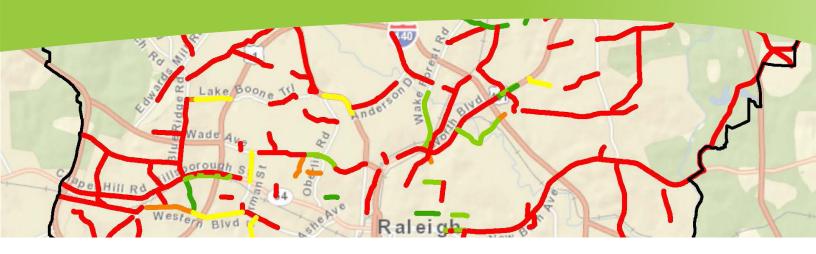
# CHAPTER SEVEN IMPLEMENTING THE PLAN



This chapter provides a timeframe for implementing the recommendations summarized in Chapter 6, Summary of Recommendations, beginning with the most important and timesensitive, such as installing new sidewalks. One of the City's highest priorities is to install missing sidewalks using funding from the fall 2011 bond issue. This chapter recommends using these bond funds to construct sidewalk projects over a four-year period beginning in July 2012.

Several factors guided the implementation timeframe:

Implementation resources. All recommendations require financial and staff resources. The availability of these has a large impact on when the recommendation can be implemented. For example, the \$7.5 million in bond revenue is available to install missing sidewalks over the next four fiscal years, allowing the City to focus on these projects for short term implementation.

*Impact on safety.* Pedestrian safety is a high priority for Raleigh. A number of recommendations can help reduce pedestrian crashes and are recommended for implementation beginning in the next year.

Sequence logic. Some recommendations provide the foundation or create momentum for subsequent recommendations. For example, police officer training on pedestrian safety laws and issues is recommended for the first year in order to prepare the officers for enforcing moving violation and crosswalk laws beginning in the second year. Likewise, the sidewalk prioritization and intersection improvement processes need to be in-place before they can be used.

Coordination of efforts/leveraged benefits. Projects and programs can often create joint momentum, if implemented during the same time and with appropriate coordination. Several Programs and Initiatives for Walkable Raleigh are examples of this, including Walking Route Maps,

Neighborhood Walking Groups, and a Citywide WalkRaleigh! marketing campaign.

Adequate staffing. Current staffing levels may not be sufficient to support additional work that would result from the recommendations. Technology can be used to create efficiencies, however, there are workload thresholds beyond which additional staffing is needed. For example, an ideal level of staffing to support the initiatives included in this plan may require a supervisor, planner, engineer, marketing specialist, and GIS specialist.

Based on these factors, recommendations are spread among three timeframes. A quick summary of the recommendations by timeframe is below.

continue to install missing sidewalks; update its ADA Transition Plan; create efficiencies in managing pedestrian network assets by converting information to GIS layers; and increase efforts at community engagement.

Over ten years. During the following five years (i.e., within 10 years) and subsequent years, Raleigh should identify funding for previously un-funded sidewalk projects, and continue to implement Initiatives for Walkable Raleigh Initiatives. It is anticipated that the Raleigh pedestrian network and overall transportation network will continue to change and develop over time. The ten-year time horizon on which the recommendations in this chapter are focused sets the stage for a longer term vision for the future of walking in Raleigh, described in



Within three Years. Projects and programs within the first year focus on installing missing sidewalks funded with bond revenue funds; adopting criteria for using recommended best practices and templates; updating City codes and engineering standards to improve pedestrian orientation and accessibility for projects and new development; and implementing other pedestrian programs and initiatives aimed at education and enforcement, pedestrian network data collection, and Safe Routes to School.

Within five years. Within five years, Raleigh will install sidewalks as part of major CIP projects. In addition, this Plan recommends that Raleigh

Chapter 8, The Pedestrian Plan and Beyond: A Longer Term Vision for a Walkable Raleigh.

