




Chapter 5: Pedestrian Network

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OVERVIEW

For the purposes of this Plan, the pedestrian network refers to improvements within the roadway right-of-way. The pedestrian network includes a series of recommended changes that will create a more safe, accessible, and connected walkway system. The pedestrian network types include sidewalks and roadway crossing improvements such as marked crosswalks, countdown signals, curb ramps, and curb extensions. It is important to remember that the greenway network (Chapter 3) is an essential part of a comprehensive pedestrian system as well. This chapter describes pedestrian types, methodology, and facility types and includes pedestrian network maps, and features project cutsheets with maps, photo renderings, and cost estimates.

TYPES OF PEDESTRIANS

Everyone is a pedestrian at some stage in their daily travel. This means pedestrians are a highly diverse road user group which includes children, adults, senior citizens, teenagers, joggers, the disabled and mobility impaired, and transit riders.

Pedestrians have a variety of characteristics so the transportation network should accommodate a variety of needs, abilities, and possible impairments. Age is one major factor that affects pedestrians' physical characteristics, walking speed, and environmental perception. Children have low eye height and walk at slower speeds than adults walk. They also perceive the environment differently at various stages of their cognitive development. Older adults walk more slowly and may require assistive devices for walking stability, sight, and hearing.

Taken from the WalkBikeNC Plan, the table on the following page summarizes common pedestrian characteristics for various age groups and anticipated portions of the state's population by 2030. According to the *Envision 35: Goldsboro Comprehensive Plan*, the median age of Goldsboro's population increased by 37.3% from 1980 to 2010, while North Carolina's median age increased 24.5%, suggesting a more rapidly aging community in Goldsboro than the state as a whole.



Pedestrians Characteristics by Age and NC Population	% Goldsboro Urbanized Area Population, 2000	% NC Population, 2000	% NC Population, 2030
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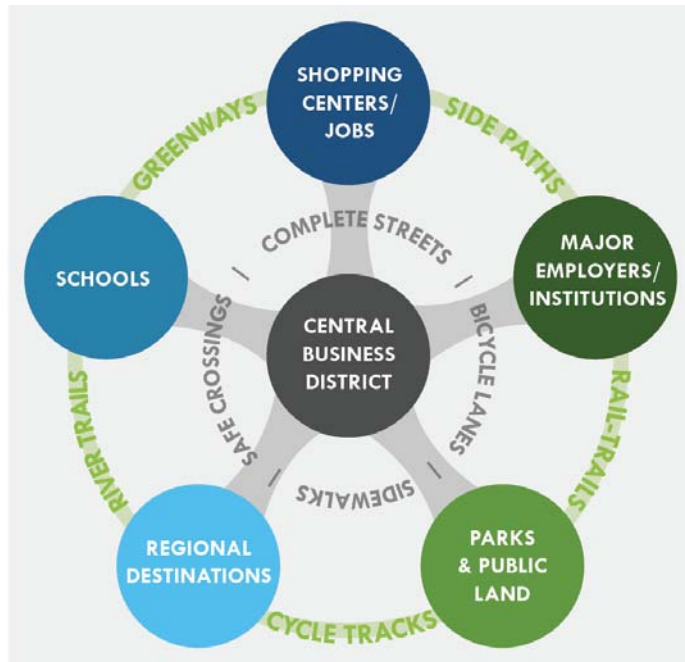
Ages 1-4			
<ul style="list-style-type: none"> Learning to walk Requires constant adult supervision Developing peripheral vision and depth perception 	26.1% (under 18)	24% (under 18)	25.2% (under 18)
Ages 5-8			
<ul style="list-style-type: none"> Increasing independence, but still requires supervision Poor depth perception 	26.1% (under 18)	24% (under 18)	25.2% (under 18)
Ages 9-13			
<ul style="list-style-type: none"> Susceptible to "dart out" intersection dash Poor judgment Sense of invulnerability Improved awareness of traffic environment 	26.1% (under 18)	24% (under 18)	25.2% (under 18)
Ages 14-18			
<ul style="list-style-type: none"> Poor judgment 	26.1% (under 18)	24% (under 18)	25.2% (under 18)
Ages 19-40			
<ul style="list-style-type: none"> Active, fully aware of traffic environment 	40.5% (18-44)	41% (18-44)	34.6% (18-44)
Ages 41-65			
<ul style="list-style-type: none"> Slowing of reflexes 	21.2% (45-64)	22.5% (45-64)	22.4% (45-64)
Ages 65+			
<ul style="list-style-type: none"> Difficulty crossing street Vision loss Difficulty hearing vehicles approaching from behind 	12.2% (65+)	12% (65+)	17.8% (65+)

Sources: AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities (July 2004), Exhibit 2-1, and the US Census Bureau, Interim State Population Projections, 2005.



METHODOLOGY FOR PEDESTRIAN NETWORK DESIGN

The recommended pedestrian network was designed in mind for all types of pedestrians with a special focus of providing a connected network that safely creates separation from the roadway via sidewalk and highly-visible and appropriate intersection and crossing improvements. The network was developed based on Steering Committee input, public input, NCDOT Division input, existing conditions analysis, recommendations from previous studies, noted destinations, presence of existing local and regional greenway projects, and field analyses (including the mapping of informal footpaths as noted in Chapter 2). The network identifies important projects, but, in the long term, sidewalks and appropriate crossing facilities should be implemented on all streets (see Chapter 6).



The Hub + Spokes Model

The image at left shows some of the key components for the overall bicycle, pedestrian and trail network based on a model of hubs (destinations) and spokes (walking and bicycling corridors).

The image below *conceptually* shows how this model of hubs and spokes could be applied in Goldsboro, NC, with a network of complete streets (in grey) and greenways (in green) connecting key destinations throughout the city. **Keep in mind the map below only conceptually shows these linkages. See maps on the following pages for actual pedestrian network recommendations.**



PEDESTRIAN FACILITY TYPES

Sidewalks

Sidewalks are the primary mode of pedestrian travel in most areas and are a crucial element in any pedestrian network. Typically, a sidewalk is at least five-feet wide and ideally features a buffer between it and the roadway.



Sidewalk in Burgaw, NC

Marked Crosswalks

Crosswalks are used to alert motorists to locations where they should expect pedestrians and to identify a designed crossing location for pedestrians. A crosswalk may be marked or unmarked since, legally, crosswalks exist at all intersections, unless specifically prohibited. Marked crosswalks reduce pedestrian crashes by 25% according to the 2008 FHWA Desktop Reference for Crash Reduction Factors. **In October 2013, Raleigh adopted a new crosswalk marking standard (high visibility markings at signalized intersections; high visibility markings at midblock locations; parallel bar markings at stop controlled locations).** This is also recommended for Goldsboro (see Chapter 6).

Marked crosswalks may reduce pedestrian crashes by 25% (2008 FHWA Crash Reduction Factors).



Marked crosswalks in Raleigh, NC



Countdown Signals

Pedestrian signal heads indicate to pedestrians when they should cross a street. Countdown signals that indicate the amount of time pedestrians have remaining to cross the street should be installed with all new or replacement signals. Pedestrian signal indications should be used at traffic signals wherever warranted, according to the MUTCD.

Countdown signals (and marked crosswalk) in Greenville, NC

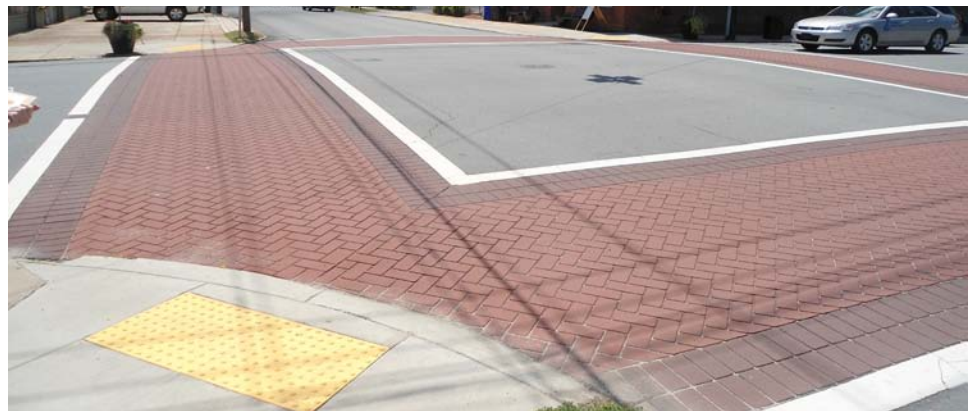


Adding pedestrian signalization may reduce crashes by upwards of 55%. Replacing WALK/DON'T WALK signals with countdown signals may reduce pedestrian crashes by 25% (2008 FHWA Crash Reduction Factors).

