



Walkable Landrum

The City of Landrum Pedestrian Master Plan

DECEMBER 2016



ACKNOWLEDGEMENTS

PUBLIC PARTICIPANTS

Thank you to the residents of Landrum for their participation in this planning process and their passion for improving the place they call home.

CITY OF LANDRUM MAYOR AND CITY COUNCIL

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LANDRUM PEDESTRIAN MASTER PLAN STEERING COMMITTEE

Thank you to the engaged leaders of the Landrum community for their continued participation throughout the planning process and for their commitment to furthering the efforts of this Plan.

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Vision & Goals

The residents of Landrum envision an active, vibrant walkable community, where people of all ages and abilities comfortably travel on foot, where key destinations are accessible via a well-connected pedestrian network and where transportation and recreation contribute to the health and economic prosperity of the community and the region.

- **Connect neighborhoods and residents to important local destinations through safe and convenient walking routes.**
- **Establish a connected network of inviting walkways, trails, crossings, and intersections.**
- **Leverage the existing downtown district and Palmetto Trail to attract and encourage walking.**
- **Incorporate the vision of a walkable community to visitors and tourists.**
- **Engage the strong network of community partners working to improve Landrum in efforts that advance health and active transportation.**
- **Increase awareness of safe and enjoyable places to walk.**





"A street that's made safer for an older adult to cross is also safer for a child walking to school, a parent pushing a stroller, a bicyclist, a jogger, a commuter, a shopper. In other words, a walkable community benefits everyone."

*- Melissa Stanton
AARP Livable Communities*

CHAPTER 1

Introduction



PROJECT BACKGROUND

Through a grant from the Centers for Disease Control and Prevention (CDC), the South Carolina Department of Health and Environmental Control (DHEC) is leading an effort to increase pedestrian planning efforts throughout South Carolina. The effort is part of the DHEC South Carolina Prevention and Health Across Systems and Environments (SC PHASE) Pedestrian Planning Project.

SC PHASE Pedestrian Planning is a 3 year project to develop pedestrian plans for 16 communities in specific counties throughout the state. Beyond the basic tenets of walkability and pedestrian safety, **key elements of the program initiative** are:

- Equity-based planning
- Community engagement
- Safe pedestrian access to healthy foods

The City of Landrum is one of the 16 communities to participate in SC PHASE Pedestrian Planning.

Pedestrian plans and policies play a critical role in fostering more walk-friendly communities by establishing the conditions that support and encourage safe walking environments. These plans can lay the ground work for new social norms where walking is seen as practical and appealing for people of all ages and abilities where infrastructure, programs, and amenities to support healthy choices and active transport. With **25.1 percent of South Carolinian adults reporting no leisure-time physical activity, and 56.6 percent of high school students reporting not being physically active** on five or more days, finding ways to support more walking as an accessible and convenient form of physical activity will be vital to improving the health of South Carolina's residents.

Downtown Landrum, is a hub for retail foot traffic, trail connections, and connected neighborhoods.

This pedestrian plan will build off of this foundation and improve access and safety for pedestrians throughout Landrum.



COMMUNITY CONTEXT

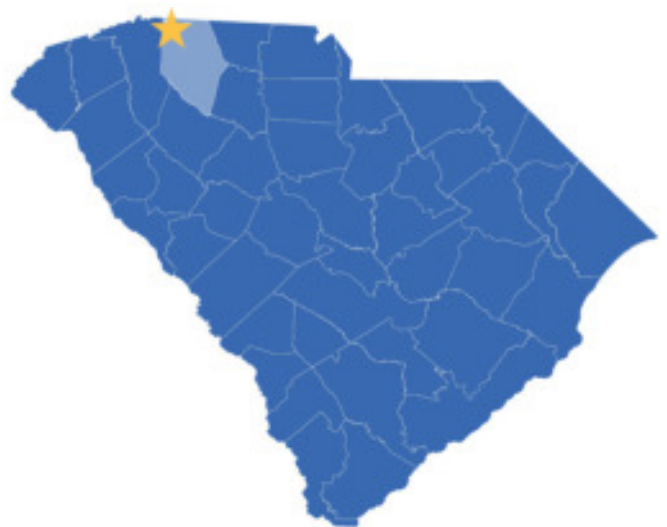
The City of Landrum is in Spartanburg County, situated at the top of the Upstate near the South Carolina state border. Landrum is a city of approximately 2,600 people, located 25 miles northwest of the City of Spartanburg. The advent of the railroad through Landrum precipitated a strong industrial-based economy. Landrum became a major producer of textiles, timber, and crops like peaches, corn, and cotton. Over the past few decades, the city's industry has diversified to include electronics and hardware.

As Landrum is located on the border of North Carolina and South Carolina, it is a member of the Chambers of Commerce for both Spartanburg County and Carolina Foot Hills Chamber of Commerce. It has a thriving tourism economy that draws visitors from both states, who are attracted by the numerous antiques shops and vibrant horse-country culture.

The nearby Blue Ridge Mountains also provide an alluring backdrop for outdoor enthusiasts. The Palmetto Trail, a statewide mountains-to-sea trail, is routed through downtown, connecting people on bikes and on foot to surrounding attractions and on long-distance trips.

Landrum has a council-manager form of government, with a 7-member City Council, including the Mayor. There is also a Planning and Zoning Commission that guides the city's land use and community development. Landrum is part of the South Carolina Appalachian Council of Governments (COG), a regional forum that allows local governments to coordinate transportation planning and decision-making across a six-county region, including Anderson, Cherokee, Greenville, Oconee, Pickens, and Spartanburg counties.

Landrum is currently in the process of updating its Comprehensive Plan, and this Pedestrian Master Plan will be a part of that Comprehensive Plan when completed and adopted by the City. The Pedestrian Master Plan will help build upon the existing conditions in Landrum that form the foundation of a walkable community, namely its compact downtown, small overall footprint, and grid-pattern street network.



Reference map of the City of Landrum within Spartanburg County and the state.

COMMUNITY PROFILE

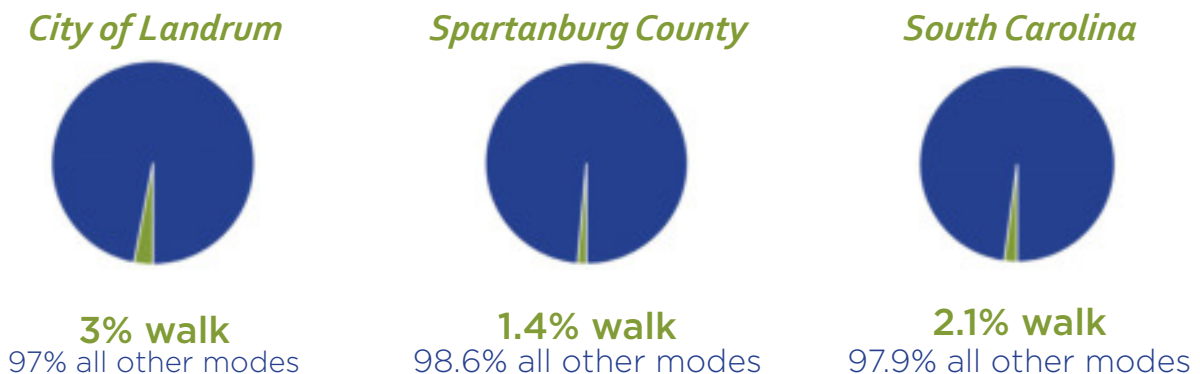
The racial make-up of the City of Landrum is predominantly white at 85.9%. Ten percent of residents identify as Black or African American and almost three percent identify as some other race. For comparison, Spartanburg County is 20.7% Black or African American, and South Carolina as a whole is 27.7% Black or African American.

The median income for household in the City of Landrum is \$37,250, about 15% less than that of the county (\$43,555) and almost 20% less than the median income for all South Carolina households (\$45,033). The overall unemployment rate in Landrum is 10.5%, which is on par with the rest of Spartanburg County (10.3%) and the state (10.6%). However, when you look at the unemployment rate among minorities and those without higher education, a disparity exists. African Americans in Landrum have an unemployment rate of 22.1%, which is almost three times higher than the 8.1% rate among Whites. Similarly, unemployment among Hispanics is at 16.4%.

In terms of travel mode share, the vast majority of residents (84%) commute to work in private vehicles. About 6% of residents carpool to work and 6.3% work at home. **3% of Landrum's workforce walks to work compared to just 1.4% and 2.1% for the county and state.** See figure below.

Mode share does not paint a full picture of need and demand, however. Travel mode share data is collected through an American Community Survey question that asks for the “primary” way a resident gets to work. This excludes walking trips that occur as a secondary mode (for example, walking to a bus) and also excludes trips to destinations other than work. Moreover, those **households in the City of Landrum who do not have access to a vehicle (9.7% — 1.5% greater than the county rate) and those households with access to only one vehicle (30.5%) may walk out of necessity.** Residents who currently drive may opt to walk to work if a safe and comfortable walking environment existed.

Commute-to-Work Mode Share



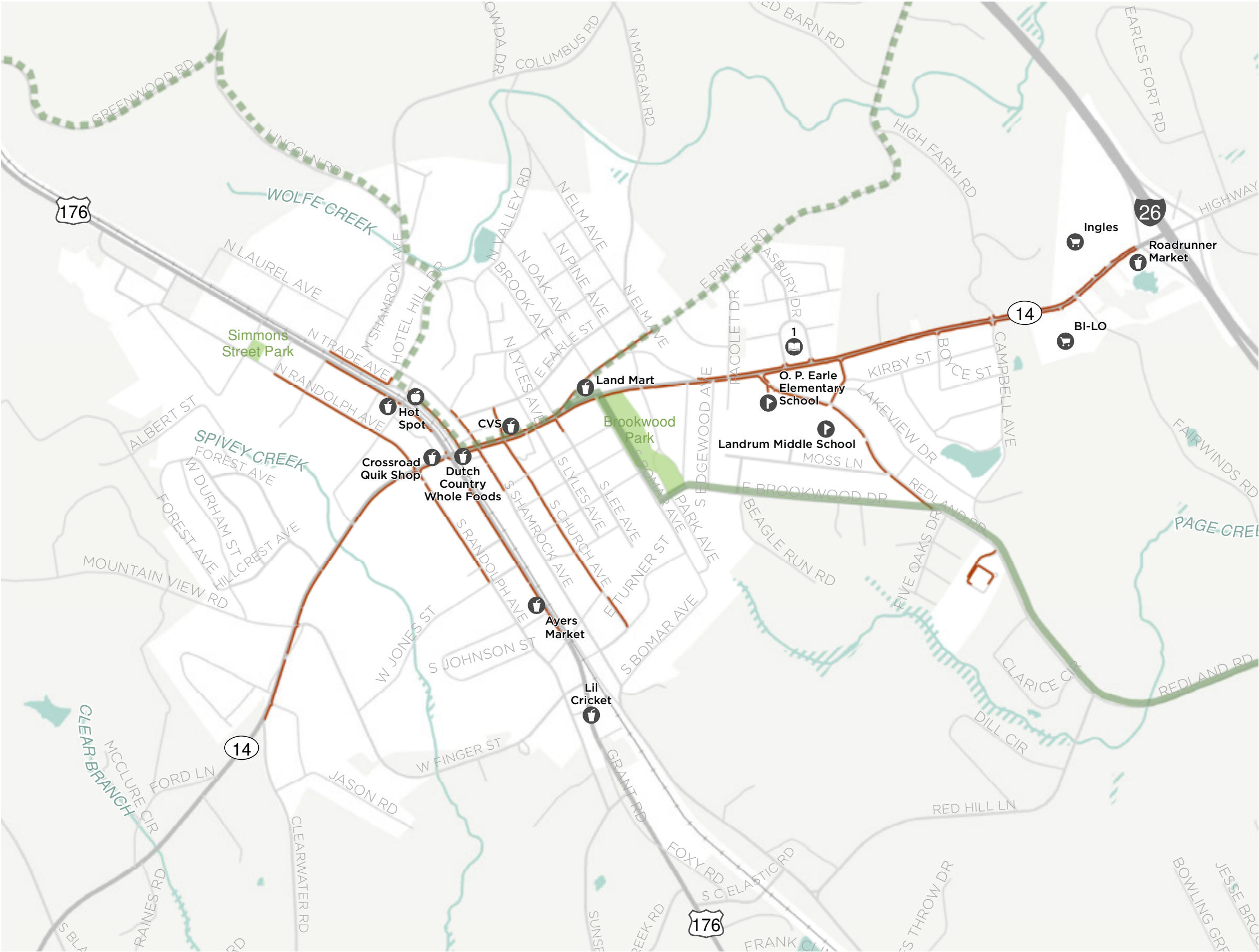
Source for all socioeconomic data: U.S. Census Bureau 2010-2014 American Community Survey 5-Year Estimates

COMMUNITY BASEMAP

Based on GIS data collected by the project team, a base map was created to illustrate existing sidewalks, as well as key supporting information, such as locations of schools, parks, grocery stores, farmers market, and other food retailers.

LEGEND

- Farmers Market
- Grocery Store
- Informal Food Outlet
- School
- Landrum Library
- Sidewalk
- Palmetto Trail (Completed)
- Palmetto Trail (Proposed)
- Road
- Railroad
- Stream
- Park
- Wetlands
- City of Landrum (white)
- Spartanburg County





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WHY PLAN FOR PEDESTRIANS?

Imagine Landrum in 20 years...

as a place where people choose to walk — not out of necessity, but because it is a convenient and enjoyable transportation and recreation choice.

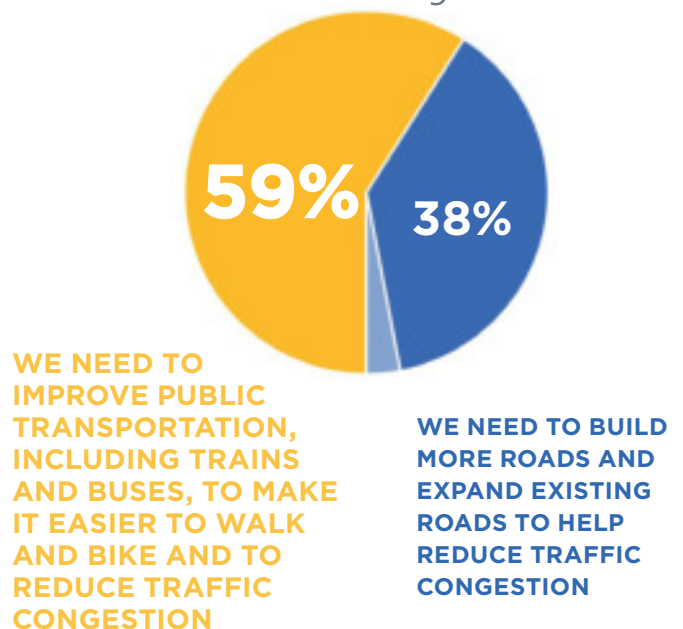
Development is well-designed and accessible so that residents have many of their everyday needs within walking distance. Pedestrian-friendly streets are prevalent throughout the community, and parents feel perfectly safe letting their children walk or bike to school, parks, or other destinations by themselves, or as part of an enjoyable and healthy family outing. Older adults who no longer drive can easily access grocery stores and medical appointments. Because the streets are safer and a growing pedestrian network connects more people to more places, people are walking in record numbers. Obesity rates decline, and families in all parts of the community can easily access healthy food. Collisions involving motor vehicles and pedestrians have dropped substantially.

The cumulative result of this environment has resulted in substantial savings for the community and taxpayers. Road maintenance is less expensive as fewer cars are on the roads, and residents save money on gas while the air quality improves for everyone. Downtown attracts more local businesses that want to invest in a vibrant, active community and cater to the growing population.

An increasing number of communities and their leadership are seeing the potential of a future like this one; a future where better active transportation environments are critical parts of transforming and revitalizing our communities, making them more desirable places to live, work, and visit. This movement is a direct result of the nationwide demand for more livable communities and transportation options.

In 2010, Transportation for America conducted a nationwide survey that showed **59% of Americans in rural and urban areas prefer a transportation future that “[improves] public transportation and makes it easier to walk and bike over building more roads and expanding existing roads.”** And 73% [expressed] they ‘have no choice but to drive as much as they do’, with 57% desiring to spend less time in the car.”

Americans' Preference to Reduce Traffic Congestion



WHAT IS WALKABILITY?

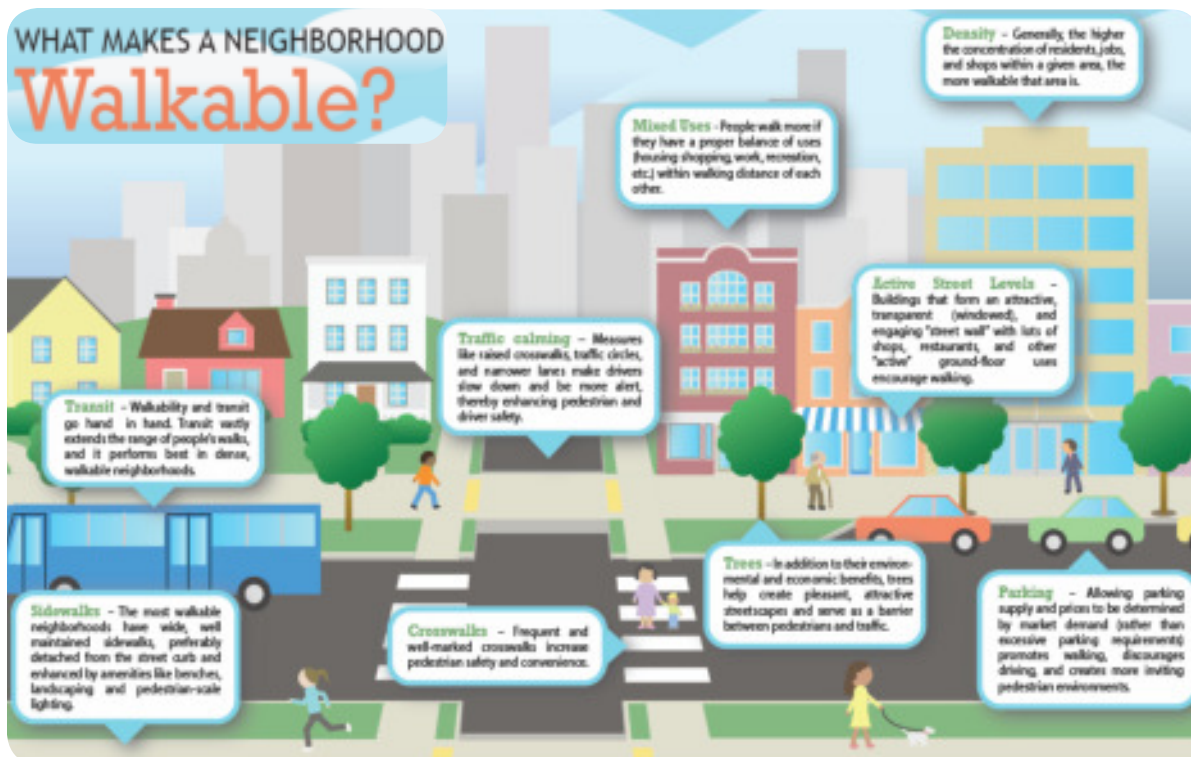
Walkability is more than the ability to walk. It is a holistic approach for evaluating a streetscape or community's design, and a means to understand the factors that influence and encourage pedestrian activity. The goals of a walkable place are multi-faceted and context-specific but typically strive for the following:

- increasing personal mobility by providing alternatives to driving private automobiles
- increasing personal mobility with ADA-accessible streetscapes
- stimulating vibrancy in commercial and social realms of a community
- increase access, proximity, and convenience to more destinations through a well-connected network of sidewalks, crosswalks, and walking trails
- creating an attractive place with inviting street orientations, landscaping, street furniture, and architectural design

There is no single, catchall walkability definition or one specific metric for measuring walkability. However, across the various attempts at a comprehensive definition, common themes emerge. Apart from the potentially obvious features that encourage walkability, like sidewalks and frequent, visible crossings, walkable places also incorporate the following key principles:

- human-scaled environment
- strong sense of place
- physical access
- connected walkways and street pattern
- mix of land uses
- density and proximity of destinations
- managed parking

The City of Landrum has a basis of existing facilities and features that will support and contribute to the City's goal of becoming more pedestrian-friendly. This Plan presents opportunities to build off of those existing resources.



