
Recommendations

This section of the Fayetteville Comprehensive Pedestrian Plan will be the one that people turn to the most going forward. After this Plan is finished, the real work begins for the staff, North Carolina Department of Transportation, and their many partners and advocacy agencies. There are some significant challenges confronting Fayetteville and its surrounding region – and the two cannot be entirely spoken of separately since they exist in an increasingly symbiotic state – that these and other transportation providers have to address to be successful.

Overview

The following is a brief overview of those challenges and where they have been supported in this study and through other sources. The recommendations in this Plan provide the response to those challenges.

Financing the Solutions. The current era, and most likely the situation for the foreseeable future, is that the funding streams coming from state and federal governments are flat or diminishing, especially compared relative to population increases in the greater Fayetteville Region. The federal gas tax, for example, has stayed at 18.4 cents for over two decades and is not pegged to inflationary or other, transportation-specific cost increases (*source: Fixing the Highway Trust Fund and/or Re-evaluating the Federal Role, University of Denver Transportation Institute*). The appetite for tax increases to return the funding formula to that earlier state is notably lacking.

Complete Streets. Overall the concerns of the survey revealed residents of Fayetteville want an increase in safer walking facilities citywide. The results of the survey combined with the number of worn paths evident along many busy corridors and the crash history demonstrate the needs for improvements. The idea of complete streets matches this range of concerns: vehicular mobility, walking, bicycling and public transit need to work with land development, design and other factors to meet the needs of everyone that wants to go from one place to another. One-size-fits-all approaches don't work in Fayetteville, since the city consists of diverse areas like Haymount and the Cross Creek Mall area that have varying design, history, and community contexts. The projects and recommendations contained in this plan respect that diversity.

Pedestrian Mobility. On any given day pedestrian activity can be viewed all across the city. Residents walk for a reason, whether to work, shop, play or to recreate. Walking and biking have important roles in Fayetteville for other reasons:

- Active modes of transportation provide a great way to exercise and reduce the propensity for being overweight or obese, which in turn reduces several types of chronic disease and improves mental health;
- The redevelopment of many areas in Fayetteville support the idea of residents and visitors to walk and bike to patronize its businesses, and enjoy recreation; and
- A well-connected street system, sidewalks, and growing trail and transit systems create alternatives to owning a private car for basic travel needs – an important aspect of congestion reduction and travel reliability as well as providing an equitable system of travel to those that may be unable to afford private transportation.

The projects outlined in this section focus on strengthening these benefits, while addressing some of the concerns that survey respondents and meeting participants suggested during the planning process. These areas of improvement included bolstering safety, creating important safety improvements, and upgrading maintenance and enhancing the appearance of streetscapes. The issue of safety is a consistent concern throughout many communities, but in Fayetteville, which has one of the lowest walking scores of any city over 200,000 (*source:www.walkscore.com*), safety is of paramount importance. Equity concerns are also important in explaining patterns of pedestrian crashes in Fayetteville, with African-Americans disproportionately representing people who walk, take transit, and are injured in pedestrian crashes.

The following pages summarize specific project and program recommendations that have been made in order of short-term, mid-term, and long-term time frames. The project terms should be used by the city as a flexible framework for implementing the recommendations in the Plan – recognizing that it is important to capitalize on unexpected opportunities while also pursuing long term goals. The city should also consider adding features along corridors that increase pedestrian comfort levels when implementing future projects. items such as street trees, benches, lighting and barriers promote a feeling of safety and provide comforting amenities that can promote walking. Staff should also look at potential improvements to road geometry, with an eye to reducing crossing distances by installing curb extensions and/or putting in a median refuge to allow a two-phase crossing. In general, the city should consider working with a wide range of partners, such as those listed in the funding section to implement various elements of the Plan and conduct periodic evaluations of projects, policies and programs after implementation.

Prioritization Factors

The recommendations included in the Plan are extensive and will take a considerable amount of time and money to complete. To help the City determine which projects to construct first, an analysis was performed to prioritize projects and create a recommended phasing schedule of short-term, mid-term, and long-term projects for construction.

Prioritization and scheduling were based on public input, including the Steering Committee and public, and project characteristics identified by the Steering Committee at their first meeting.

- **Accessibility:** Proximity to schools, parks, greenways, public facilities and commercial areas.
- **Safety:** Measured by the average daily traffic (ADT) on the roadway where the sidewalk is proposed
- **Connectivity:** Project's potential to complete a critical connection from one location to another, measured by the project's connection to existing sidewalks
- **Constructability and Cost:** Ease of constructing the project that is less than 500 feet in length.

Project prioritization and scheduling was a layered process which incorporated all of the above factors in the following steps:

- Rate projects on key characteristics.
- Projects were rated on improving or enhancing accessibility, safety and connectivity.
- A project received points for any of the characteristics shown on the following page.

The projects were organized by rating to determine the appropriate phased implementation schedule. Projects which received high ratings were placed in the short-term project category, whereas projects with low ratings were placed in the long-term project category. Mid-term projects included those projects that fit in between the lower and higher ratings. By organizing projects in a short-term, mid-term, and long-term fashion, the City has a list of projects that it can implement quickly in order to take immediate steps towards making Fayetteville more pedestrian-friendly in the interim before more intensive, long-term projects are undertaken.

The next section describes the project build-out schedule as well as the opinion of probable costs.

Project Costs

Costs of each project were calculated using material and construction costs from NCDOT Bicycle and Pedestrian Cost Estimator Worksheet. The itemized costs may not reflect costs that the City typically incurs for locally maintained roadways. Many projects in the Plan are located on NCDOT maintained corridors. The City may participate in a small portion of the overall construction costs.

The costs for the sidewalk projects include the amount of recommended sidewalk (6 ft wide) for the area, right-of-way, planning and construction fees. Costs for each category were provided by NCDOT.

Accessibility

Accessibility represents considerations of how many places can be reached by walking.

Safety

In locations where past crash records or current poor geometry or maintenance levels suggest that personal safety is relevant, the Safety factors will improve walking conditions.

Connectivity

Walking, even more than driving, depends heavily on a well-connected network to shorten travel distances and provide options.

Constructability

Recognizing that funding is always scarce and subject to competing interests, Constructability factors help ensure that projects with high returns on investment are prioritized.

School Located near Project

Yes, between .1-.2 miles = 5 points
Yes, between .2-.3 miles = 4 points
Yes, between .3-.4 miles = 3 points
Yes, between .4-.5 miles =2 points
Yes, greater than .5 miles =1 point

Commercial Use near Project

Yes, between .1-.2 miles = 5 points
Yes, between .2-.3 miles = 4 points
Yes, between .3-.4 miles = 3 points
Yes, between .4-.5 miles =2 points
Yes, greater than .5 miles =1 point

Public Facility near Project

Yes, between .1-.2 miles = 5 points
Yes, between .2-.3 miles = 4 points
Yes, between .3-.4 miles = 3 points
Yes, between .4-.5 miles =2 points
Yes, greater than .5 miles =1 point

Average Daily Traffic on Roadway

Greater than 15,000 = 5 points
9,000 - 15,000=4 points
6,000 - 9,000=3 points
3,000 - 6,000= 2 points
0 - 3,000 = 1 point

Crash Site near Project

Yes, between .1-.2 miles = 5 points
Yes, between .2-.3 miles = 4 points
Yes, between .3-.4 miles = 3 points
Yes, between .4-.5 miles = 2 points
Yes, greater than .5 miles = 1 point

Links to Destination (Distance)

Yes, between .1-.2 miles = 5 points
Yes, between .2-.3 miles = 4 points
Yes, between .3-.4 miles = 3 points
Yes, between .4-.5 miles = 2 points
Yes, greater than .5 miles = 1 point

Project less than 500’

Less than 250’ = 5 points
250’-500’ = 4 points
500’-750’ = 3 points
750’-1000’ = 2 points
Greater than 1000’ = 1 point

Table 2
Short-Term Sidewalk Recommendations

Short-Term Sidewalk Recommendations					
Map ID No.	**On Road**	**To**	**From**	**Length (ft)**	**Cost**
1	Yadkin Rd	N Platette Rd	Cimarron Dr	1818	$157,255.00
2	Bonanza Dr	Santa Fe Dr	Existing Sidewalk at Santa Fe Dr	230	$26,789.00
3	Bonanza Dr	Existing Sidewalk at Santa Fe Dr	Existing Sidewalk at Yadkin Rd	430	$42,312.00
4	Bonanza Dr	Existing Sidewalk at Yadkin Rd	Yadkin Rd	347	$35,870.00
5	Breezewood Ave	Forsyth St	Purdue Dr	1260	$110,954.00
6	Bunce Rd	Old Bunce Rd	Raeford Rd	5195	$431,636.00
7	Strickland Bridge Rd	Summerwood Dr	Fisher Rd	322	$41,806.00
14	Cliffdale Rd	Skibo Rd	Glensford Dr	1096	$94,791.00
16	Country Club Dr	Ramsey St	Rosehill Rd	5580	$479,552.00
17	Country Club Dr	Rosehill Rd	Murchison Rd	5268	$441,721.00
18	Raeford Rd	Graham Rd	Strickland Bridge Rd	6029	$454,739.15
19	Cumberland Rd	Owen Dr	Camden Rd	4035	$345,372.00
20	Cumberland St	Ramsey St	Murchison Rd	3782	$324,754.00
21	Eastwood Ave	Ramsey St	Cape Fear Trail	2475	$157,255.00
26	Levy Dr	Trainer Dr	Dixon Dr	1322	$112,698.00
27	Mason St	Ray Ave	Arch St	373	$41,826.00
32	Murchison Rd	Rosemary Dr	Phillips St	3565	$315,340.00
33	Murchison Rd	Lakeland St	Springfield Rd	4737	$410,852.00
34	Old Bunce Rd	Seventy First School Rd	Cliffdale Rd	4263	$359,818.00
35	Old Wilmington Rd	E Russell St to Carbonton St	Eastern Blvd to Belt Blvd	3274	$275,084.00
36	Owen Dr	Walter Reed Rd	Village Dr	2731	$230,833.00
44	Pamalee Dr	Murchison Rd	Helen St	4759	$400,240.00
45	Pamalee Dr	Helen St	Bragg Blvd	5113	$433,224.00
46	Raeford Rd	Skibo Rd	Existing Sidewalk at Wildwood Dr	724	$65,130.00
47	Raeford Rd	Wildwood Dr	Existing Sidewalk Bingham Dr	1432	$124,971.00
48	Raeford Rd	Existing Sidewalk at Spectrum	Bunce Rd	1396	$122,037.00

Table 2 (continued)
Short-Term Sidewalk Recommendations

Short-Term Sidewalk Recommendations					
Map ID No.	**On Road**	**To**	**From**	**Length (ft)**	**Cost**
49	Raeford Rd	Festival Dr	Seventy First School Rd	2378	$202,065.00
51	Ray Ave	Rowan St	Maiden Ln	573	$53,411.00
52	Reilly Rd	Willowbrook Dr	Lexi Ln	1954	$167,511.00
54	Rosehill Rd	Existing Sidewalk at Church	Joefield Dr	471	$57,309.00
55	Rosehill Rd	Dowfield Dr	Autumn Dr	610	$56,282.00
57	Rosehill Rd	Mulranny Dr	McArthur Dr	1608	$135,179.00
59	Santa Fe Dr	Yadkin Rd	Existing Sidewalk at Wichita Dr	590	$58,668.00
60	Seventy First School Rd	Pebblestone Dr	Raeford Rd	1919	$160,524.00
61	Seventy First School Rd	Foxberry Rd	Raeford Rd	3344	$276,654.00
62	Skibo Rd	Bragg Blvd	Swain St	942	$78,112.00
63	Skibo Rd	Swain St	Existing Sidewalk in front of Enterprise Rental	243	$31,736.00
64	Skibo Rd	Exisitng Sidewalk at Cracker Barrel	Entrance of parking lot	235	$24,814.00
65	Skibo Rd	Existing Sidewalk	Yadkin Rd	1097	$98,019.00
68	Skibo Rd	Cliffdale Rd	Existing Sidewalk at Chason Ridge Rd	1208	$102,696.00
69	Skibo Rd	Chason Ridge Rd	Lousie St	3876	$324,144.00
70	Skycrest Dr	Hermitage Ave	Marlborough Rd	2624	$238,653.00
71	Stacey Weaver Dr	McArthur Rd	Hampshire Dr	1055	$94,759.00
72	Stacey Weaver Dr	Hampshire	Chesapeake Rd	292	$31,601.00
73	Stacey Weaver Dr	Chesapeake Rd	Southland Dr	218	$21,919.00
81	Trainer Dr	Delaware Dr	Levy Dr	1302	$110,241.00
87	Yadkin Rd	Existing Sidewalk at Horsehoe Rd	Horsehoe Rd	2176	$185,603.00
88	Yadkin Rd	Santa Fe Dr	Lakevalley Dr	6241	$549,961.00
90	Yadkin Rd	Homestead Dr	Santa Fe Dr	2097	$187,435.00
98	Rim Rd	Cliffdale Rd	Abbots Landing Cir	413	$52,807.00
99	Rim Rd	Cliffdale Rd	EE Miller School	1562	$143,835.00
105	Boundary Ln	Gentry St	Hillsboro St	267	$41,476.00