Curb Ramps

Curb ramps provide access between the sidewalk and roadway for people using wheelchairs, strollers, walkers, crutches, handcarts, bicycles, and also for pedestrians with mobility impairments who have trouble stepping up and down high curbs. Curb ramps must be installed at all intersections and midblock locations where pedestrian crossings exist, as mandated by federal legislation (1973 Rehabilitation Act and 1990 Americans with Disabilities Act). In most cases, separate curb ramps for each crosswalk at an intersection should be provided rather than having a single ramp at a corner for both crosswalks.

Curb ramp (with truncated dome) in Mebane, NC.



Pedestrian Hybrid Beacon

A hybrid beacon, also known as a High-Intensity Activated Crosswalk (HAWK), consists of a signal-head with two red lenses over a single yellow lens on the major street and pedestrian and/or bicycle signal heads for the minor street. There are no signal indications for motor vehicles on the minor street approaches. Hybrid beacons were developed specifically to enhance pedestrian crossings of major streets. However, several cities have installed modified hybrid beacons that explicitly incorporate bicycle movements.(NACTO).



HAWK signal in Boone, NC

Median Islands

Median islands—also known as center islands, refuge islands, pedestrian islands, or median slow points—are raised islands placed in the center of the street at intersections or midblock to help protect crossing pedestrians from motor vehicles. Center crossing islands allow pedestrians to deal with only onedirection of traffic at a time, and they enable them to stop partway across the street and wait for an adequate gap in traffic before crossing the second half of the street. They are a proven crash reduction device for pedestrians.



Refuge islands may reduce pedestrian crashes by 56% (2008 FHWA Crash Reduction Factors).

Median islands in Charlotte, NC (photo courtesy of City of Charlotte).

Curb Extensions

Curb extensions (also called bulb-outs or bump-outs) are extensions of sidewalks that narrow the street, increase pedestrian visibility, and decrease pedestrian crossing distance. They are an element of traffic calming that prioritizes pedestrian safety, reduces vehicle speeds, and serves to protect on-street parking. Curb extensions should however not intrude into a bicycle lane.

Curb extensions in Rocky Mount, NC (Note curb extension associated with crosswalk at stoplight).



Pedestrian Signage

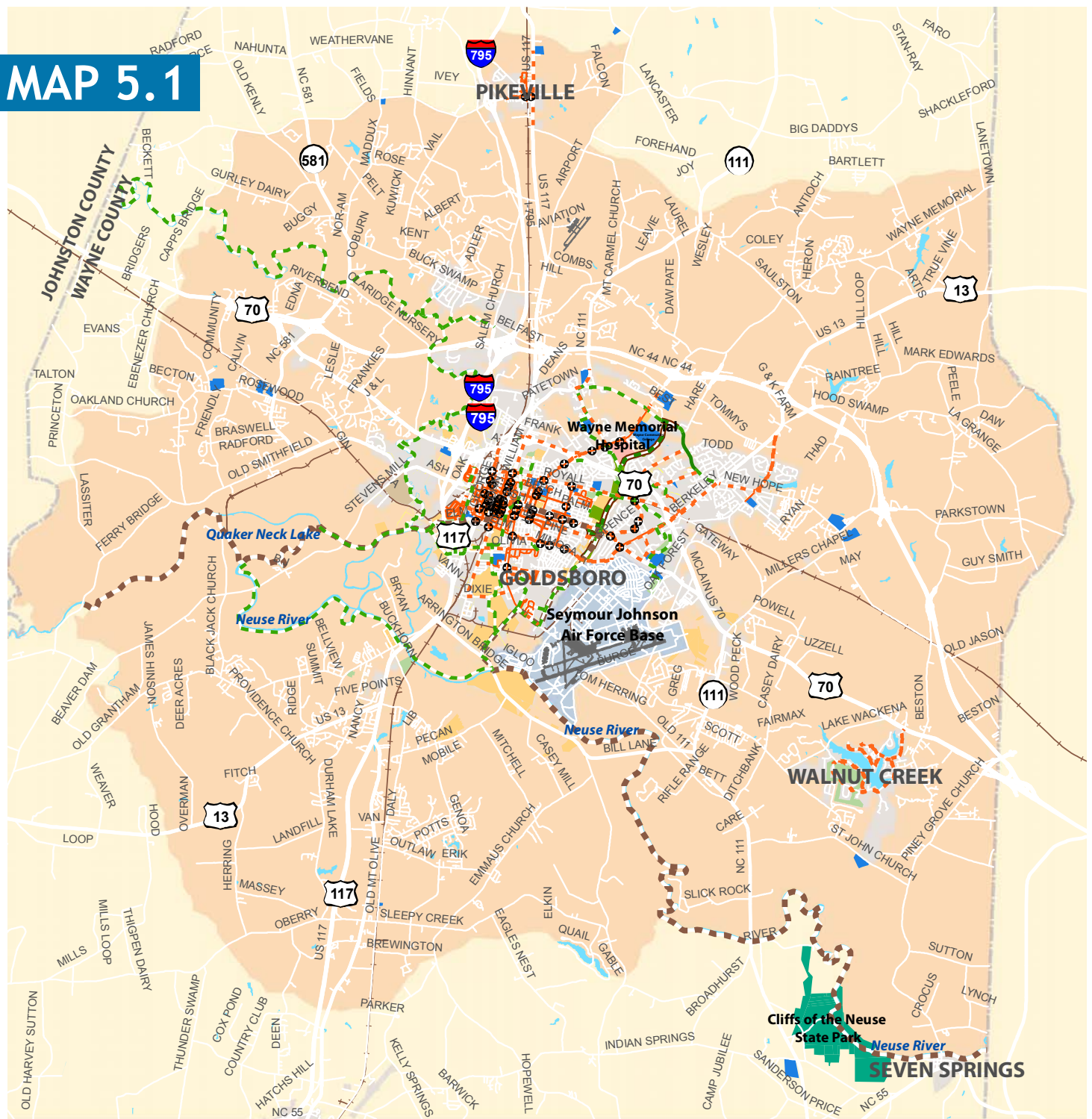
In-street pedestrian crossing signs reinforce the presence of crosswalks and remind motorists of their legal obligation to yield for pedestrians in marked or unmarked crosswalks. This signage is often placed at high-volume pedestrian crossings that are not signalized. Regular pedestrian warning signage is another type of common signage used to warn motorists of pedestrian crossings.

Pedestrian in-roadway signage at school in Conover, NC.





MAP 5.1



Recommended Pedestrian Facilities - MPO



Legend

Recommended Ped. Facilities

- Crossing Improvement
- Sidewalk
- Shared-Use Path

Existing Infrastructure

- Existing Sidewalk
- Existing Shared-Use Path
- Funded Shared-Use Path
- Roadway
- Railroad

Lands of Interest

- City Greenway Lands
- Park
- State Park
- Schools
- Hospital
- Other Destinations
- City Easements
- Other City/County Property