"What Makes a Neighborhood Walkable?" graphic from WalkDenver, a pedestrian advocacy group.

SUMMARY TABLE OF WALKABILITY BENEFITS

ECONOMIC BENEFITS	
Public infrastructure savings	Compact, walkable communities save costs on road building, maintenance other public infrastructure.
Attracts businesses	Walkable communities have lower vacancy rates and increasingly attract businesses that want to offer convenient amenities and short commutes.
Reduces individual transportation costs	Residents of walkable communities save money on costs associated with transportation, including vehicle ownership costs, operating costs, and parking costs.
Magnet for millennials and baby boomers	Demand for walkable communities is growing, especially among millennials and boomers – both generations that wish to drive less and be able to easily reach destinations on foot.
Increases housing values	Walkable communities have higher housing values and have higher stability than auto dependent communities during a recession.
Improves socioeconomic mobility	Walkable areas have concentrated amenities such as jobs that are easily accessible to low-income residents and provide greater opportunities for economic mobility.
Attracts visitors	Walkable communities attract tourist dollars with lively streets, engaging storefronts, short distances between attractions and a unique sense of place.
Attracts recreation spending	Walkable communities are great places for outdoor recreation. Multi-use trails and safe streets can attract bicyclists and events such as triathlons that pump money into the local economy.

HEALTH BENEFITS

Improves physical health	Places that encourage walking have lower rates of chronic disease related to physical inactivity such as diabetes, heart disease, and osteoporosis. A simple walk improves balance, limits sickness, strengthens muscles and builds bone mass, as well as burns more fat than jogging. People who live in walkable neighborhoods are two times as likely to get enough physical exercise as those who do not.
Improves mental health	Walkable communities can prevent the onset of cognitive decline and improve mental function. Walking can also prevent and reduce the symptoms of depression and anxiety, stimulating a sense of well-being through released endorphins.

SAFETY BENEFITS

Improves safety for all road users	Streets that are designed for pedestrians have safety benefits for all users of the road, including bicyclists and drivers. Sidewalks, medians, and traffic calming have particular direct effects. Safety in numbers - more people walking and biking - has proven to be an indirect safety improvement that reduces the risk of a collision.
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ENVIRONMENTAL BENEFITS

Improves air quality	By reducing the distance to amenities and increasing the safety of walking to destinations, more trips can be made by walking while reducing emissions and reliance on fossil fuels.
Preserves open space and greenspace	Compact, walkable development allows for more green space, water sources, and wildlife habitat to be preserved.



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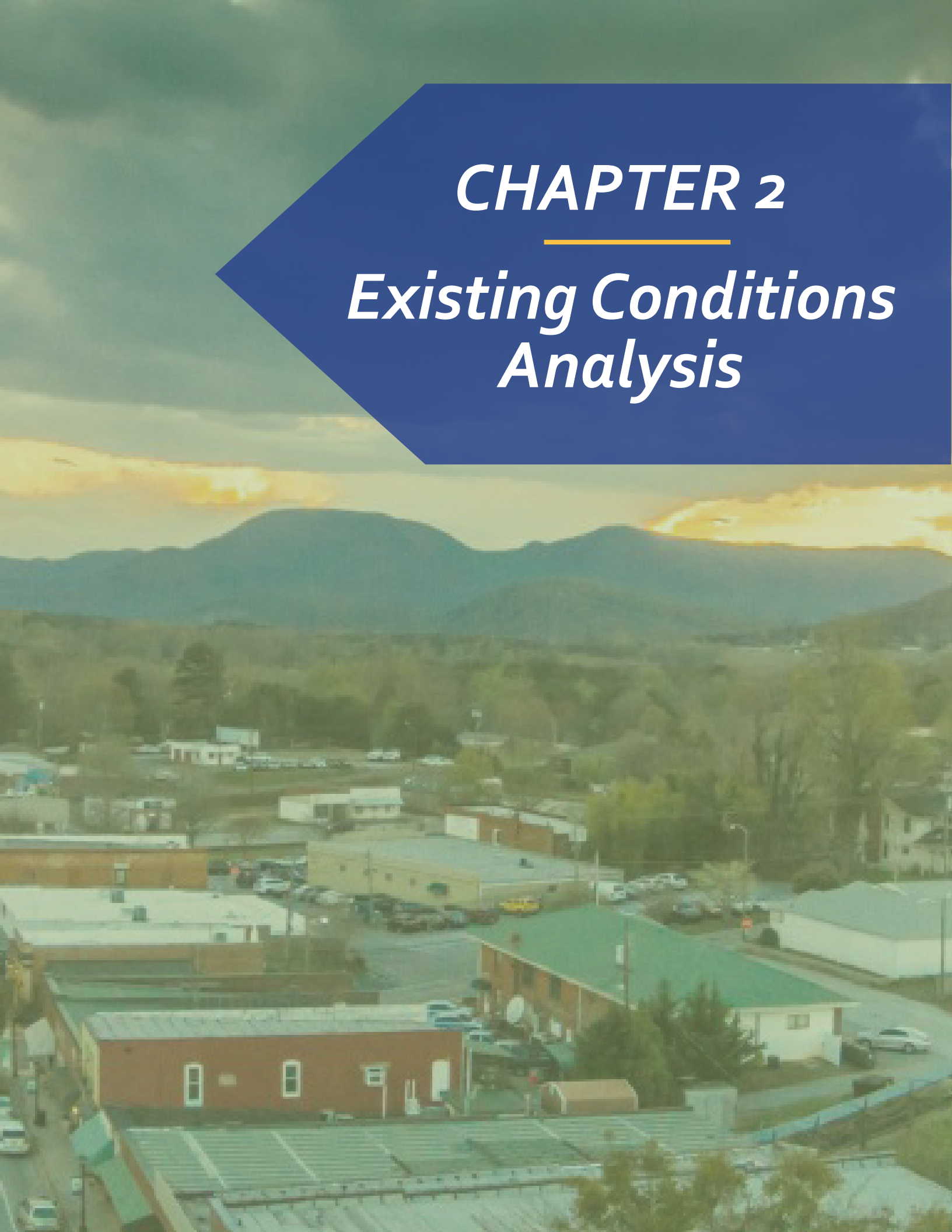
An aerial photograph of a town at sunset. The sky is filled with large, dramatic clouds in shades of orange, yellow, and grey. In the background, a range of blue mountains is visible. The town below has a mix of green trees and buildings. A large blue arrow-shaped graphic points from the left towards the center of the image, containing white text.

*"...Americans want to get back
on their feet — for better health,
stronger communities, and
happier, more relaxing lives."*

*- Jay Walljasper
Everybody Walk*

CHAPTER 2

Existing Conditions Analysis



OVERVIEW

This chapter provides an overview of the major components of the City of Landrum's existing environment for walking. This includes an assessment of the primary opportunities and constraints that exist for the development of a safe and connected pedestrian network. The assessment is based on the project team's field observations and GIS-based mapping analysis, as well as public input, which is detailed in the following chapter.



OPPORTUNITIES & CONSTRAINTS

Landrum's existing physical landscape and institutional infrastructure offer a range of opportunities and challenges for advancing walkability. The planning process included on the ground assessment of the pedestrian environment and conversations with community stakeholders and partners. Based on this research, the project team identified opportunities for connections between neighborhoods, key destinations, healthy food outlets, and recreation areas with active spaces, as well as the deficiencies and gaps in the existing network. The following section provides an overview of the opportunities and challenges that exist for walking in Landrum.

Opportunities

City Projects & Initiatives

- The City is currently updating its Comprehensive Plan. This will provide a new community-wide vision for the future and strategic policy and planning steps to work towards that vision. The City is incorporating the pedestrian plan into that guiding framework.
- A Market Analysis is underway to highlight specific opportunities for economic development and growth. Investments in walkability can be linked to target areas for retail foot traffic, new developments, and visitor destinations.
- The City is investing in its public realm and has the capacity to undertake small capital projects.

Network Opportunities

- The small town footprint and character of Landrum lends itself to walkability.
- There is a vibrant, thriving main street environment with active storefronts, pedestrian scale lighting, and sidewalk furniture.
- Brookwood Park Trail is very popular and is located within a neighborhood.
- The inactive rail line offers the potential for a seamless, linear regional rail-trail corridor.
- The statewide Palmetto Trail routes through Landrum's downtown.
- Stable neighborhoods with a relatively complete grid network border downtown.
- OP Earle Elementary and Landrum Middle Schools are in close proximity to neighborhoods.

Brookwood Park Trail is a valuable amenity for the community of Landrum.



Community Assets & Resources

- The greater Landrum area is popular for bicycling, especially weekend touring cyclists.
- There is no stigma to walking for transportation.
- Mary Black Foundation and Polk County Community Foundation are both potential partners.
- Landrum is a member of both Carolina Foothills Chamber of Commerce and Spartanburg County Chambers of Commerce.
- In terms of access to healthy foods, Landrum has a variety of sources for food in the community (Farmers Market, Backpack Ministry, and others).

This community chalkboard provides a hopeful outlook for pedestrians in the community.



- Citizens are very action-oriented and bring a do-it-yourself attitude for community improvement.
- The City has a strong, active planning commission.
- An involved group of stakeholders serves on the steering committee for the Comprehensive Plan Update.

Challenges

Community Needs

- Residents and visitors perceive walking along and crossing streets as unsafe.
- Visitors perceive barriers to access and walkability in downtown, which has resulted in visitors limiting the stores they visit and limiting themselves to on-street parking in front of stores only.
- Landrum has limited local government staff and capital budget.
- Programs specific to walking, including Safe Routes to School, are limited.
-

Network Constraints


- Sightlines and visibility are limited on SC 14 in downtown.
- Downtown is not a seamless walkable environment beyond the main stretch; specifically limited by the railroad, unimproved side street crossings, and sidewalk gaps.
- Residential areas on the City's western end are disconnected from one another and from destinations.
- SCDOT owns much of the roadway network, limiting local decision-making in road investments.
- SC 14 has a significant volume of truck and motor vehicle traffic.
- Howard Avenue is a multi-lane highway that bi-sects the city's east and west sides.
- The Palmetto Trail's routing through Landrum is not fully signed, making it difficult to follow.

The quality of the pedestrian environment is poor outside of the main stretch of downtown shops.



The Palmetto Trail is not well marked though the city. Here a small sign is located on the backside of a streetsign.





"Americans are increasingly embracing a new approach to work and school commutes that includes less time behind the wheel and more time walking or cycling."

*- David Friedman
NHTSA*

CHAPTER 3

Data Collection & Public Input



OVERVIEW

The first step in developing the *Walkable Landrum Pedestrian Master Plan* is listening to Landrum stakeholders and residents, and learning about the community's needs and opportunities. The public input process was crucial for understanding Landrum's primary needs and identifying specific programs, projects, and policies that address those needs. The graphic below describes the planning process and the various inputs used to create the Walkable Landrum Pedestrian Master Plan.

This chapter provides an overview of the data collection and public input components that shaped the recommendations of this Plan. Each section describes the information gained and the critical outcomes of that process.

Sections include:

- Review of Previous Planning Efforts
- Pedestrian Safety Analysis
- Health & Equity Analysis
- Summary of Citizen & Stakeholder Input
- Focus Groups

REVIEW OF PREVIOUS PLANNING EFFORTS

This section provides a summary of recent pedestrian and greenway planning-related efforts in the City of Landrum. A number of area planning efforts are currently underway. This includes the City of Landrum Comprehensive Plan, which will be developed in tandem with the Walkable Landrum Plan. Additionally, Spartnaburg County is updating its County Comprehensive Plan and the Appalachian Council of Governments is updating the region’s Long Range Transportaiton Plan. For the purposes of this study, a summary of relevant findings from three plans are provided: DRAFT 2040 ACOG LRTP (2016), Palmetto Trail Statewide Master Plan (2014), and the Spartanburg County Bicycle & Pedestrian Master Plan (2009). The plans reviewed are listed chronologically in the table below and are described in further detail on the following pages.

The *Walkable Landrum Pedestrian Master Plan* combines, updates, and refines previous recommendations for sidewalks and greenways to present a proposed future network. **Common themes emerge across the different plans: Landrum’s need for an improved quality of life, including active transportation and safe pedestrian access to key destinations.**

- To achieve a vision for walkability, the plans include the following recommendations:
- Provide a seamlessly connected walking network
 - Extend the current greenway system, the Palmetto Trail
 - Provide active transportation connections to neighboring communities

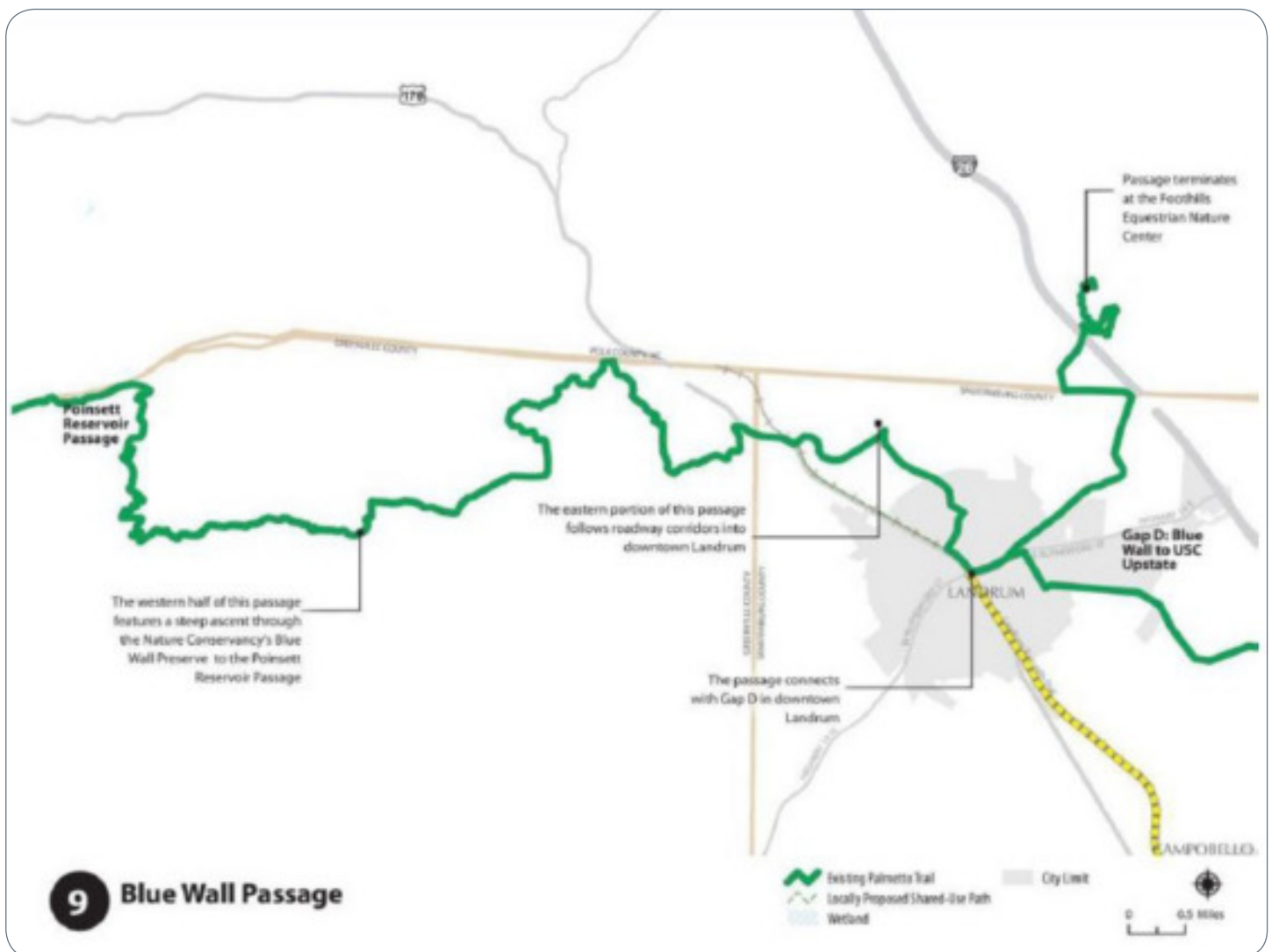
Plan	Agency	Year
Palmetto Trail Statewide Master Plan	Palmetto Conservation Foundation	2014
Spartanburg Bicycle & Pedestrian Master Plan	Spartanburg Area Transportation Study (SPATS), Spartanburg County	2009
2040 Long Range Transportation Plan (DRAFT)	Appalachian Council of Governments	2016 (DRAFT)

PALMETTO TRAIL STATEWIDE MASTER PLAN

The Palmetto Conservation Foundation commissioned the Palmetto Trail Statewide Master Plan to identify strategies for closing the gaps along the Palmetto Trail's 425-mile spine, and creating spur trails to connect to surrounding communities. The Palmetto Trail segment through Landrum is already complete, with segments heading west toward the Poinsett Reservoir, northeast

to the Foothills Equestrian Nature Center, and southeast to the city of Inman, SC. The plan also recommends creating an alternate off-road alignment to connect to Inman, as the current alignment is a signed, on-road route. This alternate alignment will connect downtown Landrum to the Landrum High School campus.