## **Installing New Sidewalks**

This section provides a schedule for installing new sidewalks during fiscal years 2013, 2014, 2015, and 2016, shown on Map 19 in Chapter 4, Pedestrian Facility Recommendations.

Chapter 4, Pedestrian Facility Recommendations shows the ranking for these sidewalk projects, using the new scoring system described in Chapter 3. Ranking the sidewalk projects is the first step in determining implementation phasing. Once scored, each project was further described as one of three project type: Sidewalk only; sidewalk, curb and gutter; and sidewalk projects as part of major street improvement. Planning level cost estimates were calculated for "sidewalk only" projects. These sidewalks are shown in Map 1.

The City anticipates funding "sidewalk only" projects with \$4.75 million in bond revenue funds generated in FY 2013 through FY 2016.¹ Sidewalk only projects scored and ranked in Chapter 4 were grouped into four tiers here, based on the following anticipated yearly bond revenue proceeds:

FY 2013	FY 2014
\$ 750,000	\$1,500,000

FY 2015	FY 2016
\$1,000,000	\$1,500,000

Cumulatively, the \$4.75 million can be used for 26.5 miles of new sidewalks. A projected list of sidewalk projects by fiscal year is included below. The following series of maps show the impact on the pedestrian network of the projects to be completed in each of the next four fiscal years. See Map 2, Map 3, Map 4, and Map 5. Map 6 shows the cumulative impact on the pedestrian network.

<sup>&</sup>lt;sup>1</sup>On October 11, 2011, voters approved a referendum to provide \$40 million in transportation improvement bonds. Pedestrian infrastructure improvements are a key component of this initiative. The Bond included \$4.75 million for new City-initiated sidewalk projects.

# Anticipated Funded Sidewalk Projects by Year:

Fiscal Y	Fiscal Year 2013						
Map ID	Rank	Project Name	From	То	Length (rounded)	Total Cost	
80	1	GREEN RD**	New Hope Church Rd	Greenock Dr	1,200	\$39,600	
78	2	NEW HOPE CHURCH RD**	Wake Forest Rd	Brentwood Rd	4,500	\$148,500	
110	5	CAPITAL BLVD*	I-440	Brentwood Rd	2,400	\$79,200	
85	6	CLARK AVE**	Woodburn Rd	Bellwood Dr	1,100	\$36,300	
72	6	ML KING JR BLVD*	Peyton St	Glenbrook Dr	2,100	\$69,300	
185	9	S PERSON ST*	Hoke Street	Bragg Street	900	\$29,700	
36	11	POOLE RD**	Beverly Dr	Sunnybrook Rd	3,700	\$122,100	
71	12	ROCK QUARRY RD	Bart St	Raleigh Blvd	2,700	\$89,100	
103	13	BLUE RIDGE RD*	Western Blvd	Hillsborough Street	3,500	\$115,500	
170	14	OAKWOOD AVE	Linden Avenue	Tarboro Street	2,200	\$72,600	

Grand Total \$801,900.00

#### Fiscal Year 2014 Map ID Rank Project Name From То Length **Total Cost** (rounded) Poole Rd Raleigh Blvd NEW BERN AVE \$62,700 15 1,900 95 Norris Street **State Street GLASCOCK ST** 1,900 \$62,700 136 15 81 15 GREEN RD Kilcullen Dr Hargrove Rd 700 \$23,100 RALEIGH BLVD\* Crabtree Blvd 21 15 I-440 \$102,300 3,100 ROCK QUARRY RD Raleigh Blvd Cross Link 16 94 4,100 \$135,300 Road WADE AVE\*\* 17 Hobson Ct Daniels St 63 3,500 \$115,500 82 18 E MILLBROOK RD\*\* Atlantic Ave Wallingford 8,300 \$273,900 Dr **GREEN RD** Hallmark Pl **Spring Forest** 2,800 19 \$92,400 83 Rd MAYWOOD AVE Lake Wheeler Saunders St 67 19 3,200 \$105,600 Rd