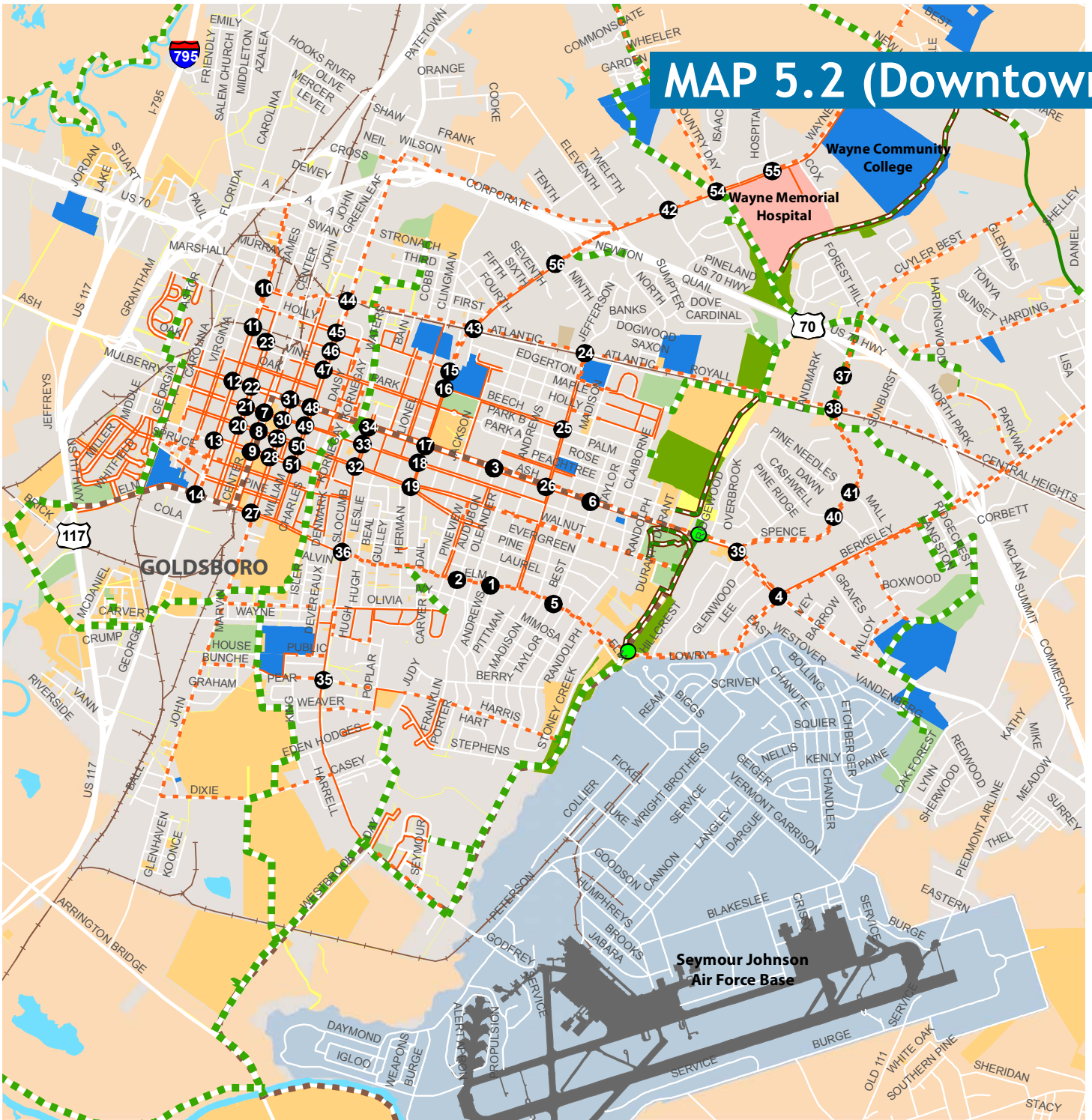
Additional Context

- Proposed Mountains-to-Sea Trail Alignment
- Water Bodies
- Seymour Johnson Air Force Base
- City Limits
- MPO Limits
- Wayne County Border

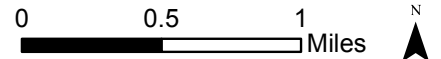




MAP 5.2 (Downtown)



Recommended Pedestrian Facilities - Downtown



Legend

Recommended Ped. Facilities

- HAWK Signal
- Crossing Improvement*
- Sidewalk
- Shared-Use Path

Existing Infrastructure

- Existing Sidewalk
- Existing Shared-Use Path
- Funded Shared-Use Path
- Roadway
- Railroad

Lands of Interest

- City Greenway Lands
- Park
- Schools
- Hospital
- Other Destinations
- City Easements
- Other City/County Property

Additional Context

- Proposed Mountains-to-Sea Trail Alignment
- Water Features
- Seymour Johnson Air Force Base
- City Limits
- MPO Limits

*Crossing Improvements correspond to table starting on page 5-12.





SIDEWALK NETWORK BY SEGMENT

Roadway	From	To	Side	Foot-path	Length (Feet)
Royall Avenue	William Street	Spence Street	North	Y	12,532
Harris Street	Ben Brewington Court	Stoney Creek Parkway	South	N	3,995
Berkeley Boulevard	Elm Street	Ash Street	Both	Y	3,393
Spence Avenue	Ash Street	US 70	Both	Y	14,357
Central Heights Road	New Hope Road	US 13	Both	N	12,519
Royall Avenue	Spence Street	Berkeley Boulevard	North	Y	4,577
John Street	Dixie Trail	Elm Street	East	N	7,485
Elm Street	Slocumb Street	Berkeley Boulevard	Both	Y	21,140
Herman Street	Beech Street	Royall Avenue	West	Y	1,679
Herman Street	Holly Street	Royall Avenue	East	Y	1,228
Cashwell Drive	Berkeley Boulevard	Malloy Street	South	Y	2,184
Ash Street	Spence Avenue	Berkeley Boulevard	Both	Y	2,926
Walnut Street	Audubon Avenue	Stoney Creek Park	Both	Y	8,578
Jefferson Avenue	Edgerton Street	Royall Avenue	Both	N	1,540
Edgerton Street	Jefferson Avenue	Madison Avenue	Both	N	1,635
Holly Street	Leslie Street	Lionel Street	North	N	443
Bunche Drive	Stadium Road	Slocumb Street	North	N	986
Bunche Drive	John Street	Sycamore Street	North	N	1,316
Olivia Lane	Deveraux Street	Slocumb Street	South	N	318
Public Drive	Existing Sidewalk	Slocumb Street	North	N	791
Spruce Street	Railroad	James Street	Both	N	3,045
Virginia Avenue	Pine Street	Chestnut	Both	N	1,485
George Street	Elm Street	Chestnut	Both	Y	1,189
Carolina Avenue	Pine Street	Walnut Street	East	N	1,022
George Street	Railroad	US 70	Both	Y	5,266
US 70 Bypass Side Rd	William Street	Eleventh Street	North	N	5,575
Holly Street	James Street	Center Street	South	N	411
Daisy Street	Mulberry Street	Holly Street	Both	N	2,297
Kornegay Street	Ash Street	Park Avenue	Both	N	1,045
Main Street	Russell Drive	Mill Street	Both	N	3,338
Main Street	Railroad Street	Goldsboro Street	North	N	403
US 117	Mt Carmel Church Rd	Big Daddys Road	East	N	3,371
Walnut Creek Drive	Breezewood Drive	US 70	Both	N	9,797
Pinehurst Lane	Doral Drive	End of Road	Both	N	2,579
Doral Drive	Pinehurst Lane	Walnut Creek Drive	Both	N	2,185
Walnut Creek Drive	Doral Drive	End of Road	Both	N	10,726
Mill Road	Lakeshore Drive	Walnut Creek Drive	Both	N	21,982
Lakeshore Drive	Lakeshore Drive	Mill Road	Both	N	10,792



Roadway	From	To	Side	Foot-path	Length (Feet)
Olivia Lane	John Street	Deveraux Street	South	N	2,426
Pineview Avenue	Evergreen Avenue	Walnut Street	Both	N	982
Holly Street	Jefferson Avenue	Existing Sidewalk	North	N	794
Wayne Memorial Drive	New Hope Road	Tommy's Road	East	N	2,487
Country Day Road	Patetown Road	Wayne Memorial Drive	West	N	6,535
Patetown Road	Country Day Road	Kearney Lane	West	N	2,804
Newsome Street	Slocumb Street	Slaughter Street	North	N	498
Slaughter Street	Newsome Street	Existing Sidewalk	West	N	212
Poplar Street	Weaver Place	Existing Sidewalk	East	N	80
Harris Street	Slocumb Street	Poplar Street	South	N	1,289
Weaver Drive	Slocumb Street	Poplar Street	North	N	1,294
Malloy Street	Ash Street	Cashwell Drive	East	N	1,461
Berkeley Boulevard	Mall Access	New Hope Road	West	Y	6,850
Berkeley Boulevard	Ash Street	Fallin Boulevard	Both	Y	9,899
Ash Street	Berkeley Boulevard	Greenwood Middle School	North	N	3,056
Wayne Memorial Drive	Hospital Road	New Hope Road	West	N	4,283
Wayne Memorial Drive	Royall Avenue	Country Day Road	Both	Y	8,505
Herman Street	Royall Avenue	Railroad	East	N	68
Ash Street	Audubon Avenue	Spence Street	North	Y	5,579
Cuyler Best Road	US 70	New Hope Road	West	N	6,475
William Street	McIntire Street	US 70	East	Y	4,306
John Street	Holly Street	Atlantic Avenue	West	N	312
Slocumb Street	Newsome Street	Olivia Lane	East	Y	650
US 117	Big Daddy's Road	High School	East	N	4,404
Slocumb Street	Day Circle	Proposed Shared-Use Path	North	Y	2,102
Neil Street	William Street	Tuskegee Street	South	N	645
Mill Street	Main Street	School Street	West	N	1,220
Eleventh Street	Lincoln Mercury Drive	Wayne Memorial Drive	West	N	163
Grantham Street	George Street	William Street	North	N	2,062
Harding Drive	Proposed Shared-Use Path	New Hope Road	North	N	4,699
Parkway Drive	North Park Drive	Berkeley Boulevard	South	N	2,297
New Hope Road	Berkeley Boulevard	Central Heights Drive	South	N	3,761
Central Heights Road	New Hope Road	Existing Sidewalk	East	N	270
New Hope Road	Central Heights Road	Food Lion	North	N	862
Dixie Trail	John Street	Slocumb Street	North	N	3,692



SIGNALIZED INTERSECTION RECOMMENDATIONS

The following table provides recommendations for pedestrian improvements at more than 50 signalized intersections and rail road crossings in Goldsboro. Table contents are based on a field inventory by project consultants in early 2014. The circled number in each row correspond to Map 5.2 Recommended Pedestrian Facilities on page 5-9.