Short-Term (0-3 Years) Sidewalk Recommendations

Figure 7
Short-Term Sidewalk Recommendations

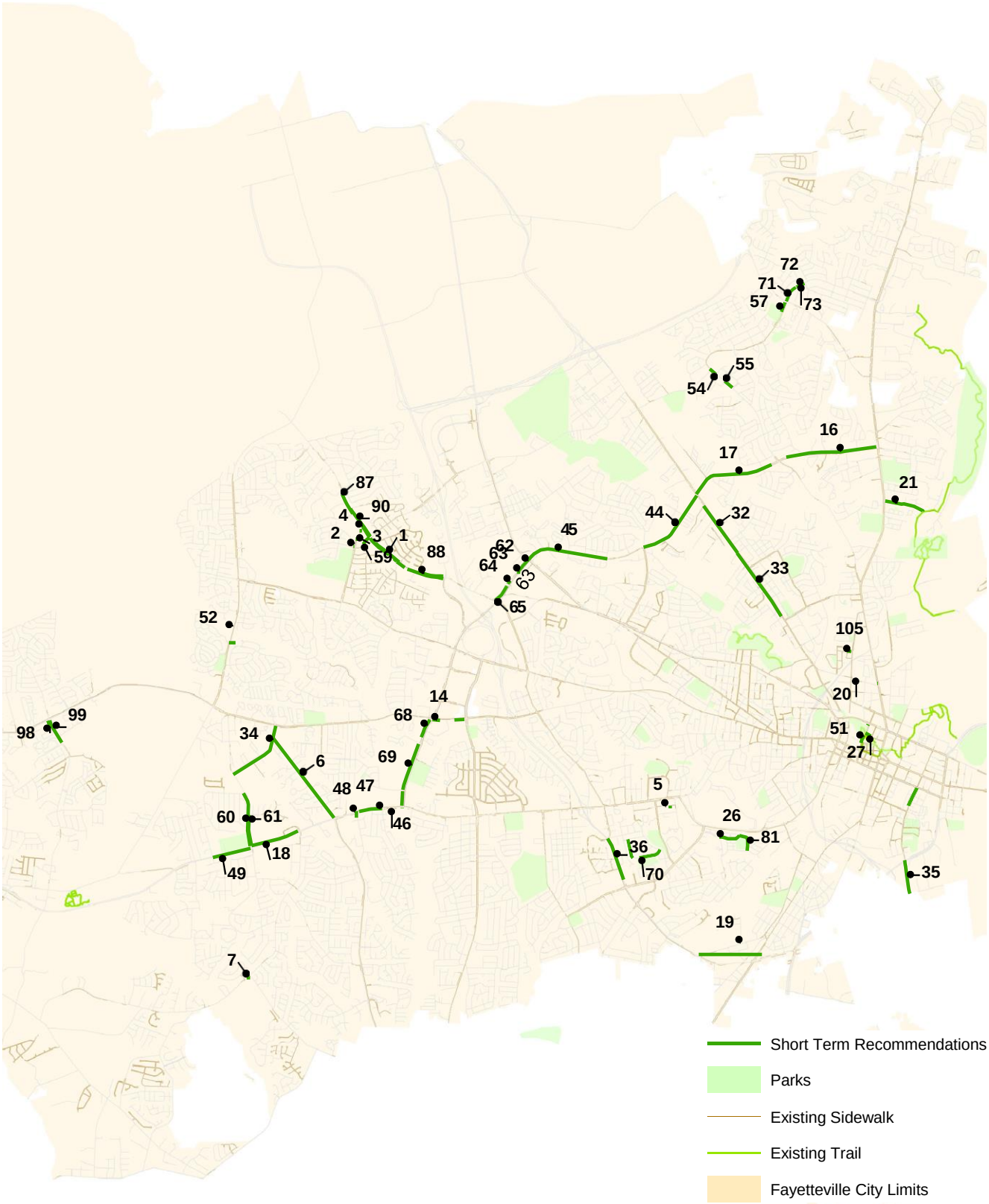

Figure 8
Short-Term Sidewalk Recommendations - East Side

Figure 9
Short-Term Sidewalk Recommendations - West Side

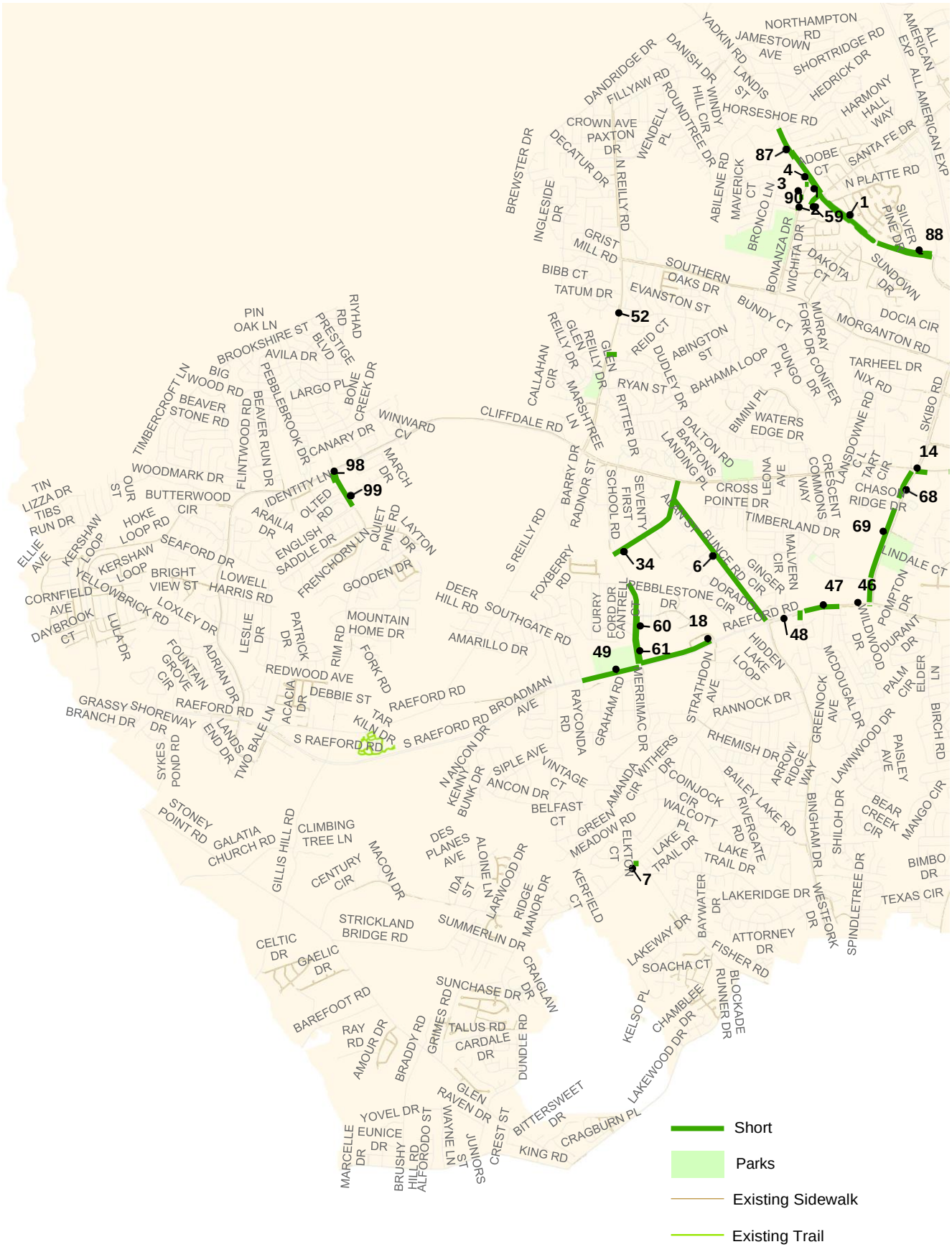

Table 3
Mid-Term Sidewalk Recommendations

Mid-Term Sidewalk Recommendations					
Map ID No.	**On Road**	**To**	**From**	**Length (ft)**	**Cost**
5	Bragg Blvd	Elm St	Filter Plant Dr	8451	$713,525.00
9	Century Cir	Existing Sidewalk at school	Strickland Bridge Rd	2212	$184,402.00
10	Cliffdale Rd	Rim Rd	Prestige Blvd	1247	$105,759.00
11	Cliffdale Rd	Prestige Blvd	Winward Cove	1459	$118,901.10
12	Cliffdale Rd	Winward Cove	Existing Sidewalk at Cliffdale Community Church	820	$68,643.00
13	Cliffdale Rd	S Reilly Rd	Marshtree Lane	885	$78,414.00
22	Fillyaw Rd	Yadkin Rd	Existing sidewalk at Yadkin Rd	336	$44,472.00
24	Foxhall Rd	Millbrook Rd	Westchester Dr	329	$34,473.00
25	Ft Bragg Rd	Bragg Blvd	Hobson St	1235	$108,916.00
28	McPherson Church Rd	Morganton Rd	Cliffdale Rd	2339	$194,751.00
36	Owen Dr	Village Dr	Briar Cir	1484	$136,994.00
37	Owen Dr	Briar Cir	Coronada Pkwy	1696	$154,509.00
50	Raeford Rd	Broadfoot Ave	Robeson St	7091	$610,962.00
53	Reilly Rd	Morganton Rd	Cissna Dr	1228	$104,248.00
56	Rosehill Rd	Dowfield Dr	Rutledge Dr	472	$47,147.00
66	Skibo Rd	Yadkin Rd	Lake Valley Dr	3055	$253,102.00
67	Skibo Rd	Morganton Rd	Cliffdale Rd	3642	$305,075.00
74	Stacey Weaver Dr	Southland Dr	Cooper Rd	1853	$159,280.00
75	Stacey Weaver Dr	Cooper Rd	Hampton Rd	829	$73,280.00
76	Stacey Weaver Dr	Hampton Rd	Arbor Rd	1283	$107,039.00
77	Stacey Weaver Dr	Arbor Rd	Ramsey St	545	$49,662.00
79	Tamarack Dr	Rosehill Rd	Existing Sidewalk at Rosehill Rd	216	$33,579.00
80	Bingham Dr	Raeford Rd	Bunce Rd	3486	$292,361.00
82	Old Owen Dr	All American Exp	Player Ave	86	$11,674.00

Table 3 (continued)
Mid-Term Sidewalk Recommendations

Mid-Term Sidewalk Recommendations					
Map ID No.	**On Road**	**To**	**From**	**Length (ft)**	**Cost**
83	Yadkin Rd	Fillyaw Rd	Existing Sidewalk at Yadkin Rd	180	$34,723.00
84	Yadkin Rd	Existing Sidewalk at Summer Hill Rd	Horsehoe Rd	1074	$29,951.00
85	Yadkin Rd	Existing Sidewalk at Summerhill Rd	Summerhill Rd	220	$97,809.00
86	Yadkin Rd	Horsehoe Rd	Existing Sidewalk at Horsehoe Rd	102	$20,793.00
89	Yadkin Rd	Silver Pine Dr	Existing Sidewalk at Silver Pine Dr	200	$24,461.00
91	Yadkin Rd	Homestead Dr	Southwick Dr	1000	$32,886.00
92	Yadkin Rd	Southwick Dr	Milford Rd	339	$32,886.00
93	Yadkin Rd	Lancaster Rd	Milford Rd	1553	$134,832.00
94	Yadkin Rd	York Rd	Lancaster Rd	394	$43,456.00
95	Yadkin Rd	Existing Sidewalk at Fillyaw Rd	Summerhill Rd	3009	$261,759.00
96	Rim Rd	Mountain Home Dr	Englsih Saddle Dr	4548	$387,179.00
97	Rim Rd	Olted Rd	English Saddle Dr	818	$84,241.00
100	NC 59	S Sumac Rd	City Limits	6518	$547,724.00
101	Ramsey St	Summerchase Rd	McCloskey Rd	1766	$160,460.00
102	McPherson Church Rd	Raeford Rd	School	2471	$217,914.00
104	Murchison Rd	Shaw Rd	I 295	4245	$362,486.00
107	Ramsey St	Summerchase Dr	I 295	1663	$152,066.00
108	Treetop Dr	Ramsey St	Cape Fear Trail	2594	$227,938.00
109	Brookwood Ave	Ramsey St	North St	1220	$114,000.00
110	North St	Brookwood Ave	Hoffer Dr	222	$40,000.00
111	Hoffer Dr	North St	Cape Fear Trail	1975	$183,279.00

Mid Term (3-5 Years) Sidewalk Recommendations

Figure 10
Mid-Term Sidewalk Recommendations

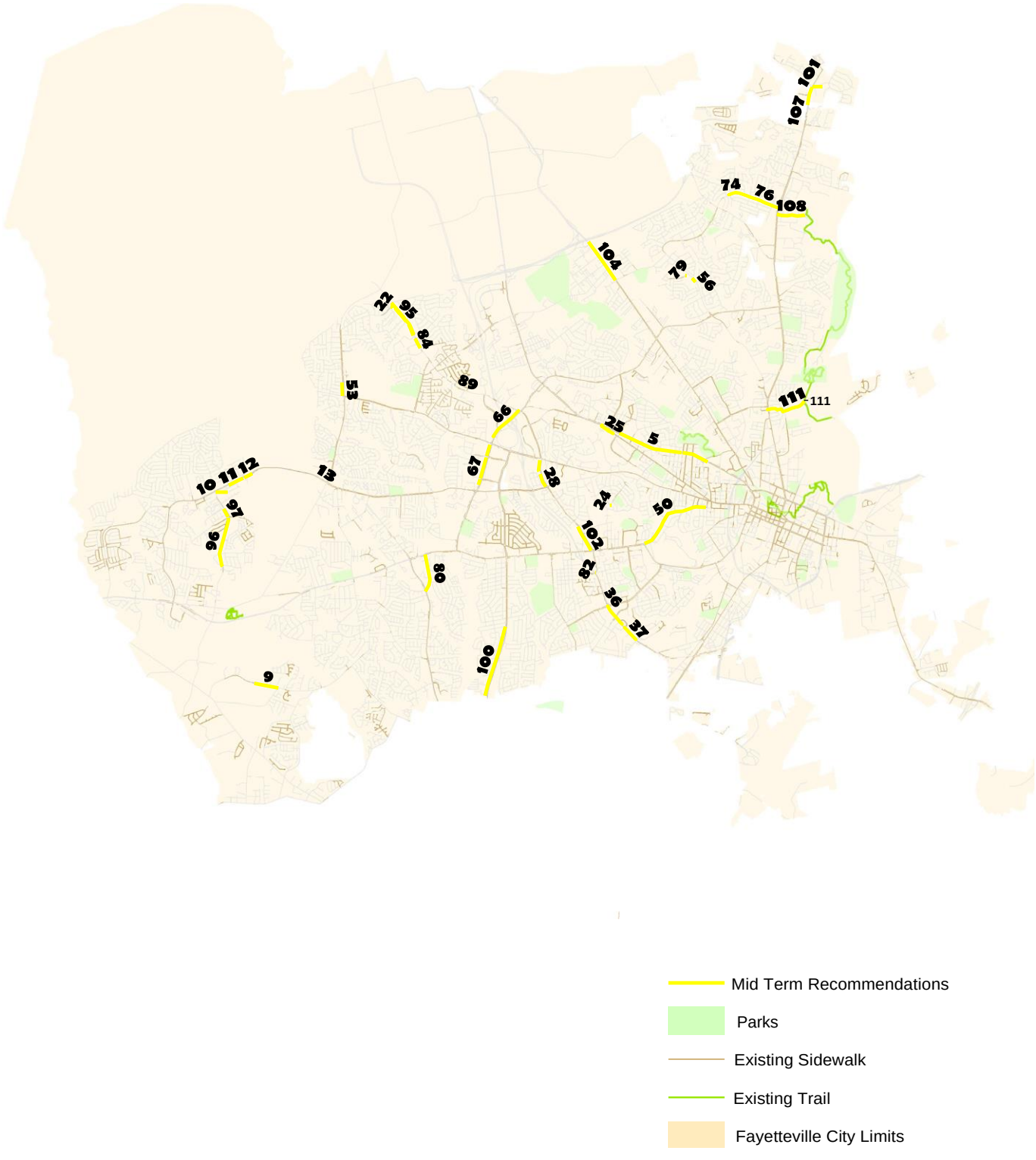

Figure 11
Mid-Term Sidewalk Recommendations - East Side

Figure 12
Mid-Term Sidewalk Recommendations -West Side

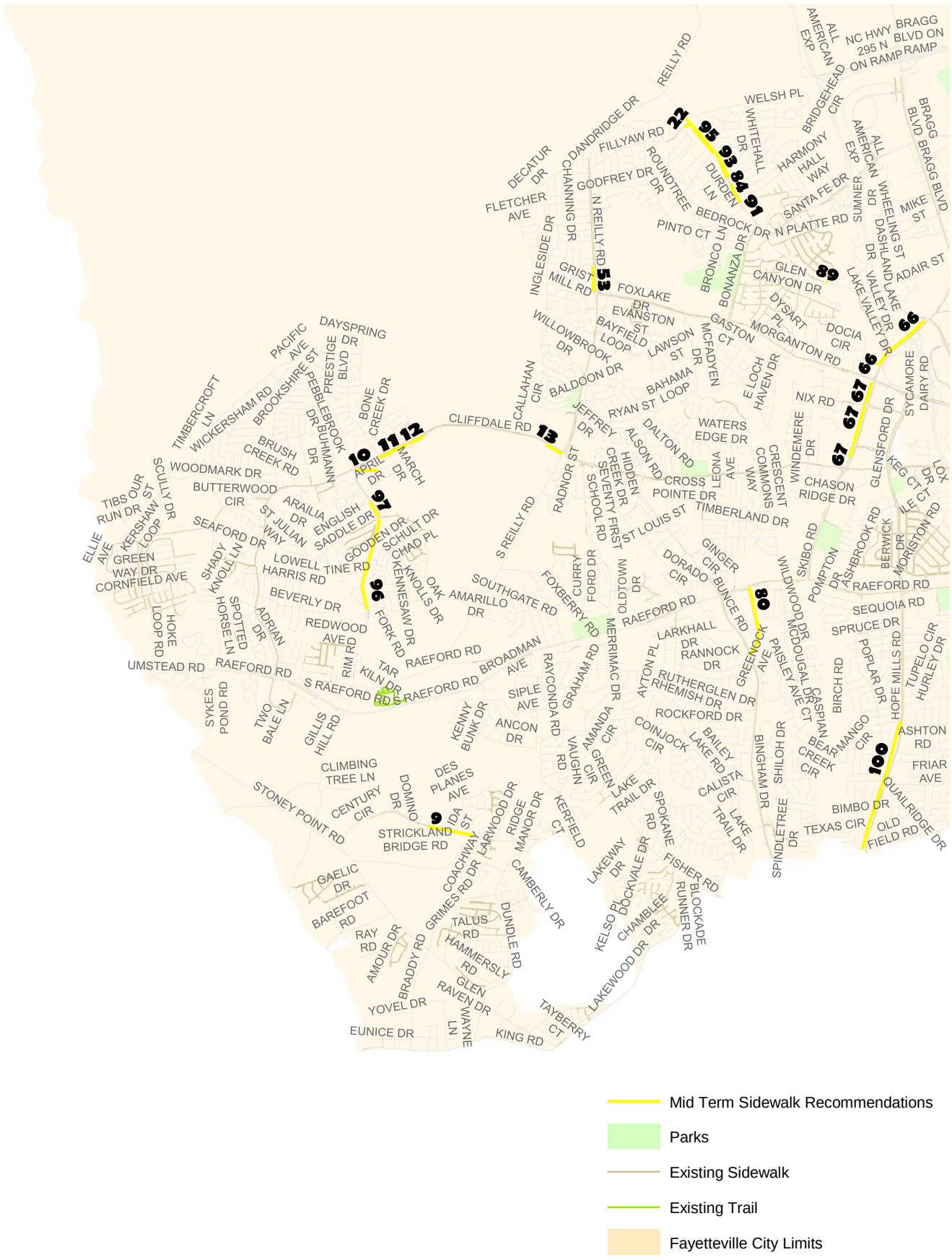


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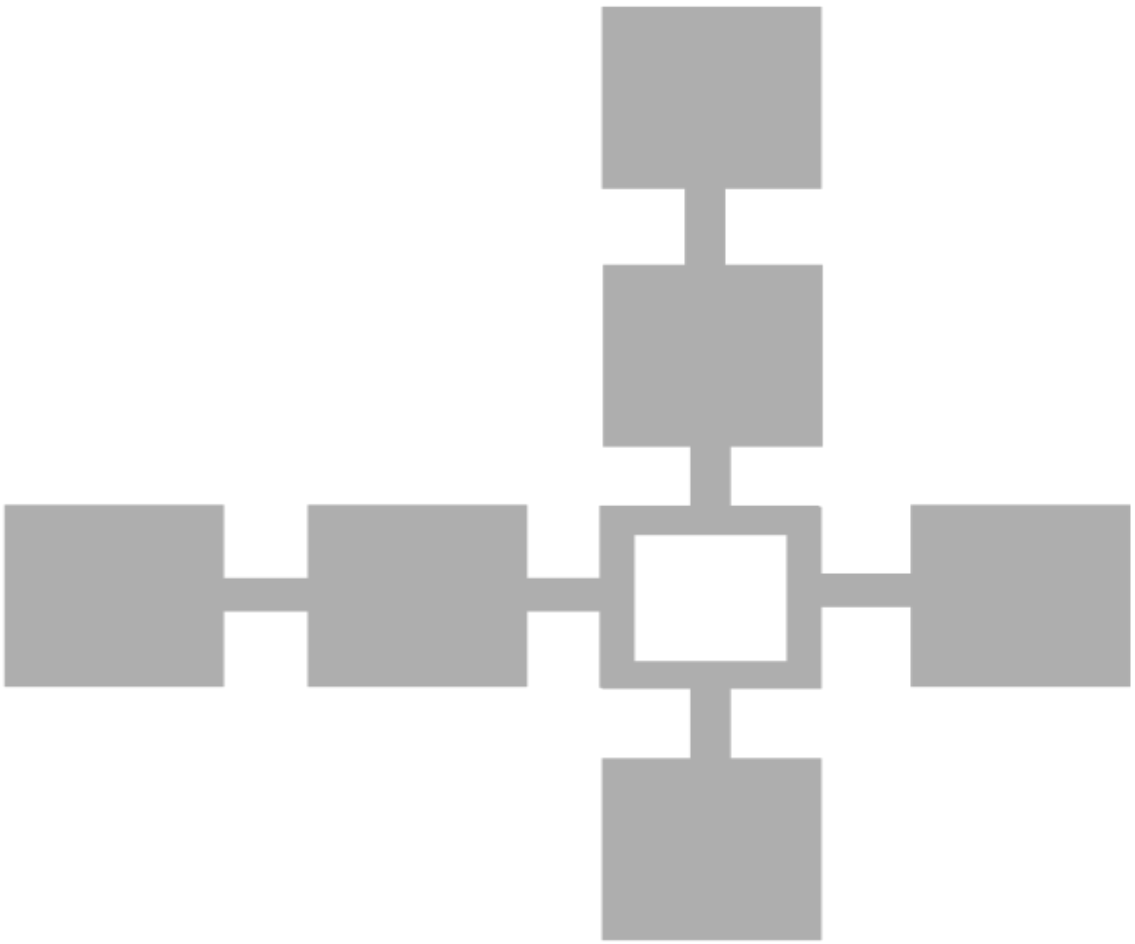
Table 4
Long-Term Sidewalk Recommendations

Long-Term Sidewalk Recommendations					
Map ID No.	**On Road**	**To**	**From**	**Length (ft)**	**Cost**
15	Cliffdale Rd	S Herndon St	Overton Pl	2049	$171,118.00
29	Morganton Rd	S Herndon St	Great Oaks Dr	1414	$119,369.00
58	S Herndon St	Morganton Rd	Cliffdale Rd	869	$80,323.00
78	Strickland Bridge Rd	Century Cir	Existing Sidewalk at Pardoner Pl	426	$45,940.00
103	McPherson Church Rd	Murray Hill Rd	McPherson Church Rd	167	$33,714.00
106	Rim Rd	Fork Rd	Raeford Rd	3233	$280,013.00