<sup>\*</sup>School within 1/4 mile

<sup>\*\*</sup>School within ½ mile

169	19	OAKWOOD AVE	Hill Street	Colleton Road	1,500	\$49,500
68	21	BLOODWORTH ST	ML King Jr Blvd	Worth St	600	\$19,800
74	21	CRABTREE BLVD	Capital Blvd	Raleigh Blvd	2,700	\$89,100
18	22	WAKE FOREST RD	Capital Blvd	Creekside Dr	5,900	\$194,700
20	32	CAPITAL BLVD*	I-440	Brentwood Road	2,300	\$75,900
65	40	BERYL RD**	Hillsborough St	Blue Ridge Rd	4,600	\$151,800

Grand Total: \$1,554,300.00

<sup>\*\*</sup>School within ½ mile

Fiscal Y	ear 20	15				
Map ID	Rank	Project Name	From	То	Length (rounded)	Total Cost
84	41	SPRING FOREST RD*	McHines Pl	Capital Blvd	4,800	\$158,400
54	42	W MILLBROOK RD**	Light Brigade	Lead Mine Rd	4,400	\$145,200
77	43	TRAWICK RD*	Capital Blvd	Broadlands Dr	2,300	\$75,900
202	43	VARSITY DR*	Avent Ferry Road	Western Blvd	3,600	\$118,800
57	44	LAKE BOONE TRL**	I-440	Rexwoods Dr	3,400	\$112,200
129	45	FAIRCLOTH ST*	Hillsborough Street	Wade Avenue	2,900	\$95,700
123	47	E MILLBROOK RD	Old Wake Forest Road	Atlantic Av- enue	1,400	\$46,200
58	47	GLENWOOD AVE*	Oberlin Rd	Wake Dr	3,600	\$118,800
91	47	WESTERN BLVD**	Blue Ridge Rd	Gorman St	5,000	\$165,000

**Grand Total \$1,036,200.00** 

# Fiscal Year 2016

Map ID	Rank	Project Name	From	То	Length (rounded)	Total Cost
42	51	WESTERN BLVD	Blue Ridge Rd	Hillsborough St	4,700	\$155,100
62*	57	VAN DYKE AVE	Chamberlain St	Oberlin Rd	1,300	\$42,900
199	60	TRIANGLE TOWN BLVD	Fox Road	I-540	3,100	\$102,300