<i>Road 1</i>	<i>Road 2</i>	<i>Nearby Destinations</i>	<i>Speed Limit</i>	<i>Marked Crosswalk Present? Condition?</i>	<i>Ped Signal Present? (Y/N)</i>	<i>Intersection Field Notes</i>	<i>Recommendations</i>
Andrews Ave 1	Elm St	Residential	35/25	No; but stop lines present	N	Part of an MPO/TIP Pedestrian Corridor.	Provide at least one high-visibility crosswalk across Elm and two standard crosswalks along Elm. Provide pedestrian countdown signals and curb ramps with truncated domes.
Audubon St 2	Elm St	Residential	25	No	N	Part of an MPO/TIP Pedestrian Corridor.	Provide two high-visibility crosswalk across Elm and two standard crosswalks along Elm. Provide pedestrian countdown signals and curb ramps with truncated domes.
Audubon St 3	Ash St	Residential, small business	25	No; but stop lines present	N		Provide two high-visibility crosswalk across Ash and two standard crosswalks along Ash. Provide pedestrian countdown signals. Complete curb ramps with truncated domes.
Berkeley Blvd 4	Ash St	Pharmacies, shopping centers, small businesses, and nearby residential and school	35	No; but stop lines present	N	Part of an MPO/TIP Pedestrian Corridor. Concrete medians on each street, ranging from 2-5 feet wide. Opportunity for pedestrian refuge islands. One bike and one pedestrian accident nearby.	Provide at least one high-visibility crosswalk across Ash and one standard crosswalks along Ash. Provide pedestrian countdown signals. Complete curb ramps with truncated domes. Consider opportunity for a pedestrian refuge islands.
Best St 5	Elm St	Residential	35/25	No	N	Part of an MPO/TIP Pedestrian Corridor.	Provide at least one high-visibility crosswalk across Elm and one standard crosswalks along Elm. Provide pedestrian countdown signals and curb ramps with truncated domes.
Best St 6	Ash St	Food Lion and small businesses	35/25	No; but stop lines present	N	Sidewalk on Best near this intersection is not in the original GIS data set. One bus stop nearby on Best.	Provide at least one high-visibility crosswalk across Ash and one standard crosswalks along Ash. Provide pedestrian countdown signals. Complete curb ramps with truncated domes.



Road 1	Road 2	Nearby Destinations	Speed Limit	Marked Crosswalk Present? Condition?	Ped Signal Present? (Y/N)	Intersection Field Notes	Recommendations
Center St 7	Mulberry St	Downtown destinations, small businesses, Town Hall, gov't services	20	Yes; Not highly visible, but in good condition with stop lines	Y	Large landscaped median with street furniture and bicycle racks. Sidewalk features brick pavers. Pedestrian friendly streetscape elements such as benches, wide sidewalk, trash cans, landscaping, hanging planters, street trees. Mid-block pedestrian crossing signage just north of this intersection.	Provide two high-visibility crosswalk along Center, one along the south side of Mulberry. Add truncated domes to curb ramps on south side.
Center St 8	Walnut St	Downtown destinations, small businesses	20	Yes; Not highly visible; in fair condition with stop lines.	Y	Large landscaped median with street furniture. Sidewalk features brick pavers. Pedestrian friendly streetscape elements such as benches, wide sidewalk, trash cans, landscaping, hanging planters, pedestrian scale lighting, street trees.	Provide two high-visibility crosswalk along Center, one along the south side of Walnut. Complete curb ramps (currently single ramps serving crossings in both directions); add truncated domes.
Center St 9	Chestnut St	Downtown destinations, small businesses, Cornerstone Commons	20	Yes; Not highly visible, in poor condition with stop lines	Y	This is a two-stage east-west intersection. Concrete median with street trees. Some sidewalk features brick pavers. Pedestrian friendly streetscape elements such as wide sidewalk, trash cans, landscaping, hanging planters, pedestrian scale lighting, street trees.	Provide two high-visibility crosswalk along Center, one along the south side of Chestnut. Complete curb ramps (currently single ramps serving crossings in both directions); add truncated domes.
George St 10	Grantham St/US 70 Business	Express Mart, gas station auto services, small businesses	35	N	N	Sidewalk near this intersection is not in the original GIS data set. One pedestrian accident and one bus stop nearby.	Provide at least one high-visibility crosswalk across Grantham/US 70 Business and standard crosswalks along Grantham/US 70 Business. Provide pedestrian countdown signals. Complete curb ramps with truncated domes.
George St 11	Railroad (just south of Grantham St)	Small businesses along George St	35	N/A	N/A	Railroad crossing. Existing east side sidewalks do not connect over the RR tracks (no pedestrian accommodation)	Initiate discussions with RR owners & operators. Provide safe, complete, and accessible crossings over RR tracks for pedestrians, bicyclists, wheeled-devices and people with disabilities.



Road 1	Road 2	Nearby Destinations	Speed Limit	Marked Crosswalk Present? Condition?	Ped Signal Present? (Y/N)	Intersection Field Notes	Recommendations
George St 12	Ash St	Restaurant, Dollar General, small businesses	35/20	Yes; Not highly visible, but in good condition with stop lines	Y	High pedestrian activity observed (3 pedestrians in 5 minutes w/ cold weather). Pedestrian crash.	Provide high visibility crosswalks and pedestrian countdown signals in all directions. Complete curb ramps with truncated domes.
George St 13	Chestnut St	Residential, NC Wesleyan College	35	N	N	Chestnut St is off-set at George St. Fair sight distance.	Provide high visibility crosswalks and pedestrian countdown signals along both sides of George, and at least one across George. Complete curb ramps with truncated domes.
George St 14	Elm St	D & H Mart, Family Dollar, small businesses, restaurant, School Street Elem.	35	N	N	Worn footpaths near intersection. High pedestrian activity observed. Bus Stop. Fair sight distance.	Provide high visibility crosswalks and pedestrian countdown signals along both sides of George, and at least one across George. Complete curb ramps with truncated domes.
Herman St 15	Holly St	Wayne School of Engineering, Goldsboro High School, residential, and nearby elementary school	35	Yes; Not highly visible, in fair to poor condition with stop lines	Y	Part of an MPO/TIP Pedestrian Corridor. Sidewalk recommended by MPO in State TIP along Herman; footpath noted on Herman. Pedestrian school crossing signs.	Provide high visibility crosswalks in all directions. Complete curb ramps (currently single ramps serving crossings in both directions); add truncated domes.
Herman St 16	Beech St	Residential, Herman Park, Wayne School of Engineering/Goldsboro High School	25	No; but stop lines present	N	Part of an MPO/TIP Pedestrian Corridor. Major crossing for park, school and neighborhood. Sight distance: (tree on NW corner blocks some view).	Provide high visibility crosswalks and pedestrian countdown signals in all directions. Complete curb ramps (currently single ramps serving crossings in both directions); add truncated domes.
Herman St 17	Ash St	Herman Park, Wayne County Office Building (DSS/DPH), Rite Aid, Goldsboro Recreation and Parks Department, small businesses	35	Yes; Highly visible, in good condition with stop lines	Y	Pedestrian crash and nearby bus stops. Crosswalk currently in one place only. Historic marker signage.	Provide high visibility crosswalks in all directions. Complete curb ramps (currently single ramps serving crossings in both directions); add truncated domes.
Herman St 18	Mulberry St	Residential and church	25	No	N	Pedestrian crash	Provide high visibility crosswalks and pedestrian countdown signals in all directions. Complete curb ramps (currently single ramps serving crossings in both directions); add truncated domes.
Herman St 19	Evergreen and Walnut	Residential, including public housing nearby	25	No; but stop lines present	N	This is a five-points intersection with roundabout/traffic circle potential with reconstruction.	Consider redesigning this intersection with a roundabout/traffic circle. If not feasible, provide high visibility crosswalks and pedestrian countdown signals. Complete curb ramps with truncated domes.



