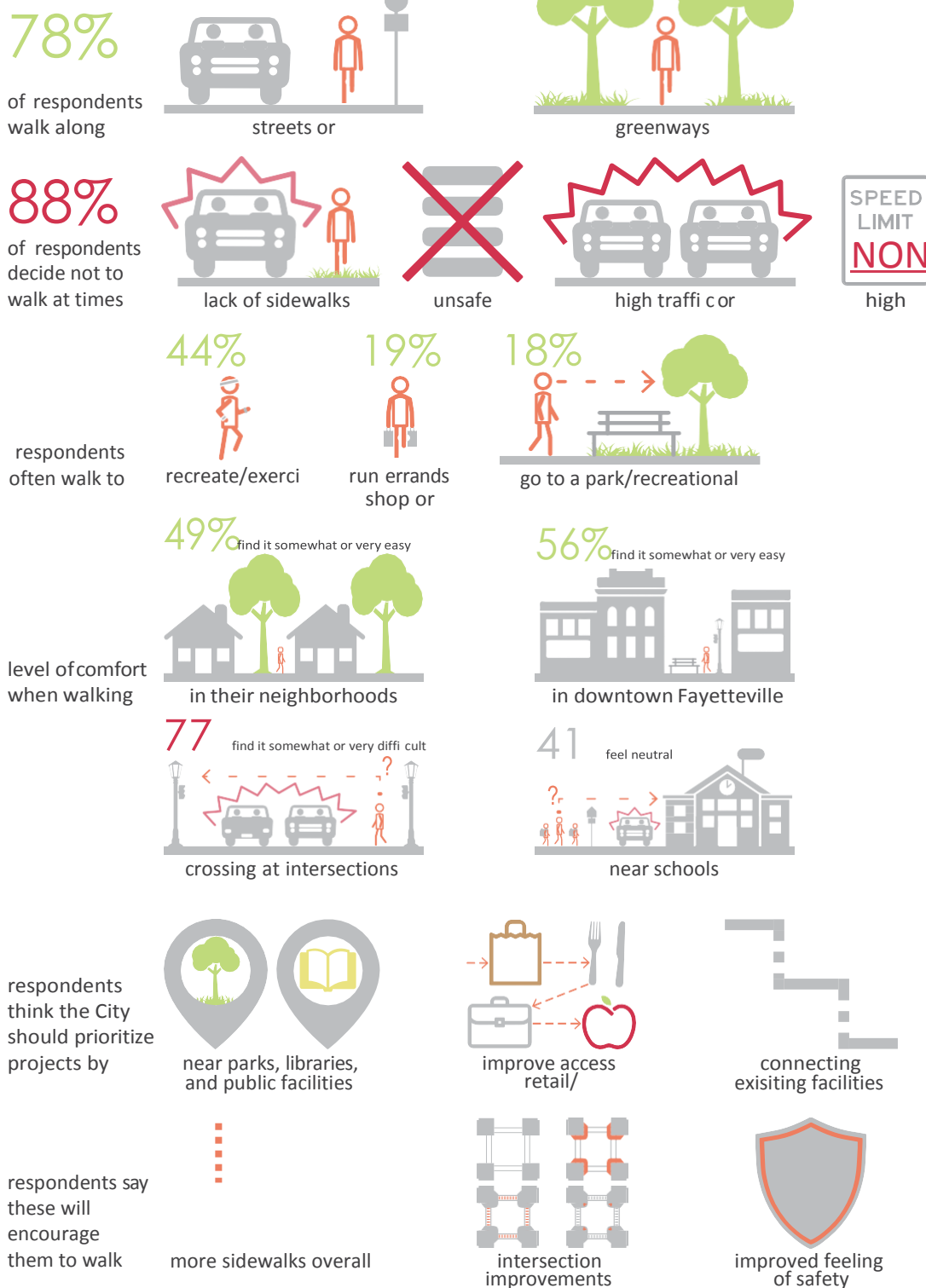
## Areas Identified for Improvements

- Skibo Road
- Murchison Road
- Cross Creek Mall Area
- Raeford Road
- Ramsey Street
- Rosehill Road
- Terry Sanford High Area
- 71st High Area
- Ft Bragg Road
- Morganton Road
- Reilly Road
- Cape Fear Valley Hospital Area
- Yadkin Road
- Santa Fe Road