Long-Term (5+Years) Sidewalk Recommendations

Figure13
Long Term Sidewalk Recommendations

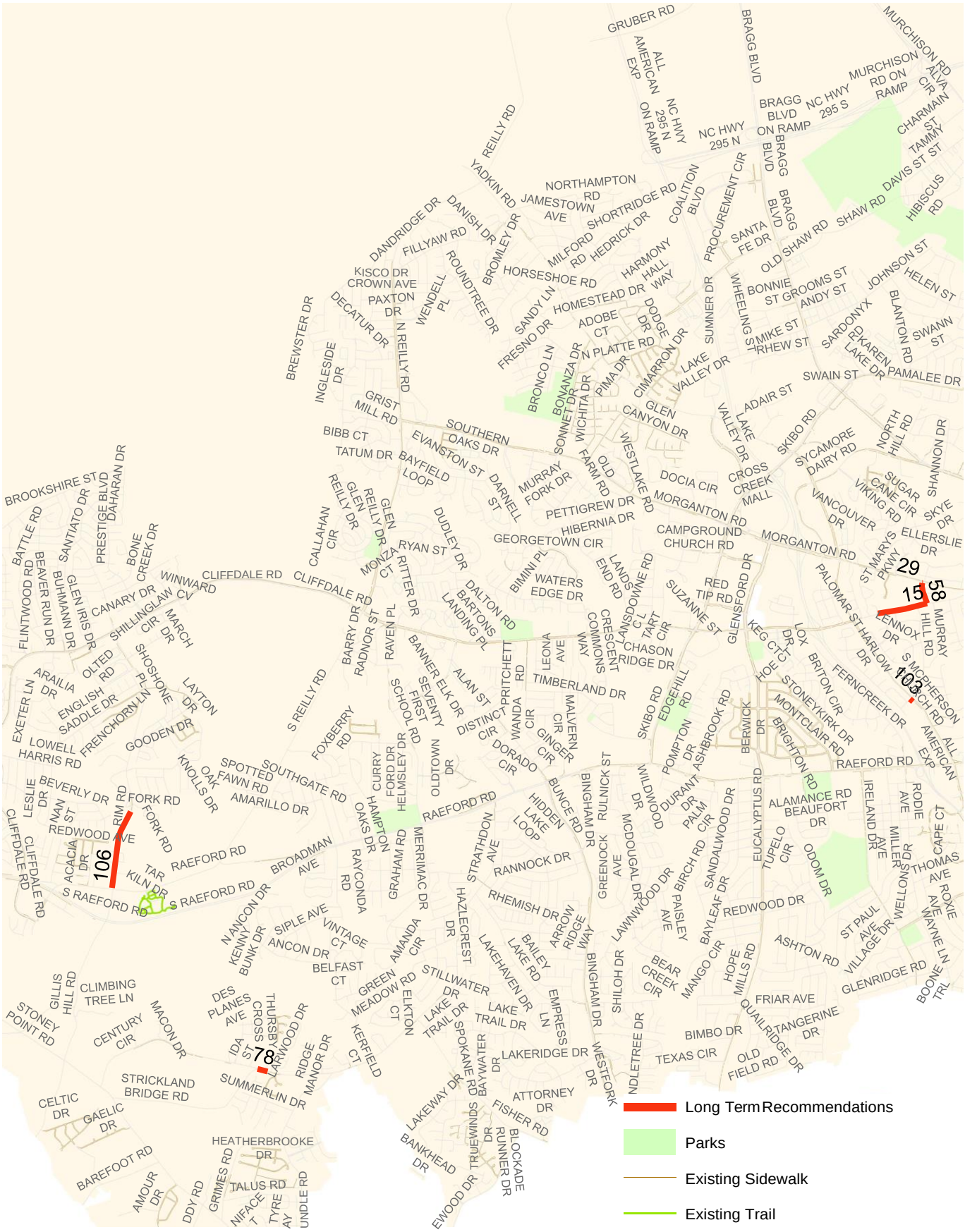


Table 5
Short-Term Intersection Recommendations

Short-Term Intersection Recommendations*		
Map ID No.	**Intersection**	**Treatments**
2	Raeford Rd and Seventy First School Rd	Crosswalks and Pedestrian Signals
6	Raeford Rd and Skibo Rd	Crosswalks and Pedestrian Signals
7	Raeford Rd and Brighton Rd	Crosswalks and Pedestrian Signals
8	Raeford Rd and Montclair Rd	Crosswalks and Pedestrian Signals
9	Raeford Rd and Ireland Dr	Crosswalks and Pedestrian Signals
13	Raeford Rd and Purdue Dr	Crosswalks and Pedestrian Signals
20	Woodside St and Hay St	Crosswalks and Pedestrian Signals
24	Morganton Rd and Dobbin Rd	Crosswalks and Pedestrian Signals
28	Langdon St and Ramsey St	Crosswalks and Pedestrian Signals
30	Hillsboro St and Ramsey St	Crosswalks and Pedestrian Signals
31	Langdon St and Murchison Rd	Crosswalks and Pedestrian Signals
37	Skibo Rd and Entrance to WalMart	Crosswalks and Pedestrian Signals
53	Yadkin Rd and Santa Fe Dr	Crosswalks and Pedestrian Signals
62	Rosehill Rd and McArthur Rd	Crosswalks and Pedestrian Signals
67	Murchison Rd and Country Club Rd	Crosswalk and Pedestrian Signals
68	Owen Dr and Melrose Rd	Crosswalk and Pedestrian Signals
69	Bonanza Dr and Westover School Area	Crosswalks and Pedestrian Signals
70	Bonanza Dr and Santa Fe Dr	Crosswalks and Pedestrian Signals

**Intersections should be evaluated for crossing distance improvements involved with road geometry, curb radii, median refuges, and other design elements*

According to staff the average cost of intersection improvements, including countdown pedestrian signals and crosswalks, is $45,000. Itemized costs include:

- Signal Plans - $5,000
- Signal Equipment - $10,000
- Signal Equipment Install Fee - $10,000
- Accessible Ramps - $15,000
- Pavement Markings-$10,000
- Crosswalks Installed at Non-Signalized Intersections - $1,000 per leg of intersection

The anticipated costs to complete the short, mid and long term intersection recommendations in this Plan is $2.5 million.

Short-Term (0-3 Years) Intersection Recommendations

Figure14
Short-Term Intersection Recommendations

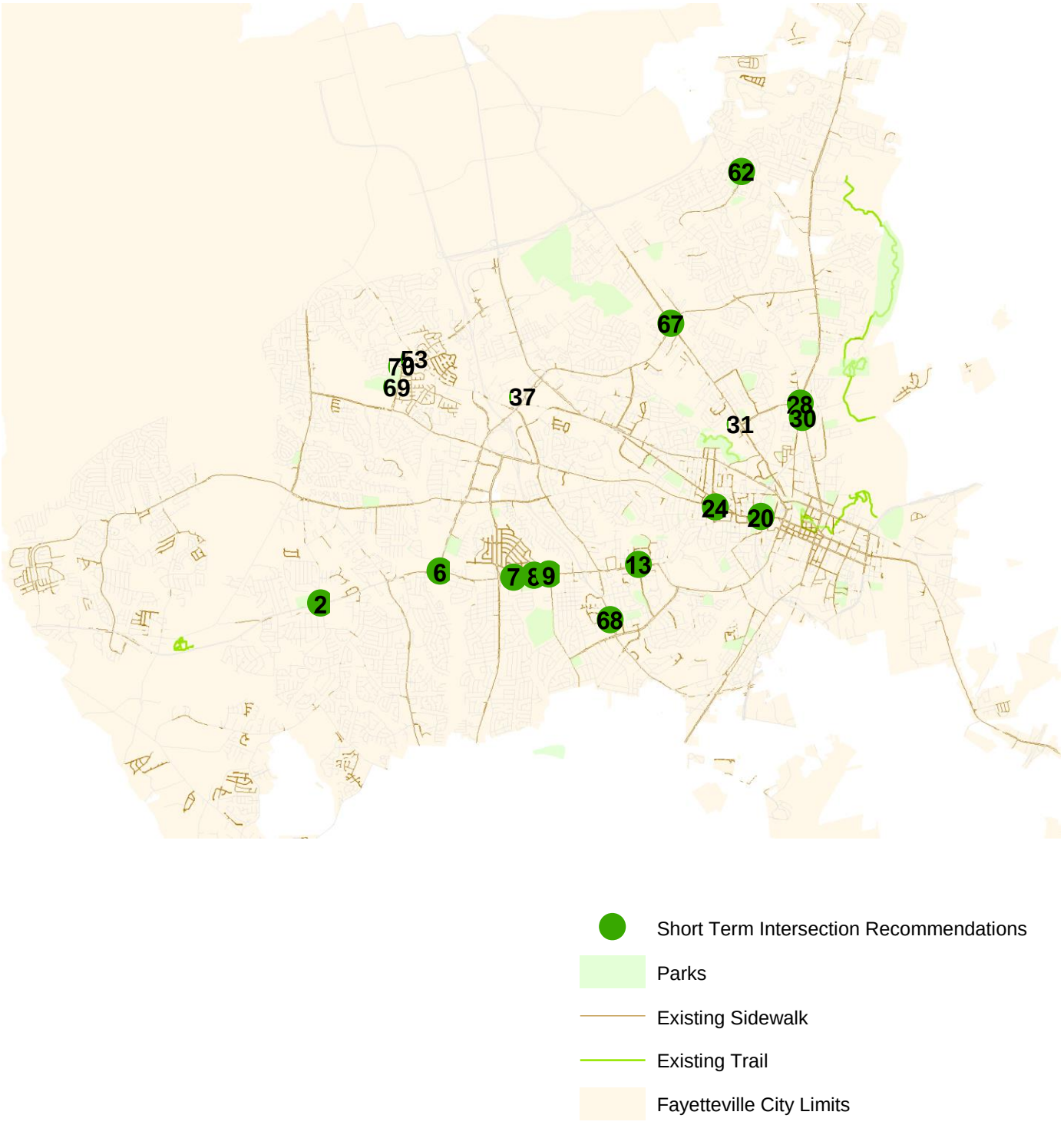


Table 6
Mid-Term Intersection Recommendations

Mid-Term Intersection Recommendations*		
Map ID No.	**Intersection**	**Treatments**
1	Raeford Rd and Chilton Dr	Crosswalk and Pedestrian Signals
3	Raeford Rd and Bunce Rd	Crosswalk and Pedestrian Signals
4	Raeford Rd and Bingham Dr	Crosswalk and Pedestrian Signals
5	Raeford Rd and Revere St	Crosswalk and Pedestrian Signals
10	Raeford Rd and Ferncreek Dr	Crosswalks and Pedestrian Signals
11	Raeford Rd and McPhearson Church Rd	Crosswalks and Pedestrian Signals
12	Raeford Rd and Fairfiled Rd	Crosswalk and Pedestrian Signals
14	Raeford Rd and McPhee Dr	Crosswalk and Pedestrian Signals
15	Village Dr and Robeson St	Crosswalk and Pedestrian Signals
16	Whitfield St and Robeson St	Crosswalk and Pedestrian Signals
17	Robeson St and MLK Off Ramp	Crosswalks and Pedestrian Signals
18	Blount St and Winslow St	Crosswalks and Pedestrian Signals
19	Blount St and Robeson St	Crosswalk and Pedestrian Signals
21	Highland Ave and Hay St Straighten out crosswalk	New Crosswalk (Straighten out existing crossing)
22	Hay St - Continue Crosswalk from Ft Bragg Rd	Crosswalks and Pedestrian Signals
23	Oakridge Ave and Ft Bragg Rd	Crosswalks and Pedestrian Signals
25	Bragg Blvd and Rowan St	Crosswalk and Pedestrian Signals
26	Cumberland St and Hillsboro St	Crosswalks and Pedestrian Signals
27	Boundary Ln and Hillsboro St	Crosswalks and Pedestrian Signals
29	Rosehill Rd and Ramsey St	Crosswalk and Pedestrian Signals
32	Raeford Rd and Chilton Dr	Crosswalks and Pedestrian Signals
33	Raeford Rd and Bunce Rd	Crosswalk and Pedestrian Signals
34	Raeford Rd and Bingham Dr	Crosswalk and Pedestrian Signals
35	Raeford Rd and Revere St	Crosswalk and Pedestrian Signals

**Intersections should be evaluated for crossing distance improvements involved with road geometry, curb radii, median refuges, and other design elements*

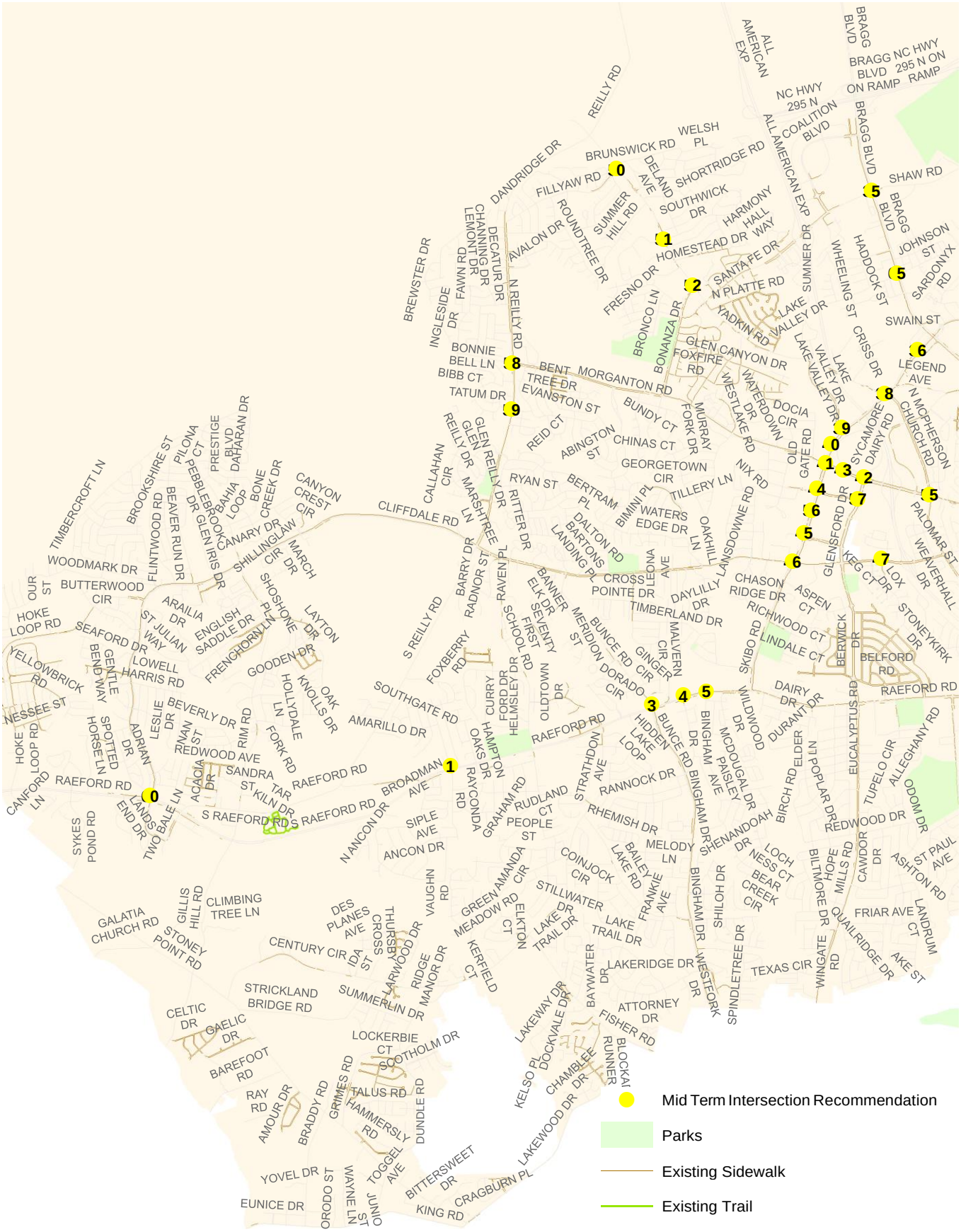
Table 6
Mid-Term Intersection Recommendations

Mid-Term Intersection Recommendations*		
Map ID No.	**Intersection**	**Treatments**
36	Skibo Rd and Swain St	Crosswalk and Pedestrian Signals
38	Skibo Rd and Yadkin Rd	Crosswalk and Pedestrian Signals
39	Skibo Rd and Lake Valley Dr	Crosswalk and Pedestrian Signals
40	Skibo Rd and Mall Entrance	Crosswalks and Pedestrian Signals
41	Morganton Rd and Skibo Rd	Crosswalks and Pedestrian Signals
42	Morganton Rd and Glensford Dr	Crosswalk and Pedestrian Signals
43	Morganton Rd and Entrance to Mall	Crosswalks and Pedestrian Signals
44	Skibo Rd and Campground Church Rd	Crosswalk and Pedestrian Signals
45	Skibo Rd and Red Tip Rd	Crosswalk and Pedestrian Signals
46	Skibo Rd and Cliffdale Rd	Crosswalk and Pedestrian Signals
47	Tradewinds Dr and Cliffdale Rd	Crosswalks and Pedestrian Signal
49	Village Dr and Fordham Dr	Crosswalks and Pedestrian Signal
50	Fillyaw Rd and Yadkin Rd	Crosswalks and Pedestrian Signal
51	Yadkin Rd and Southwick Dr	Crosswalks and Pedestrian Signals
52	Yadkin Rd and Bonanza Dr	Crosswalk and Pedestrian Signals
55	Morganton Rd and S McPhearson Church Rd	Crosswalks and Pedestrian Signals
56	Skibo Rd and Ihop/Panera	Crosswalk and Pedestrian Signals
57	Glensford Dr and Campground Rd	Crosswalks and Pedestrian Signals
58	Morganton Rd and Reilly Rd	Pedestrian Signal
59	Lexi Ln and S Reilly Rd	Crosswalks and Pedestrian Signals
60	Raeford Rd and Cliffdale Rd	Crosswalks and Pedestrian Signals
61	Rosehill Rd and Country Club Dr	Crosswalks and Pedestrian Signals
63	Stacey Weaver Dr and Ramsey St	Crosswalks and Pedestrian Signals
64	Ramsey St and Summerchase Dr	Crosswalks and Pedestrian Signals
65	Bragg Blvd and Johnson St	Crosswalks and Pedestrian Signals
66	Bragg Blvd and Hull St	Crosswalks and Pedestrian Signals

**Intersections should be evaluated for crossing distance improvements involved with road geometry, curb radii, median refuges, and other design elements*