Road 1	Road 2	Nearby Destinations	Speed Limit	Marked Crosswalk Present? Condition?	Ped Signal Present? (Y/N)	Intersection Field Notes	Recommendations
James St 20	Walnut St	Downtown destinations, small businesses	25	N	N	Some street furniture (trash cans). Bus Stop.	Provide high visibility crosswalks and pedestrian countdown signals in all directions. Complete curb ramps with truncated domes.
James St 21	Mulberry St	Downtown destinations, small businesses, church	25	N	Y	Existing parking is close to intersection.	Provide high visibility crosswalks in all directions. Complete curb ramps with truncated domes.
James St 22	Ash St	Comco Fuel Mart, small businesses, church	35/25	N	N	Historic signage on the NW corner.	Provide high visibility crosswalks and pedestrian countdown signals in all directions. Complete curb ramps with truncated domes.
James St 23	RR (just north of Vine)	Small industrial businesses along George St	35	N/A	N/A	Railroad crossing. Existing east side sidewalks do not connect over the RR tracks (no pedestrian accommodation)	Initiate discussions with RR owners & operators. Provide safe, complete, and accessible crossings over RR tracks for pedestrians, bicyclists, wheeled-devices and people with disabilities.
Jefferson Ave 24	Royall Ave	Boys and Girls Club, small businesses, nearby residential	35	Yes; Not highly visible, in fair to poor condition with stop lines	Y	Part of an MPO/TIP Pedestrian Corridor. RR tracks and small roadway located directly south of intersection. Footpaths nearby (no pedestrian accommodations at RR tracks). Mid-block pedestrian crossing and "Do Not Pass" signage just west of this intersection (at boys and Girls Club)	Provide high visibility crosswalks, pedestrian countdown signals, and curb ramps with truncated domes on at least one side both across and along Royall. Also, initiate discussions with RR owners & operators for tracks directly south of this intersection. Provide safe, complete, and accessible crossings over RR tracks for pedestrians, bicyclists, wheeled-devices and people with disabilities.
Jefferson Ave 25	Beech St	Residential, Goldsboro Housing Authority Service Center	25	No; but stop lines present	N	Sight distance: landscaping on NW corner blocks some view.	Provide high visibility crosswalks and pedestrian countdown signals in all directions. Complete curb ramps (currently single ramps serving crossings in both directions); add truncated domes.
Jefferson Ave 26	Ash St	Residential, small businesses, Express Mart, Edge-wood Community Development School	35/25	No; but stop lines present	N	Ash is off-set at Jefferson. Two bus stops.	Provide high visibility crosswalks and pedestrian countdown signals in all directions. Complete curb ramps (currently single ramps serving crossings in both directions); add truncated domes.
John St 27	Elm St	Restaurant (Sof-T-Serve), residential, small business	20	No; but stop lines present	N	Part of an MPO/TIP Pedestrian Corridor. Bike crash; two bus stops. Landscaping is overgrown on nearby sidewalk (covering entire width)	Provide high visibility crosswalks and pedestrian countdown signals in all directions. Complete curb ramps (currently single ramps serving crossings in both directions); add truncated domes.



Road 1	Road 2	Nearby Destinations	Speed Limit	Marked Crosswalk Present? Condition?	Ped Signal Present? (Y/N)	Intersection Field Notes	Recommendations
John St 28	Chestnut St	Downtown destinations, small businesses, church, residential	20	No; but stop lines present	N	Pedestrian crash, bus stop; truncated domes on ramps.	Provide high visibility crosswalks and pedestrian countdown signals in all directions. Complete curb ramps (currently single ramps serving crossings in both directions).
John St 29	Walnut St	Downtown destinations, small businesses, Arts Council of Wayne County	20	Yes; Not highly visible, in poor condition with stop lines	N	Some sidewalk features brick pavers. Pedestrian friendly streetscape elements such as wide sidewalk, trash cans, landscaping. Parking very close to intersection.	Provide high visibility crosswalks and pedestrian countdown signals in all directions. Complete curb ramps (currently single ramps serving crossings in both directions); add truncated domes.
John St 30	Mulberry St	Downtown destinations, small businesses, Jefferys Building, block from Town Hall	20	No; but stop lines present	N	Limited streetscape elements (trash cans only); nearby bus stop.	Provide high visibility crosswalks and pedestrian countdown signals in all directions. Complete curb ramps (currently single ramps serving crossings in both directions); add truncated domes.
John St 31	Ash St	Small businesses, banks, restaurants, near downtown destinations,	20	No; but stop lines present	N	Speed limit is 20, but observed speeds are much higher.	Provide high visibility crosswalks and pedestrian countdown signals in all directions. Complete curb ramps (currently single ramps serving crossings in both directions); add truncated domes.
Slocumb St 32	Walnut St	Residential, including Walnut St School Apartments	25	No; but stop lines present	N	Pedestrian crash and two bus stops. Sight distance: tree on SE corner blocks some view.	Provide high visibility crosswalks and pedestrian countdown signals in all directions. Complete curb ramps with truncated domes.
Slocumb St 33	Mulberry St	Residential	25	No; but stop lines present	N	Pedestrian crash and bike crash	Provide high visibility crosswalks and pedestrian countdown signals in all directions. Provide curb ramps with truncated domes.
Slocumb St 34	Ash St	Small businesses, church, barber shop, auto services, nearby residential	35	No; but stop lines present	N		Provide high visibility crosswalks and pedestrian countdown signals in all directions. Complete curb ramps (currently single ramps serving crossings in both directions); add truncated domes.
Slocumb St 35	Harris St	Residential	35/25	No; but stop lines present	N	Part of an MPO/TIP Pedestrian Corridor. Also need sidewalk from Schools to Slocumb St on Harris	Provide at least one high visibility crosswalk and pedestrian countdown signal across Slocumb, and at least one along Slocumb. Provide curb ramps with truncated domes.



Road 1	Road 2	Nearby Destinations	Speed Limit	Marked Crosswalk Present? Condition?	Ped Signal Present? (Y/N)	Intersection Field Notes	Recommendations
Slocumb St 36	Elm St	Express Mart, nearby residential	25	No; but stop lines present	N	Part of an MPO/TIP Pedestrian Corridor. Nearby footpaths, pedestrian crash, bike crash, and multiple bus stops	Provide high visibility crosswalks and pedestrian countdown signals in all directions. Complete curb ramps (currently single ramps serving crossings in both directions); add truncated domes.
Spence Ave 37	at Walmart	Pinewood Square shopping center, Walmart, North Plaza Shopping Center, hotels and restaurants	35	No; but stop lines present	N	Part of an MPO/TIP Pedestrian Corridor. Concrete landscaped median on west side. Pedestrian activity could include service industry employees in addition to customers. Multiple pedestrian accidents nearby.	Provide at least one high visibility crosswalk and pedestrian countdown signal across Spence, and at least one along Spence. Complete curb ramps with truncated domes.
Spence Ave 38	Royall Ave	Pinewood Square shopping center, Walmart, North Plaza Shopping Center, hotels and restaurants	35	No	N	Part of an MPO/TIP Pedestrian Corridor. RR tracks located directly south of intersection (no pedestrian accommodations at RR tracks). Sight distance note: elevation and curve blocks some view.	Provide high visibility crosswalks, pedestrian countdown signals, and curb ramps with truncated domes on at least one side both across and along Royall. Provide pedestrian countdown signals. Provide curb ramps with truncated domes. Also, initiate discussions with RR owners & operators for tracks directly south of this intersection. Provide safe, complete, and accessible crossings over RR tracks for pedestrians, bicyclists, wheeled-devices and people with disabilities.
Spence Ave 39	Ash St	Small businesses and nearby residential	35	No; but stop lines present	N	Part of an MPO/TIP Pedestrian Corridor. Pedestrian sign at the east Ash approach.	Provide at least one high visibility crosswalk and pedestrian countdown signal across Ash, and at least one along Ash. Provide curb ramps with truncated domes.
Spence Ave 40	Cashwell	Small businesses, Crossroads Plaza, and nearby residential	35	No; but stop lines present	N	Part of an MPO/TIP Pedestrian Corridor.	Provide high visibility crosswalks and pedestrian countdown signals in all directions. Complete curb ramps (currently single ramps serving crossings in both directions); add truncated domes.
Spence Ave 41	Mall Rd	Small businesses, Express Mart	35	No; but stop lines present	N	Part of an MPO/TIP Pedestrian Corridor.	Provide at least one high visibility crosswalk and pedestrian countdown signal across Spence, and at least one along Spence. Provide curb ramps with truncated domes.