Map of the proposed alternate alignment (yellow dashed line) of the Palmetto Trail from Landrum to Inman, from the Palmetto Trail Statewide Master Plan



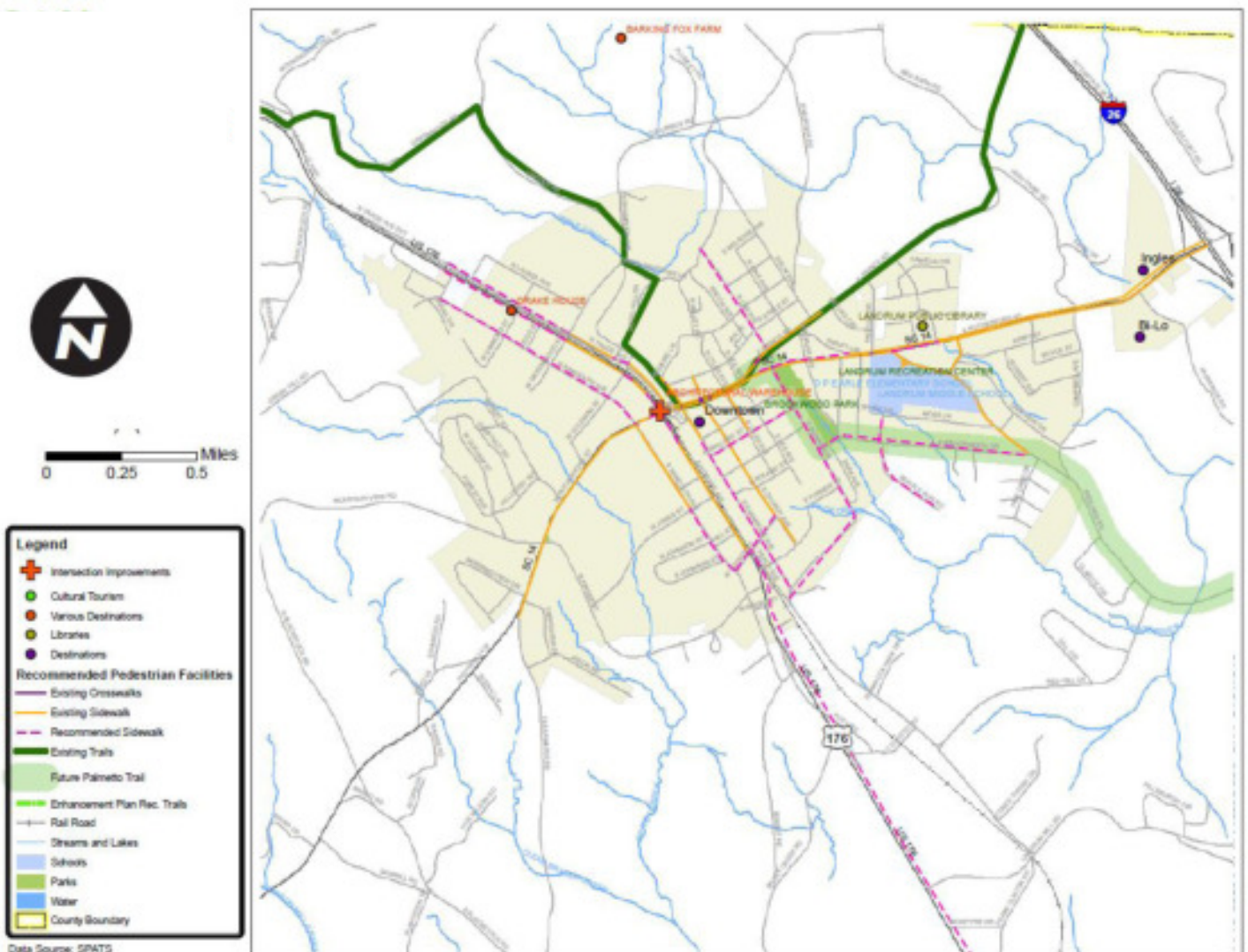
SPARTANBURG BICYCLE & PEDESTRIAN MASTER PLAN

This plan is a bicycle and pedestrian master plan for Spartanburg County, with specific recommendations for 13 municipalities within the county. For Landrum, the plan identifies key destinations, key issues, priority projects, and a priority intersection for improving pedestrian access and safety.

Key issues identified for Landrum walkability in the plan include:

- Sidewalks need to be extended in places to connect key destinations, including the library and Brookwood Park.
- Downtown accessibility is problematic with triple curb (steps).
- Existing sidewalks near S. Lyles Ave. require rehabilitation.
- Lighting of sidewalks near BI-LO is needed.
- Rails to Trails. A creative reuse project for railroad right-of-way is desired from Greenwood Road to Hulon Howard Rd (near new high school site). This is an opportunity for a multi-purpose trail.
- Connect with Isothermal Trail Plan
- The intersection of Rutherford Street and Howard Avenue is a priority for pedestrian improvements.

Map of the pedestrian recommendations in the Spartanburg Bicycle & Pedestrian Master Plan.



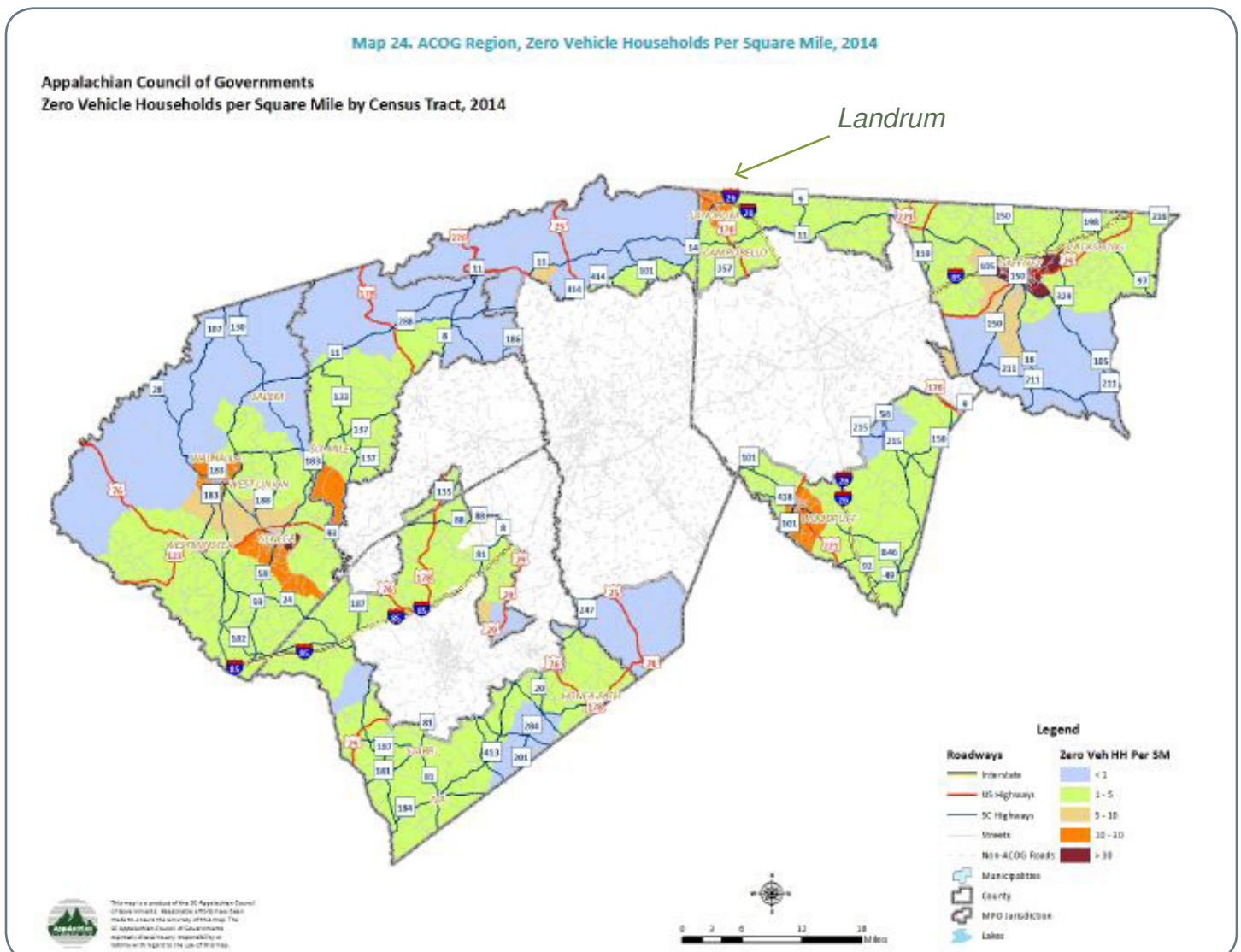
ACOG 2040 LONG RANGE TRANSPORTATION PLAN

The 2040 LRTP for the Appalachian Council of Governments is currently in draft form at the time of this writing. This plan outlines the current conditions of the transportation system in the 6-county region (including Anderson, Cherokee, Greenville, Oconee, Pickens, and Spartanburg Counties), and identifies and prioritized transportation needs for the next 25 years.

In terms of pedestrian facilities, this plan recognizes that most of the existing sidewalk infrastructure is limited to

downtown historic cores in each community, and maintenance has been ignored for a long time. Most of the rural roads lack sidewalks or paved shoulders and present considerable safety concerns for pedestrians. The plan recommends improving and expanding the sidewalk network around urban centers, as well as widening shoulders where appropriate to create a safer pedestrian environment.

Map depicting households with Zero Vehicles, by Census Tract, from the ACOG 2040 LRTP. Landrum has a relatively high concentration of such households, as indicated by the orange shading.



PEDESTRIAN SAFETY ANALYSIS

While pedestrian safety is a growing concern throughout the United States and South Carolina, **no pedestrian collisions have been reported in Landrum in the recent past** (data is available for 2009-2016). This is a remarkable trend considering that pedestrian fatalities in the state rose 23.8% between 2008 and 2012, outpacing national trends. The table below summarizes fatality figures for the state during this time.

South Carolina ranks 45th in the nation for levels of walking mode share, yet ranks 2nd in the nation for walking fatality rates.

While reasons for the increase in pedestrian crashes are difficult to pinpoint, demographic shifts, more people walking, and higher numbers of pedestrians on dangerous, high-speed arterials all likely play a role. A number of factors impact pedestrian safety. Visibility, driver behavior, time of day/year, access to safe crossings, and traffic volume all play a

role. However, key factors such as speed, the number of traffic lanes, and roadway design disproportionately affect safety for vulnerable roadway users. According to Fatality Analysis Reporting System data, **58.8% of all pedestrian deaths in South Carolina were on arterials** — wide, high speed roads rarely built with pedestrian safety in mind. Similarly, 78.8% of South Carolina’s pedestrian fatalities occurred on roads with a speed limit of 40 mph or higher.⁶

Some populations are disproportionately affected by unsafe walking conditions. Households without access to vehicles are more reliant on walking, yet often live in areas where auto-oriented street patterns and dangerous arterial roads predominate. Older adults require more time at crossings and are more vulnerable to injury when a collision occurs. Older adults are also more susceptible to other non-collision events which do not involve a motor vehicle but

Pedestrian Fatality Figures for South Carolina:

	2008	2009	2010	2011	2012	% change
Pedestrian Fatalities	101	89	90	113	125	23.76%
Pedestrian Fatality Rate per 100,000 people	2.23	1.94	1.94	2.41	2.65	18.83%
Pedestrians as Percent of all Traffic Fatalities	10.97%	9.96%	11.12%	13.65%	11.6%	5.74%

which can cause injury. These “pedestrian only” events such as tripping on sidewalks and slipping on curbs, are not typically captured when discussing pedestrian safety but are important considerations in this plan.⁷

Children are also disproportionately affected by unsafe walking conditions. Children often walk to schools built along unsafe arterial or major roads, putting them at higher risk. Children also use neighborhood streets as areas to ride bikes and play games. They often go unseen by drivers though.

Pedestrian injuries occur at a higher rate than pedestrian fatalities. Official crash statistics, however, do not capture a significant portion of these collisions. Collisions that go unreported and near-miss incidents are not reflected in most collision statistics, and thus may not be fully representative of safe walking conditions. This is especially true when accounting for whether a pedestrian injury occurred in the roadway (1.7 times more likely to report than non-roadway locations), the severity of the injury (1.3 times more likely to report when hospitalized), and the age of the pedestrian (ages 15-24 are significantly less likely to report a collision even after controlling for location and severity).⁷

In recent years, a series of successful national campaigns have targeted drunk driving, seat belt use, and distracted driving. For people in vehicles, the resources and focus dedicated to safety has saved thousands of lives. A similar dedication to creating safe streets for pedestrians will encourage walkability, improve health outcomes, and improve livability for all residents.

Dangerous by Design is a report issued by Smart Growth America's National Complete Streets Coalition. The Smart Growth organization also issues state-specific versions with nuanced relevant data. The report documents preventable pedestrian fatalities and details measures that can be taken to make streets safer for all road users.

⁶ Dangerous by Design - South Carolina

⁷ Federal Highway Administration Office of Safety - Bike/Ped Documents
*Police-reporting of Pedestrians and Bicyclists Treated in Hospital
Emergency Rooms*

⁸ Smart Growth America Senate Fact Sheet



HEALTH & EQUITY ANALYSIS

OVERVIEW

An equity analysis provides insight about the areas of Landrum that have higher concentrations of vulnerable populations. This information, coupled with an overlay of healthy food outlet locations and active space locations, can also distinguish which neighborhoods may need improvements the most.

This quantitative analysis gave the project team a starting point for identifying priority areas, however, recommendations were ultimately based on a synthesis of factors, including the equity analysis results, current best practices, public input, existing conditions analysis, and the pedestrian collision analysis,

This section describes the equity analysis process in more detail, and includes the following:

- Equity Analysis Methodology
- Equity Analysis Results
- Healthy Food Access Analysis
- Active Space Access Analysis

METHODOLOGY

The equity analysis incorporated the following seven socioeconomic criteria:

- Seniors
- Children
- Non-white populations
- Low-income households
- Vehicle access
- Linguistic isolation
- SNAP recipients

The measure and rationale for each criteria are further described below.

Seniors

Metric: Senior citizens are defined as those who are 65 years old and older. This follows the *2010 Census Brief - The Older Population*.

Rationale: Walkable neighborhoods help seniors remain active, healthy, social and free to move around. Older adults socialize more when living in walkable neighborhoods, because regular social interaction is possible, convenient and more frequent. In a walkable neighborhood the senior citizens are more likely to know their neighbors, participate in politics, engage socially and even trust people.

According to Center for Disease Control and Prevention survey, 32.5 percent of Americans over the age of 65 don't have regular physical activity. There are many health benefits of walking, especially

for people older than 50. Elderly adults who walk are less likely to suffer mental deterioration or dementia and physical activity may actually add years to their life. Therefore, living in a walkable neighborhood gives options for walking right out your front door.

A survey by AARP Public Policy Institute found that people over age 50 listed lack of walkability part of barriers to walking.

“Older adults perceive poor sidewalks, the absence of resting places and dangerous intersections as barriers to walking.”

Thus, walkable environment benefits seniors, keeping mind and body healthy through their surroundings and neighborhoods.

Children

Metric: Children are defined as individuals 14 years old and younger. This threshold was determined based on the legal age for driving in South Carolina. At age 15, young adults are eligible for a learner’s permit, and after 180 days young adults are eligible for a provisional driver’s license. While conditional, even a permit and provisional driver’s license broaden a young person’s mode of choice, and significantly increase their mobility.

Rationale: As parents, physicians and policy makers look for ways to curb childhood obesity, they may need to look no further

obesity, they may need to look no further than a child’s own backyard. Studies show that children are less likely to be obese if they live in a neighborhood that is safe and within walking distance of parks and retail services.

The U.S. has been experiencing a growing trend in overweight and obesity among youth and children and recent evidence shows that approximately 32 percent of youth are overweight or obese. Physical inactivity impacts weight and in an effort to curb the growing obesity epidemic there is an increasing research that has examined associations between local area environmental factors and physical activity among youth. Greater availability of outdoor play/sports areas and parks, and access to commercial physical activity-related facilities have been associated with higher levels of youth and children physical activity.

Neighborhood design can also influence physical activity levels in youth and children. However, perceived environmental barriers, such as lack of access to these types of settings such as low connectivity street networks, have been associated with lower income neighborhoods. Whereas, high walkability (grid street network) neighborhoods have shown to have more physical activity and hence, less obesity among youth and children.

Non-White Populations

Metric: Non-white is measured as the percentage of all races, excluding those that identified as white. This includes Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, or some other race.

Rationale: Communities with more racial and ethnic minorities and lower-income residents often lack specific features that support walking, such as clean and well-maintained sidewalks, trees and nice scenery and safety. Such deficits may undermine the generally favorable effects of walkable neighborhood design. The presence of parks, open space and other recreational facilities is consistently linked with higher physical activity levels among children and adolescents. However, many studies show that lower-income groups and racial and ethnic minorities have limited access to well-maintained or safe parks and recreational facilities,

Low leisure-time physical activity rates and high risk of obesity among racial or ethnic minority children and those living in lower-income areas, can be partially explained by poor access to parks and private recreation facilities. In light of this growing evidence, policy makers should pursue strategies that improve walkability, access to parks, green space and recreational facilities, and neighborhood safety.

Low-Income Households

Metric: Low-income is measured as the percent of the population living below two times the federal poverty level. 2015 Federal Poverty Guidelines identified \$48,500 as the threshold for a four-person household. American Community Survey (ACS) data groups income by increments of \$4,999 so this analysis captures all household incomes at or below \$49,999.

Rationale: The U.S. Department of Housing and Urban Development (HUD) defines low income households as households earning less than 80% of the Area Median Income (AMI). Very low income households earn less than 50% of AMI.

These groups of people are the least likely to have access to a car and may depend on walking to reach work, school, public transportation, or other destinations. People with lower incomes are more likely to live in areas with high crime rates, perceive their neighborhoods as less safe, and report physical and social disorder in their neighborhoods, such as broken windows, litter, graffiti, loitering and public drinking. These environmental variables may be why, in some cases, a higher proportion of lower-income children tend to be less active than their peers, overweight or obese. Walkable and safe access to healthy food outlets would support both nutrition and physical activity needs of low-income populations.