<sup>\*</sup>Schools within 1/4 mile

<sup>\*</sup>Schools within 1/4 mile

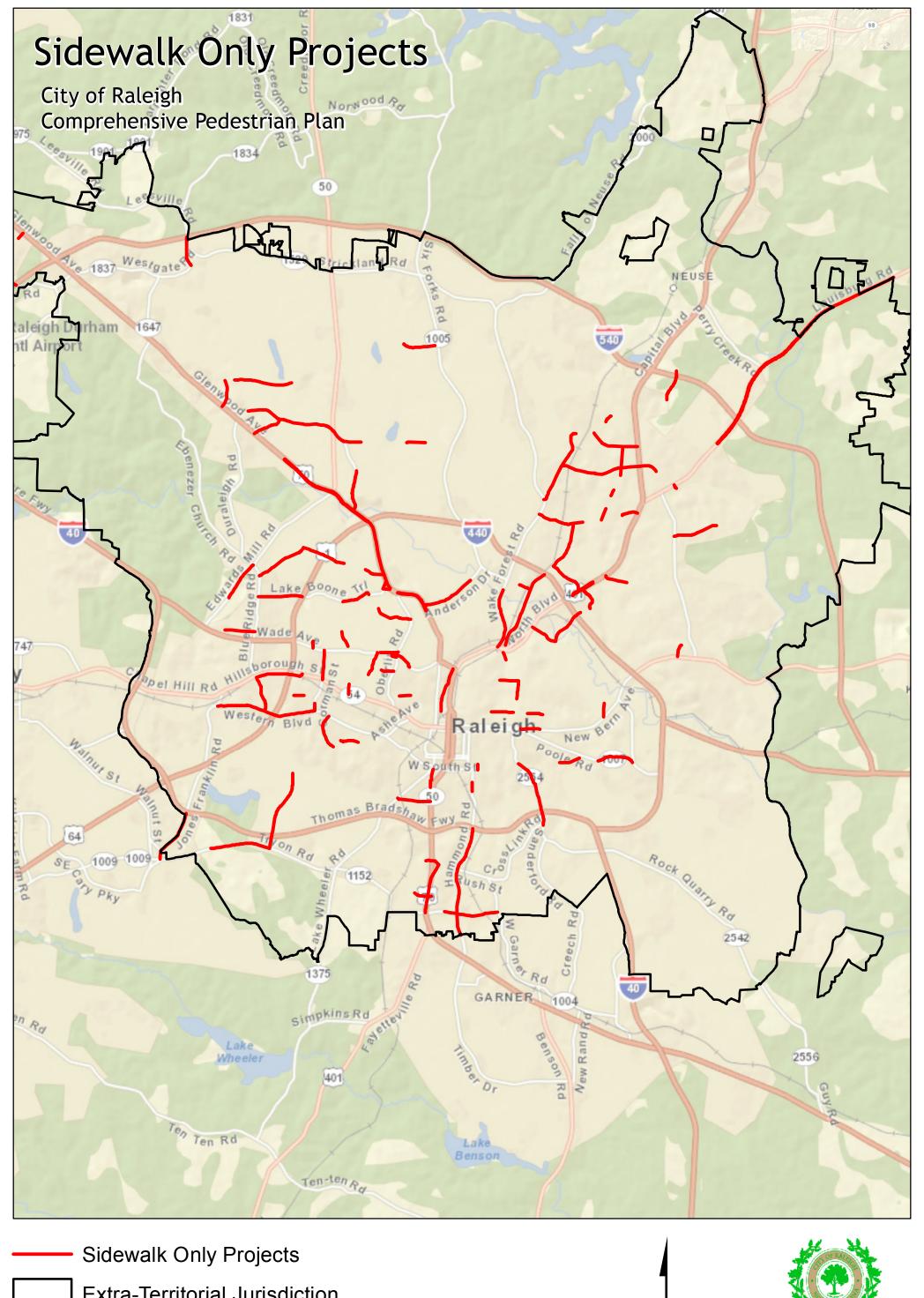
<sup>\*\*</sup>School within ½ mile

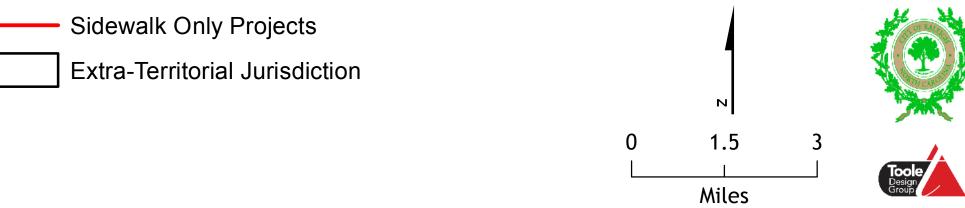
51**	61	LYNN RD	Pleasant Pines Dr	Madison Ridge Way	5,700	\$188,100
140**	67	GORMAN ST	Avent Ferry Road	Tryon Road	7,800	\$257,400
61**	68	GARDNER ST	Van Dyke Ave	Wade Ave	2,400	\$79,200
75 <sup>*</sup>	72	RALEIGH BLVD	Yonkers Rd	Appliance Ct	900	\$29,700
73	73	BROOKSIDE DR	Wake Forest Rd	Vale St	800	\$26,400
150*	73	LAKE BOONE TRL	Blue Ridge Road	Rexwoods Drive	900	\$29,700
9*	73	LEAD MINE RD	Town & Coun- try	Charles Dr	2,200	\$72,600
203**	73	W MILLBROOK RD	North Hills Drive	Dixon Drive	1,900	\$62,700
53	74	W MILLBROOK RD	Light Brigade Ln	Still Pines Dr	7,600	\$250,800