Road 1	Road 2	Nearby Destinations	Speed Limit	Marked Crosswalk Present? Condition?	Ped Signal Present? (Y/N)	Intersection Field Notes	Recommendations
Wayne Memorial Drive 42	Lockhaven Dr	Pharmacies, small businesses, and nearby residential	35	No; but stop lines present	N	Three pedestrian crashes nearby. Two bus stops.	Provide at least one high visibility crosswalk and pedestrian countdown signal across Wayne Memorial, and two along Wayne Memorial. Complete curb ramps (currently single ramps serving crossings in both directions); add truncated domes.
Wayne Memorial Drive/Herman St 43	Royall Ave	Pharmacy, food mart, residential, small businesses, Goldsboro High School and Middle School	35	No; but stop lines present	N	Part of an MPO/TIP Pedestrian Corridor. RR tracks located directly south of intersection (no pedestrian accommodations at RR tracks). Footpaths observed near intersection. One pedestrian accident and two bus stops nearby.	Provide high visibility crosswalks, pedestrian countdown signals, and curb ramps with truncated domes on at least one side, both across and along Royall. Provide pedestrian countdown signals. Also, initiate discussions with RR owners & operators for tracks directly south of this intersection. Provide safe, complete, and accessible crossings over RR tracks for pedestrians, bicyclists, wheeled-devices and people with disabilities.
William St 44	Royall Ave	Industrial and auto services	35	No; but stop lines present	N	Part of an MPO/TIP Pedestrian Corridor. Two pedestrian crashes and a nearby bus stop. RR tracks and small roadway located directly south of intersection. Footpaths nearby (no pedestrian accommodations at RR tracks).	Provide high visibility crosswalks, pedestrian countdown signals, and curb ramps with truncated domes on at least one side, both across and along Royall. Also, initiate discussions with RR owners & operators for tracks directly south of this intersection. Provide safe, complete, and accessible crossings over RR tracks for pedestrians, bicyclists, wheeled-devices and people with disabilities.
William St 45	Holly St	Small industrial businesses, Salvation Army	25	No; but stop lines present	N	Pedestrian crash and nearby bus stop	Provide high visibility crosswalks and pedestrian countdown signals in all directions. Complete curb ramps (currently single ramps serving crossings in both directions); add truncated domes.
William St 46	Beech St	Auto services, Fast Strip Mart, residential	25	No; but stop lines present	N	Nearby existing sidewalk is poorly maintained on NW side.	Provide high visibility crosswalks and pedestrian countdown signals in all directions. Complete curb ramps with truncated domes.
William St 47	Park Ave	Auto services, House of Fordham (social/religious service), residential	25	No; but stop lines present	N	Nearby bike crash.	Provide high visibility crosswalks and pedestrian countdown signals in all directions. Complete curb ramps with truncated domes.



Road 1	Road 2	Nearby Destinations	Speed Limit	Marked Crosswalk Present? Condition?	Ped Signal Present? (Y/N)	Intersection Field Notes	Recommendations
William St 48	Ash St	Banks, restaurants, AT&T, Chamber of Commerce, Visitors Center, and Post Office	20	Yes; Not highly visible, but in good condition with stop lines	Y	Bicycle crash. Two historic signage markers.	Provide high visibility crosswalks in all directions.
William St 49	Mulberry St	Wayne County Museum, post office church, small businesses, nearby residential	20	Yes; Not highly visible, but in good condition with stop lines	Y	Mulberry St is offset at William St.; two pedestrian crashes. Civil War Trail signage. Off-set intersection may impact sight distance.	Replace current crosswalks with high visibility crosswalks. Complete curb ramps (currently single ramps serving crossings in both directions); add truncated domes.
William St 50	Walnut St	Wayne Co Veterans Memorial, small businesses, county courthouse, nearby residential	20	Yes; Not highly visible, in poor condition with stop lines	Y	Veterans Memorial serves as a park. Historic marker signage.	Provide high visibility crosswalks in all directions. Complete curb ramps (currently single ramps serving crossings in both directions); add truncated domes.
William St 51	Chestnut St	Wayne Co courthouse, small businesses, Co Administrative Building, nearby residential	20	Yes; Not highly visible, in poor condition with stop lines	Y	Crosswalk lines nearly invisible. Mid-block pedestrian crossing signage just north of this intersection.	Replace current crosswalks with high visibility crosswalks. Complete curb ramps (currently single ramps serving crossings in both directions); add truncated domes.
Main St 52	RR	Downtown Pikeville	25	No; Pedestrians forced in road at RR xing	N	Existing sidewalk on Main Street in Downtown; no ped crossing of RR	Continue sidewalk/ADA-compliant crossing of RR tracks that gets pedestrians out of road; Add marked crosswalks across Railroad Street
Main St 53	US 117	Downtown Pikeville; convenient stores	25/35	No; but stop lines present	N	Existing sidewalk on only one leg but recommended sidewalk along two more legs. Some curb ramps missing.	Add marked crosswalks; complete ADA compliant curb ramps; add countdown signals.
Wayne Memorial Dr 54	Country Day Rd	Wayne Memorial Hospital, Wayne Community College, Wayne Country Day School, residential	35	No; but stop lines present	Y	Existing sidewalk on hospital side. Two curb ramps are present but are overgrown and need to be upgraded.	Add high visibility crosswalks, pedestrian countdown signals, and curb ramps with truncated domes on all sides to accommodate the recommended sidewalk on the north side and the recommended trail crossing at this intersection.
Wayne Memorial Dr 55	Hospital Rd	Wayne Memorial Hospital, medical offices, Wayne Community College	35	No; but stop lines present	Y	Existing sidewalk on south side and northwest side. Median on hospital side forces pedestrians into road. Curb ramps present.	Add high visibility crosswalks, pedestrian countdown signals, and curb ramps with truncated domes on all sides. Redesign the hospital-side median to accommodate pedestrians.
Wayne Memorial Drive 56	Ninth Street	Carly C's grocery, shopping, residential	35	No; but stop lines present	Y	No curb ramps, no sidewalk or crosswalks to connect to shopping.	Add high visibility crosswalks, ADA-compliant curb ramps with truncated domes, and pedestrian countdown signals in all directions.

GOLDSBORO PHOTO VISUALIZATION: ASH AND BERKELEY INTERSECTION



With no pedestrian crossing amenities, this intersection is not hospitable for pedestrians. The addition of countdown signals, marked crosswalks, and curb ramps are essential.