Mid-Term (3-5 Years) Intersection Recommendations

Figure15
Mid-Term Intersection Recommendations - West



Mid-Term (3-5 Years) Intersection Recommendations

Figure16
Mid-Term Intersection Recommendations - East

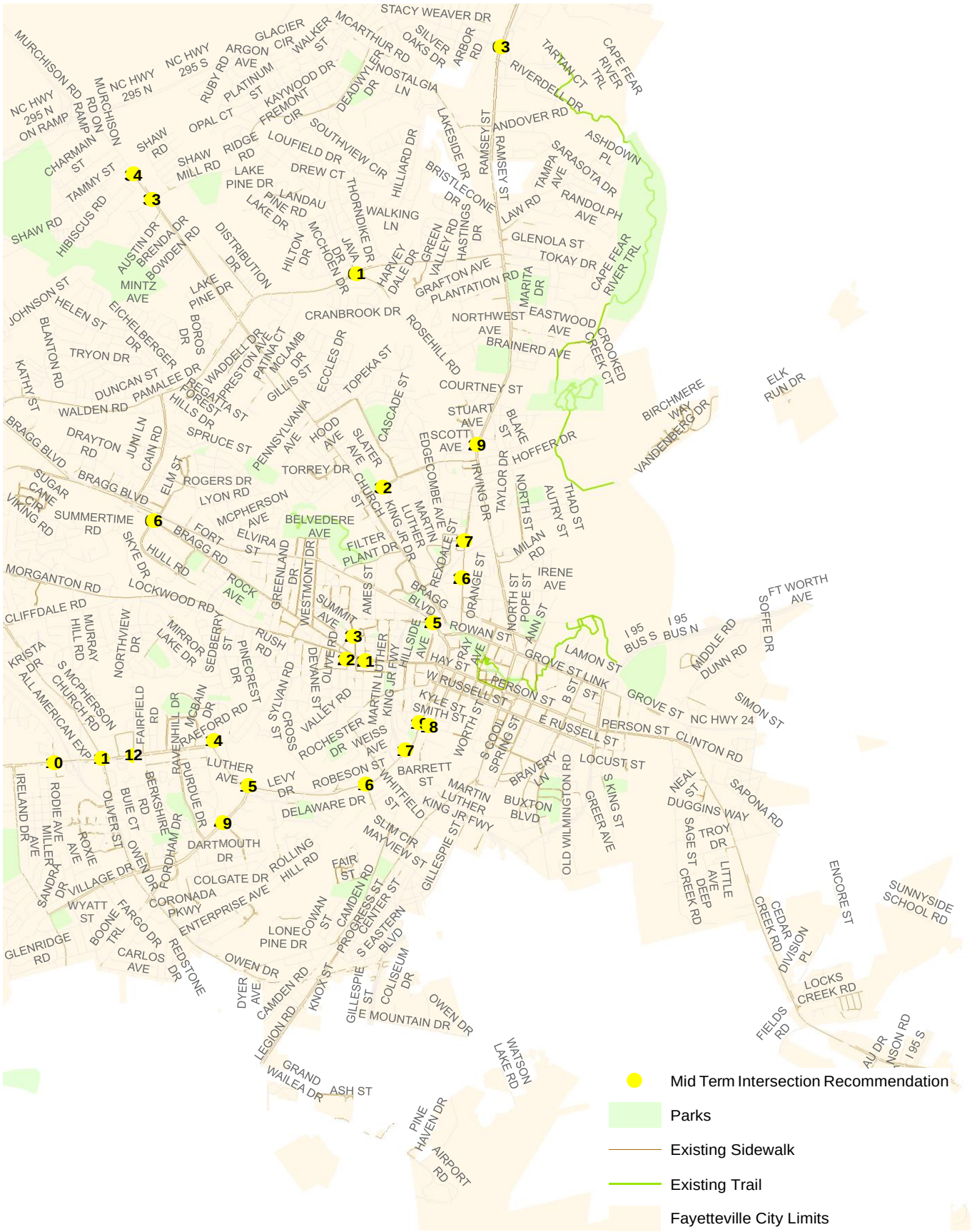


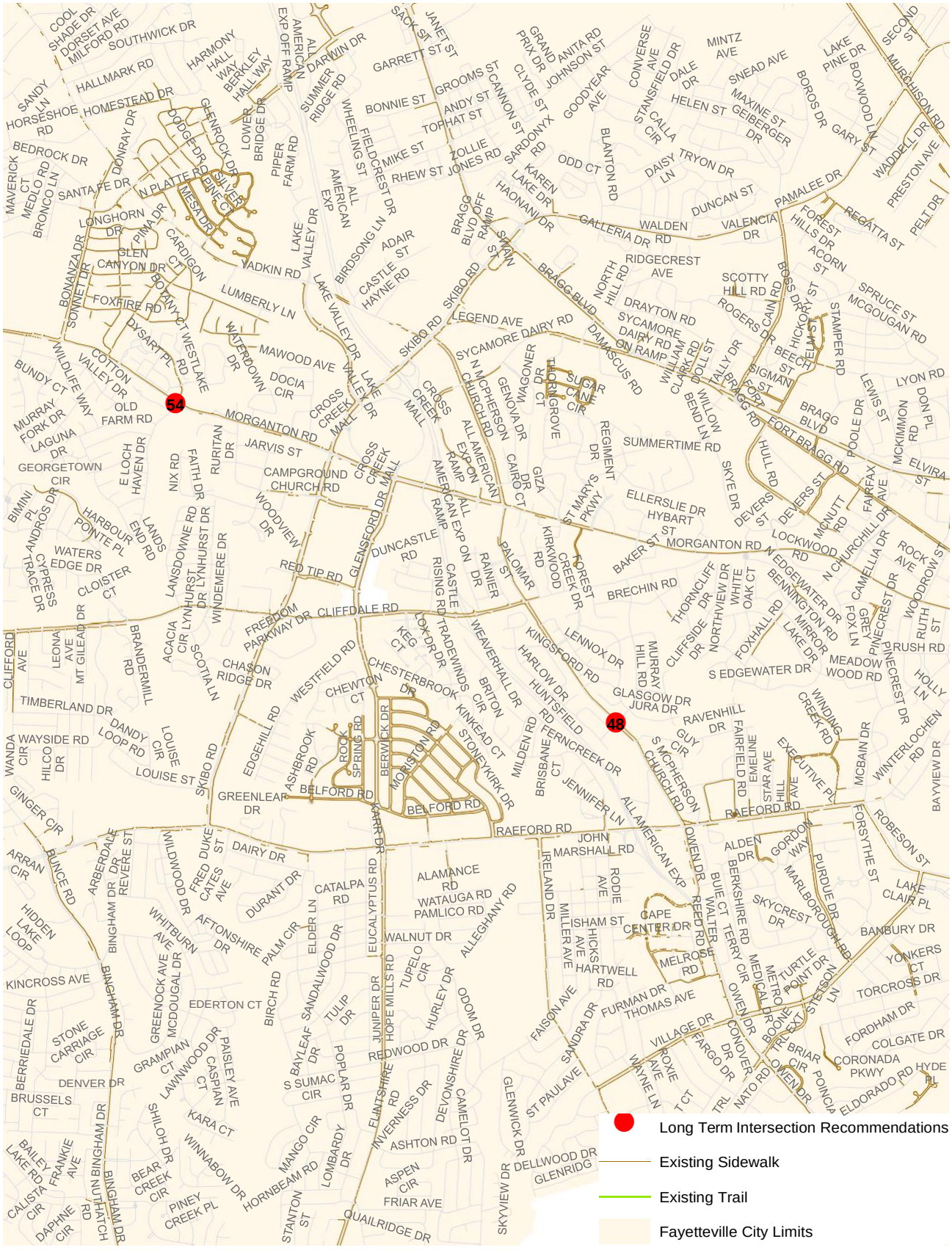
Table 7
Long-Term Intersection Recommendations

Long-Term Intersection Recommendations*		
Map ID No.	**Intersection**	**Treatments**
48	Murray Hill Rd and McPherson Church Rd	Crosswalks
54	Westlake Rd and Morganton Rd	Crosswalks and Pedestrian Signals

**Intersections should be evaluated for crossing distance improvements involved with road geometry, curb radii, median refuges, and other design elements*

Long-Term (5+ Years) Intersection Recommendations

Figure17
Long-Term Intersection Recommendations



Design Guidelines

The number of design guidelines available to the transportation practitioner has greatly increased in recent years. The USDOT (Federal Highway Administration) Manual on Uniform Traffic Control and American Association of Highway and Transportation Officials (AASHTO) A Policy on Geometric Design of Highways and Streets have been joined by a plethora of guidance documents prepared by these and other agencies. The following is not a comprehensive listing, but help identify the major guidance for complete street planning and design in common use in North America, and a few that are notable in coastal plain and urban environments like Fayetteville.

American Association of Highway and Transportation Officials (AASHTO)

- A Guide for Achieving Flexibility in Highway Design
- Guide for the Development of Bicycle Facilities
- Guide for the Planning, Design, and Operation of Pedestrian Facilities
- Roadway Lighting Design Guide
- Drainage Manual

USDOT (Federal Highway and Federal Transit Administrations)

- Revision of Thirteen Controlling Criteria for Design and Documentation of Design Exceptions
- Mitigation Strategies for Design Exceptions
- AASHTO Roadside Design Guide
- Americans with Disabilities Act (ADA) Accessibility Guidelines and Detectable Warnings
- Designing Sidewalks and Trails for Access, Part II, Best Practices Design Guide
- Manual on Pedestrian and Bicycle Connections to Transit
- PEDSAFE - Pedestrian Safety Guide and Countermeasure Selection System
- BIKESAFE - Bicycle Safety Guide and Countermeasure Selection System

National Association of City Transportation Officials (NACTO)

- Urban Street Design Guide
- Global Street Design Guide
- Urban Bikeway Design Guide
- Transit Street Design Guide

Additional resources include PedBike.net, National Complete Streets Association, Pedestrian and Bicycle Information Center, National Center for Safe Routes to School, and the book, "Greenways: A Guide To Planning Design And Development." Security resources often fall under the rubric of Crime Prevention through Environmental Design (CPTED), and are available for transit (American Public Transportation Association (APTA) recommended practice SS-SIS-RP-007-10) and the book, "Crime Prevention Through Environmental Design," by C. Ray Jeffries. CPTED also offers a way to merge the missions of Fayetteville's transportation and law enforcement staffs in a common goal: making the urban environment more secure. The ideal of making better transportation systems loses much of its value when people are afraid to walk outside, navigate through a dark parking lot, or leave their car in on-street parking to patronize businesses. Finally, accessibility standards for those with impaired personal mobility are provided by Americans with Disability Act Accessibility Guidelines and proposed Public Rights of Way Accessibility Guidelines.

The following pages are provided to help the city and others address some of the more commonplace situations confronting complete street implementation in Fayetteville, arranged simply by being either "Along the Street" or "Across the Street." It should be obvious that in an environment as fundamentally rich and varied as Fayetteville that the real way to implement complete streets is through a collaborative and consistent process undertaken led by city staff, accompanied by the strong participation of NCDOT and partnering entities. To this end, there is one final section on special topics that Fayetteville can undertake to more generally support complete street development.

The following Complete Streets Context Guide presents a high-level overview of the functional considerations of Complete Streets design elements; a strong, proactive process must also be the foundation for a consistent application of complete streets principles.

Context Zone

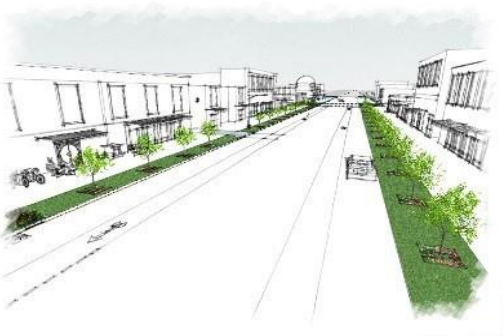
- Defined by the overall environment and framework of the corridor and surrounding network of streets and adjacent land uses
- Stresses context-specific treatment for three primary areas:
  - Building form and massing
  - Pedestrian space and design treatments
  - Travelway modal integration (bike, walk, transit, & vehicular)

Travelway Zone

- Defined by the edge of pavement or curb line that traditionally accommodates the travel or parking lanes needed for vehicles in the transportation corridor
- Recommendations focus on modes of travel and medians
- Travelway zone focuses on two objectives:
  - Achieve balance between travel modes sharing the corridor
  - Promote human scale for the street and minimize pedestrian crossing distances and vehicular conflict points / speeds

Pedestrian Zone

- Extends between the outside edge of the sidewalk and the face-of-curb located along the street
- Quality of the pedestrian realm is achieved through four primary channels:
  - Continuous pedestrian facilities (on both sides of the road if possible) to maximize safety and mobility needs
  - High-quality buffers between pedestrians and moving traffic
  - Safe and convenient opportunities to cross the street
  - Consideration for shade, lighting, and amenities



Building Zone

- Define and frame the roadway and its purposes
- Streets should serve these adjacent uses, unless the roadway is primarily used for through travelers (focus on reducing or managing conflict points)
- Building scale and massing focus on two areas:
  - Orientation (setbacks, accessibility, etc.)
  - Design & architectural character (height, wall/void ratio, etc.)
  - Ground floor activities, seating, shops, restaurants

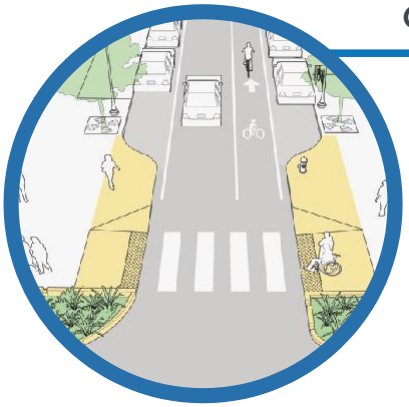
The following are typical treatments for both bicycle (right) and pedestrian facilities. These are not all-inclusive, but represent commonplace treatments that align with the issues found in Fayetteville most frequently by the planning team. Images and some descriptive elements are provided by the National Association of City Transportation Officials

Residential Sidewalk

- Design for a buffer of equal width to the sidewalk
- Standard is five feet in width
- Use colors or textures to demarcate conflict points, intersections
- Pervious pavements and plantings help mitigate stormwater runoff

Widen Curb / Painted Sidewalk (Temporary)

- NACTO describes an extruded curb to buffer pedestrians
- Painted curblines are used in Fayetteville on local streets, but should be considered temporary and signed or plant gateway curb extensions at each intersection to caution and protect pedestrians and motorists
- Construct a permanent sidewalk as funds allow



Curb Extensions / Extrusions / Bulb-Outs

- On-Street parking should extend 1' to 2' beyond edge of curbline
- Useful as gateways to caution motorists of changing conditions, speeds, or levels of pedestrian activity
- Combine curb extensions with stormwater mitigation measures such as bioswales, raingardens

(NACTO) published guidelines, which serve as an excellent resources to policymakers, planners, engineers, and the concerned public (https://nacto.org). Guidance does not replace engineering discretion, common sense, or a complete street mentality: pedestrians and cyclists win any safety-related argument with vehicular performance.

Buffered Bike Lanes

- More appropriate for Fayetteville's high crash rates
- Helps to mitigate sideswipe crashes - including with other cyclists
- Nearly 9 in 10 cyclists prefer buffered lanes, and these appeal to wider range of cyclists with varying skill levels
- Needs adequate right of way to avoid door opening-related conflicts with on-street, parked vehicles

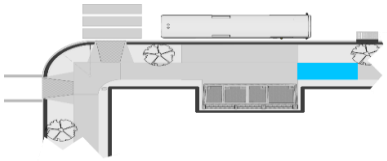
Intersection Crossings

- On-Street bicycle facilities need specialized intersection treatments
- "Elephant's Feet" markings (shown here) or green paint highlighting conflict points with through and turning vehicles reinforce space sharing
- Increases visibility of cyclists and provides additional assurance to cyclists in the delineated space for their travel

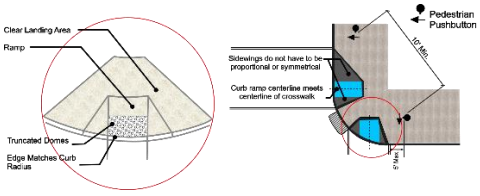
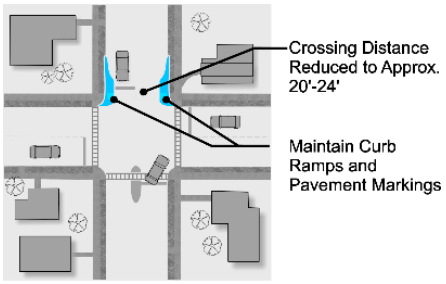
Painted Bike Lanes

- Useful for conflict points such as on-street parking door swing areas, intersection approaches, turning areas, and busy driveways
- Highlights use of space, slows some traffic, discourages illegal parking
- Budget for additional, minor maintenance costs

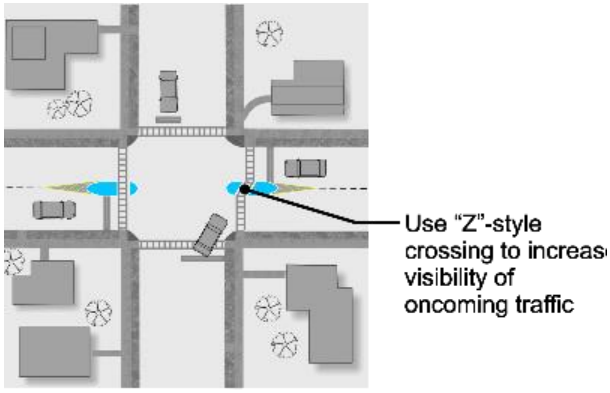
Along the Street.....

WHAT	WHERE	HOW	GRAPHIC
Pedestrian and Sidewalk Gaps Infill	Any street with missing or poorly maintained sidewalk	Fill the gap, replace broken or uneven sidewalk	
WHY	*Gap infill Increases connectivity, and offers an opportunity to improve design if cross-slopes (e.g., more than 2%) if substandard conditions are present – but it requires a dedicated funding pool and proactive identification of problems "bundled" into cost-effective repair and construction contracts. Don't prioritize, except for doing low-cost projects first.*		
Improve Management of Stormwater and Street Flooding	Low-lying areas or streets with historically poor drainage	Storm sewer improvements, raingardens, on-site runoff management, and pervious pavements (note additional maintenance requirements)	
WHY	*Tree canopy and raingardens provide an excellent buffer for the first ½-inch of rainfall, but also creates the attractive streetscape that favors pedestrians and reduces urban heat island effects. Expect and budget for additional maintenance expense.*		
Strong Access Management Policy and Program	High-crash areas where the frequency and design of driveways create many conflict points for drivers, cyclists, and pedestrians	Close secondary driveways, require side-street access and rear parking in walkable commercial areas; be prepared to compensate loss of driveway access	
WHY	*An ounce of prevention is worth pounds of cure: access management is easier to accomplish in locations where there are no or few developed parcels or existing driveways. Policies that require shared access, backage roads, and full or partial median controls (see graphic) are individually minor but collectively enormous in their impact on safety and reducing traffic congestion (over 25% of traffic delay is caused by crashes in urban areas).*		

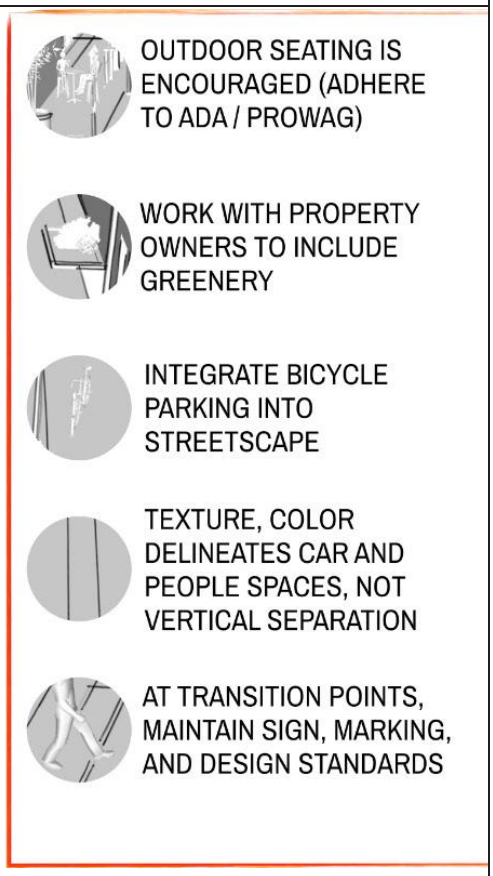
Across the Street.....

WHAT	WHERE	HOW	GRAPHIC
Ensure Accessibility	Any street intersection crossing, including freeway ramps	Assess intersections, prioritize improvements, integrate improvements with utility or street maintenance actions	
WHY	*Cities have proactively turned to creating ADA accessibility evaluations, reports, and programs to help populations that are mobility challenged navigate city intersections. High numbers of tourists, occasional legal actions, and aging populations add to the urgency of improving accessibility for all populations.*		
Better Access to Public Transportation	Known high-crash transit stops; stops with high ridership; stops on busier main streets	Improve lighting, surrounding bike/ped networks, station design elements. Design of pedestrian facilities around bus stops should be based on a good source of design guidance for pedestrian access and ADA access around bus stops. https://nacto.org/publication/urban-street-design-guide/street-design-elements/transit-streets/bus-stops/ and http://www.ped-bikeinfo.org/pdf/PlanDesign_Tools_Audits_EasterSealsBusStopAccess2006.pdf	 1. Taper (25' – 30') 2. Clearance to Crosswalk (10') 3. Bike Lane to left of bus loading area *Source: NACTO*
WHY	*Incomplete networks of sidewalks, unfavorable stop locations relative to crossings, and other design problems pose threats to riders and translate into lower ridership. The issues are especially problematic on multi-lane roadways where multiple and blind threats present several potential obstacles or hazards to safe access.*		
Curbs that Support Pedestrians	High-Speed corners in residential areas, schools, or other places where pedestrians often cross	Reduce curb radii to 15'-20' or use curb extrusions (bulb-outs) to shorten crossing distances and reduce speeds of turning vehicles	
WHY	*Lower speeds at corners translate typically into more rear-end crashes but fewer high-energy turning-type crashes with pedestrians and cyclists. Free-flow right-turn "slip lanes" should be used never or only when necessary to prevent a severe and dangerous queuing condition upstream.*		

Across the Street (continued)

WHAT	WHERE	HOW	GRAPHIC
Good Intersection Control (choose the right pedestrian crossing option)	Street crossings, including freeway ramps; assign in part by crash types or crash potential suggested by substandard design elements	See below	
WHY	*Pedestrians are told repeatedly to cross at intersections, so the provisions at these locations need to respect their importance since it is the location where pedestrians and cars interact directly. Consider the following ideal minimum standards for identifying crossing treatments:*		
HOW	CROSSING TYPE	TRAFFIC VOLUMES	PRIMARY DESIGN CONSIDERATIONS
	Parallel Stripes	Low	Signal or STOP control; low pedestrian volumes
	High-Visibility Ladder	Moderate	Wide, multi-lane crossings; high turn volumes
	Median Refuge (*see image*)	High	Ideally use with "Z" crossing to improve visibility
	Mid-Block Crossing	Low-Moderate	Seldom, high-pedestrian traffic, off-road paths
	Traffic Signal	High	Meets warrants, improves vehicular traffic operations

Specialized Situations.....