Vehicle Access

Metric: Vehicle access is measured from a question on the American Community Survey about whether a household has access to a car, truck, or van of 1-ton capacity or less.

Rationale: Access to private vehicles can be an indicator of mobility and access, particularly access to healthy food options and active spaces.

Linguistic Isolation

Metric: Linguistic isolation is measured as percentage of households in which those over the age of 5 speak English “not well” or “not at all”.

Rationale: Households that are linguistically isolated may have greater difficulty accessing services that are available to fluent English speakers, such as transportation services and social services.

SNAP Recipient

Metric: SNAP recipients measures the percentage of households who have received SNAP assistance in the past 12 months.

Rationale: Current regulations require food retailers who accept SNAP to stock three varieties of foods in each of the following four food groups: fruits and vegetables, dairy, breads and cereals, and meat, poultry

and fish. While a new rule requiring seven varieties in each food group was proposed in February of 2016, SNAP recipients still travel farther to access their food and are more likely to be affected by diet-related diseases. Additionally, only 0.02% of SNAP funds are redeemed at farmers markets indicating an opportunity for outreach and education efforts aimed at attracting households that receive SNAP assistance.



**of SNAP dollars
are spent at
farmers markets**

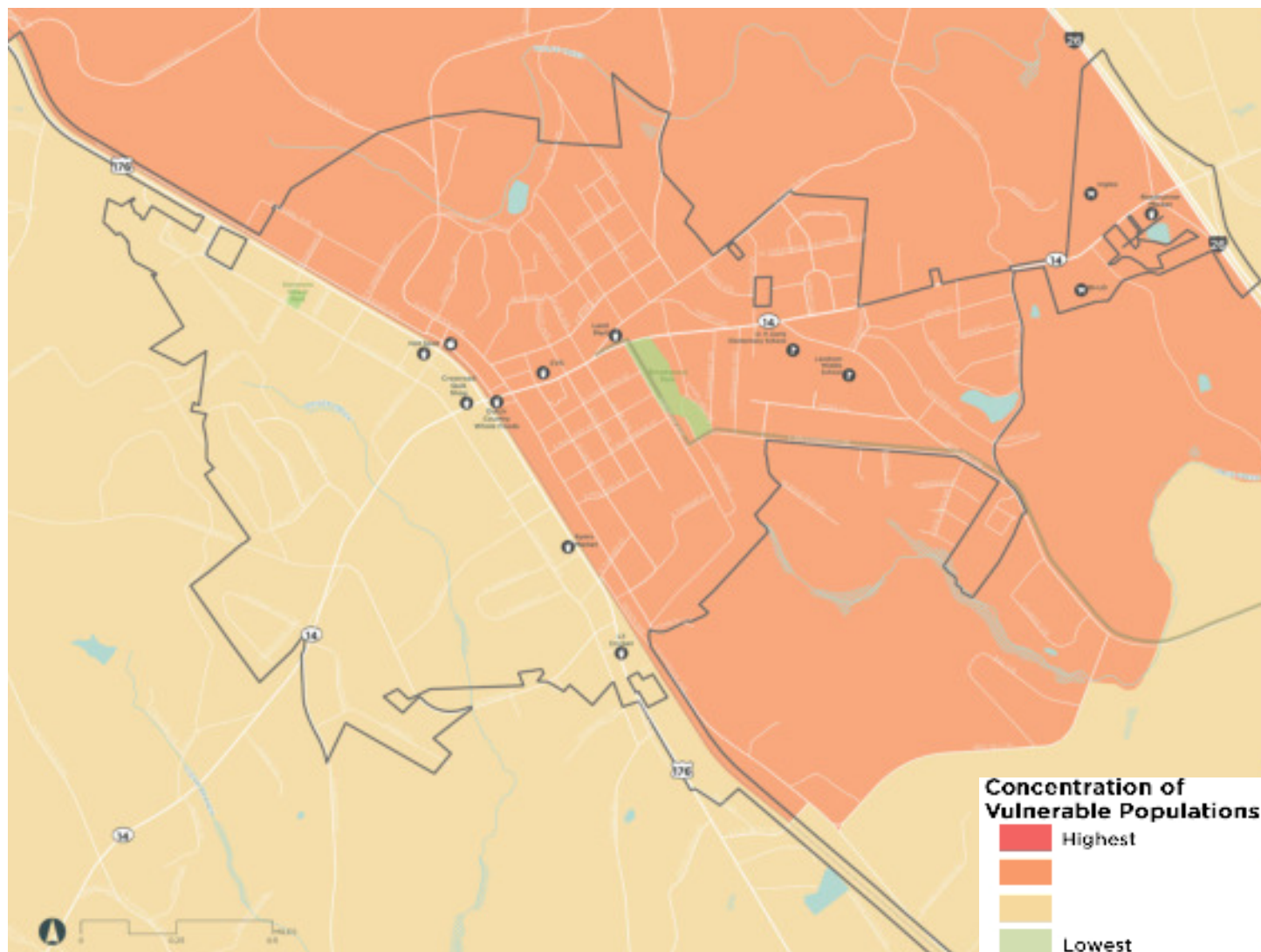
What is SNAP?

SNAP stands for Supplemental Nutrition Assistance Program. It is a federal nutrition program that helps stretch food budgets and supports the purchase of healthy foods. It is the largest program in the domestic hunger safety net.

EQUITY ANALYSIS MAP

The adjacent map reflects areas of the City of Landrum with greater than average concentrations of the seven aforementioned socioeconomic criteria by census tracts. These groups are more vulnerable to disparities related to access to healthy foods, active lifestyles, and economic advantages. As such, they represent populations ideal for targeted walkability interventions to improve mobility, access, and quality of life.

The entire eastern half of the City is drawn in orange, the second-greatest concentration of vulnerable populations, while the western half (yellow) is a less concentrated area of vulnerable populations.



HEALTHY FOOD ACCESS ANALYSIS

OVERVIEW

Walkable and safe access to supermarkets, grocery stores, farmers markets, and specialty markets is important, because they give consumers access to a variety of fruits and vegetables. Diets rich in fruits and vegetables offer a number of health benefits and have been linked to a lower prevalence of obesity.

Most Americans, especially those with a low income, consume far fewer fruits and vegetables than recommended by current dietary guidance. Communities with limitations in resources, disposable income, language proficiency, and transportation often have restricted access to, and knowledge about, a variety of healthy food options.

While there is general agreement that consumption of fresh, healthy foods such as fruits, vegetables, and whole grains are necessary for health and nutritional well-being, many communities across the region have negative health consequences caused by a lack of access to high-quality food. Grocery stores, farmers markets, and community gardens tend not to be as readily available to people in low-income, low-access communities. The result is an over-dependence on neighborhood convenience stores with limited offerings of fresh foods sold, frequently for a high price. This leads to myriad health and nutritional and long-term sustainability implications.

Therefore, creation of active transportation routes such as sidewalks, and bicycle paths between all neighborhoods and grocery stores, farmers markets, or other healthy food outlets can ease this disparity in accessibility, and help lower rates of chronic disease and lower levels of obesity.



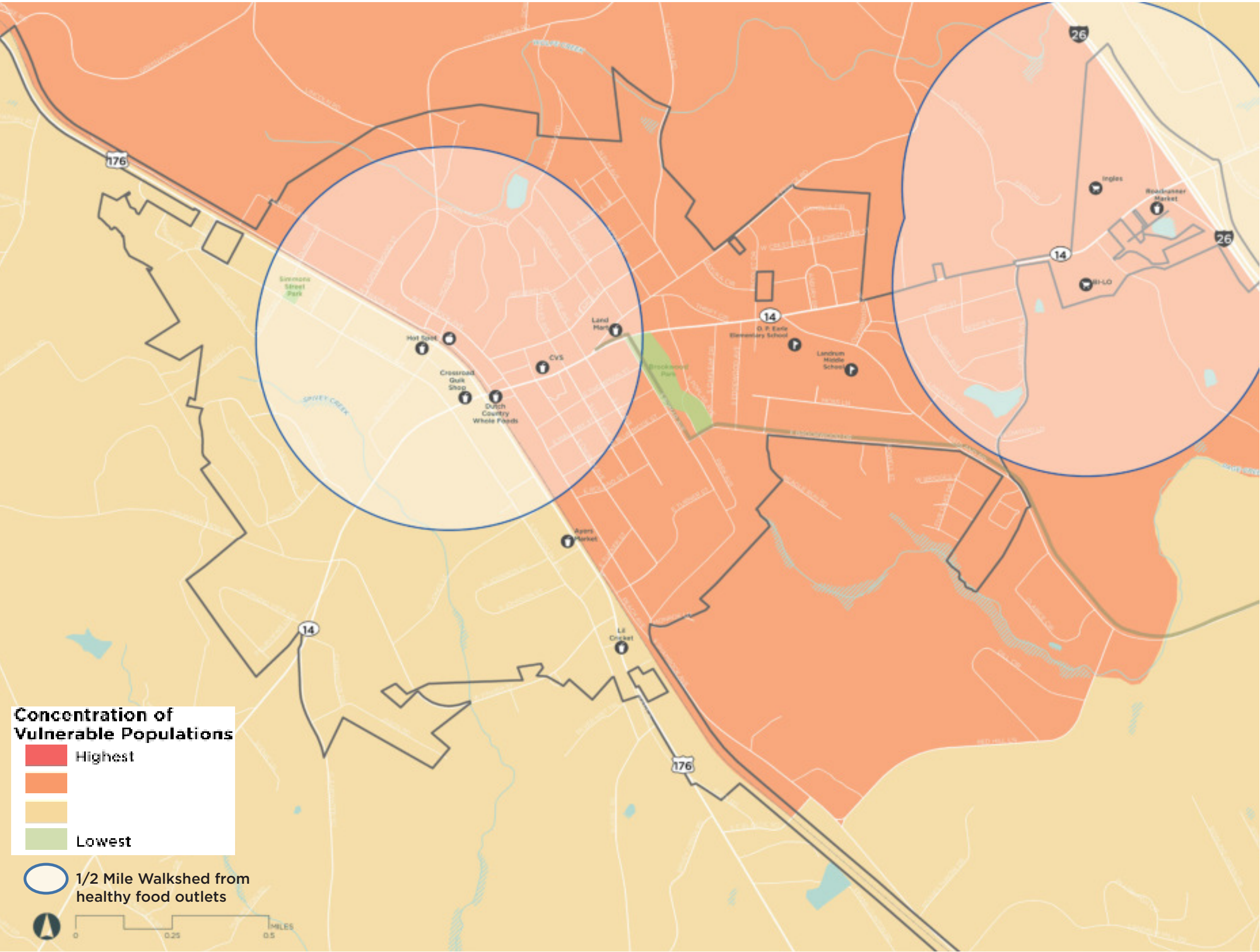
**people in
America lack
access to a
supermarket
within one mile
of their home**

HEALTHY FOOD ACCESS ANALYSIS MAP

The results of the Composite Equity Analysis are combined with a mapping study of the locations of healthy food outlets. Healthy food outlets are defined to include all grocery stores and farmers markets. The farmers market is seasonal.

A half-mile walkshed is a widely accepted catchment area for pedestrian analyses. A half-mile is about a 10 minute walk for most pedestrians. This distance also serves as the Federal Transit Authority's (FTA's) designated catchment area for pedestrian improvements that are eligible for transit enhancement funds. This diameter presumes that, barring barriers to mobility and accessibility, individuals within the catchment area would be willing to walk to these activities and destinations. **Walksheds, in combination with equity data, assess connectivity and reveal opportunities where infrastructure improvements may have the greatest impact.**

The walkability and food access connection center around downtown Landrum and the area around the I-26 exit along SC-14. While there are several food outlets downtown, many of them are convenience stores and do not provide a full spectrum of healthy food options. The location of Ingles and Bi-Lo on the eastern fringe of the city limits presents its own difficulties for accessing fresh food via foot, given the distance necessary to travel to the shopping center.

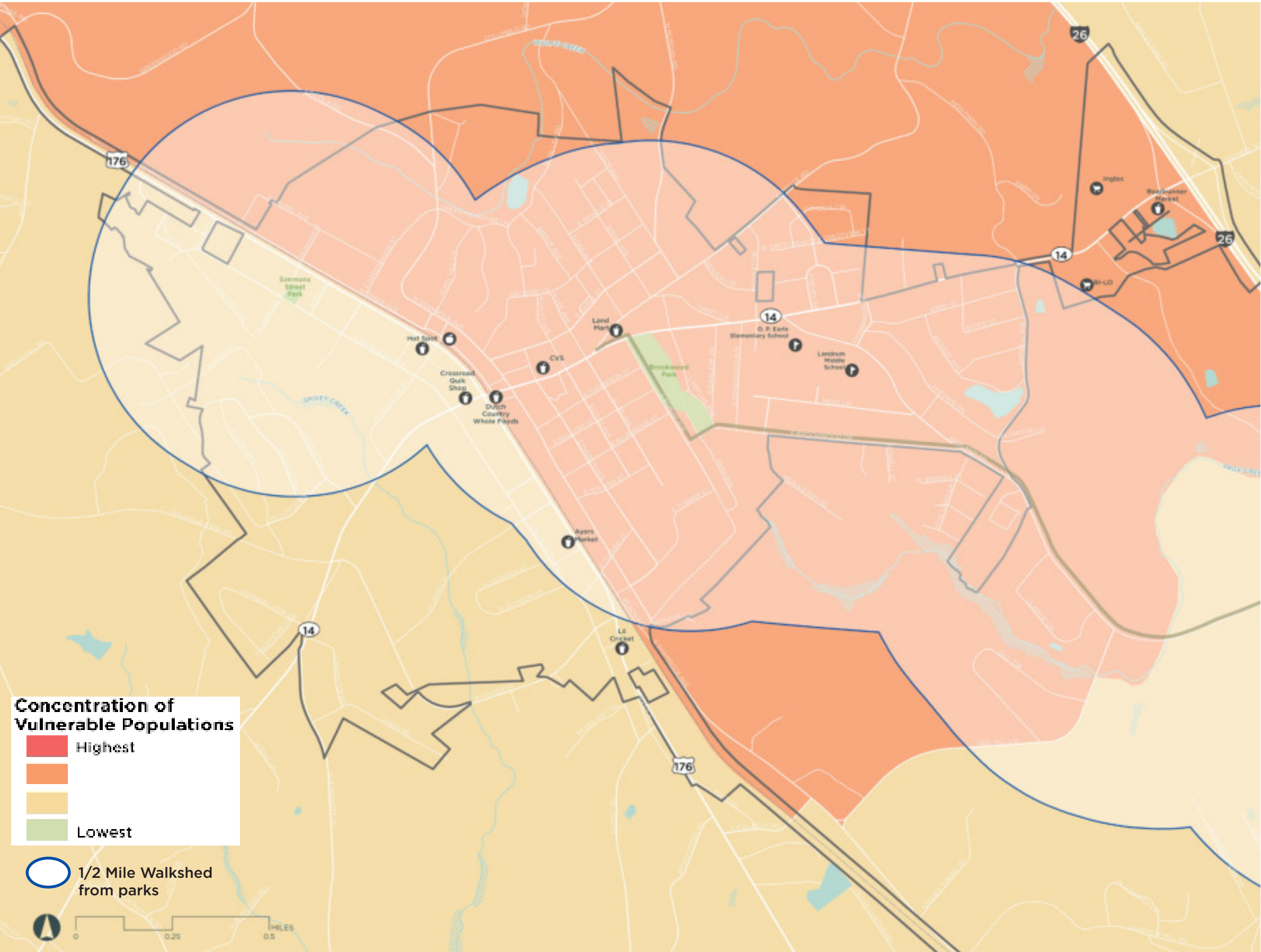


ACTIVE SPACE ACCESS ANALYSIS MAP

The results of the Composite Equity Analysis were also combined with a mapping study of the locations and walkability of active spaces. Active spaces are defined to include all existing parks, trails, greenspace, and the recreation centers.

This analysis again uses a half-mile walkshed or 10 minute walk for most pedestrians. **The resulting map is a starting point for understanding how to link areas in need to active space destinations through pedestrian infrastructure improvements.**

The walkability and active space access connection covers much of the city, and sidewalks exist along many of the corridors leading to the parks. The Palmetto Trail also offers opportunities for recreation and active transport throughout the southeast section of the city. Only the southwest quadrant of the city lacks active spaces and opportunities to connect via foot.



ACTIVE SPACE ACCESS ANALYSIS

OVERVIEW

Walking can be a critical form of transportation, particularly for older adults who no longer drive, young people who cannot yet drive, and for people who do not have access to a vehicle. Apart from walking as a means for transportation, however, walking serves a vital role in maintaining and improving one's health.



**economic cost
of physical
inactivity
per adult in
Spartanburg
County**

The CDC recommends 60 minutes of physical activity for children per day, 150 minutes of physical activity for adults per week, and 150 minutes of aerobic and muscle-strengthening activity per week. The parks and recreation facilities in Landrum provide ample access to exercise opportunities, however, accessing these destinations on foot is challenging.

Spartanburg County physical activity data show that:

- **Women report being less physically active than men.¹²**
- **17.4% of adults are physically inactive.** This is lower than the state rate of 26.2%.¹³
- Of all South Carolina counties, **Spartanburg ranks 17th out of 46 for health behavior.¹⁴** Health behavior accounts for factors such as obesity, smoking, food environment index, and physical inactivity.

Obesity and physical inactivity rates in Spartanburg County have worsened year after year. One way to reverse this trend is to expand mobility options by providing safe and comfortable pedestrian facilities in Landrum to support healthy lifestyles.

12. Institute for Health Metrics and Evaluation. (2015). "US County Profile: Spartanburg County, South Carolina." Available at http://www.healthdata.org/sites/default/files/files/county_profiles/US/County_Report_Spartanburg_County_South_Carolina.pdf.

13. SC DHEC. (2011). "South Carolina Nutrition, Physical Activity and Obesity Fact Sheets, for Youth and Adults." Available at <http://www.scdhec.gov/library/cr-009958.pdf>.

14. County Health Rankings & Roadmaps. (2015). Florence County Health Rankings. Available at <http://www.countyhealthrankings.org/app/south-carolina/2015/rankings/florence/county/outcomes/overall/snapshot>

SUMMARY OF CITIZEN & STAKEHOLDER INPUT

As part of the data collection process and during the development of network recommendations, the project team solicited input from Landrum residents, community leaders, and project stakeholders. Feedback was collected in a number of ways in order to be most inclusive and representative of the community make-up. This includes:

- Survey
- Focus group sessions
- Outreach at Landrum Farmers Market

This section summarizes the key findings from each channel of public outreach.