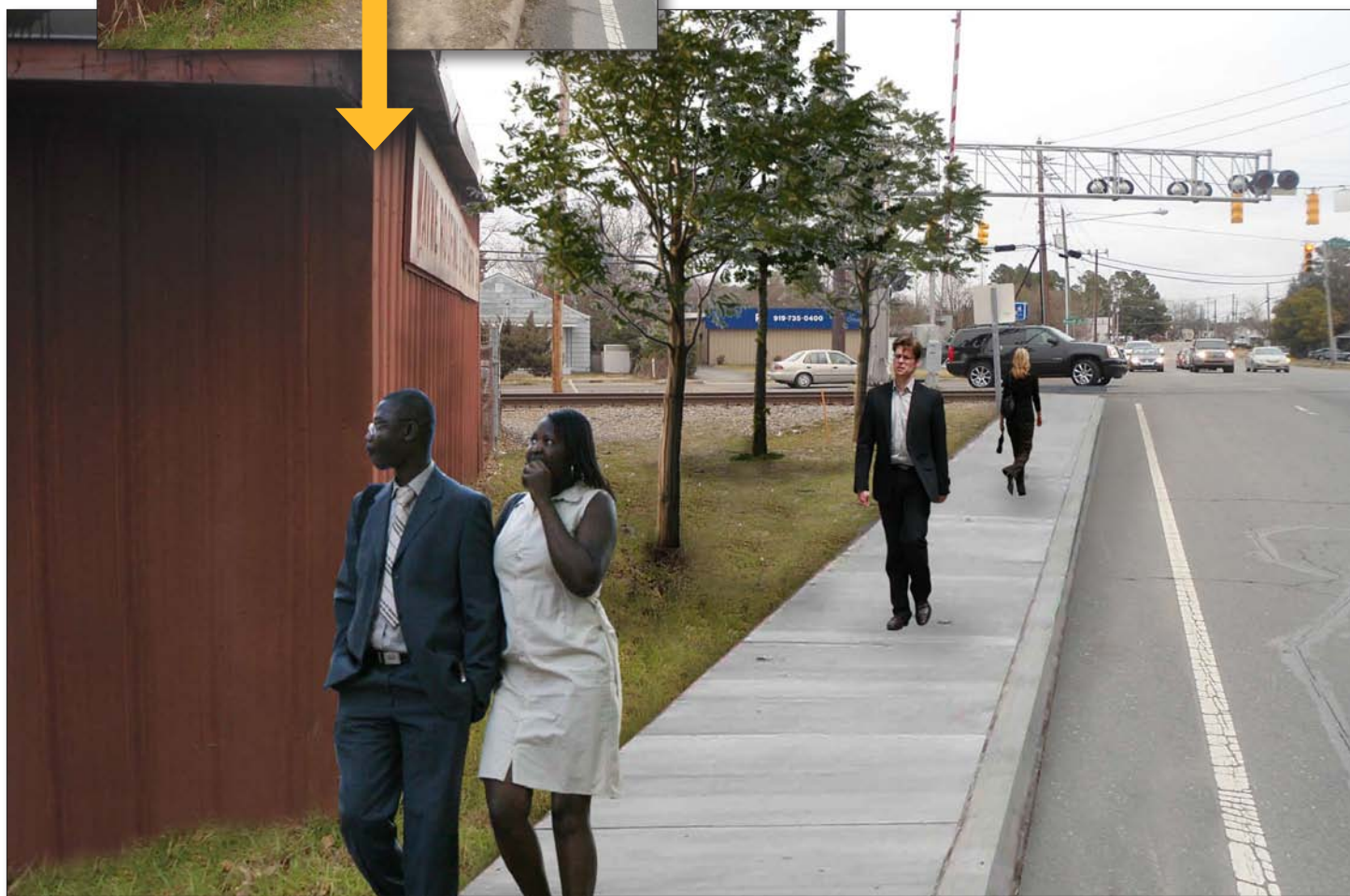


GOLDSBORO PHOTO VISUALIZATION: ROYALL AND SPENCE INTERSECTION



Royall and Spence were noted often by the public as needing pedestrian improvements. The addition of sidewalk, crosswalk, and curb ramps are needed at this intersection. In addition, the railroad crossing should be pedestrian-friendly as well.

GOLDSBORO PHOTO VISUALIZATION: HERMAN/WAYNE MEMORIAL AND ROYALL INTERSECTION



One of the many footpaths in Goldsboro is found here along Herman Street. Sidewalk should be provided along this roadway.



GOLDSBORO PHOTO VISUALIZATION: JOHN AND WALNUT INTERSECTION



Downtown Goldsboro features sidewalks making walking an enjoyable experience. Small intersection improvements like curb bulbouts, marked crosswalks, and curb ramps will make for shorter crossing distances and better visibility.

PIKEVILLE PEDESTRIAN RECOMMENDATIONS

As a small town, Pikeville is walkable but would be improved with key sidewalk and crossing improvements discussed below.



Main Street at
Railroad crossing
Downtown.

Key Recommended Sidewalks

- » Main Street (from Russell Drive to Mill Street) - Both sides
- » Main Street (from Railroad Street to Goldsboro Street) - North side
- » US 117 (from Mt Carmel Church Road to Big Daddys Road - East side
- » US 117 (from Big Daddy's Road to High School) - East side
- » Mill Street (filling gaps from Main Street to Park) - West side

Key Crossing Improvements

- » Main Street at US 117 - Despite not having sidewalk on all legs at the time of this study, high visibility marked crosswalks, curb ramps, and countdown signals should be added.
- » Main Street at RR crossing - Additional space or sidewalk crossing of RR tracks would prevent pedestrians from having to walk in the road. In addition, marked crosswalks should be provided along Main Street crossing SE Railroad Street.

Other Notes

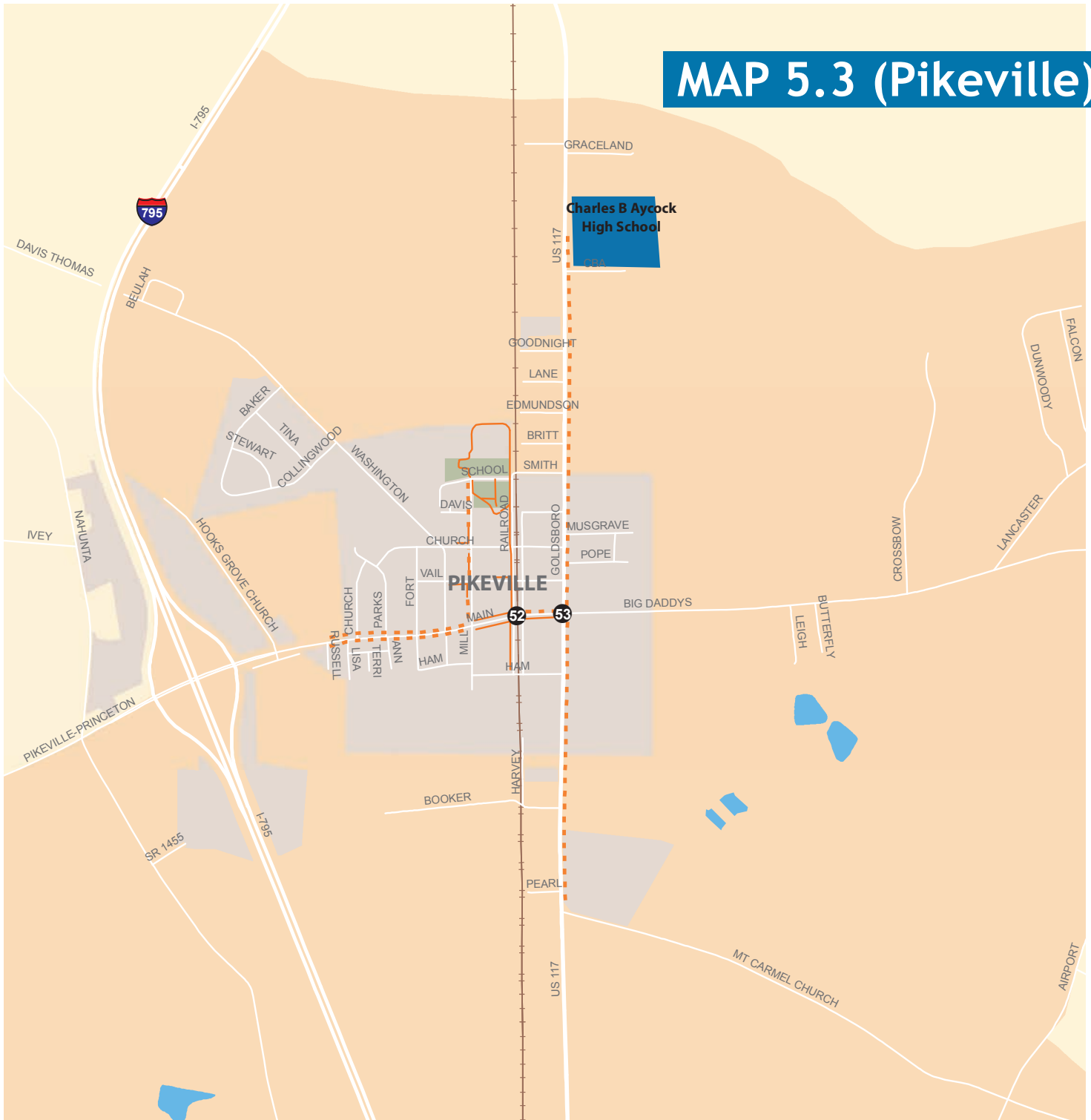
- » While other parts of Pikeville would benefit from sidewalk, the above projects are most important for overall connectivity and safety along major roads and connecting important destinations. Residential roads would benefit from sidewalk and traffic calming as well and should be explored over time.