WHAT	WHERE	HOW
Woonerf (streets that accommodate cars and people together)	Highly pedestrian-focused streets that still have to serve very low-speed car traffic (less than 15mph).	Pilot project first; consult with other places that have already gone through the process. The City of Raleigh and Asheville both have completed a Woonerf street.
		
WHY	*While true woonerf streets are rare in the U.S., the concept of mixing pedestrians and (very low-speed) car traffic, including at "naked" (uncontrolled) intersections has application in open street marketplaces and event spaces.*	
Complete Street Design Process and Standards	This program is city-wide, and applicable to every street up to major arterials and freeway classifications.	Additional elements, such as design guidance, should be added after an initial resolution and detailed process have been adopted and put into place. ***The following pages provide detail on adopting a complete street process in Fayetteville.***

Complete Streets Policy Development

The creation of a complete street policy should be undertaken during a detailed process, preferably embedded within a transportation plan update or as an individual effort focused on complete streets and related policies. The effort ideally requires the inputs of citizens, technical staff, elected/appointed officials, business interests, real estate developers, and other members of the community to ensure a policy tailored to the specific interests and needs of the community. A "study team" comprised of municipal staff and (possibly) private consulting staff is assumed to be present and technically competent to perform the necessary work that the policy implies. Note also that, since complete streets are part of an overall design objective that includes land use and other elements of the public and realms the study team should represent public works, planning/zoning, law enforcement, and other departments within the town or city.

The following is a suggested starting point, and one that is borrowed from established, proven resources such as the Charlotte, NC Complete Streets Policy and National Complete Streets Coalition. The latter is the best starting point for staff to undertake development of their own policy, as well as identifying training, samples of complete streets policies from around the country, and other resources to help communities understand the importance, development, and effects of a complete streets policy.

The National Complete Streets Coalition (a subsidiary of Smart Growth America) notes that the following are ten vital components of a policy framework to ensure that streets are designed for everyone, at every age, at every level of physical ability:

1. Vision: The policy establishes a motivating vision for why the community wants Complete Streets: to improve safety, promote better health, make overall travel more efficient, improve the convenience of choices, or for other reasons.
2. All users and modes: The policy specifies that "all modes" includes walking, bicycling, riding public transportation, driving trucks, buses and automobiles and "all users" includes people of all ages and abilities.
3. All projects and phases: All types of transportation projects are subject to the policy, including design, planning, construction, maintenance, and operations of new and existing streets and facilities.
4. Clear, accountable exceptions: Any exceptions to the policy are specified and approved by a high-level official.
5. Network: The policy recognizes the need to create a comprehensive, integrated and connected network for all modes and encourages street connectivity.
6. Jurisdiction: All other agencies that govern transportation activities can clearly understand the policy's application and may be involved in the process as appropriate.
7. Design: The policy recommends use of the latest and best design criteria and guidelines, while recognizing the need for design flexibility to balance user needs in context.
8. Context sensitivity: The current and planned context—buildings, land use, transportation, and community needs—is considered in when planning and designing transportation solutions.
9. Performance measures: The policy includes performance standards with measurable outcomes.
10. Implementation steps: Specific next steps for implementing the policy are described.

Sample Vision Statement (Park Forest, IL): "This Complete Streets Policy shall directs Fayetteville to develop and provide a safe and accessible, well-connected, and visually attractive surface transportation network that balances the needs of all users, including: motorists, pedestrians, bicyclists, public transportation riders and driver, emergency vehicles, freight carriers, agricultural vehicles and land uses and promote a more livable community for people of all ages and abilities, including children, youth, families, older adults and individuals with disabilities."

Sample Process Guidance (Charlotte, NC; Nashville, TN; Complete Streets Coalition): The purpose of the following steps is to ensure that planning, design, and other processes contemplate all users and all modes of travel. This process will reflect the ten concepts identified previously, and is intentionally condensed to make it as simple and as broadly applicable as possible.

Steps for Designing a Complete Street

Step 1.0: Technical Inventory of the Street and Surroundings. The study team will develop a description of the project area/corridor that includes at a minimum the building types, densities, character, setbacks, and historic properties on adjacent lands as well as nearby and connected sidestreets. The subject corridor will be described in terms of geometry (lane widths, speed limits, design speed, cross-section(s), volumes of users by mode, signalization, crossing treatments, accommodations / demand for public transportation, walking, and bicycle users), crash histories from the most recent 3-5 year period, and a conditions analysis that includes safety/security, mobility/performance, and maintenance elements. A brief synopsis of the demographics of workers and residents in the corridor that includes comparisons to the larger geography (e.g., municipality or county) will also be included, mentioning age, race/ethnicity, language spoken at home, and income levels, at a minimum. Technical Products: Crash mapping; aerial photography underplaying labeled buildings/structures; zoning / land use map; transit stop locations; multimodal level-of-service analysis using accepted methods such as MUTCD and Florida DOT Quality/Level-of-Service. Future demand and automobile performance measures may also be available through travel demand model outputs. A summary of the existing conditions, including adopted plans, policies, and "pipeline" actions, will complete this step but remain internal to the study team pending completion of Step 2.0.

Step 2.0: Community Context. The study team will work with representatives of the community, preferably in a collaborative process (e.g., workshop or charrette) to enhance the understanding of the corridor and its strengths, challenges, and opportunities. The output of this public exercise will include the following:

- *Barriers*, including poor access, lighting, inadequate street crossings, dangerous conditions, and lack of capacity for users such as transit stops, turning lanes, and pedestrian crossing distances greater than 1,000' apart;
- *Opportunities and Resources*, such as parks, schools, office complexes, shopping centers, underutilized spaces, and underutilized parking areas; and
- *Aesthetics*, especially elements that support alternative modes of travel as well as businesses/customers, such as streetscaping, street furniture, pedestrian-scale lighting, wayfinding.

Step 3.0: Selection of a Preferred Option. Unlike other practices narrowly defined by the street itself, the preferred option in a complete street study should (1) include actions outside the street right-of-way, including development, zoning, and other policy actions; and (2) clearly identify options that were considered and why they were not chosen based on performance measures, alignment with current plan/policy, and/or alignment with public/stakeholder input from Step 2.0. At a minimum, documentation describing the selection process should answer the following questions:

- How does the preferred option compare to other considered options in terms of the performance measures selected for the project and public inputs?
- What were the public comments on the preferred option, and how did the study team respond to each of the main categories of commentary? How did the comments change the design, policy, or other recommendations contained in the project plan? [In order to answer this question a public forum has to be held specifically to review the preferred option, effectively and inclusively getting public input from the affected communities.]
- A conceptual corridor map should be created on an aerial map (1"=200') describing the structures, design features, resources, aesthetic/streetscape improvements, and multimodal treatments throughout the corridor. A separate map and accompanying text may contain descriptions of cross-access between properties and other access management treatments; suggested land use/design recommendations/policies; wayfinding/gateway treatments, and other suggestions that support identified economic and community goals.
- Any changes to adopted plans, policies, ordinances, or other existing documentation to bring them into compliance with the recommendations should also be briefly identified.

Rendering of potential Complete Street in Fargo, ND

Best Practices Recommendations

- **Countdown Pedestrian Signals.** Continue installing "countdown" pedestrian signal heads and crosswalks with the installation of all new signalized intersections. Provide pedestrian signals even in locations without sidewalk on one or both sides of an intersection.
- **School Zones.** Create a policy that requires "safe zones" around schools (i.e. school zones) in which speeds are reduced by 10 mph within a quarter mile of the school and signs are posted warning of school and student presence. Typical school zones speeds are 25mph or 35mph. "School" crossing pavement markings are used to reinforce signage, and flashing beacons often accompany speed limit signage.
- **Signage.** Restrict use of free-flowing turn lanes, utilizing "No Right Turn on Red" signage at signalized intersections with high pedestrian volumes. Provide appropriate treatments to warn both motorists and pedestrians of potential conflicts when free-flow turn lanes are used (e.g. "Yield to Pedestrians" signage).
- **Signal Timing.** At intersections with protected right-on-red for automobiles, provide signal phases which specifically create protected crossing intervals for pedestrians.
- **UDO Role.** Update language in the UDO to require greenway connections/easements for all new development within a 1/4 mile of greenways included in local and state plans.
- **Water Allocation Policy.** Update the Water Allocation Policy to give more points for building greenways on developing properties.
- **Sidewalk Petition Process.** Develop a sidewalk petition process and budget allocation to handle "spot improvements," allowing citizens to make requests for short sidewalk connections that will quickly and easily fill gaps in the pedestrian network. Once program is implemented, promote the program to citizens and educate residents on details in order to ensure its success and utility.
- **Education.** Create education programs for the public about the benefits and the means to incorporate walking into their daily lives
- **Crosswalk Installations.** Create a policy of installing high-visibility (zebra-striped) crosswalks at all intersections within a school zone, as well as in the Central Business District (downtown). Though motorists are required by law to yield the right-of-way to pedestrians at marked and unmarked intersections, crosswalks can be an awareness-building treatment and their visibility is very important in key locations.
- **Sidewalk & Crosswalk Maintenance.** Existing sidewalks that are cracked, uneven and impassable should be checked and repaired immediately. A regular maintenance schedule should then be established for periodic repairs of sidewalk cracking and restriping of crosswalks that fade with weather and wear.
- **Parks & Open Space Planning.** Update the City's Recreation, Park, and Open Space Plan to incorporate and expand upon the ultimate recommendations of this plan
- **Pedestrian Design Standards.** Develop Engineering & Design Standards for pedestrian accommodations. Ensure that such guidelines explicitly state that all facilities must comply with the requirements outlined in the American Disabilities Act Accessibility Guidelines for Buildings and Facilities. These standards should generally follow those provided by this Plan, NACTO, and MUTCD.
- **ROW dedication.** Create a citywide policy to require right-of-way (ROW) dedication, instead of ROW "reservation"
- **Bridge Accommodations.** All new and retrofitted roadway bridges should accommodate pedestrians through the inclusion of sidewalks on at least one side of the facility (preferably both) and pedestrian-safe railings (42ft minimum height).
- **Ordinance.** Fayetteville should consider policy changes and new ordinance language that requires dedication of trail easements for future construction and/or construction of connector trails to proposed and existing greenways during all new development.
- **Improvement Plan.** Improvements included in this Plan should be included in the next Capital Improvement Program update.
- **Comfort Items.** Include items that provide comfort when upgrading or adding new pedestrian facilities. Items such as street trees, benches, parklets and barriers provide a feeling of comfort and safety to pedestrians and can increase walking trips.
- **Design Guidance.** Design of pedestrian facilities around transit stops should be based on guidance (https://nacto.org/publication/urban-street-design-guide/street-design-elements/transit-streets/bus-stops/ and http://www.pedbikeinfo.org/pdf/PlanDesign_Tools_Audits_EasterSealsBusStopAccess2006.pdf) for pedestrian access and ADA access around the stop.

Key: A - Action/Administrative Actions
P- Policies/Updates
M- Projects/Maintenance
D- Design Guidance/ Best Practices

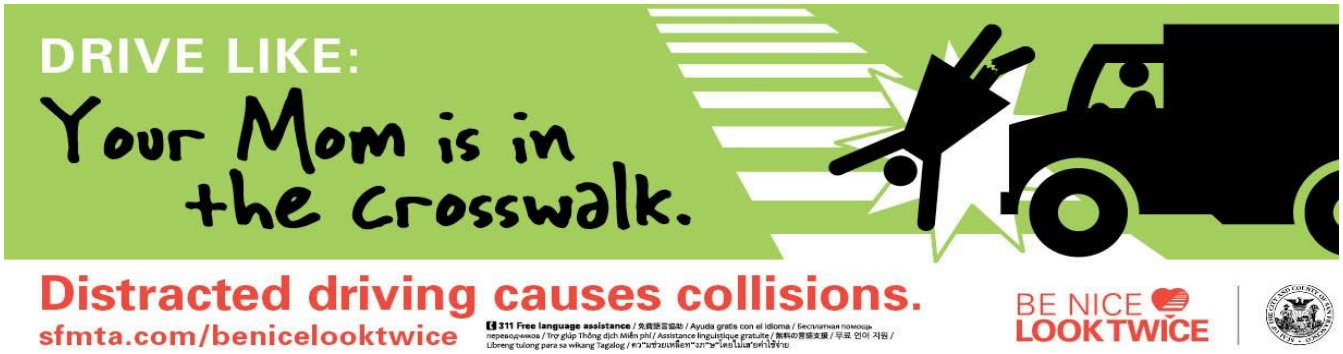
Program Recommendations

Pedestrian facilities alone do not make a City pedestrian-friendly. A variety of programs should also be implemented to create and support a pedestrian-friendly culture. A pedestrian-friendly culture has several different characteristics, including the behavior of people when they are walking, the attitude of motorists in the community towards pedestrians, and the role of police and other law officials to enforce pedestrian safety. To address all of these elements, programs are often created to fit within the "three E's" of pedestrian planning: education, encouragement, and enforcement.

Education programs teach others about safe pedestrian behaviors, the benefits of walking, and can assist people in feeling more comfortable with their "new" mode of travel. Education programs can also be used to teach motorists how to interact safely with pedestrians. Encouragement programs, like education programs, can also teach about the benefits of walking, and serve to promote walking and pedestrian-friendly behavior through various activities and incentives. Finally, enforcement programs provide the "teeth" of a safe and legal pedestrian environment. When law enforcement officers and other officials protect pedestrians and encourage walking, this sends a clear message that the presence of pedestrians is a legitimate and permanent condition in the city's transportation network. Additional resources for educational and enforcement resources are available at www.pedbikeinfo.org.

This Plan will not attempt to identify every possible program, but instead focus on those programs that most closely suit the interests, needs, and environment found in the City. Stakeholders and citizenry spoke often about walking issues near schools and residential areas. Programs were included in the recommendations that support further education to drivers as well as children to develop better walking behaviors. Education programs teach others about safe pedestrian behaviors, the benefits of walking, and can assist people in feeling more comfortable with their "new" mode of travel.

The City participates in annual Earth Day celebrations, bicycle rodeos, and special events like the Better Block with a Purpose (shown at right). The more programs that are implemented the more the City can successfully encourage healthier lifestyles and create the pedestrian friendly community that Fayetteville hopes to be. It is recommended that the City continue planned programs and add more in as the City grows and changes. The following section discusses program recommendations for a well rounded pedestrian program in Fayetteville.



The Better Block (with a Purpose) event in Haymount took a lot of work, but was a huge success. It also provided a showcase into how temporary design changes could affect the quality of the walking environment.

The Steering Committee discussed the programs recommended in the Plan and set priorities for the City to consider when implementing the programs. Developing an action plan for the programs allows the City to implement programs that have the greater opportunity for success. While all the programs are beneficial to the City, it is important to introduce programs that are relevant to community needs.

The members ranked each program by five factors : 1. Anticipated Costs, 2. Enforcement Based Program, 3. Recreation Based Program, 4. Event Based Program and 5. Education Based Program. Each member ranked each program from a score of 1-5, 1 being not important and 5 being most important, on how they felt in regards to each. The total scores for each program and factor were totaled and the top vote-getters are shown in the table at right along with some suggested by the Steering Committee directly.

The following are the results of the program priority voting:

- **Cost Associated with Implementation - 20 points**
- **Enforcement Based Type Program - 23 points**
- **Recreation Based Type Program - 23 points**
- **Event Based Type Program - 26 points**
- **Education Based Type Program - 36 points**

Dogs and Jogs: Cumberland County Animal Shelter and Fayetteville Run Club team up for running, walking, and enjoying everyone's best friend. (www.meetup.com/FayRunClub/events/248992521)

Open Streets Event - Bloomington Indiana. Source: (http://indianapublicmedia.org/news/health-fitness-festival-closes-bloomington-streets-56076/)

Program	Lead	Details	More
Safe Routes to School (SRTS)	School Staff / PTA	An international movement to enable and encourage children, including those with disabilities, to walk and bicycle to school. Successful Safe Routes to School programs involve the whole community and take a comprehensive approach to improving safety. Through a joint partnership between NCDOT's Safe Routes to School Program and NC Division of Public Health, Active Routes to School Regional Coordinators help to implement Safe Routes to School strategies in partnership with local communities across North Carolina.	www.communityclinicalconnections.com https://connect.ncdot.gov/projects/BikePed/Documents/NCDOT_SRTS_Description.pdf
Better Block	City Engineering	The Better Block with a Purpose, as it was nicknamed, was a great success in 2017 and drew hundreds of people to participate in events and to see an example of a street redesign project.	www.facebook.com/betterblockfaync
Let's Go NC	NCDOT / City Engineering	Let's Go NC is a program that teaches children how to walk and bike safely. This program was developed for NCDOT and SRTS to provide a curriculum that offers children the skills to build safe habits while practicing an active lifestyle.	www.ncdot.gov/bikeped/safetyeducation/letsgonc
Speed Campaign Tool Kit	City Traffic Services Division	Slowing drivers to enforced speed limits can reduce risks of pedestrian crashes and encourage more people to walk. Tools developed by the NHTSA include media materials, billboards, posters and logo ideas to help local governments reduce speeds.	http://icsw.nhtsa.gov/newtsm/tk-speeding
The Bicycle Man	Local Church	The Bicycle Man organization, founded by Moses Mathis and carried on by Ann Mathis and many others, repairs and donates bicycles every year to the children of Fayetteville. Truly, The Bicycle Man has become regionally famous for its generosity and commitment.	www.thebicycleman.bike
Weekend Walkabout Program	Arts Council / Historic Preservation	Programs such as the "Weekend Walkabout" are events that occur regularly and promote walking within communities. The Program highlights safe and inviting places to walk in City. This program is suitable for families and the elderly. Themed walks could be incorporated in the program such a holiday decoration walk, artwalk (see right), or historic buildings walk.	www.theartscouncil.com/calendar/event/spring-art-walkabout
Walking Safe - Pedestrian Safety	City Traffic Services Division	The City has initiated the Walking Safe program to reduce pedestrian and bicycle crashes by improving community engagement, public education, infrastructure and visible law enforcement. Safety tips are posted in the City's website as well as announcements for current and future multi-modal projects.	https://fayettevillenc.gov/government/city-departments/public-services/engineering-infrastructure/traffic-services-division/pedestrian-safety-tips
National Trails Day		Hosting a "National Trails Day" in Fayetteville can promote and encourage walking as well as support future trails for the area.	http://nationaltrailsday.americanhiking.org
Quick Response Funding	City Council / City Engineering	Fayetteville allocates $25,000 now to quick-reaction projects determined by staff to be cost-feasible and high-value. Doubling this amount, and requiring an annual report on actions taken, would increase the value and transparency of this innovative and successful program.	
Celebrate Fayetteville's Success	City Engineering	When projects are completed, even small sidewalk installations, acknowledge the hard, behind-the-scenes work and public investment that went into the successful project through special (temporary) signage and / or (permanent) concrete stamping. A second action is to continuously map all transportation improvements made across the city, link it prominetly on the website, and make it available in printed form at public meetings, for elected officials to carry with them, etc.	a clever variation only shows up when it rains: www.citylab.com/design/2015/03/this-seattle-street-art-only-appears-when-its-raining/388529
Jog with a Dog	Cumberland County Animal Shelter	Running with dogs is fun, and they might just get adopted to a new home in the process. Scheduled runs occur with the Cumberland County Animal Shelter, and 3Ks are sometimes hosted by the Fayetteville Running Club.	www.meetup.com/FayRunClub/events/248992521/

Implementation

Completion of the *Fayetteville Pedestrian Plan* is only the first step in creating a walkable community. The implementation of the Pedestrian Plan will require a coordinated effort amongst City officials, leaders, and citizen volunteers. This section provides a series of actions steps for moving forward with the recommendations of the Plan.