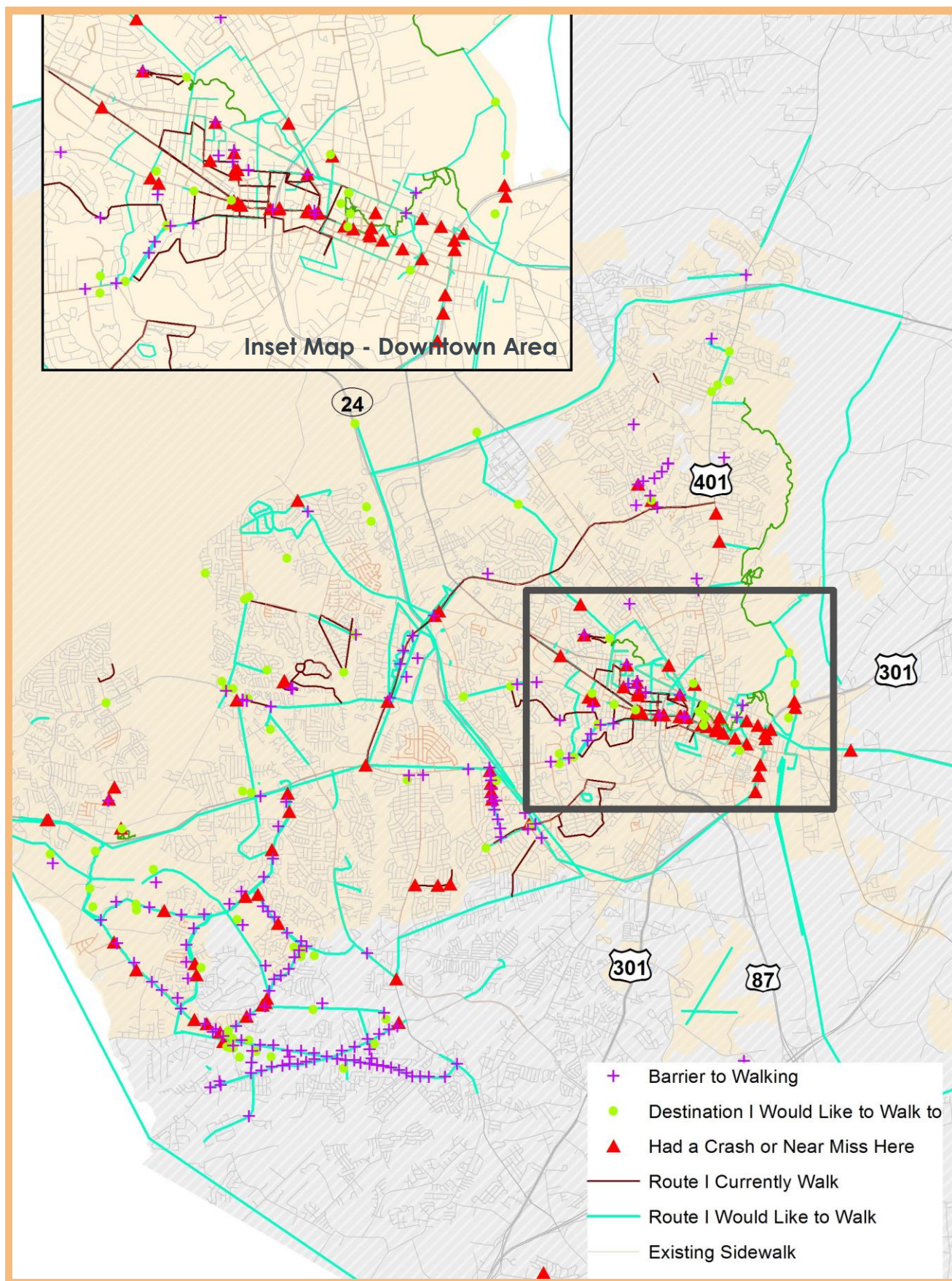


## Fayetteville Pedestrian Plan Survey Results

Beginning in May 2017, the City of Fayetteville have been asking citizens for their thoughts on walking and biking in and around the city. With this feedback, the city leaders and planners can work to prioritize initiatives while developing the Fayetteville Pedestrian Plan. As of August 15<sup>th</sup>, this is what the respondents have to say.



**Figure 5**  
Survey Results



**Figure 6**  
Online survey mapping comments