People at the farmers market share their thoughts about what would make them walk more in Landrum.



SURVEY SYNOPSIS

Walkable Landrum surveys were used to garner a better understanding of community needs and priorities related to walking. Surveys were accessible via the project website. The survey provided an important opportunity for input by those who could not participate in other public outreach efforts. In total, 16 respondents submitted survey answers. Survey responses supported and supplemented the findings from other public input sources.

KEY FINDINGS

- **100% of respondents** agreed that it is **very important to improve walking conditions** in Landrum
- Respondents also confirmed that the **top three reasons they walk** in their community are:
 - for **transportation**
 - for **exercise**
 - to **enjoy nature**
- The **top three key destinations** in the area which residents want to walk to are:
 - Restaurants, delis, diners, coffee shops and similar places
 - Landrum Library
 - Brookwood Park & Simmon Street Park
- More than **30% walk to get their groceries**

A full report of survey results can be found in the Appendix.

"Love my small town.
Keep it beautiful and accessible."
- Survey respondent

"Most streets that people walk on do not have sidewalks and are unsafe. Cars speed and do not look out for walkers."
- Survey respondent

"We have a great town, but we need to get traffic under control. Speeding and reckless driving are out of control and pose a safety issue to pedestrians."
- Survey respondent

"We need rails-to-trail to link our communities"
- Survey respondent

FOCUS GROUPS

Three focus groups were conducted at Landrum City Hall in Council Chambers in June 2016. In total, twenty community members participated in the focus groups. Focus group participants were chosen to include a diverse mix of residents who represent the town's demographics and have a vested interest in improving connectivity between the places where Landrum's residents live, work, learn, and play.

KEY FINDINGS

Through the course of the focus groups conversations and the subsequent analysis of the discussion points, the following key findings have been highlighted to help create a vision of what the residents want to see as part of the Walkable Landrum pedestrian plan:

Priority Projects and Destinations:

Focus group participants were asked to discuss the opportunities that exist to improve walkability, connectivity, and pedestrian access in priority areas of the city. The common themes from the discussions are summarized below:

1. Intersection of Highway 14 & Highway 176
 - Sidewalks - Focus group participants said there is a lack of sidewalks in this area and the sidewalks that are available are in poor condition.
 - Several focus group members reported having to walk in the "break down" lane due to the lack of

sidewalks.

- Noise - Residents said noise pollution caused by large trucks using the thoroughfare as a "cut through" is a major deterrent for walkers. They said the noise level is distracting and incongruent with the bucolic nature of the community.
- Safer Crossing - The intersection is not pedestrian friendly, focus group participants said. They would like to see the addition of a pedestrian crossing signal and buffers and signage to slow down speeding drivers.

2. Brookwood Park

- Sidewalks - Brookwood Park is a major community asset, residents said. Many people walk to the park and use it for recreation and exercise. Focus group participants said many

"I'm very interested in seeing the area be all that it can be while maintaining its uniqueness. Making it better but staying the same."
- Focus group participant

"I want to see improvements on what we already have here. We have already done a lot. Can we build on that?"
- Focus group participant

more residents would walk to the park if sidewalk conditions are improved in the residential neighborhoods closest to it.

- Traffic – Residents said many drivers ignore the speed limit on E. Rutherford Street near the park, which limits walkability in the area.
- Sidewalk conditions – Several sidewalks in the park are in disrepair, focus group participants said. Tree roots growing through cracks in the sidewalks create the biggest impediment to pedestrians. Many residents said they hope the town would consider ways to improve the sidewalks without removing any trees.
- Lighting - Brookwood Park has no lighting after dark. Focus group participants said they believe that added lighting would increase the number of people walking to the park in the evenings.

3. Downtown Landrum - E. Rutherford St.

- Sidewalk conditions - The section of E. Rutherford St. that runs through Landrum's downtown is a main pedestrian thoroughfare. While there are sidewalks throughout the entire area, many community members noted that the sidewalks along one side of E. Rutherford are raised unusually high creating an impediment for handicapped users

and the elderly and safety concern for walkers and runners.

- Noise Pollution - In all three focus groups, participants said noise pollution along Highway 14 is a major barrier to pedestrian activity. They said large trucks cutting through town cause the problem. Focus group participants said they want to see efforts made to divert large trucks around Landrum. They also want better enforcement of the "Jake Brake" law that is already in place.
- Handicap accessibility - Focus group participants would like to see curb ramps added throughout the area to improve handicap accessibility.
- Lighting - Several participants noted that lighting was not an issue in the downtown area, but they would like to see an extension of the business district's decorative light poles extended further along Rutherford Street in both directions.

"I would love to be able to walk. And they started a sidewalk near my neighborhood many years ago but then stopped. Finishing the projects that are halfway done is incredibly important."
- Focus group participant

4. Randolph Avenue

- Project completion - Residents want to see the completion of the Randolph Avenue sidewalk project that will better connect the neighborhoods off Randolph Avenue – home to much of the town’s African American community – to Highway 14. In 2009, the city began the first phase of the project that runs from the intersection of Randolph Ave. and W. Rutherford St. to the intersection of Randolph Ave. and Coleman St. Additional phases of the project have been on hold due to a lack of funding. Some focus group participants said they hope that completing the project will be a priority in the pedestrian master plan.
- Simmons Street Park – Many residents use this park, which is located at the intersection of Randolph Avenue and Simmons Street near many homes. Completion of the Randolph Street sidewalk project would improve pedestrian access to the park. Currently, most residents who use the park drive to get there.

sidewalks creates safety issues for residents walking to the library and to the elementary and middle schools and for students walking back and forth between the schools and the Library. Some focus group participants said they want pedestrian buffers at the intersection. Many said they want to walk to the library and would be more inclined to do so if traffic moved slower or if more measures were in place to make pedestrians safer.

“I really want to see the cut through traffic slow down. Most of those drivers aren’t from here. They are cutting through. How can we slow them down or divert them around?”
- Focus group participant

5. The intersections near O.P. Earle Elementary School, Landrum Middle School, and the Landrum Library. (E. Rutherford Street / Redland Road / W. Asbury)

- Pedestrian Crossing - Focus group members said the combination of speeding traffic and inadequate

6. Bomar Avenue Area

- Connection to Brookwood Park - Many community members walk along S. Bomar Ave. The roadway connects to Spruce Pines apartments, a government-subsidized housing unit. Residents said there needs to be better walkability between this area and Brookwood Park. They believe that more children and parents would utilize the park area more often if there was a sidewalk connecting the road and the park.
- Pedestrian buffers - This is also an area where speed enforcement and pedestrian buffers were suggested as ways to increase walkability.
- Crosswalk - The intersection of East Prince Rd. and Bomar Ave. at Fagan's Car Lot (KFT Trucks) was noted as an area where you can't cross the pedestrian crosswalk easily. Residents suggested that the "trip light" on either side be repaired to ease crossing and make pedestrian activity at the intersection safer.

7. Additional Priorities

- E. Rutherford St. and S. Church Ave Intersection - Many cars do not observe the pedestrian crosswalk near Landrum Hardware. Residents want to see additional or more effective.
- S562 and E. Rutherford St.- Many cars fail to yield to pedestrians at the crosswalk at The Hare and Hound. Residents requested that additional or more effective signage.
- Rail Trail - Several residents said they would like to see the city turn the railroad tracks that run parallel to Asheville Highway into a "rail to trail" walking trail. However, at least some of those residents also seemed aware that it is unlikely that that city can pursue the project. The inactive tracks are owned by a railway company that uses them as an emergency route.
- Landrum Youth Association - Residents want to add sidewalks to the area near Landrum Youth Association on S. Lyles St. to better connect it to the community around it. Focus group participants also suggested this as an area to add additional soccer fields and basketball goals. Residents said improvements to the area could help fill the large need for activities for teenagers to walk to in Landrum. The addition of beautification projects and picnic tables were also suggested as a way to increase use by families.

- Palmetto Trail - Focus group members noted that signage for the Palmetto Trail Trailhead, which draws a large number of tourists, is severely lacking. And the signs that exist are unclear. They said they hope the town can partner with the foundation to improve signage that directs visitors and residents to the trailhead. They also suggested that brochures be made available to local stores.
- Wayfinding signs - Focus group participants want to see the addition of signs around the town that encourage walking by directing pedestrians to parks, trails, and historical destinations and letting them know the distance between destinations.
- Community garden - Many residents said they hope the city will explore the possibility of creating a community garden in a central location that is walkable to many residents.

the town set shared goals, track progress, and win prizes.

A possible scavenger hunt (similar to Greenville's Mice on Main) was also suggested as a way to increase walking by community members and tourists. Several participants said they would like to see someone create walking, running, and biking maps that highlight pedestrian and bike friendly areas.

2. Enforce Leash laws - A handful of focus group members said that many in Landrum do not walk because unleashed dogs frequently threaten pedestrians. Participants said they hope that the town can either strengthen leash laws or better enforce the laws that are currently in place.

"Landrum is a very special place. We have to find ways to make it better without losing what is great."
- Focus group participant

Priority Strategies

Focus group participants identified the following additional strategies for developing a pedestrian plan for the city:

1. Make walking fun. Residents said they want to get their friends and neighbors excited about walking. Some participants said they would like to see the town initiate a community wide walking effort similar to the library's summer reading program, where individuals throughout



Focus group participants review a map of Landrum and identify key destinations they would like to access via walking.



"It's important for a city to view walking and biking as a basic human right, which should be safe, easy and pleasurable for everyone. Walking adds the spice to a city, and we don't like a spice-less city any more than we like pasta without sauce."

*- Gil Penalosa
8 to 80 Cities*



CHAPTER 4

Recommendations

OVERVIEW

This chapter presents the proposed pedestrian network improvements that were identified through input from the community and supplemented by input from the project team, field work, and the equity analysis. The recommendations are organized as follows:

Overview Map of Recommendations

This map paints a high-level picture of all recommended projects across the City. This map includes supporting information to show how the proposed recommendations, build off of the previously proposed sidewalk network of the 2009 Spartanburg Bicycle and Pedestrian Master Plan and the existing and proposed alignment of the Palmetto Trail. These recommendations create a well-connected pedestrian network that links residents and visitors to destinations within Landrum and to regional destinations nearby.

To that end, recommendations include not just sidewalk infill but also spot improvements and corridor improvements. The latter two are described below.

- **Spot improvements** account for both signalized and unsignalized crossing improvements. Crossing improvement recommendations address pedestrian safety, comfort, and convenience by targeting specific areas with high foot traffic and problem areas. Each identified spot recommendation will have a host of improvements that are typical of a well-designed crossing. These improvements include:
 - High-visibility crosswalk
 - Pedestrian push buttons
 - Pedestrian countdown signals
 - ADA compliant curb ramps
 - Pedestrian warning signs
 - Median refuge islands
 - Traffic calming
- **Corridor improvements** also address pedestrian safety, comfort, and convenience by looking holistically at the pedestrian experience along a stretch of the road or trail passage. In terms of the Palmetto Trail, corridor recommendations include adding a shared-use path as well as the improvements listed below. Typical corridor recommendations include:
 - ADA compliance
 - Streetscape design elements such as landscaping, benches and trash cans, wayfinding, and pedestrian-scale lighting
 - Traffic calming
 - Bicycle parking (see near term opportunities identified in the Appendix)

Project Cutsheets

In order to meet the project goals of increasing pedestrian mobility and access, and increasing connectivity to healthy food outlets and active spaces, four specific recommendations have been identified as priority projects that can advance walkability in the City of Landrum. Priority recommendations include:

- Downtown Landrum
- Randolph Avenue
- Rail with Trail
- Randolph Road (SC-14) & Highway 176

The priority project cutsheets are intended to convey a vision of what the priority recommendations can look like to residents and stakeholders, as well as assist in applying for implementation funds. The four projects detailed in individual cutsheets are crucial catalysts for economic development, walkability, and quality of life in Landrum.

It is important to note that while this plan offers an action plan for creating a more walkable Landrum, **the recommendations of the plan should not preclude other investments in the pedestrian environment that are not included in this report.** This Plan provides a useful framework for proactively seeking funding and advancing projects from concept to implementation. This proactive approach does not, however, lessen the need to consider opportunistic improvements as well, such as the timeliness of capitalizing on a new development or

capital project, streetscape enhancement project, SCDOT corridor improvement, upgrade to an intersection, or new trail connection.

Details about the proposed recommendations for each of these priorities are described via cutsheets on the pages 58 through 61, following the overview map of recommendations.

PEDESTRIAN FACILITY TYPES

SIDEWALKS

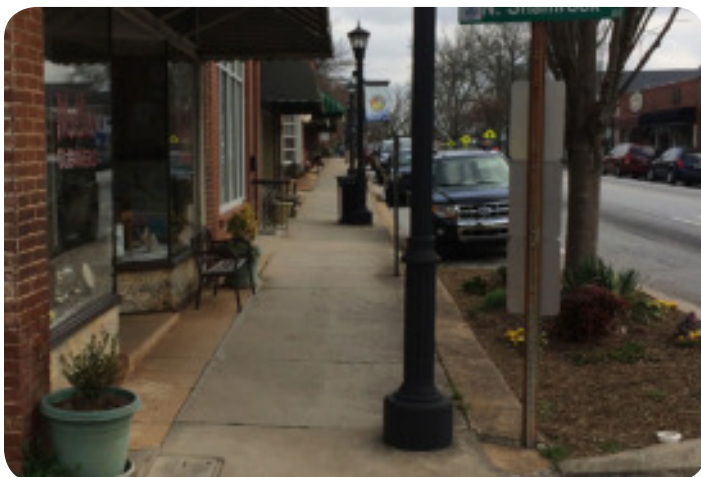
Sidewalks are the most fundamental element of the walking network, as they provide an area for pedestrian travel that is separated from vehicle traffic. Sidewalks are typically constructed out of concrete and are separated from the roadway by a curb or gutter and sometimes a landscaped planting strip area. Attributes of well-designed sidewalks include the following:

- **Accessibility:** A network of sidewalks should be accessible to all users.
- **Adequate width:** Two people should be able to walk side-by-side and pass a third comfortably.
- **Safety:** Design features of the sidewalk should allow pedestrians to have a sense of security and predictability. Sidewalk users should not feel they are at risk due to the presence of adjacent traffic.
- **Continuity:** Walking routes should be obvious and should not require pedestrians to travel out of their way unnecessarily.

- **Landscaping:** Plantings and street trees should contribute to the overall psychological and visual comfort of sidewalk users, and be designed in a manner that contributes to the safety of people.
- **Drainage:** Sidewalks should be well graded to minimize standing water.
- **Social space:** There should be places for standing, visiting, and sitting. The sidewalk area should be a place where adults and children can safely participate in public life.
- **Quality of place:** Sidewalks should contribute to the character of neighborhoods and business districts.

SIDEPATHS

Multi-use paths along roadways, also called Sidepaths, are a type of path that run adjacent to a street. Because of operational concerns it is generally preferable to place paths within independent rights-of-way away from roadways. However, there are situations where existing roads provide the only corridors available.



When designed correctly, these facilities have the ability to provide a high level of comfort for pedestrians (and bicyclists). However, the AASHTO Guide for the Development of Bicycle Facilities cautions practitioners of the use of two-way sidepaths on urban or suburban streets with many driveways and street crossings. Where implemented, sidepaths should be coupled with strict access management regulations or improvements.

PEDESTRIAN CONNECTION

Pedestrian connections provide residential areas with direct pedestrian access to parks, trails, greenspaces, and other recreational areas. They most often serve as small path connections to and from the larger pedestrian network, typically having their own rights-of-way and easements.

Additionally, these smaller paths can be used to provide pedestrian connections between dead-end streets, cul-de-sacs, and access to nearby destinations not provided by the street network. Qualities of well-designed pedestrian connections include:

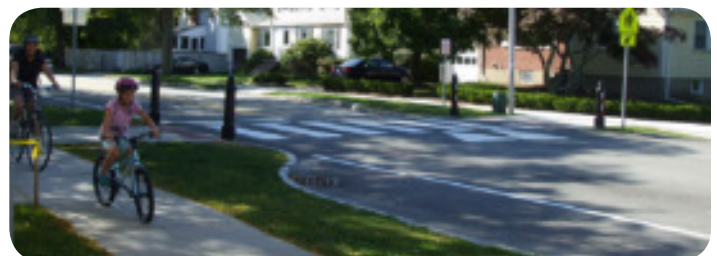
- Pedestrian connections should remain open to the public.
- Path pavement shall be at least 8' wide to accommodate emergency and maintenance vehicles, meet ADA requirements and be considered suitable for multi-use.
- Path widths should be designed to be less than 8' wide only when necessary to

protect large mature native trees over 18" in caliper, wetlands or other ecologically sensitive areas.

- Paths should slightly meander whenever possible.

INTERSECTION TREATMENTS

There are a variety of intersection treatments that can be applied to make a safer and more comfortable crossing environment for pedestrians. As seen in the examples below, push button signals, reduced curb radii, raised crosswalks, and refuge islands can help guide pedestrians to safe crossings, and help motorists predict where pedestrians will be.



RAILROAD CROSSINGS

Railroad crossings present certain difficulties for pedestrians and are particularly hazardous to those who rely on wheeled devices for mobility (railroad crossings have flangeway gaps that allow passage of the wheels of the train, but also have the potential to catch wheelchair casters and bicycle tires). In addition, rails or ties that are not embedded in the travel surface create a tripping hazard.

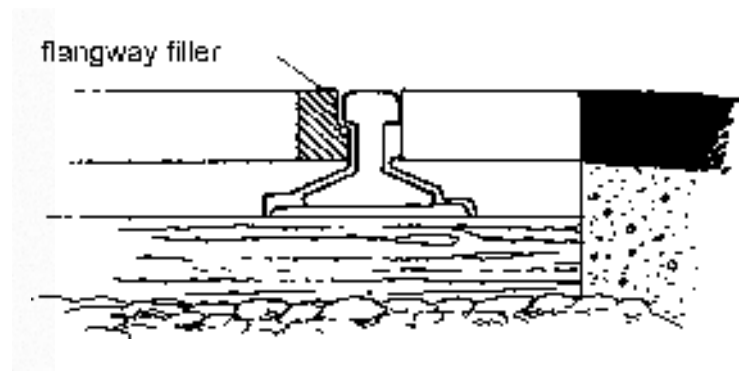
Guidance for improving railroad crossings include:

- Make the crossing level: Raise approaches to the tracks and the area between the tracks to the level of the top of the rail.
- When roadways and pedestrian facilities cross railroad tracks at grade, the roadway should ideally be at a right angle to the rails.
- Use Multiple Forms of Warning: Provide railroad crossing information in multiple formats, including signs, flashing lights, and audible sounds.
- Clear Debris Regularly: Perform regular maintenance to clear debris from shoulder areas at railroad crossings.
- Fill Flangeway with Rubberized Material or Concrete Slab: Normal use of rail facilities causes buckling of paved-and-timbered rail crossings. Pavement buckling

- can be reduced or eliminated by filling the flangeway with rubberized material, concrete slab, or other treatments. A beneficial effect of this is a decrease in long-term maintenance costs.