1) Adopt this Plan. Adoption of this Plan will be the first step to implementation for Fayetteville. Once adopted, the Plan should be forwarded to regional and state decision-makers, such as the MPO and NCDOT Division office, for inclusion in a regional planning and development processes.

2) Form a Pedestrian Advisory Committee. The pedestrian planning process has engaged many citizens in visioning and goal-setting for Fayetteville. Building on this momentum to keep citizens engaged in a permanent committee structure will allow continued citizen involvement in the Plan's implementation.

3) Secure funding for the short term projects. In order for Fayetteville to become a more pedestrian-friendly City, it must have the priorities and the funding available to proceed with implementation. The City should work to secure funding for implementation of several short term projects (see the Project Recommendations section and develop a long-term funding strategy. This will help reinforce the commitment to the Pedestrian Plan and reaffirm to residents that the Plan is moving forward.

4) Begin work on top priority projects. In addition to committing local funds to high-priority projects in the Pedestrian Plan, the City should work with NCDOT on a local Safe Routes to School (SRTS) project and/or seek other state, national or private funding sources for continued, long-term success in implementing the Plan.

5) Adopt policy changes that support the goals of the Pedestrian Plan. Proposed ordinance changes that will be crucial to balancing the public/private burden of implementing this Pedestrian Plan are listed in the funding section of the Plan.

6) Develop supportive education, encouragement and enforcement programs. Pedestrian facilities alone do not make a City pedestrian friendly. A variety of programs should also be implemented to create and support a pedestrian-friendly culture. Programs and policy priorities should be implemented alongside infrastructure improvements.

7) Embark on complementary planning efforts. The City should incorporate the recommendations of the Pedestrian Plan into future and existing Plans developed and updated at the local, regional and statewide level.

KNOW YOUR FINANCING

In the past, federal and state funds were used extensively to finance pedestrian projects. Today's funding picture requires a more complete palette of sources comprised of many organizations and players, sometimes in collaboration to complete construction or maintenance of active mode infrastructure or programs. Below is a basic guide to the main sources of funding; grants and even state-level funding are always subject to some change, however, so early and proactive are watchwords when seeking project funding.

Government. Major streets are typically the purview of the state, but pedestrian improvements can be incorporated into state road projects and covered 50%. Powell Bill funds are distributed to local governments based on their population and miles of local streets; they can be used to construct sidewalks or safety-related projects but are a minor source stretched thinly to address key maintenance issues. Fayetteville typically spends $350,000 to $400,000 annually on pedestrian projects, so extending those amounts through matching is important; bond lettings are commonplace in North Carolina and should be considered as part of a larger package of improvements to increase the "audience" of the proposed bond.

Table 8
Implementation Plan

Action Plan for Implementation

Task	Lead	Support	Details	Phase
Newly formed BPAC should review and assist in implementing the Plan	BPAC/City Council	City Council/ Staff	The BPAC should focus on implementation of this Plan and coordinate with regional partners (i.e., Sustainable Sandhills) to promote walkability in Fayetteville.	Short-Term
Begin annual meeting with key project partners	City Council., Staff, BPAC	NCDOT, Local and Regional Stakeholders	Project partners discussed through out the implementation section of this Plan should meet on an annual bases with the City to evaluate the implementation of the Plan.	Short-term (ongoing)
Monitor NCDOT bridge replacement projects, resurfacing and STIP allocations	City Staff	NCDOT, FAMPO	The Division 6 road resurfacing schedule presents potential for opportunities to accomplish the projects that require pavement markings, such as intersection improvements. For implementation of pavement markings, it is essential that Cities stay in close touch with the local highway Division operations and maintenance staff, to stay on top of the resurfacing schedule and keep closely abreast of any updates or changes to the schedule. It's easy with staff turnover and other factors to miss an opportunity for pavement re-striping; talking and checking back with the Division at least once every quarter is not too often! Resurfacing is a very important part of implementing crossing facilities and comes at very little cost, so definitely indicate these actions and details in the table. The City should not rely on the Division to inform the City when resurfacing will be done; rather, the City needs to stay on top of this and initiate quarterly check-ins with Div O&M personnel.	Short-term (ongoing)

Private Sector. Private development is required to create sidewalks or make intersection improvements as part of addressing their impacts on the transportation system from new users. It is also possible to initiate voluntary assessments for sidewalks on streets where people want them to happen, although it may take all property owners to agree on such a measure. Temporary actions, like the striped, multi-use lanes sometimes used in Fayetteville on low-volume, low-speed streets, could be used as an interim treatment.

Grant Programs. A kaleidoscope of grant programs is available, although all have differing target project criteria and timelines for applications. Having a dedicated person deal with these funds is advisable; working through the Council of Governments may help multiple towns compete for grants cost effectively. Examples include the Land & Water Conservation Fund, NC Recreational Trails Grant, Small Cities Community Development Block Grant, Parks & Recreation Trust Fund, and foundation grants such as Z. Smith Reynolds.

Action Plan for Implementation

Task	Lead	Support	Details	Phase
Update Plan	City Staff, Council, BPAC	NCDOT, FAMPO	This Plan should be updated every 5 years. If many projects and programs have been completed within that time frame and new list of priorities should be established.	Long Term
Implement Programs	City Staff, BPAC	Council	Implementation of Programs recommended in the Plan should begin immediately. New programs that fit the City's needs should be considered and added to the list.	Short Term (ongoing)
Update Policies	Council	City Staff	Policy update recommendations (discussed on page 85) should be undertaken to assist in promoting walkablity into future development. Guidance policy manuals (discussed on page 72) should be used when updating policies.	Short Term
Create a Complete Streets Policy	Council	City Staff	As discussed on page 80, the City should develop a Complete Streets Policy	Short Term
Develop a process for Applying the Newly Created Complete Streets Policy	Council	City Staff	A detailed process for implementing Completing Streets Policy should be implemented. Page 81 and 82 detail the design analysis process.	Short Term
Designate Staff	Council, Staff	City Staff	Designate staff to oversee the implementation of this Plan and the proposer maintenance of the facilities.	Short Term
Launch Programs as New Projects are Built	BPAC	City Staff	Assist in the coordination of education and encouragement programs.	Mid Term (ongoing)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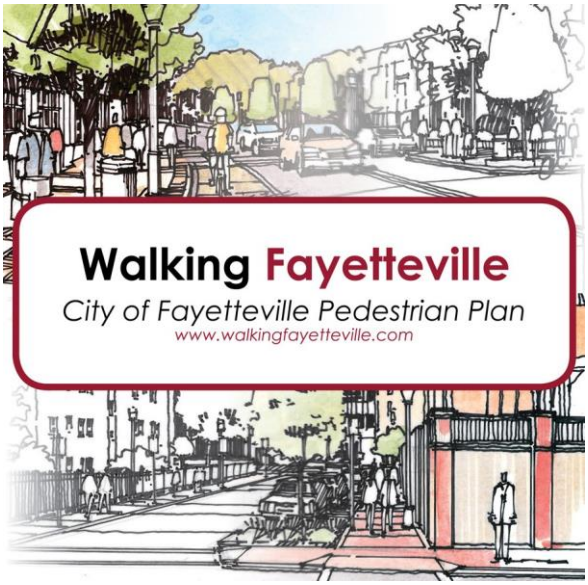
Walking Fayetteville
City of Fayetteville Pedestrian Plan
www.walkingfayetteville.com


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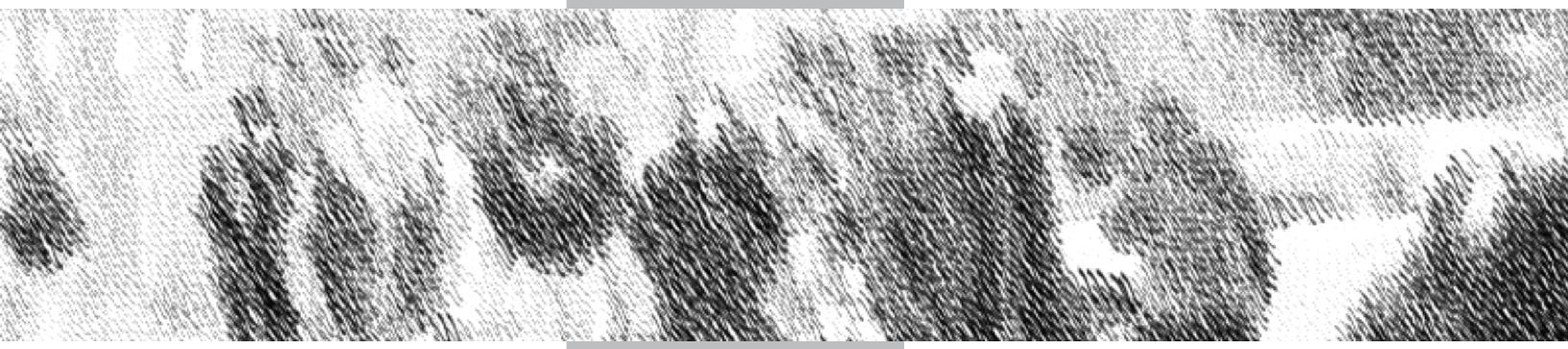



Small Area Studies

Small Area Studies

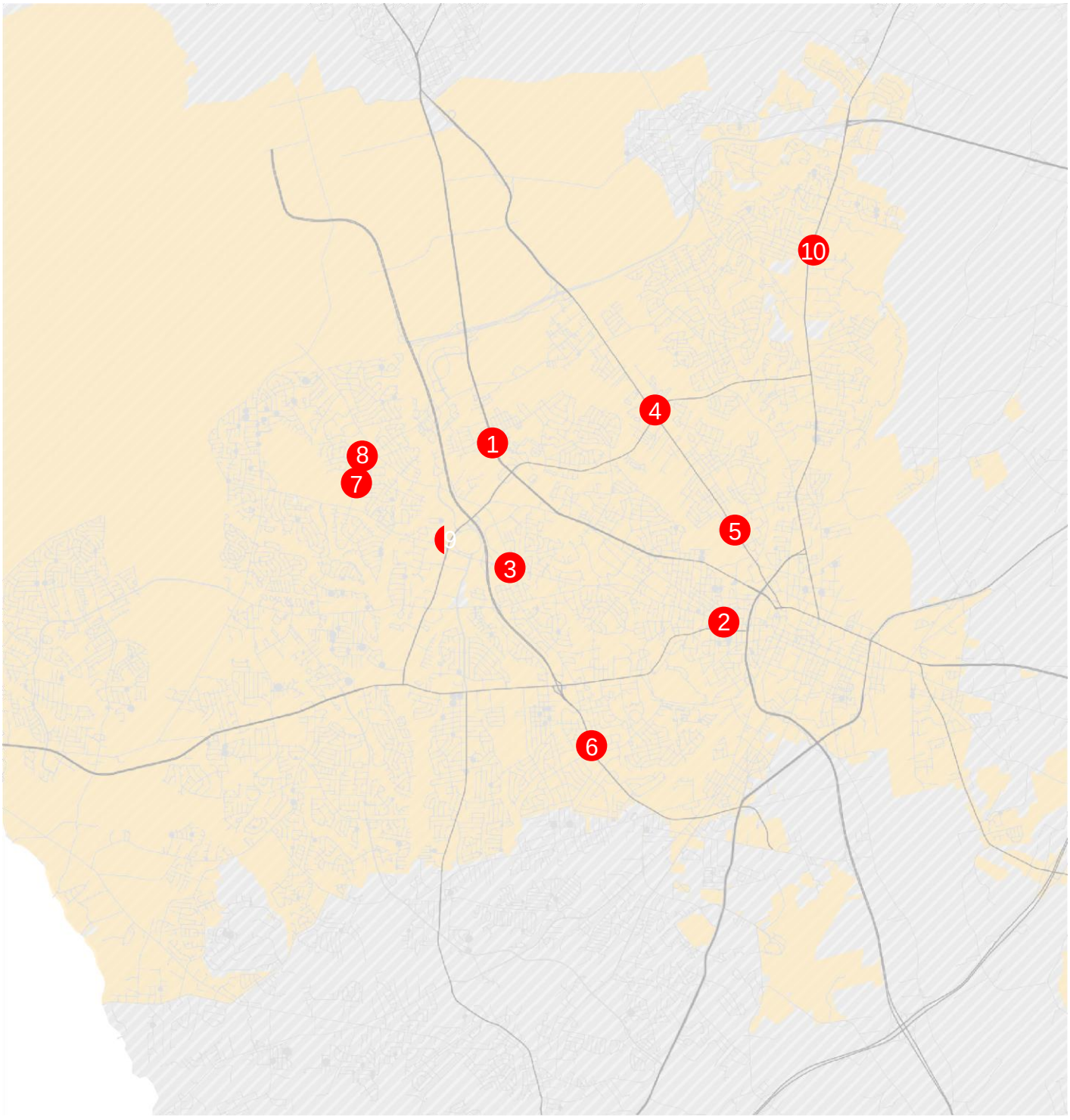
The next several pages includes a detailed investigation into ten (10) areas in Fayetteville that was identified as areas that have a high presence of pedestrians and need to calm traffic. Photographic renderings were completed of each area to depict potential enhancement solutions identified in the Plan.

Recommendations including sidewalks, crossings, signals, and small width medians were recommended in many of the areas to increase pedestrian safety. The area identified in the studies were selected by the steering committee as areas where high pedestrian volumes are seen as well as areas that have safety concerns for walkers. The studies are examples to illustrate how improvements can transform an area with improved facilities. It should be noted that development constraints may be present in some of the areas. Constraints such as utility lines and poles, hydrants, lack of right-of-way and other physical obstacles can disrupt planning for pedestrian facilities. Inventory of the surrounding area should be completed prior to developing engineering designs to identify the barriers.

Some projects included in the small study areas received higher priority rankings (chapter 3) than others. The process for project prioritization is further discussed in Chapter 3. Further studies are recommended for each during the design phase to determine the most appropriate solutions and placements of pedestrian amenities.

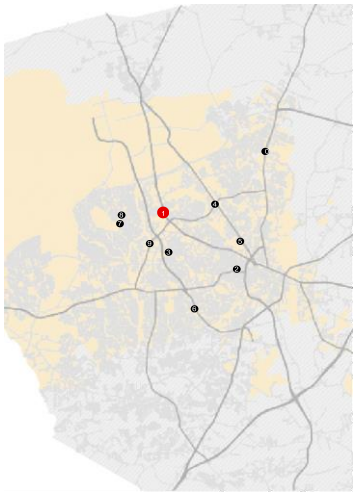
1. **Bragg Boulevard and Johnson Street**
2. **Fort Bragg Road and Hull Road**
3. **Morganton Road and McPhearson Church Road**
4. **Murchison Road and Country Club Road**
5. **Murchison Road and Langdon Street**
6. **Owen Drive and Melrose Road**
7. **Bonanza Drive and Westover School Area**
8. **Bonanza Drive and Santa Fe Drive**
9. **Skibo Road and Morganton Road**
10. **Ramsey Street and Stacey Weaver Drive**

Figure18
Small Area Studies Locations



Bragg Boulevard and Johnson Street

Lead Agency	NCDOT
Type	Intersection
Length (miles)	N/A
Estimated Cost to Construct	$200,000 (includes resurfacing)
Project Id No(s)	Intersection 65
Funding Status	Funded NCDOT
Project Description	This area is utilized by transit riders and local business frequenters. This area has a high number for residents who are reported living at or below poverty as well as being a zero car household. Walking is a need for many of the residents of this area to work, shop and visit. The intersection is a highly congested, commercial node. There is a need to enhance safety and crossings as 13 pedestrian crashes have been reported in the area.
Project Needs (Included in Costs)	• Median Refuge • High-Visibility Crosswalks • Pedestrian Countdown Signals • Pedestrian-Level Lighting • Street Trees • ADA Compliant Upgrades



1

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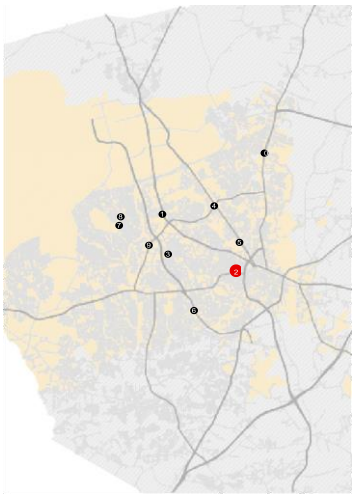
Ft Bragg Road and Hull Road

Lead Agency	City of Fayetteville
Type	Intersection
Length (miles)	N/A
Estimated Cost to Construct	$30,000
Project Id No(s)	Intersection 66
Funding Status	Unfunded
Project Description	Intersection experiences a lot of pedestrian traffic due to the locality of nearby transit stops and Fayetteville Technical Community College. Evening walk can be dark in this area due to lack of lighting. Lighting and street trees can provide comfort and safe feelings for pedestrians in this area. These items should be consideration to the students of the school attending night classes and walking to local restaurants and bus stops.
Project Needs (Included in Costs)	• High-Visibility Crosswalks • Pedestrian Countdown Signals • Accessible Ramps • Pedestrian-Level Lighting • Pedestrian signage • Street Trees



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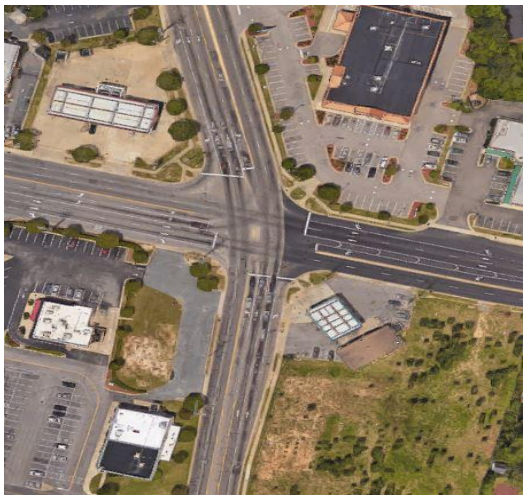
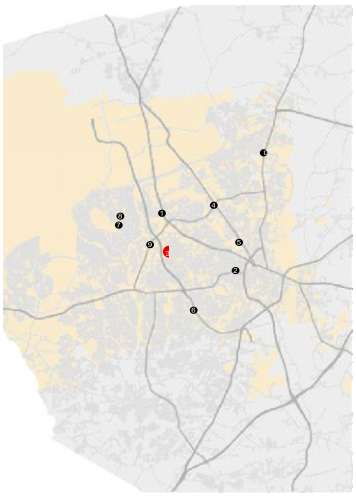
Morganton Road and McPherson Church Road

Lead Agency	NCDOT
Type	Intersection and Linear Sidewalk Improvements
Length (miles)	N/A
Estimated Cost to Construct	$2.1 Million
Funding Status	Unfunded
Project Id No(s)	Sidewalk 28, Intersection 55
Project Description	Busy intersection with evidence of pedestrian traffic evident by worn paths leading to the intersection from all sides Lack of sidewalk and crossing facilities makes this a difficult and dangerous crossing area. Pedestrians would benefit from a median on multiple legs of the intersection to provide an area of refuge during high traffic periods. Vision Project - Recommend redesign of intersection geometry to slow cars and reduce length pedestrians have to cross.
Project Needs (Included in Costs)	• Median Refuge(s) • High-Visibility Crosswalks • Pedestrian Countdown Signals • Accessible Ramps • ADA Compliance Upgrades • Pedestrian-Level Lighting • Pedestrian Signage • Sidewalks • Street Trees