Pedestrian safety benefits

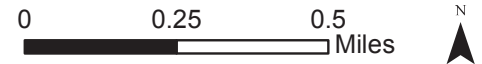
- » 88% crash reduction factor when adding sidewalk along a roadway; 25% crash reduction factor when replacing WALK/DON'T WALK signals with countdown signals (FHWA).



MAP 5.3 (Pikeville)



Recommended Pedestrian Facilities - Pikeville



Legend

Recommended Ped. Facilities

- Sidewalk
- Crossing Improvement

Existing Infrastructure

- Existing Sidewalk
- Roadway
- Railroad

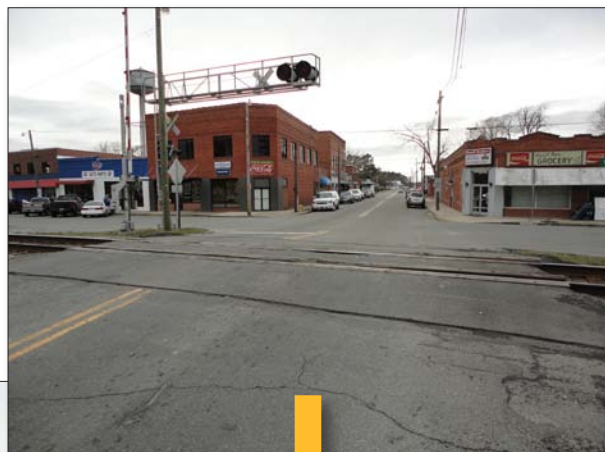
Lands of Interest

- Park
- Schools

Additional Context

- Water Features
- City Limits
- MPO Limits





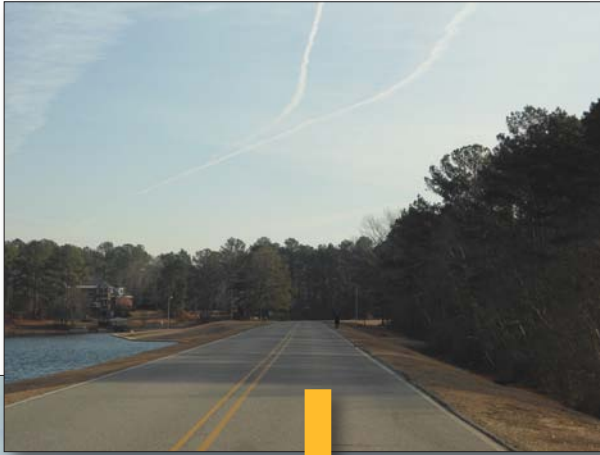
PIKEVILLE PHOTO VISUALIZATION: MAIN STREET/RAILROAD CROSSING IN DOWNTOWN PIKEVILLE



The Main Street crossing of the Railroad is an important crossing to improve for pedestrians. The addition of separated sidewalk with ADA-compliant crossing of railroad tracks, and marked crosswalks across Railroad Street would be a significant improvement.



WALNUT CREEK PHOTO VISUALIZATION: MILL ROAD SIDEWALKS



Mill Road in Walnut Creek is a scenic roadway. The addition of sidewalks would create a separated space for pedestrians.

WALNUT CREEK PEDESTRIAN RECOMMENDATIONS

As a residential community, Walnut Creek is a very beautiful place to walk for recreation. Sidewalks are recommended along the main community roads. A lower-cost alternative would be traffic calming elements like speed humps, mini-circles, or chicanes.



*Walnut Creek
Road*

Recommended Sidewalks

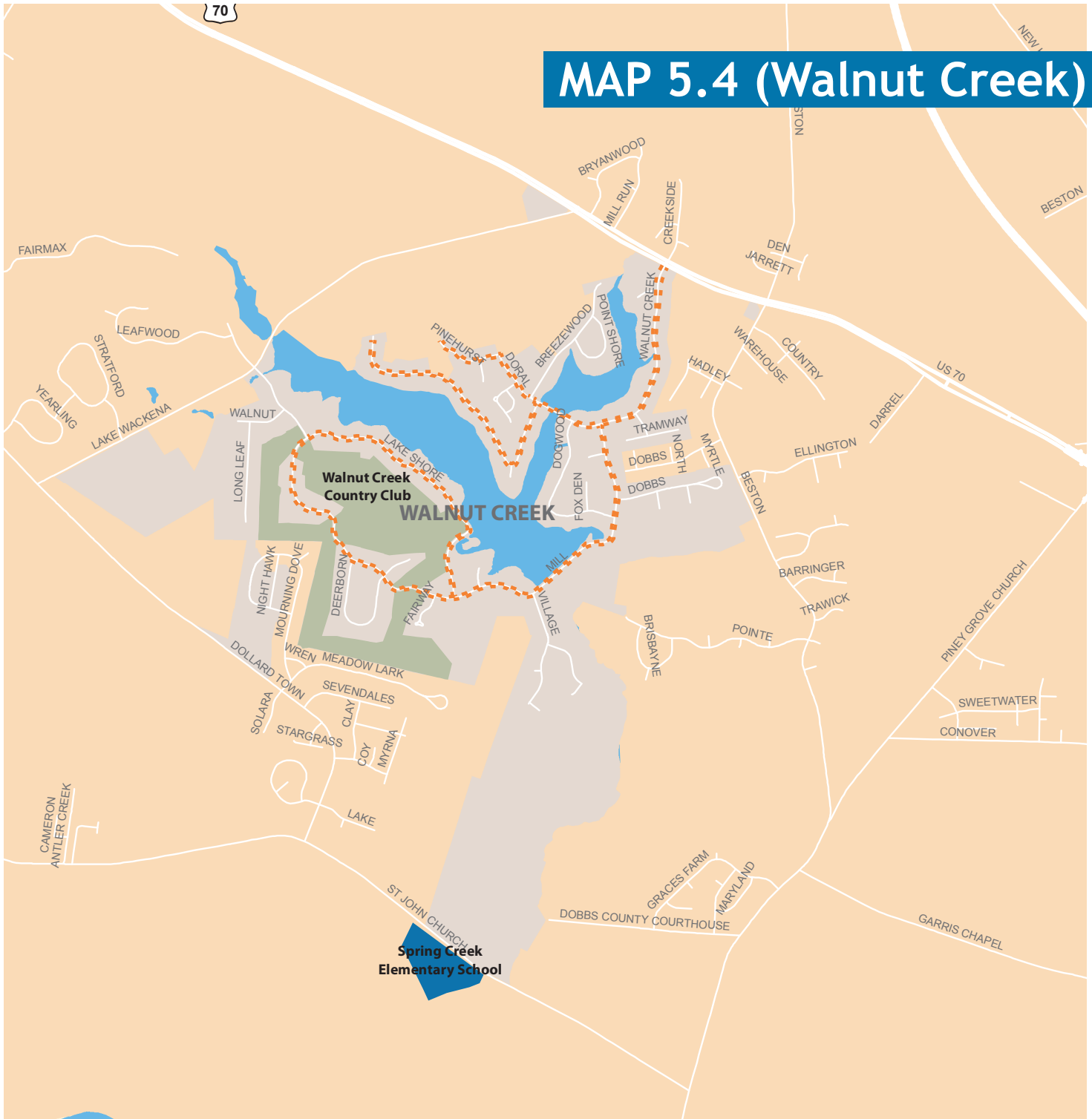
- » Walnut Creek Drive (from Breezewood Drive to US 70) - both sides
- » Pinehurst Lane (from Doral Drive to End of Road) - both sides
- » Doral Drive (from Pinehurst Lane to Walnut Creek Drive) - both sides
- » Walnut Creek Drive (from Doral Drive to End of Road) - both sides
- » Mill Road (from Lakeshore Drive to Walnut Creek Drive) - both sides
- » Lakeshore Drive (from Lakeshore Drive to Mill Road) both sides

Aging Population in Walnut Creek

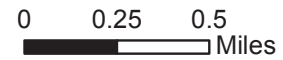
The median age in Walnut Creek is 53.5; this compares to 45 for North Carolina and 36 for Goldsboro. Sidewalk and traffic calming additions will be useful to address pedestrian age issues described on page 5-2.



MAP 5.4 (Walnut Creek)



Recommended Pedestrian Facilities - Walnut Creek



Legend

Recommended Ped. Facilities

- - Sidewalk

Existing Infrastructure

- Roadway
- Railroad

Lands of Interest

- Park
- Schools

Additional Context

- Water Features
- City Limits
- MPO Limits