Installing a rubber surface rather than asphalt around railroad flangeways reduces changes in level and other maintenance problems.



The “flangeway filler” eliminates the gap in the path of travel for pedestrians crossing railroad tracks. The filler, consisting of a rubber insert, will deflect downward with the weight of a train and does not affect railway function.



OVERVIEW MAP OF RECOMMENDATIONS

The adjacent infrastructure recommendations across the City of Landrum represent the “engineering” aspect of a multi-faceted approach described as the Five E’s: Engineering, Education, Encouragement, Enforcement, and Evaluation. A sixth ‘E’, Equity, is often included in order to ensure equal consideration for those whom pedestrian improvements may benefit the most. Chapter 5 provides a summary of recommended strategies for the remaining four “Es” through community programs and policy concepts.

The recommendations of this plan provide a starting point for community partners to join the City in moving towards a culture of pedestrian friendliness and ultimately increasing walking activity in Landrum.

Background Layers

Farmers Market

Grocery Store

Informal Food Outlet

School

Landrum Library

Road

Railroad

Stream

Park

City of Landrum (white)

Spartanburg County

Recommendations

Spot Improvements

Sidewalk (Existing)

Sidewalk Infill

Pedestrian Connection

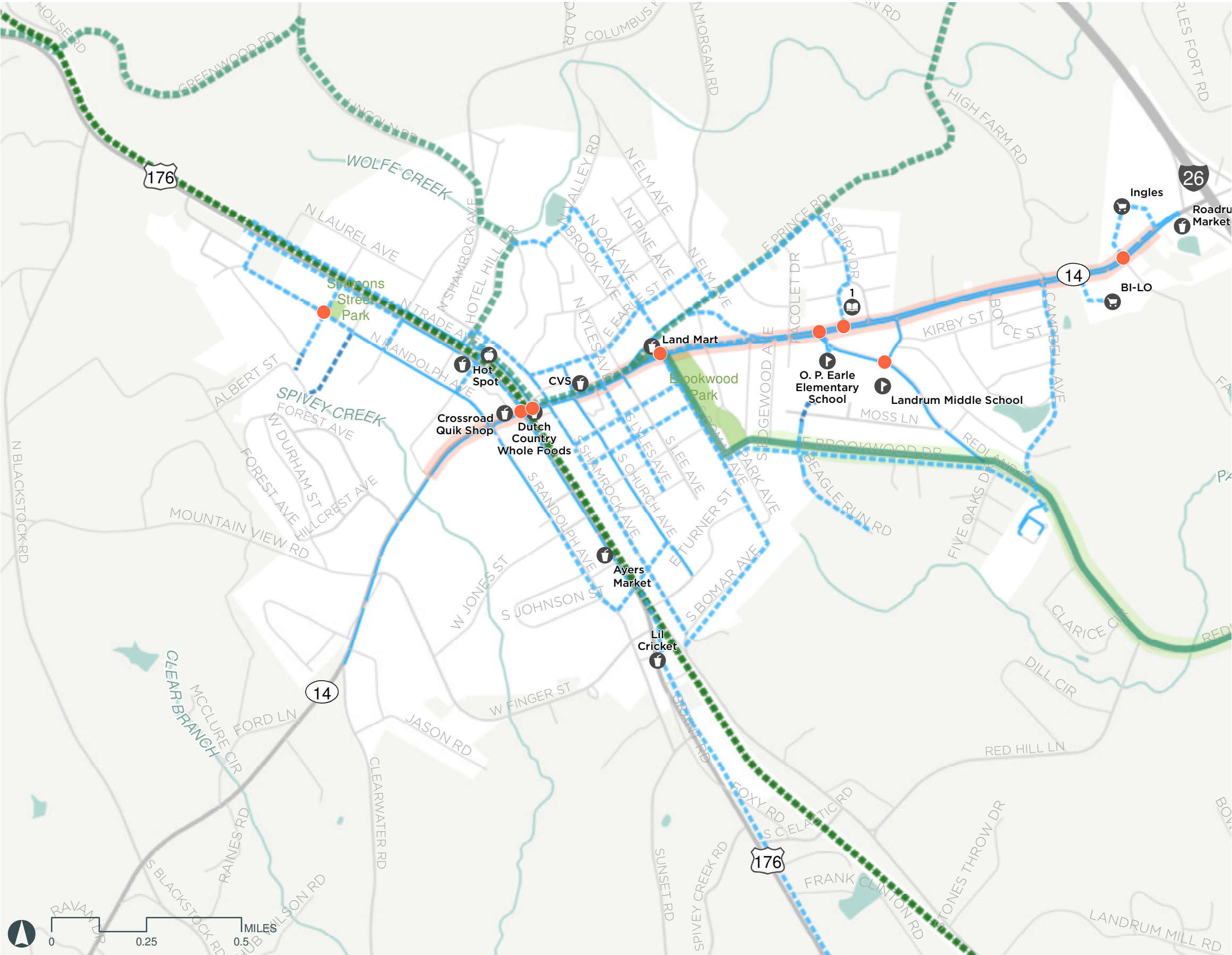
Palmetto Trail (Existing)

Palmetto Trail (Proposed)

Rail to Trail (Proposed)

Streetscape Improvements

Trail Improvements





Downtown

Successful downtowns provide a walkable district that supports retail foot traffic and promotes the economic vitality of local businesses. This is accomplished through a holistic approach to creating safe and attractive streets. SC 14 could be improved through adding high visibility crosswalks and moving the curb line to provide a wider pedestrian zone and reduce curb height. Trade Avenue could be improved with a rail-with-trail path, widened sidewalk, narrowed travel lanes, and reduced crossing distance.

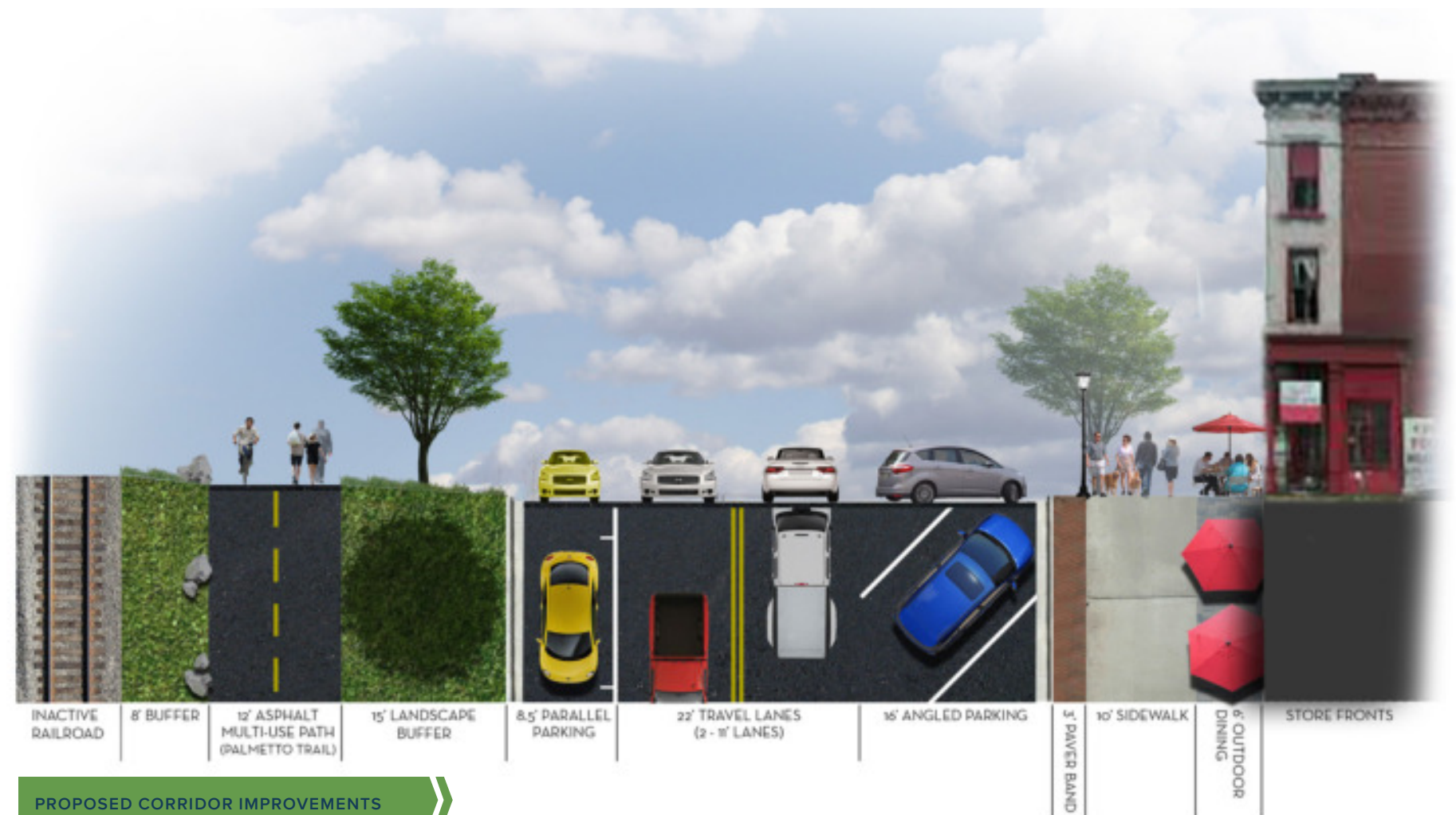
RECOMMENDED IMPROVEMENTS

- + Wayfinding Signage
- + Re-evaluating design speed
- + Raised Intersections
- + Decorative crosswalks
- + Chicanes and bulbouts



Proposed Downtown Improvements: Crosswalks, Plantings, and Wayfinding. View of Rutherford Ave. from Shamrock, looking west.

INFRASTRUCTURE IMPROVEMENTS



PROPOSED CORRIDOR IMPROVEMENTS

Proposed cross-section on Trade Avenue, looking north.



Randolph Ave Sidewalk

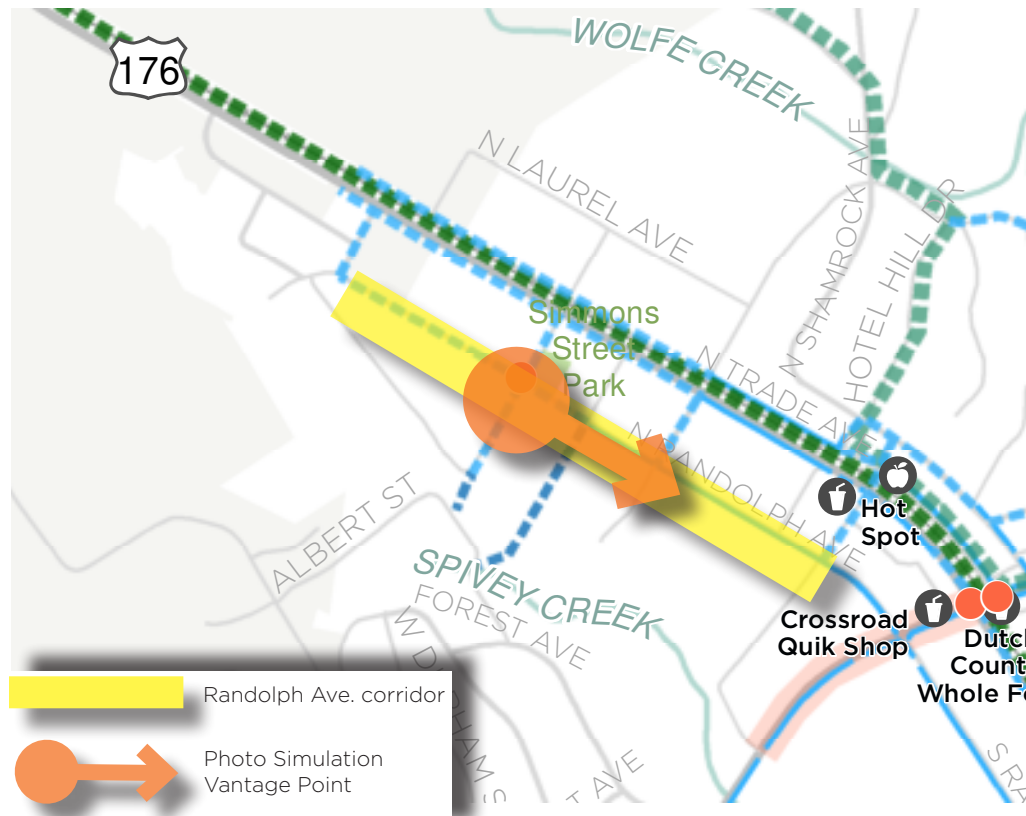
INFRASTRUCTURE IMPROVEMENTS

Randolph Avenue currently lacks a connected sidewalk network and safe, pedestrian access and crossing facilities. Through funding from SCDOT, the sidewalk will be extended north. A safe crossing to Simmons Street Park is critical to leverage the pedestrian connection. Future investment should extend the sidewalk south.

Crossing improvement should include high visibility cross walks, pedestrian signage, and flashing beacons where appropriate. Wayfinding signage provides guidance to pedestrians and further connected user to key destinations.

RECOMMENDED IMPROVEMENTS

- + Continuous Sidewalk
- + Pedestrian Refuge Islands
- + High Visibility Crosswalks
- + Wayfinding Signage



The Randolph Ave sidewalk project is already funded by SCDOT. It is recommend that the City coordinate with SCDOT to ensure recommendations provide connections to Northside Community Park



Continue planned sidewalk opposite the North Side Community Park and provide crossing improvement at the park entrance.



Rail with Trail

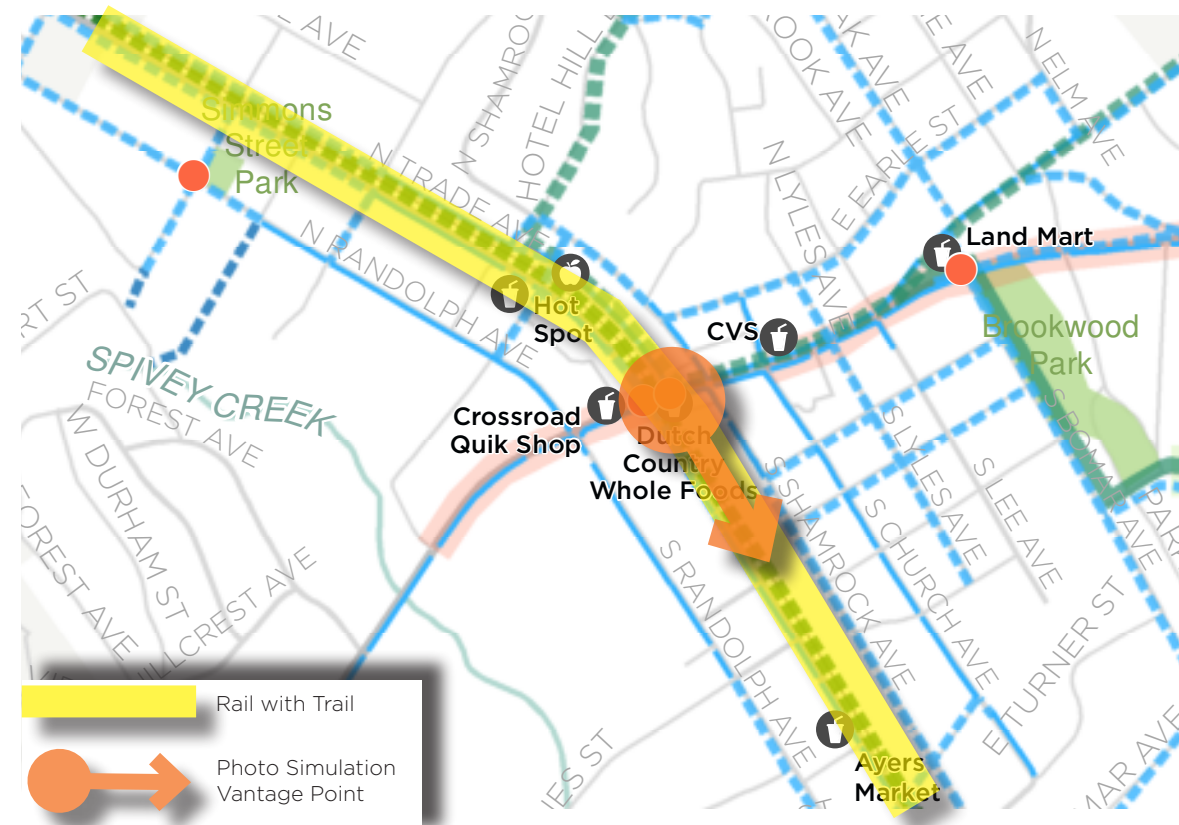
INFRASTRUCTURE IMPROVEMENTS

The proposed rail-to-trail conversion and spur connections are a long-term vision for the City of Landrum. The plan's recommendations build upon the existing Palmetto Trail network, capitalize on the topography of rail right-of-way, and support regional and cross-state connections.

The recommendations presented in the adjacent map further flesh out the existing and proposed network of trails, creating key linkages to major destinations like downtown, shopping centers, neighborhoods and parks. The trail network will also supplement and compliment on-street pedestrian facilities, ensuring accessibility across the city.

RECOMMENDED IMPROVEMENTS

- + Extended Trail Network
- + Grade Separated Crossings where possible
- + Connections to destinations
- + Trail User Wayfinding Signage
- + Trailhead Development



View of the trail from Rutherford Street, between Howard Avenue and Rose Lane, looking south.



Highway 14 + 176 Intersection

INFRASTRUCTURE IMPROVEMENTS

Railroads have historically divided American towns and limited at grade crossings for pedestrian and automobile traffic. Wherever possible, it is recommended to improve existing at grade crossings to provide more accessibility to pedestrians, better inform pedestrians at the crossings, and better separate pedestrians from vehicular traffic.

Installing a rubber surface rather than asphalt around railroad flangeways reduces changes in level and other maintenance problems. Proper railroad signage, including railroad warning signs and stop signs are recommended to be installed before and after railroad crossings.