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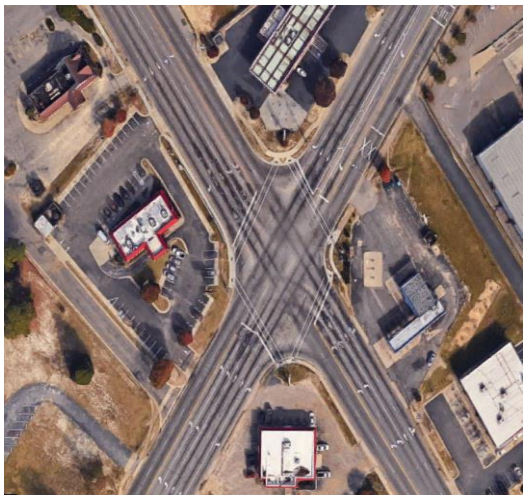
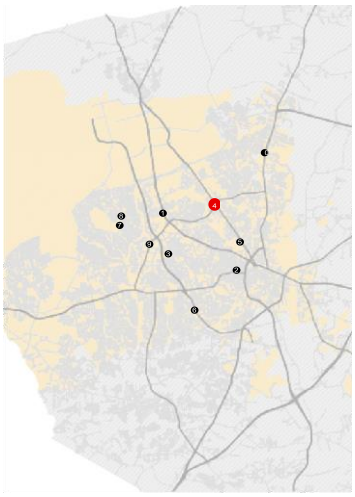
Murchison Road and Country Club Road

Lead Agency	NCDOT
Type	Intersection and Linear Sidewalk Improvements
Length (miles)	N/A
Estimated Cost to Construct	$1.0 Million
Funding Status	Unfunded
Project Id No(s)	Sidewalk 42,14,18,30 Intersection 67
Project Description	This area experiences high traffic volumes daily. Transit riders are frequently seen boarding and alighting buses through the day. Demographic analysis reveals a high population living below the poverty line and has no access to a vehicle. Westover Elementary School is located within walking distance to the intersection of Murchison Road and Country Club Dr. Pedestrian signals and crosswalks are currently available in the area, but pedestrians would benefit to a median refuge in the center of each roadway as the intersection is large multi-lane corridors. Vision project -Geometry could be re worked to slow cars.
Project Needs (Included in Costs)	• Median Refuge • High-Visibility Crosswalks • Median Refuge(s) • Sidewalks • Street Trees





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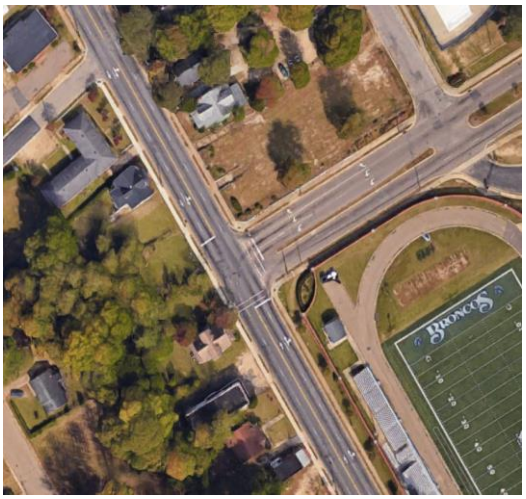
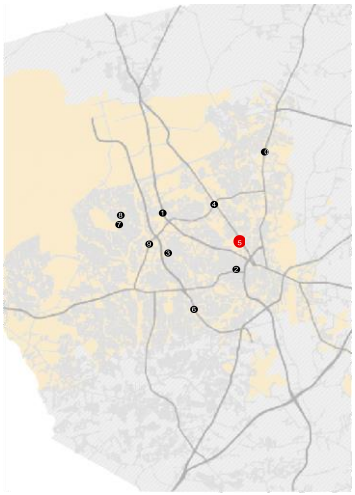
Murchison Road and Langdon Street

Lead Agency	NCDOT
Type	Intersection
Length (miles)	N/A
Estimated Cost to Construct	$18,000
Funding Status	Unfunded
Project Id No(s)	Intersection 31
Project Description	This area was identified by the project steering committee as an important area to increase pedestrian facilities. This area is home to Fayetteville State University and produces a high volume of pedestrians daily and even higher volumes during school events. High visibility crossings on all legs on the intersections increase pedestrian awareness.
Project Needs (Included in Costs)	• High-Visibility Crosswalks • Pedestrian Countdown Signals • Accessible Ramps





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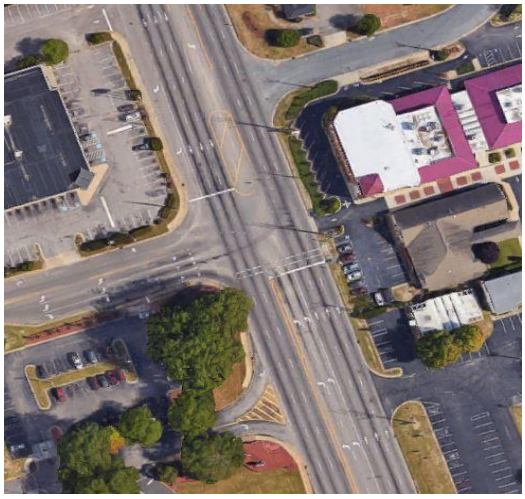
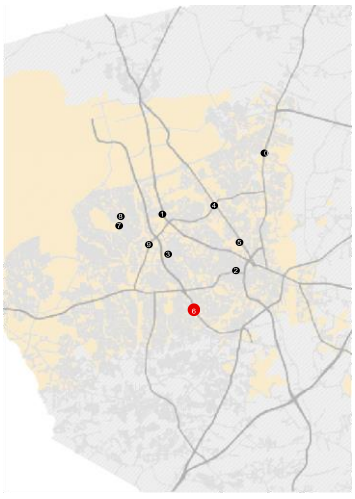
Owen Drive and Melrose Road

Lead Agency	NCDOT
Type	Intersection
Length (miles)	N/A
Estimated Cost to Construct	$150,000
Funding Status	Funded - NCDOT W-5514
Project Id No(s)	Sidewalk 38 Intersection 68
Project Description	The area of Caper Fear Medical Center lacks sidewalk and crossing facilities in many areas. Owen Drive is a high traffic corridor that provides connection from the north side of the City to the south and east. Owen Drive should be equipped with sidewalks along the corridor due to the presence of bus stops, residential areas and commercial areas. Visitors of the hospital as well as employees have an opportunity to walk to various places, but unfortunately do not have access to a connecting sidewalk network, safe crossings and signal assistance when crossing.
Project Needs (Included in Costs)	• High-Visibility Crosswalks • Pedestrian Countdown Signals • Continuous Sidewalks • Accessible Ramps





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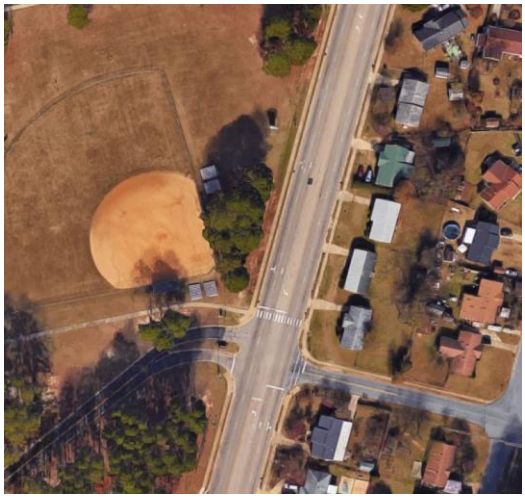
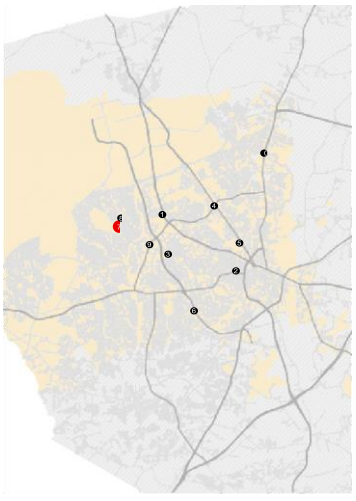
Bonanza Drive (Westover Middle and High School)

Lead Agency	NCDOT
Type	Intersection
Length (miles)	N/A
Estimated Cost to Construct	$1.1 Million
Funding Status	Unfunded
Project Id No(s)	Sidewalk 18 Intersection 69
Project Description	Westover Middle and High School and Westover Recreation Center is located in this area and all produce a large volume of pedestrians. The areas currently has crossing facilities as well as cross guards to help with the road crossings during the morning and afternoon school rush. Additional features such as a median refuge on Bonanza Dr and high visibility crossings should be added to assist in safer crossings.
Project Needs (Included in Costs)	• High-Visibility Crosswalks • Median Refuge





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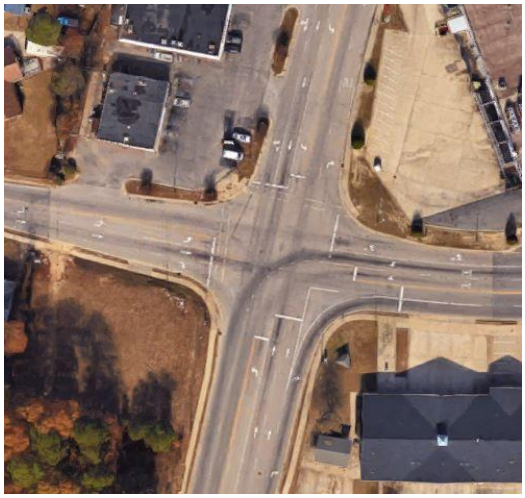
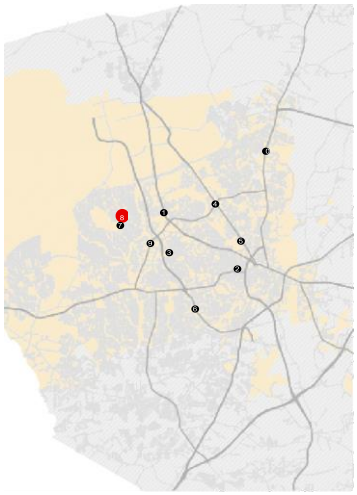
Bonanza Drive and Santa Fe Drive

Lead Agency	NCDOT
Type	Intersection and Linear Sidewalk Improvements
Length (miles)	N/A
Estimated Cost to Construct	$357,000
Funding Status	Unfunded
Project Id No(s)	Intersection 70
Project Description	Just north of the Westover area schools is the intersection of Bonanza Dr and Santa Fe Dr. Students frequently use this intersection to walk to and from school. The corridors that make up the intersection are large and pedestrians would benefit from a median addition to the wide angle channelization currently utilized on Bonanza Dr to Santa Fe Dr. Additional sidewalks on Santa Fe Dr are needed to provide a connected network.
Project Needs (Included in Costs)	• High-Visibility Crosswalks • Median Refuge • Continuous Sidewalks • Accessible Ramps





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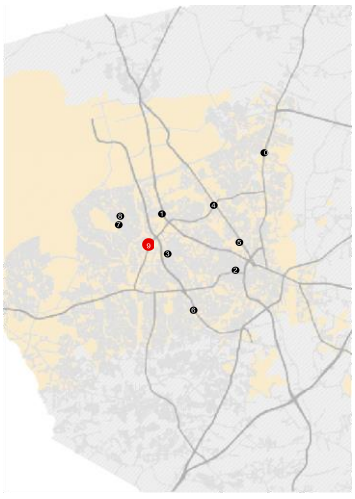
Skibo Road and Morganton Road

Lead Agency	NCDOT
Type	Intersection
Length (miles)	N/A
Estimated Cost to Construct	$375,000
Funding Status	Unfunded
Project Id No(s)	**Sidewalk 73**
Project Description	Skibo Road is the busiest road in Fayetteville. Several large retail areas are located along the corridor. Nearly 250 pedestrian crashes have occurred in and around the Morganton Rd and Skibo Rd area. Skibo Rd lacks continuous sidewalks and crossing facilities. To help battle the high crash numbers that plague this area, it is imperative that crosswalks, signals, ramps and sidewalks are constructed along Skibo Road. Vision Project - Consider reworking geometry of the intersection to reduce crossing distances and allow staged crossings.
Project Needs (Included in Costs)	• High-Visibility Crosswalks • Pedestrian Signals • Continuous Sidewalks • Accessible Ramps



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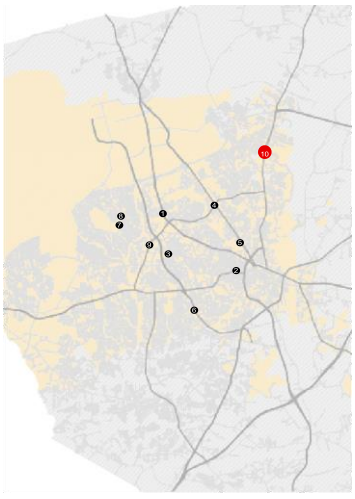
Ramsey Street and Stacey Weaver Drive

Lead Agency	NCDOT
Type	Intersection
Length (miles)	N/A
Estimated Cost to Construct	$36,000
Funding Status	Unfunded
Project Id No(s)	**Intersection 63**
Project Description	This area houses Methodist University, transit stops, large residential area and numerous commercial areas. Ramsey Street just went through a recent construction facelift adding turn lanes, medians, sidewalks and eliminating some driveways and left turns. Crossing facilities were not completed at the intersection of Ramsey St and Stacey Weaver Dr. Ramps, signals and crossings need to be added to this intersection to improve walkability.
Project Needs (Included in Costs)	• High-Visibility Crosswalks • Median Refuge Cut • Pedestrian Signals • Accessible Ramps



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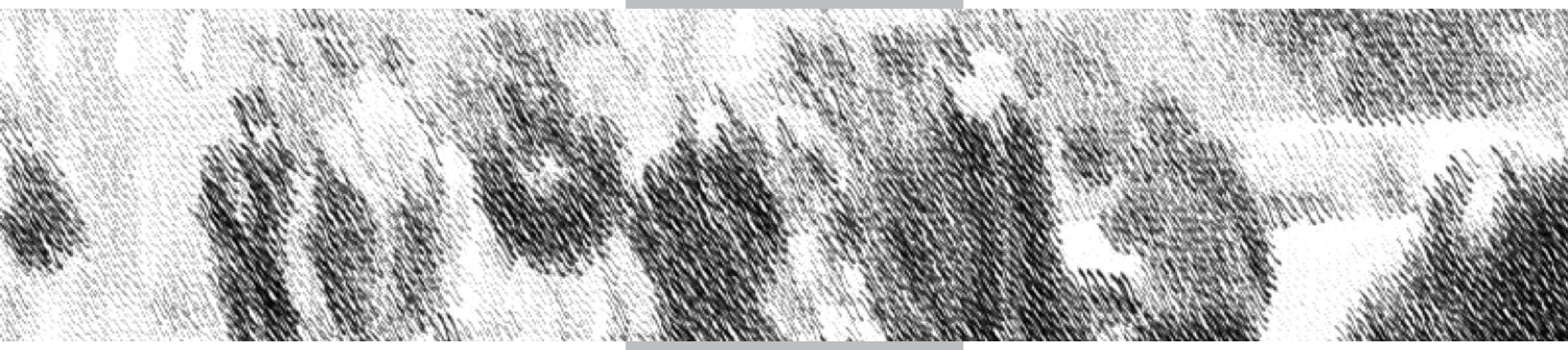


Funding
Opportunities

There are many sources of funding to draw from when considering possible funding sources for programs, planning, design, implementation and construction for the City of Fayetteville's pedestrian projects. It is important to consider several different sources as not all planning, design or construction activities or programs will be accomplished with a single funding source. This section outlines potential sources of funding from the federal, state and local government sectors, as well as private and non-profit sources. The funding amounts, cycles, and the programs themselves change periodically, so it is advised to contact the funding source liaison.

Federal Funding Sources

Fixing America's Surface Transportation (FAST) Act

The 'Fast" Act was signed into law in 2015 and will create a 5-year certainty for states and local governments to fund specific projects. The bill's total 5-year funding pot is $305 billion, with $835 million in 2016 and 2017, and $850 million in 2018-2020 dedicated to bicycle and pedestrian projects.
The FAST Act is the first ever federal transportation bill to include Complete Streets Guidelines. The requirements help ensure that new National Highway System roadways offer better transportation options and keep pedestrians safe in and around roadway corridors. It also requires the use of NACTO's Urban Streets Design Guide when designing roadways, as well as permitting local governments to use their own adopted design guidelines if they are the direct recipient of federal funds, even if it differs from state standards.
The Surface Transportation Block Grant program (STBG) provides flexible funding that may be used by States and localities for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure.

Federal Transit Administration

This program provides funding for transportation projects at the federal level and is allocated to State Department of Transportations. The State then applies funding to eligible projects. Projects including pedestrian projects are eligible as they increase safety for users and enhances interaction of all users on the full transportation network. One often-overlooked potential resource is funding for connecting transit stops with pedestrian facilities. https://cms.fta.dot.gov/

Safe Routes To School (SRTS)

The Federal Safe Routes to School program was established in 2006 and provided funding to all State Departments of Transportation. More recent legislation did not include funds specifically for Safe Routes to School, though projects to improve walking and bicycling safety are still eligible under the Transportation Alternatives Program. Infrastructure projects can only be considered Safe Routes to School projects if they are located within two miles of an elementary or middle school. Visit https://connect.ncdot.gov/projects/BikePed/Documents/NCDOT_SRTS_Description.pdf for more information.

Congestion Mitigation and Air Quality (CMAQ)

CMAQ was created under the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 to support transportation projects that contributed to a reduction in congestion and in turn improved air quality. In 2015, the CMAQ program contributed more than $30 billion to fund over 30,000 transportation and environmental projects. This option applies only to areas that are not in attainment with national air quality standards.

Transportation Alternatives Program Grants
The Fixing America's Surface Transportation (FAST) Act set-aside program funding for transportation alternatives. These funds include all projects and activities that were previously eligible under TAP, encompassing a variety of smaller-scale transportation projects such as pedestrian and bicycle facilities, recreational trails, safe routes to school projects, community improvements such as historic preservation and vegetation management, and environmental mitigation related to stormwater and habitat connectivity. The City should continue to apply for grants to support funding for the projects in this Plan.

State/Local Funding Sources

Capital Improvement Program (CIP)

Currently Fayetteville has a CIP that outlines funded prioritized improvement projects. Future multi-modal transportation projects should be considered when amending the CIP each year.

Powell Bill

This program is paid to municipalities for the purposes of maintaining or constructing local streets that are the responsibility of the municipalities. Funds can be used for planning, construction, and maintenance of bikeways and sidewalks.

NCDOT State Transportation Improvement Program Projects

NCDOT funds projects both incidental to highway construction / widening and independent bicycle/pedestrian projects based on established project selection criteria. Approval of metropolitan or rural planning organizations is required.

Transportation Bonds

Revenue, general obligation, special assessment are used by various government entities – after a public referendum approving the bond proposal – to construct a variety of transportation improvements.

Fayetteville Area Metropolitan Planning Organization (FAMPO)

FAMPO can utilize federal funding that is the responsibility of the MPO (such as Surface Transportation Program – Direct Allocation (STP-DA). This process will involve a once-a-year call for all local roadway, transit, bicycle and pedestrian projects, and will result in an annual program of projects in the Transportation Improvement Program (TIP).