RECOMMENDED IMPROVEMENTS

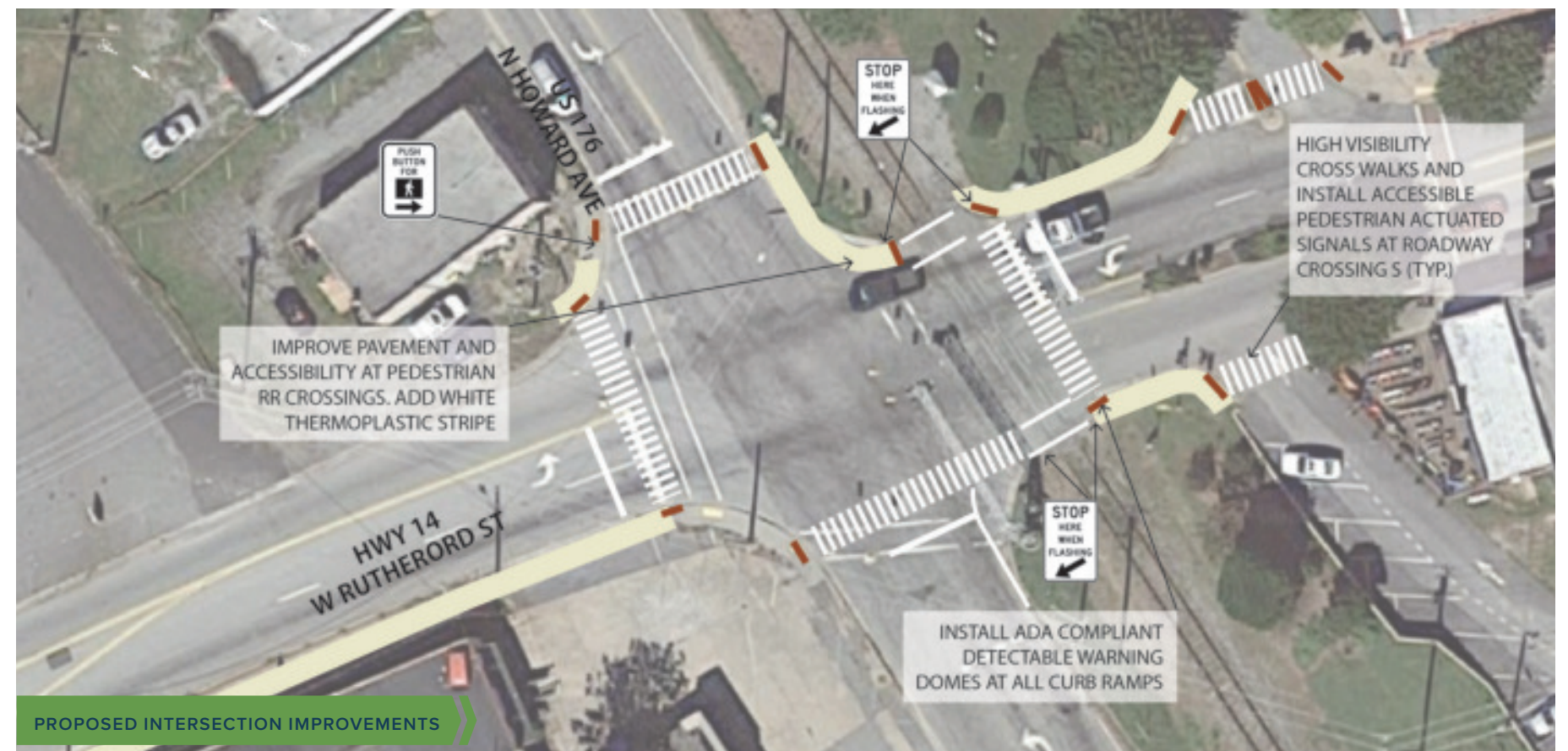
- + High Visibility Pavement Markings
- + Accessible rail road
- + Warning signage
- + track crossing



Rail crossing in San Diego, CA.



A first phase of pedestrian improvements for a railroad crossing could include high-visibility crosswalk access, striping for pedestrian lane, and smooth, level pavement, as shown in this example in Durham NC.



View from Bridge Street Corridor



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On walking to school: "I like getting up for school on a morning because I know that I'm going to spend time with my dad on the way. During the day I am looking forward to the end of school because I know I am going to get to talk to him on our way home. It has always been my favorite part of the day."

*- Trinity, 11
Living Streets*



CHAPTER 5

Program & Policy Recommendations

OVERVIEW

The Pedestrian Plan and infrastructure recommendations will provide safer, more comfortable places for residents and visitors alike, all while increasing livability, walkability, and local trail use. However, while improving infrastructure is critical to increasing walkability, the importance of education, encouragement, enforcement and evaluation efforts should not be underestimated.

Programs can ensure that residents will know about new and improved facilities, learn about the many benefits of walking, and receive positive reinforcement about why and how to integrate walking into an active and healthy lifestyle. In essence, programs can help to provide the maximum “return on investment” in the form of more

people walking and a higher degree of safety and awareness around walking and pedestrians in Landrum.

Education and encouragement programs are designed to raise awareness of walking; connect users to existing and future resources; and to encourage residents to walk more often. These program recommendations will give the City of Landrum the tools they need to address travel choices, public health, and increase community-wide physical activity.



PROGRAM RECOMMENDATIONS

SAFE ROUTES TO SCHOOL PROGRAM

Safe Routes to School (SRTS) programs use a “5 Es” approach that integrates Engineering, Education, Enforcement, Encouragement, and Evaluation strategies to improve safety and encourage children to walk and bicycle to school. Programs educate youth and parents about safe bicycling and walking skills, encourages schools and communities to support bicycling and walking, and help communities make the streets, trails, and sidewalks safe for bike riders and walkers of all ages.

It is recommended that OP Earle Elementary and Landrum Middle Schools work with the City of Landrum, Spartanburg County School District One, teachers, parents and students, and neighbors to develop SRTS Travel Plans that outline programs and infrastructure improvements that promote and encourage walking and bicycling in Landrum. Upstate Forever, the Mary Black Foundation, and Partners for Active Living may serve as potential partners as well, sharing insights from other successful SRTS programs in the County and across the Upstate. Development of the SRTS Travel Plans should include establishing an advisory group, coordination meetings and goal-setting, a group Walk Audit, observation of school pick-up and drop-off times, identifying priority routes, specific linear and crossing improvements, and a set of programmatic priorities with assigned stakeholder roles in further developing those.

Under the umbrella of a Safe Routes to School Program, there are a number of initiatives that can help improve the safety of school children and their families as they travel to and from school. Additionally, research from Active Living Research and the Robert Wood Johnson Foundation, has shown that not only does SRTS increase safety, it also increases physical activity rates and decreases a student’s body mass index (BMI). Thus, pursuing active transportation efforts that link community members to neighborhood schools can increase accessibility, change perceptions about traffic and personal safety, and encourage other walking and bicycling trips apart from the commute to school.

With these goals in mind, the following two safe routes to school programs are recommended for further exploration — Walk & Roll Days and Walking School Buses & Bike Trains. When starting these programs, consider ramping up their frequency as interest and investment grows. For instance, hold a Walk & Roll day once a season and gradually transition to a more regular event like a Walk & Roll Wednesday every week.



Resources:

Program Resource:

[The Walking School Bus Guide](#)

Example Program:

[Walk and Roll Wednesdays](#)
[Marin County, CA](#)

POP-UP and DEMONSTRATION PROJECTS

Landrum has the opportunity to continue the momentum established through the community outreach of the Comprehensive Planning process. An outdoor chalk board used to field citizen comments proved popular and helpful in the process. With a similar approach to integrated, spontaneous community engagement, temporary installations or pop-up projects can make use of Landrum's creativity through demonstrating walkability improvements. These temporary demonstration projects can vary greatly in scope, cost, and number of volunteers required. Residents and students are engaged directly in the planning, design, and evaluation of the improvement.

Examples include temporary wayfinding signs, community chalkboards, and pop-up plazas, parks, or parklets. These outlets provide Landrum citizens and students an effective means of communicating their needs and coming together for community improvement. It is an opportunity to reinvent and craft a vision for vacant lots, empty buildings, or underutilized spaces while keeping investment to a minimum.

The section of Trade Avenue, north of Main Street presents a near-term opportunity. Consider integrating a temporary streetscape improvement as part of a Saturday Farmers Market event. Establish space for outdoor café seating, reduce

travel lane widths, mock curb extensions, create a crosswalk that links farmer markets customers directly to retail storefronts, add movable landscaping (such as potted plants), and modify parking configurations to calm traffic and prioritize pedestrians in the street.



Resources:

Program Resources:

[Tactical Urbanism Guide](#)

[Slow Your Street: A Guide to Pop-up Traffic Calming](#)

PROMOTE ECONOMIC DEVELOPMENT and TOURISM THROUGH WALKABILITY

More and more small communities are looking to tourism related to walkability and bikeability as a priority within their economic development plans. Landrum has the benefit of equestrian, outdoor recreation, and heritage tourism as existing and growing niches that dovetail with livability principles and promotions. With the City's existing collaboration with both the Carolina Foothills Chamber of Commerce and the Spartanburg County SC Chamber of Commerce, as well as state level coordination with Palmetto Conservation Foundation and South Carolina Department of Parks, Recreation, & Tourism, Landrum has the right partnerships in place to further development a tourism audience around walkability and trails.

Landrum should work with local and regional tourism partners to identify opportunities and create targeted marketing plans related to walkability, and also bikeability, to capitalize on this low-impact, sustainable tourism segment. Evidence of this growing market and its impacts is described in Eat Smart Move More SC's recent report *Stronger Economies through Active Communities*.

A first step will be the establishment of a regional walk- and bike-friendliness tourism committee. The committee would begin by assessing:

- efforts that already exist to promote the livability of communities in the area,
- strengths for walkability, bikeability, and outdoor recreation in the region that are not yet being promoted, and
- opportunities to connect other, related visitor-promotions (such as equestrian or heritage tourism) with livability-oriented tourism.

Following this initial evaluation, the partners can work together to create an action plan for individual (municipal-level) efforts that can bolster the regional image and a regional campaign that builds on common strengths. Landrum can connect this tourism promotion effort with other recommended programs, such as promotion of an outdoor public art program along a pedestrian and trail network and by linking a wayfinding signage program to visitor destinations and tourism-based promotion.



Resources:

Program Resources:

[Stronger Economies through Active Communities: The Economic Impact of Walkable, Bikeable Communities in South Carolina](#)

[Ten Principles of Sustainable Tourism](#)

OUTDOOR PUBLIC ART

Public art along a pedestrian and greenway network can bring attention to the network, encourage usage of it, and attract newcomers to bicycling and walking.

By combining art with the streetscape environment and with greenway facilities, the community is creating a unique interactive amenity for both residents and visitors. Such programs also attract new partners, promoters, and sponsors of the active transportation network.

This program can build from an earlier successful effort in Landrum to create unique, high quality painted horses, which were ultimately auctioned. Building from similar partnerships and collaboration that made that effort possible, Landrum can establish a program for both temporary and permanent art installations in the downtown public right-of-way. Specifically, the City's prior market analysis of downtown noted visitors' hesitation to continue on-foot to retail destination beyond a small core along Landrum's Main Street. The outdoor public

art installations could serve as a draw for foot traffic that provides a new and different type of visual interest where existing land uses do not currently offer “window-shopping” or “active storefronts.”

Resources:

Program Resources:

[Mice on Main in Downtown Greenville, SC](#)

[Trains on the Trail in Spartanburg, SC](#)

[Indianapolis Cultural Trail](#)

[KC Riverfront Heritage Trail](#)

WAYFINDING SIGNAGE PROGRAM

Wayfinding signs direct users along the network and to community destinations. These signs can also include mileage, estimated travel time, and even calories burned. The signs provide an opportunity for recognition of community or trail partners and sponsors, where applicable. A “sponsor-a-sign” program may be one avenue for funding the program.

Landrum should directly engage with the Palmetto Conservation Foundation and with local tourism partners to develop a seamless and complementary wayfinding program. While the Palmetto Trail maintains its own brand and wayfinding scheme, Landrum can collaborate with the organization to develop citywide, trail-specific, and downtown-

specific signage that is complementary in colors, some elements of branding, and in general feel, experience, and information sharing.

Development of the wayfinding signage program can also occur iteratively through first developing temporary installations. This effort can be linked to the pop-up and demonstration projects also recommended as Landrum programs. One low-cost and accessible resource for developing temporary signage is the Walk Your City program, which provides templates and general guidance for grassroots-driven efforts.

Resources:

Program Resources:

[Walk Your City](#)

[City of Alexandria, VA, Wayfinding Program](#)

[Louisville Loop Signage and Wayfinding Master Plan \(Louisville, KY\)](#)

[Mecklenburg County Parks & Recreation Greenway Signage \(Charlotte, NC\)](#)

ACTIVATION OF BROOKWOOD PARK

Parks are essential to creating an active neighborhood, providing recreational opportunities, and supporting a neighborhood's identity. Landrum's Brookwood Park is embedded in a quiet residential area, easy accessible from a main arterial, popular among local residents, and home to a section of the Palmetto Trail. Activating this rich resource can encourage residents and visitors to enjoy nature and be active. Below are a list of potential events that will help to support physical activity, neighborhood cohesion, and access to healthy foods.

Fitness in the Park

Regular physical activity has been shown to have considerable health benefits, such as helping to maintain a healthy weight and reduce the risk of heart disease, high blood pressure, and type 2 diabetes. Reaching out to residents to encourage walking and other physical activities can help to improve personal health and strengthen ties within the community. By partnering with local fitness experts, physical education teachers, or others, the park can host multiple outdoor activities to include:

- Yoga classes
- Meditation classes
- Tai chi classes
- Nature walks
- Boot camp
- Zumba classes
- Fitness walks or runs to the park



Resources:

Example Programs:

City of St. Paul, MN
[Fitness in the Park](#)

City of Johns Creek, GA
[Free Outdoor Fitness](#)

Build Community

A fun way to build community that reinforces walkability and friendly public spaces is to host special events at Brookwood Park. This approach not only underscores the park's role as a "livingroom" of the community but also provides a broad community activity to which residents can walk, rather than drive. Examples of relatively low-cost easy to develop programs include a community concert series in the park or a National Night Out event in the park. For example, the Ardenwald and Johnson Creek Neighborhood Association in Milwaukie, Oregon, hosts a family-friendly summer concert series in their neighborhood park. The neighborhood association and its volunteers are fully responsible for the event. The association even sells food and drinks to help support the event and their efforts.

National Night Out is an annual community-building campaign that promotes police-community partnerships and neighborhood camaraderie to make neighborhoods safer. This event would give the neighborhood, city, and public health organizations the opportunity to promote safety awareness

with a special emphasis on pedestrian safety, answer questions from citizens, and provide fun activities and materials for children that help support walking and physical activity.

Resources:

Example Programs:

[City of Portland/Milwaukie, OR,
Concert Series](#)

[National Night Out](#)

FARM-TO-SCHOOL or FARM-TO-INSTITUTION

Farm-to-institution food service provides a substantial benefit to both the participating farmers and the institutions through increasing local economy, reducing transportation distribution costs, and developing a new revenue for farmers.

When applied to schools, the students can benefit from the improved nutritional quality and taste as well as from related educational programs on local agriculture, nutrition and food systems. This is especially true for those from lower income families who rely on free and reduced price school meals.

The South Carolina Farm to School Program offers mini-grants and technical assistance for schools to implement the four core components of Farm to School. The call for applications for the 2016-17 school year closed in early May. Grant funding for

schools is usually announced early spring, and the website has an example of the RFP from the 2016-17 announcement. Schools that have not received any funding from the SC Farm to Institution program in the past 3 school years are eligible to apply if they meet the following requirements: a) participate in the National School Lunch/Breakfast Program, and b) have an ADM (Average Daily Membership) that is 50% or more eligible for free and/or reduced-price lunch.

Landrum's development of this program can be linked with partners involved in Safe Routes to School efforts, local neighborhood community garden programs, and even the local culinary business community. Farm-to-Institution programs underscore the value of access to healthy foods and often provide a new opportunity for accessing healthy foods within a walkable distance of neighborhoods.

Resource:

Program Resource:

[South Carolina Farm to Institution](#)

POLICY RECOMMENDATIONS

FURTHERING the COMPREHENSIVE PLAN & MUNICIPAL CODE

Development of the Walkable Landrum Pedestrian Master Plan coincides with the planning schedule for the City of Landrum's updated Comprehensive Plan. A first policy step to support walkability in Landrum is the adoption of this Plan as part of the City Comprehensive Plan. This underscores walkability and pedestrian safety and improvements as part of the vision for Landrum's leadership and directs staff to work towards implementation of the recommendations of this Plan.

As a further step beyond that adoption is the update to the City's municipal code. The City's existing code of ordinances currently gives little attention to persons traveling on foot and on bicycle. As the City moves toward investment in pedestrian improvements and promotion of the community's walkability, the local codes, ordinances, and, to the extent possible, influence of County land use regulations, should be updated to reflect the local vision. The topics for review and revision include every regulation or guide that impacts the pedestrian environment, ranging from lot dimensions to driveway access, from street trees to parking standards, from building setbacks to crime prevention, and many others.

The national framework provided for communities seeking to improve walkability is the Walk Friendly Communities program. The criteria used to evaluate communities that apply for designation as an official Walk Friendly Community provide a helpful cross-

reference for planning and regulatory steps to take to address long-term investments in the community's livability.



Resources:

Example Programs:

[Spartanburg Area Active Living Assessment](#)

[South Carolina Health + Planning Toolkit](#)

[Walk Friendly Communities](#)

COMPLETE STREETS

For several decades, the prime consideration in road design and construction has been the automobile. This has led to a road system that is unsafe, if not unusable, for walking and cycling, and is automobile-dependent for transportation to work, food, shops, and any other destinations. Retail and commercial development is often accessible only by automobile along roads that have the heaviest traffic. Potential shoppers are left with fewer choices but to fill up the tank and drive.

A Complete Streets approach is necessary to allow safe access for everyone, regardless of age, ability, income or ethnicity, and no matter how they travel. The City of Landrum should prioritize the development and implementation of a complete streets policy. Implementing complete streets in Landrum will require a long-term strategy and an incremental approach. The City's complete

street strategy should be guided by policy and integrated with current and future City initiatives, such as greenway planning and brownfield redevelopment. While the policy can be drafted and adopted after complete streets projects are initiated, the City is encouraged to develop and implement the policy as soon as possible.

A complete streets policy will enable the City to:

- Advance an integrated, town wide transportation network that supports safe travel for users of all modes, ages, and abilities
- Ensure complete streets are prioritized for all projects and all phases, including design, planning, construction, maintenance, and operations of new and existing streets and facilities
- Improve connectivity to existing and future greenway systems
- Establish measurable goals
- Prioritize transportation spending

Municipal code development standards can require Complete Streets design considerations for all new roads, road maintenance, and improvement construction projects. Adoption of a local Complete Streets resolution also affirms local interests, values, and expectations that are relevant to coordination with SCDOT staff, when a state-led roadway project in Landrum is being designed and engineered.

Landrum should establish a process for not only developing and adopting a Complete Streets policy, but also educating Council member, local business leaders, and community members on the concept and benefits of Complete Streets.



Resources:


Program Resources:

[South Carolina Complete Streets Toolkit](#)

[National Complete Streets Coalition](#)



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A photograph of a park with large, leafy trees, a wooden fence, and a paved path. The scene is bright and sunny, with shadows cast on the ground. A blue arrow-shaped graphic points from the left towards the right, containing white text.

"Few actions can do more to make urban areas safer, healthier, prettier, and more environmentally balanced than setting aside corridors or trails for walking, biking, wildlife watching, and just plain breaking up the monotony of cars and concrete."

*- James Snyder,
Publisher, Environment Today*

CHAPTER 6

Steps for Moving Forward

A paved trail winds through a wooded area. On the right side of the trail, there is a green trash can and a white sign with a blue border. The sign reads: "Trail length is 2,710 feet or .51 miles". The trail is surrounded by trees and dappled sunlight.

Trail length is
2,710 feet or
.51 miles

Now that priority programs and projects have been identified, what are our next steps?

The implementation of the City of Landrum Pedestrian Plan recommendations will require a comprehensive approach that includes multiple sources of funding, partnerships, design, construction, and management. It will also require the dedication of town staff and a commitment to the vision established by the steering committee and this plan.

As best practices for pedestrian facility design is a rapidly-evolving field, the recommendations in this plan should be re-evaluated at least every five years to ensure that these still constitute best-practices and still reflect Landrum's long-term vision for an active, walkable community.

Achieving the vision that is defined within this plan requires a stable and recurring source of funding. Communities across the country that have successfully implemented pedestrian programs have relied on multiple funding sources to achieve their goals. No single source of funding will meet the recommendations identified in this plan. Stakeholders will need to work cooperatively across a range of private sector, municipality, state, and federal partners to generate funds sufficient to implement this network. A descriptive list of potential funding sources can be found in the appendix.

The resources provided herein — the pedestrian safety analysis, the access to healthy foods assessment, infrastructure recommendations, coupled with the following appendices resources — can serve as a daily reference material for the City of Landrum and its implementing partners.

The City of Landrum should strive to follow the priority recommendations, as each program, project, and policy was selected based on public input, need, and potential impact. However, the city should also look for opportunities to coordinate pedestrian enhancements with regularly-programmed maintenance activities, new developments, and large roadway construction projects, regardless of whether enhancements occur on priority corridors or intersections.



The following steps provide direction to ensure the City of Landrum Pedestrian Plan serves as a valuable and accessible resource for the community.

1

CONTINUE THE STAKEHOLDER COMMITTEE

A team effort is required to move the plan forward. The stakeholder committee process includes citizens and community leaders that can partner to make programs and projects a reality. Capitalize on this momentum, and formalize the committee as an Landrum Walkability Commission that meets quarterly, at a minimum.

2

PROGRAM AND FUND INFRASTRUCTURE PROJECTS

Begin the process of connecting infrastructure projects with available funding sources. Work with the Appalachian Regional Council of Governments to identify eligible projects for rural transportation funding. Coordinate with SCDOT District staff to consider implementation strategies for projects on state-owned roads. Additionally, capitalize on this Plan itself to garner regional, state, and federal funding.

3

DEVELOP & IMPLEMENT ONE PROGRAM AT A TIME

Programs have a big impact on walkability and are easy to accomplish without a major investment. A variety of community partners can assist by funding efforts or volunteering their time. Work through the steering committee to develop a list of communications strategies to promote each program and attract volunteers. Establish a goal of implementing each program within eighteen months of adopting the Plan

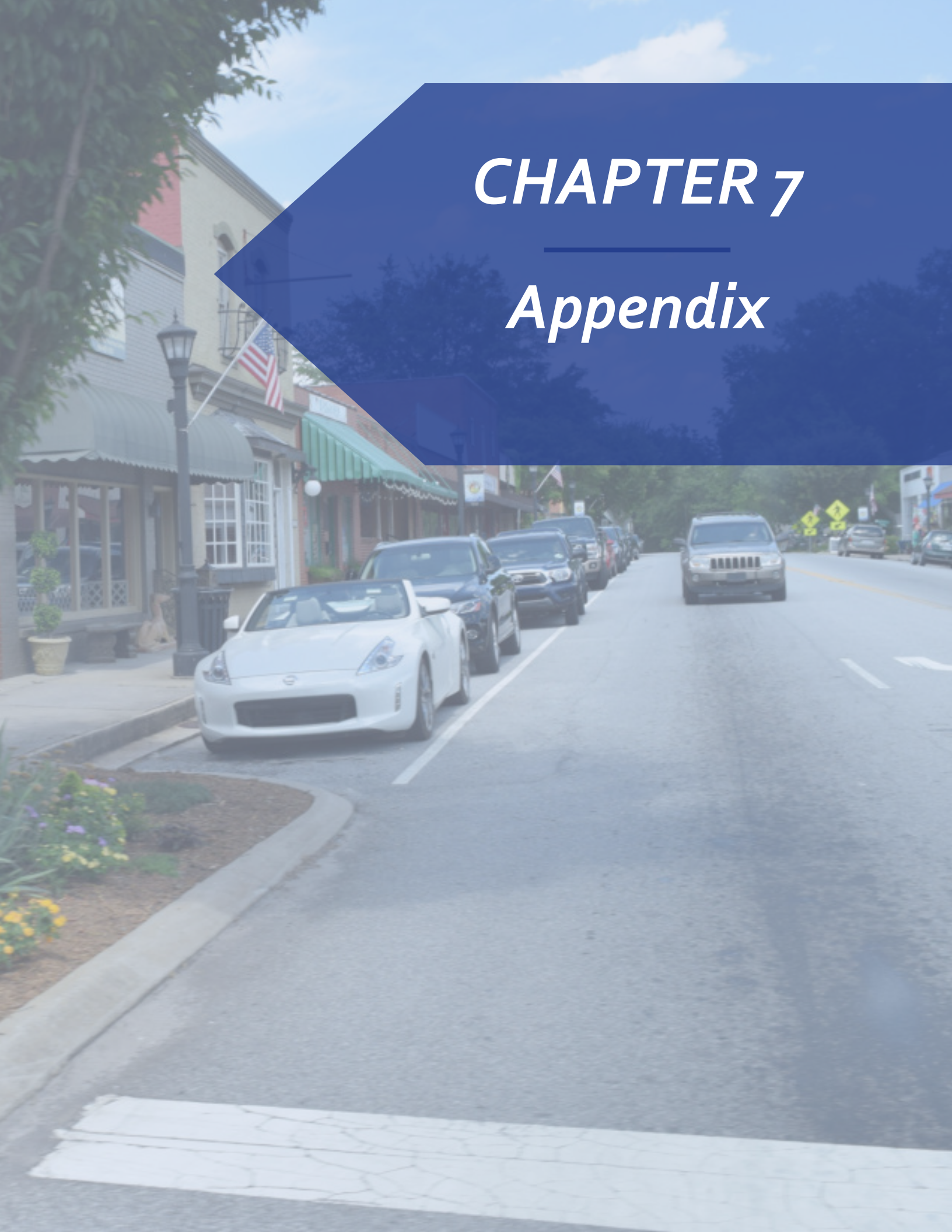


*"Lowly, unpurposeful and random
as they appear, sidewalk contacts
are the small change from which
a city's wealth of public life must
grow."*

- Jane Jacobs

CHAPTER 7

Appendix



POTENTIAL HEALTH-ORIENTED FUNDING SOURCES

Funder	Grant Name	Funding Description	Funding Amount
Aetna	Cultivating Healthy Communities	"The Cultivating Healthy Communities program will support projects that benefit underserved, low-income, and minority communities. We are interested in projects that address the social determinants of health and participants' physical, mental, social, and emotional well-being. "	up to \$100,000
W.K. Kellogg Foundation		<p>"Focus areas include: Educated Kids, Healthy Kids, Secure Families, Community and Civic Engagement, Racial Equity. We work alongside communities – especially those facing health inequities – to support community-based approaches in four key areas: maternal and child health, oral health, breastfeeding (breast milk as the optimal first food), and continued access to good food and active living throughout a child's early development.</p> <p>In our national grantmaking and investments in priority places, WKKF supports efforts to improve the health of mothers and families; to increase breastfeeding rates; to provide innovative, community-based oral health care and to transform food systems so children and families have healthier foods in child care settings, in schools and in their communities."</p>	high: \$8,000,000; low: \$600
SunTrust Foundation		The foundation supports programs designed to help generations achieve their full potential; promote job growth and financial education that leads to stability; help people get access to the care they need to live healthier lives; and advance the arts and culture in the communities.	

Open Date	Close Date	Funding Cycle	Notes
20-Mar-16	April 15, 2016 (Stage 1)	N/A	Stage 1 application is due April 15 and if invited stage 2 application is due June 10
		<p>The Kellogg Foundation does not have any submission deadlines. Grant applications are accepted throughout the year and are reviewed at our headquarters in Battle Creek, Michigan, or in our regional office in Mexico (for submissions focused within their region).</p>	<p>"Once we receive your completed online application, an automated response, which includes your WKKF reference number, will be sent to you acknowledging its receipt. Our goal is to review your application and email our initial response to you within 45 days. Your grant may be declined or it may be selected for further development.</p> <p>As part of review process you may be asked to submit your organization's financial reports and/or IRS Form 990. While this information may be required, it is not intended to be the overall determining factor for any funding. You will not be asked to provide any financial reports or detailed budget information during this initial submission. We will only request this information later if needed as part of the proposal development."</p>
			Will need to contact someone with SunTrust; the website gives minimal information.

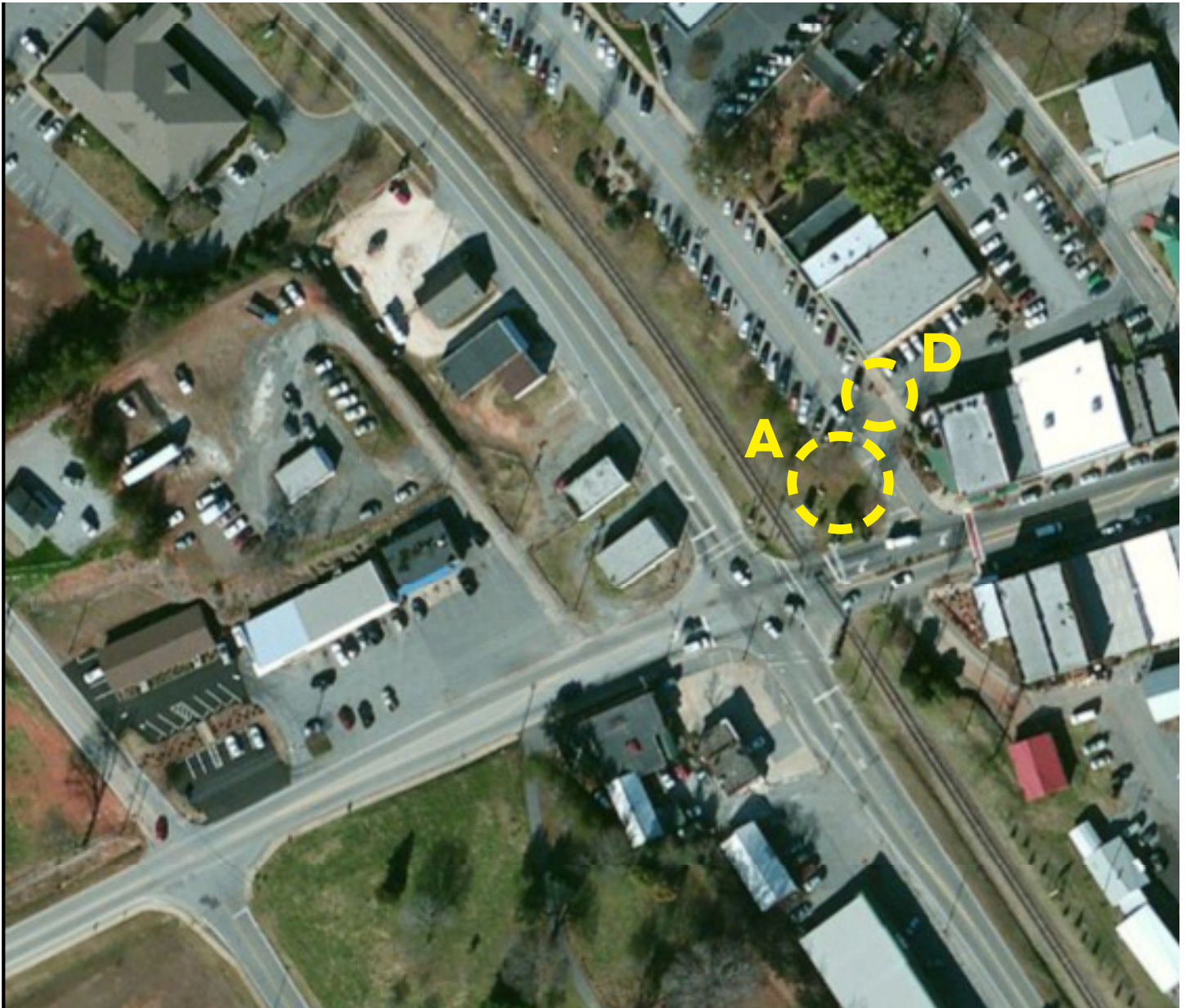
Funder	Grant Name	Funding Description	Funding Amount
Michael and Susan Dell Foundation		<p>"Childhood Health in the US</p> <p>The program is working to reverse the trend of children suffering from obesity and early onset of Type 2 diabetes through its childhood obesity prevention and wellness programs that promote healthy eating behaviors, and better access to both healthy foods and safe environments for exercise. Other U.S. health initiatives focus on: 1) Applied pediatric research into the origins of chronic diseases that are a leading cause of premature death; 2) Basic health services for under- and uninsured children; and 3) Childhood safety for neglected and abused children."</p>	high: \$1,800,000; low: \$5,000
Anthem Foundation	Healthy Generations Program	<p>The foundation supports programs designed to create a healthier generation of Americans. Special emphasis is directed toward healthy hearts, including preventative initiatives that minimize controllable cardiovascular diseases and strokes, smoking, obesity, hypertension, and stressful and sedentary lifestyles; healthy cancer prevention, including lifesaving cancer-prevention and early-detection; healthy maternal practices, including initiatives that encourage first trimester prenatal care and help at-risk mothers commit to reduce the numbers of low birth-weight babies; healthy diabetes prevention, including programs that stem the spread of diabetes through lifestyle changes and physical activity; and healthy active lifestyles, including initiatives that raise awareness, education, and encourage new behaviors.</p>	

Open Date	Close Date	Funding Cycle	Notes
		Appears to be year around	<p>"Important: Please be prepared to furnish us with contact and financial information (including total revenue and fiscal operating expenses)for your organization, as well as a detailed description of the project for which you are seeking support. To complete the application, you will also need:</p> <ul style="list-style-type: none"> - amount you are requesting - project budget - the number of children your project will reach - problem statement (500 character limit) - project description (1500 character limit) - brief description of how the requested funding will be used (500 character limit) - brief description of proposed success metrics (500 character limit)" <p>http://www.msdf.org/assets/grant-planning-worksheet-2-7-2008.pdf</p>
	<p>"Cycle One 2016: Applications are due no later than Friday, February 19, 2016.</p> <p>Cycle Two 2016: Applications are due no later than Friday, August 19, 2016.</p> <p>"</p>	Applications are reviewed twice a year.	<p>"You must submit your grant proposal online; no exceptions will be made. All applicants will be notified of the Foundation's receipt of grant proposals via e-mail. Typically, our review process lasts four to six months. Please do not call the Foundation for status updates. Due to the high volume of requests we receive, we cannot respond to such phone calls.</p> <p>CONTACT US anthem.foundation@anthem.com"</p>

Funder	Grant Name	Funding Description	Funding Amount
Robert Wood Johnson Foundation (www.rwjf.org)	Culture of Health	<p>"Health Systems Catalyzing fundamental changes in health and health care systems to achieve measurably better outcomes for all.</p> <p>Healthy Kids, Healthy Weight Enabling all children to attain their optimal physical, social and emotional well-being, including growing up at a healthy weight.</p> <p>Healthy Communities Creating the conditions that allow communities and their residents to reach their greatest health potential.</p> <p>Health Leadership Engaging a diverse array of leaders in all sectors with the vision, experience, and drive to help build a Culture of Health."</p>	Varies by grant program
Blue Cross Blue Shield of South Carolina Foundation		<p><i>Access to Care:</i> Support adult safety net providers to provide primary physical and mental health care. Implement evidence-based or innovative delivery models to improve health</p> <p><i>Improving Health and Health Care Quality and Value:</i> Support quality improvement projects that yield cost and resource efficiencies through innovative approaches that develop solutions in the health care delivery system</p> <p><i>Investing in SC Children:</i> Improve health through innovative collaborations. Support projects that target childhood obesity risk factors. Increase access to mental health services. Support easily accessible health care services to meet the health care needs of at-risk children and adolescents</p> <p><i>Research/Special Projects:</i> Projects to inform, influence and support our investment strategies and/or our mission. These projects may fall outside of an established area of focus, yet would generate value-added information and data relevant to our mission and vision.</p>	

Open Date	Close Date	Funding Cycle	Notes
varies by grant program		Check website for Call for Proposals	
		Fall Cycle begins July 1, 2016	<p>"Apply for a Grant</p> <p>We have developed a two-phase approach to make the review process more effective and efficient. This approach lets us determine which programs are potentially the best matches for our investment strategies and preferred areas of focus. If you are interested in receiving funding from the Foundation, your first step is to submit the two-page Letter of Intent form. We will review it carefully. If we decide your organization is a good match, you will be able to complete the second phase. We will invite you to submit a full application."</p>

NEAR-TERM BICYCLE PARKING OPPORTUNITIES



A -- room for a cement pad between trees that can accomodate a larger bike rack

B -- room for an inverted U-shape bike rack on bulb out

C -- consider bike corral since CVS and church have surface parking

D -- consider using dead space next to angle parking on 562 (right image)