Governor's Highway Safety Program

The Governor's Highway Safety Program (GHSP) offers grants for safety improvement projects for state highways in North Carolina. Projects must focus on reducing crashes, injuries and fatalities as conditional requirements for qualifying for a potential grant. Learn more about the GHSP https://connect.ncdot.gov/municipalities/Law-Enforcement/Pages/Law-Enforcement-Reporting.aspx .

Annual Budget Allocations

The City should set aside a budget each year so it can be prepared to participate in funding opportunities. Typically federal or foundation funds require a certain percentage of matching funds by a local government. Preparedness would eliminate the chances of losing funding due to time needed for planning and locating funds for a match.

North Carolina Health and Wellness Trust Fund

The NC Health and Wellness Trust Fund was created by the General Assembly as one of 3 entities to invest North Carolina's portion of the Tobacco Master Settlement Agreement. HWTF receives one-fourth of the state's tobacco settlement funds, which are paid in annual installments over a 25-year period. Fit Together, a partnership of the NC Health and Wellness Trust Fund (HWTF) and Blue Cross and Blue Shield of North Carolina (BCBSNC) established the Fit Community designation and grant program to recognize and rewards North Carolina communities' efforts to support physical activity and healthy eating initiatives, as well as tobacco-free school environments. Fit Community is one component of the jointly sponsored Fit Together initiative, a statewide prevention campaign designed to raise awareness about obesity and to equip individuals, families and communities with the tools they need to address this important issue. All North Carolina municipalities and counties are eligible to apply for a Fit Community designation, which will be awarded to those that have excelled in supporting physical activity, healthy eating and tobacco use prevention in communities, schools, and workplaces.

Designations are valid for two years, and designated communities may have the opportunity to reapply for subsequent two-year extensions. The benefits of being a Fit Community include heightened statewide attention that can help bolster local community development and/or economic investment initiatives (highway signage and a plaque for the Mayor's or County Commission Chair's office will be provided), as well as the use of the Fit Community designation logo for promotional and communication purposes.

The application for Fit Community designation is available on the Fit Together Web site: http://www.fittogethernc.org/home.aspx. Fit Community grants are designed to support innovative strategies that help a community meet its goal to becoming a Fit Community. Eight to nine, two-year grants of up to $30,000 annually will be awarded to applicants that have a demonstrated need, proven capacity, and opportunity for positive change in addressing physical activity and/or healthy eating.

Hazard Elimination and Railway-Highway Crossing Program (HSR)

The NCDOT sponsors these three programs through the NC Highway Safety Improvement Program. The Spot Safety program focuses on smaller ($250,000 or less) projects and mentions pedestrian facilities by name. Small urban funds are a similar source, but not often used for trails projects.

Recreational Trails Program

NCDENR manages a trails grant program with amounts up to $75,000 with a 25% match requirement. All grants are matched 1:1 with cash, donated property value, or in-kind services.

Land and Water Conservation Funds (LWCF)

The LWCF program is managed by NCDENR for acquiring land at a single site with grants up to $250,000 for permanent outdoor recreation uses.

Parks and Recreation Trust Fund (PARTF)

The North Carolina Division of Parks and Recreation provide a matching grant through the PARTF to local governments for parks and recreational projects to serve the public.

Community Development Block Grant

CDBG funding is intended to help communities provide housing, create suitable living environments, and expand economic opportunities primarily in low- and medium-income areas. could use these grant funds for recreation facilities and planning. It should be noted that CDBG Funds are highly competitive and the requirements are extensive. For more information, please see: www.hud.gov/offices/cpd/communitydevelopment/programs.

Governors Highway Safety Program (GHSP)

The mission of the GHSP is to promote highway safety awareness and reduce the number of traffic crashes in the state of North Carolina through the planning and execution of safety programs. GHSP funding is provided through an annual program, upon approval of specific project requests. Amounts of GHSP funds vary from year to year, according to the specific amounts requested. Communities may apply for a GHSP grant to be used as seed money to start a program to enhance highway safety. Once a grant is awarded, funding is provided on a reimbursement basis. Evidence of reductions in crashes, injuries, and fatalities is required. For information on applying for GHSP funding, visit: www.ncdot.org/programs/ghsp/.

North Carolina Conservation Tax Credit

Persons donating their land through conservation easements for public trails (among other uses) can receive up to $250,000 or 25% of the fair market value of the land conserved. Credits are not transferable to new property owners.

Z. Smith Reynolds Foundation

This Winston-Salem based Foundation has been assisting the environmental projects of local governments and non-profits in North Carolina for many years. The foundation has two grant cycles per year and generally does not fund land acquisition. However, the foundation may be able to support municipalities in other areas of greenways development. More information is available at www.zsr.org.

Blue Cross Blue Shield of North Carolina Foundation Grants

The Blue Cross Blue Shield (BCBS) Foundation's mission is to improve the health and well-being of all North Carolinians by supporting living in active communities. BCBS's Healthy Living priority area emphasizes that healthy choices are made in communities and schools through access to safe, inviting places to be active such as sidewalks and safe places to bike. The program's strategy focuses on planning, promotion and consumer demand to get people out and active on sidewalks and existing trails. Local government entities are eligible to apply, and be able to submit select components of a certified public accounting audit, dependent on annual revenues. In addition to grant-making, the Foundation also supports programs such as Be Active Kids and Healthy Community Institute, which are direct service programs that address healthy communities. More information: http://www.bcbsncfoundation.org/grantees/available-grants/

Project For Public Spaces

Project for Public Spaces Heart of the Community grants provide financial and technical assistance to connect people and strengthen communities. The grant aims to support approximately six projects per year, and looks to address clear needs in the local community and have the potential for catalytic improvements. Grants have ranged between $50,000 and $100,000 to the grantee, plus an equivalent amount of in-kind support in the form of technical assistance from PPS staff, so the total values of the grants could be between $100,000 and $200,000. More information: http://www.pps.org/hotc-faq/

Alliance for Biking and Walking: Advocacy Advance Grants

Advocacy Advance's Rapid Response Grants are predominately for advocacy efforts to help local organizations win, increase, and preserve public funding in their communities. The grants are short-term campaigns and aims to support how active transportation investments, whether from federal, state or local sources, are spent. More information: http://www.advocacyadvance.org/grants#rapidresponsegrants

Robert Wood Johnson Foundation

The Robert Wood Johnson Foundation funds a variety of initiatives that help everyone live a healthier life. Awards range from $3,000 to $300,000 and run from one to three years, generally. The grant funds four focal areas: Healthy Kids, Health Leadership, Health Systems and, in the Fayetteville Pedestrian Plan's interest, Healthy Communities (Built Environment and Health). Some, not all, of areas that are funded include:

- Planning and demonstration projects
- Research and evaluations
- Policy and statistical analysis
- Learning networks and communities
- Public education and strategic communications
- Community engagement and coalition-building
- Training and fellowship programs
- Technical assistance

More information: http://www.rwjf.org/en/how-we-work/grants-and-grant-programs.html

North Carolina Community Foundation

The North Carolina Community Foundation provides funding assistance through their community grant-making program which helps to meet local needs in the form of education, human services, basic needs, health, recreation, youth development, environment, and others. More information: http://www.nccommunityfoundation.org/grants-scholarships/grants/grantmaking-guidelines

Walmart Foundation

The Walmart Foundation's mission is to create opportunities so people can live better in their communities. The foundation aims to provide grants to communities that have a Walmart store present. Both programmatic and infrastructure projects are eligible for funding through its State Giving Program. Grants range from $25,000 to $200,000. More information: http://giving.walmart.com/foundation

Duke Energy Foundation

The Duke Energy Foundation provides support to address the needs of the communities their customers live and work, with one of their focus areas being community impact.
The foundation receives grant requests for funding during the request for proposal cycle, which are published online and in the grant application. More information: https://www.duke-energy.com/community/foundation.asp

Impact Fees

Impact fees are permissable in North Carolina only by authorization from the State of North Carolina. As time passes, this option may become more feasible than it is today. Impact fees can be placed on new development (usually by square footage of building footprint) to finance parks, utilities, transportation, and school (in counties) construction. Greenway sections may be purchased with stormwater fees, for example, if the property in question is used to mitigate floodwater or filter pollutants. Impervious surfaces (such as rooftops and paved areas) increase both the amount and rate of stormwater runoff compared to natural conditions. Such surfaces cause runoff that directly or indirectly discharges into public storm drainage facilities and creates a need for stormwater management services. Thus, users with more impervious surface are charged more for stormwater service than users with less impervious surface.

Volunteer Work

It is expected that many citizens will be excited about the development of a greenway corridor. Individual volunteers from the community can be brought together with groups of volunteers form church groups, civic groups, scout troops and environmental groups to work on greenway development on special community work days. Volunteers can also be used for fund-raising, maintenance, and programming needs.

Pedestrian and Bicycle Funding Opportunities
U.S. Department of Transportation Transit, Highway, and Safety Funds

Revised August 12, 2016

This table indicates potential eligibility for pedestrian and bicycle projects under U.S. Department of Transportation surface transportation funding programs. Additional restrictions may apply. See notes and basic program requirements below, and see program guidance for detailed requirements. Project sponsors should fully integrate nonmotorized accommodation into surface transportation projects. Section 1404 of the Fixing America's Surface Transportation (FAST) Act modified 23 U.S.C. 109 to require federally-funded projects on the National Highway System to consider access for other modes of transportation, and provides greater design flexibility to do so.

Key: $ = Funds may be used for this activity (restrictions may apply). $* = See program-specific notes for restrictions. ~$ = Eligible, but not competitive unless part of a larger project.

	Pedestrian and Bicycle Funding Opportunities U.S. Department of Transportation Transit, Highway, and Safety Funds														
Activity or Project Type	TIGER	TIFIA	FTA	ATI	CMAQ	HSIP	NHPP	STBG	TA	RTP	SRTS	PLAN	NHTSA 402	NHTSA 405	FLTTP
Access enhancements to public transportation (includes benches, bus pads)	$	$	$	$	$		$	$	$						$
ADA/504 Self Evaluation / Transition Plan								$	$	$		$			$
Bicycle plans			$					$	$		$	$			$
Bicycle helmets (project or training related)								$	$SRTS		$		$*		
Bicycle helmets (safety promotion)								$	$SRTS		$				
Bicycle lanes on road	$	$	$	$	$	$	$	$	$		$				$
Bicycle parking	~$	~$	$	$	$		$	$	$	$	$				$
Bike racks on transit	$	$	$	$	$			$	$						$
Bicycle share (capital and equipment; not operations)	$	$	$	$	$		$	$	$						$
Bicycle storage or service centers at transit hubs	~$	~$	$	$	$			$	$						$
Bridges / overcrossings for pedestrians and/or bicyclists	$	$	$	$	$*	$	$	$	$	$	$				$
Bus shelters and benches	$	$	$	$	$		$	$	$						$
Coordinator positions (State or local)					$ 1 per State			$	$SRTS		$				
Crosswalks (new or retrofit)	$	$	$	$	$*	$	$	$	$	$	$				$
Curb cuts and ramps	$	$	$	$	$*	$	$	$	$	$	$				$
Counting equipment			$	$		$	$	$	$	$	$	$*			$
Data collection and monitoring for pedestrians and/or bicyclists			$	$		$	$	$	$	$	$	$*			$
Historic preservation (pedestrian and bicycle and transit facilities)	$	$	$	$				$	$						$
Landscaping, streetscaping (pedestrian and/or bicycle route; transit access); related amenities (benches, water fountains); generally as part of a larger project	~$	~$	$	$			$	$	$						$
Lighting (pedestrian and bicyclist scale associated with pedestrian/bicyclist project)	$	$	$	$		$	$	$	$	$	$				$
Maps (for pedestrians and/or bicyclists)			$	$	$			$	$		$	$*			
Paved shoulders for pedestrian and/or bicyclist use	$	$			$*	$	$	$	$		$				$

Key: $ = Funds may be used for this activity (restrictions may apply). $* = See program-specific notes for restrictions. ~$ = Eligible, but not competitive unless part of a larger project.															
	Pedestrian and Bicycle Funding Opportunities U.S. Department of Transportation Transit, Highway, and Safety Funds														
Activity or Project Type	TIGER	TIFIA	FTA	ATI	CMAQ	HSIP	NHPP	STBG	TA	RTP	SRTS	PLAN	NHTSA 402	NHTSA 405	FLTTP
Pedestrian plans			$					$	$		$	$			$
Recreational trails	~$	~$						$	$	$					$
Road Diets (pedestrian and bicycle portions)	$	$				$	$	$	$						$
Road Safety Assessment for pedestrians and bicyclists						$		$	$			$			$
Safety education and awareness activities and programs to inform pedestrians, bicyclists, and motorists on ped/bike safety								$SRTS	$SRTS		$	$*	$*	$*	
Safety education positions								$SRTS	$SRTS		$		$*		
Safety enforcement (including police patrols)								$SRTS	$SRTS		$		$*	$*	
Safety program technical assessment (for peds/bicyclists)								$SRTS	$SRTS		$	$*	$		
Separated bicycle lanes	$	$	$	$	$	$	$	$	$		$				$
Shared use paths / transportation trails	$	$	$	$	$*	$	$	$	$	$	$				$
Sidewalks (new or retrofit)	$	$	$	$	$	$	$	$	$	$	$				$
Signs / signals / signal improvements	$	$	$	$	$	$	$	$	$		$				$
Signed pedestrian or bicycle routes	$	$	$	$	$		$	$	$		$				$
Spot improvement programs	$	$	$			$	$	$	$	$	$				$
Stormwater impacts related to pedestrian and bicycle projects	$	$	$	$		$	$	$	$	$	$				$
Traffic calming	$	$	$			$	$	$	$		$				$
Trail bridges	$	$			$*	$	$	$	$	$	$				$
Trail construction and maintenance equipment								$RTP	$RTP	$					
Trail/highway intersections	$	$			$*	$	$	$	$	$	$				$
Trailside and trailhead facilities (includes restrooms and water, but not general park amenities; see guidance)	~$*	~$*						$*	$*	$*					$
Training					$	$		$	$	$	$	$*	$*		
Training for law enforcement on ped/bicyclist safety laws								$SRTS	$SRTS		$			$*	
Tunnels / undercrossings for pedestrians and/or bicyclists	$	$	$	$	$*	$	$	$	$	$	$				$

Abbreviations

ADA/504: Americans with Disabilities Act of 1990 / Section 504 of the Rehabilitation Act of 1973
TIGER: Transportation Investment Generating Economic Recovery Discretionary Grant program
TIFIA: Transportation Infrastructure Finance and Innovation Act (loans)
FTA: Federal Transit Administration Capital Funds
ATI: Associated Transit Improvement (1% set-aside of FTA)
CMAQ: Congestion Mitigation and Air Quality Improvement Program
HSIP: Highway Safety Improvement Program
NHPP: National Highway Performance Program
STBG: Surface Transportation Block Grant Program
TA: Transportation Alternatives Set-Aside (formerly Transportation Alternatives Program)
RTP: Recreational Trails Program
SRTS: Safe Routes to School Program / Activities
PLAN: Statewide Planning and Research (SPR) or Metropolitan Planning funds
NHTSA 402: State and Community Highway Safety Grant Program
NHTSA 405: National Priority Safety Programs (Nonmotorized safety)
FLTTP: Federal Lands and Tribal Transportation Programs (Federal Lands Access Program, Federal Lands Transportation Program, Tribal Transportation Program, Nationally Significant Federal Lands and Tribal Projects)

Program-specific notes

Federal-aid funding programs have specific requirements that projects must meet, and eligibility must be determined on a case-by-case basis. For example:

- TIGER: Subject to annual appropriations.
- TIFIA: Program offers assistance only in the form of secured loans, loan guarantees, or standby lines of credit, but can be combined with other grant sources, subject to total Federal assistance limitations.
- FTA/ATI: Project funded with FTA transit funds must provide access to transit. See Bikes and Transit and the FTA Final Policy Statement on the Eligibility of Pedestrian and Bicycle Improvements under Federal Transit Law.
  - Bicycle infrastructure plans and projects funded with FTA funds must be within a 3 mile radius of a transit stop or station, or if further than 3 miles, must be within the distance that people could be expected to safely and conveniently bike to use the particular stop or station.
  - Pedestrian infrastructure plans and projects funded with FTA funds must be within a ½ mile radius of a transit stop or station, or if further than ½ mile, must be within the distance that people could be expected to safely and conveniently walk to use the particular stop or station.
  - FTA funds cannot be used to purchase bicycles for bike share systems.
  - FTA encourages grantees to use FHWA funds as a primary source for public right-of-way projects.
- CMAQ projects must demonstrate emissions reduction and benefit air quality. See the CMAQ guidance at www.fhwa.dot.gov/environment/air_quality/cmaq/ for a list of projects that may be eligible for CMAQ funds. Several activities may be eligible for CMAQ funds as part of a bicycle and pedestrian-related project, but not as a highway project. CMAQ funds may be used for shared use paths, but may not be used for trails that are primarily for recreational use.
- HSIP projects must be consistent with a State's Strategic Highway Safety Plan and either (1) correct or improve a hazardous road location or feature, or (2) address a highway safety problem.
- NHPP projects must benefit National Highway System (NHS) corridors.
- STBG and TA Set-Aside: Activities marked "$SRTS" means eligible only as an SRTS project benefiting schools for kindergarten through 8th grade. Bicycle transportation nonconstruction projects related to safe bicycle use are eligible under STBG, but not under TA (23 U.S.C. 217(a)).
- RTP must benefit recreational trails, but for any recreational trail use. RTP projects are eligible under TA and STBG, but States may require a transportation purpose.
- SRTS: FY 2012 was the last year for SRTS funds, but SRTS funds are available until expended.
- Planning funds must be used for planning purposes, for example:
  - Maps: System maps and GIS;
  - Safety education and awareness: for transportation safety planning;
  - Safety program technical assessment: for transportation safety planning;
  - Training: bicycle and pedestrian system planning training.
- Federal Lands and Tribal Transportation Programs (FLTTP) projects must provide access to or within Federal or tribal lands:
  - Federal Lands Access Program (FLAP): Open to State and local entities for projects that provide access to or within Federal or tribal lands.
  - Federal Lands Transportation Program: For Federal agencies for projects that provide access within Federal lands.
  - Tribal Transportation Program: available for federally-recognized tribal governments for projects within tribal boundaries and public roads that access tribal lands.
- NHTSA 402 project activity must be included in the State's Highway Safety Plan. Contact the State Highway Safety Office for details: http://www.ghsa.org/html/about/shsos.html
- NHTSA 405 funds are subject to State eligibility, application, and award. Project activity must be included in the State's Highway Safety Plan. Contact the State Highway Safety Office for details: http://www.ghsa.org/html/about/shsos.html

Cross-cutting notes

- FHWA Bicycle and Pedestrian Guidance: http://www.fhwa.dot.gov/environment/bicycle_pedestrian/
- **Applicability of 23 U.S.C. 217(i) for Bicycle Projects:** 23 U.S.C. 217(i) requires that bicycle facilities "be principally for transportation, rather than recreation, purposes". However, sections 133(b)(6) and 133(h) list "recreational trails projects" as eligible activities under STBG. Therefore, the requirement in 23 U.S.C. 217(i) does not apply to recreational trails projects (including for bicycle use) using STBG funds. Section 217(i) continues to apply to bicycle facilities other than trail-related projects, and section 217(i) continues to apply to bicycle facilities using other Federal-aid Highway Program funds (NHPP, HSIP, CMAQ). The transportation requirement under section 217(i) is applicable only to bicycle projects; it does not apply to any other trail use or transportation mode.
- There may be occasional DOT or agency incentive grants for specific research or technical assistance purposes.
- Aspects of many DOT initiatives may be eligible as individual projects. For example, activities above may benefit Ladders of Opportunity; safe, comfortable, interconnected networks; environmental justice; equity; etc.