Grand Total \$1,296,900.00

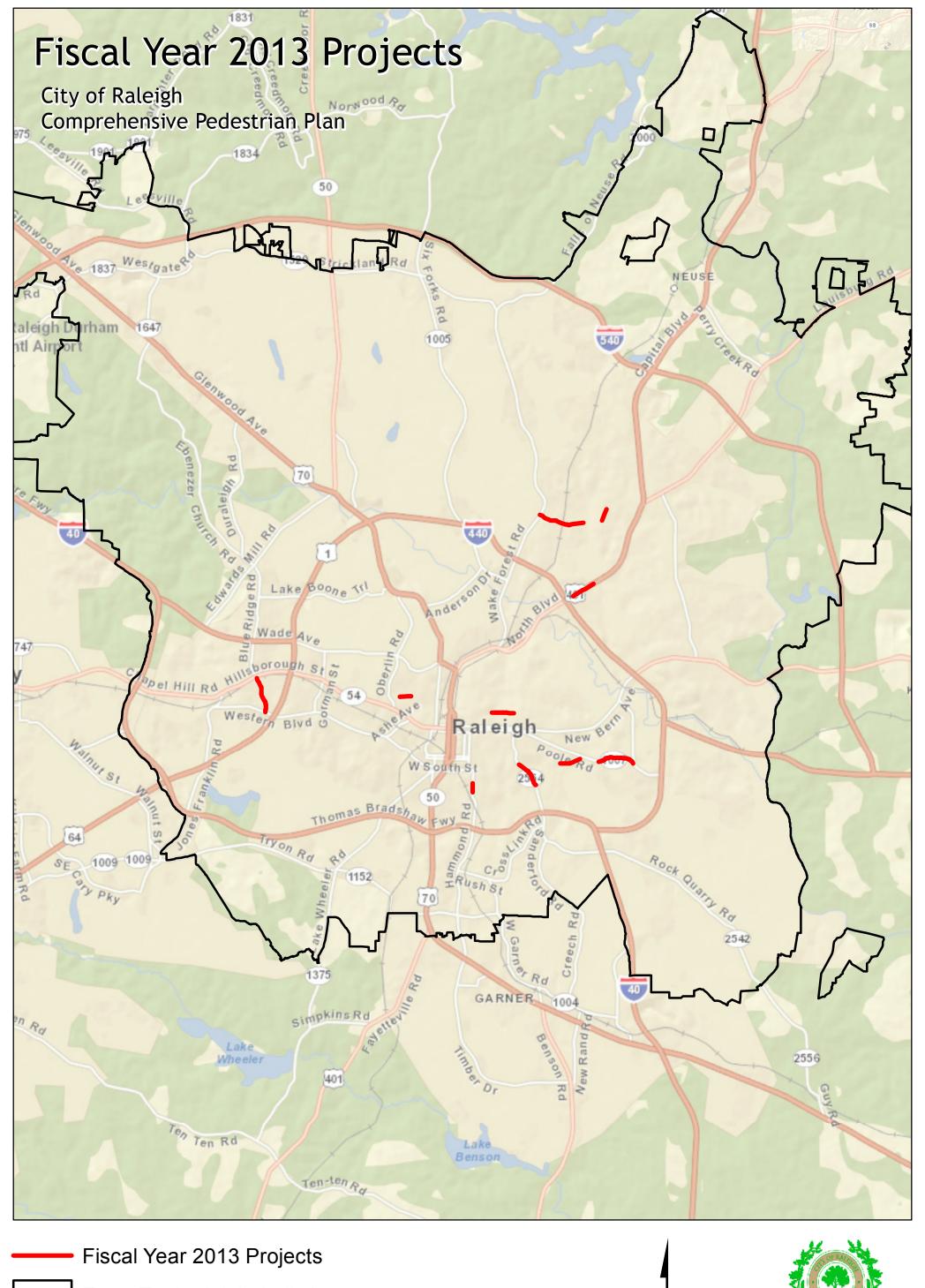
<sup>\*</sup>Schools within 1/4 miles

<sup>\*\*</sup>School within 1/2 mile

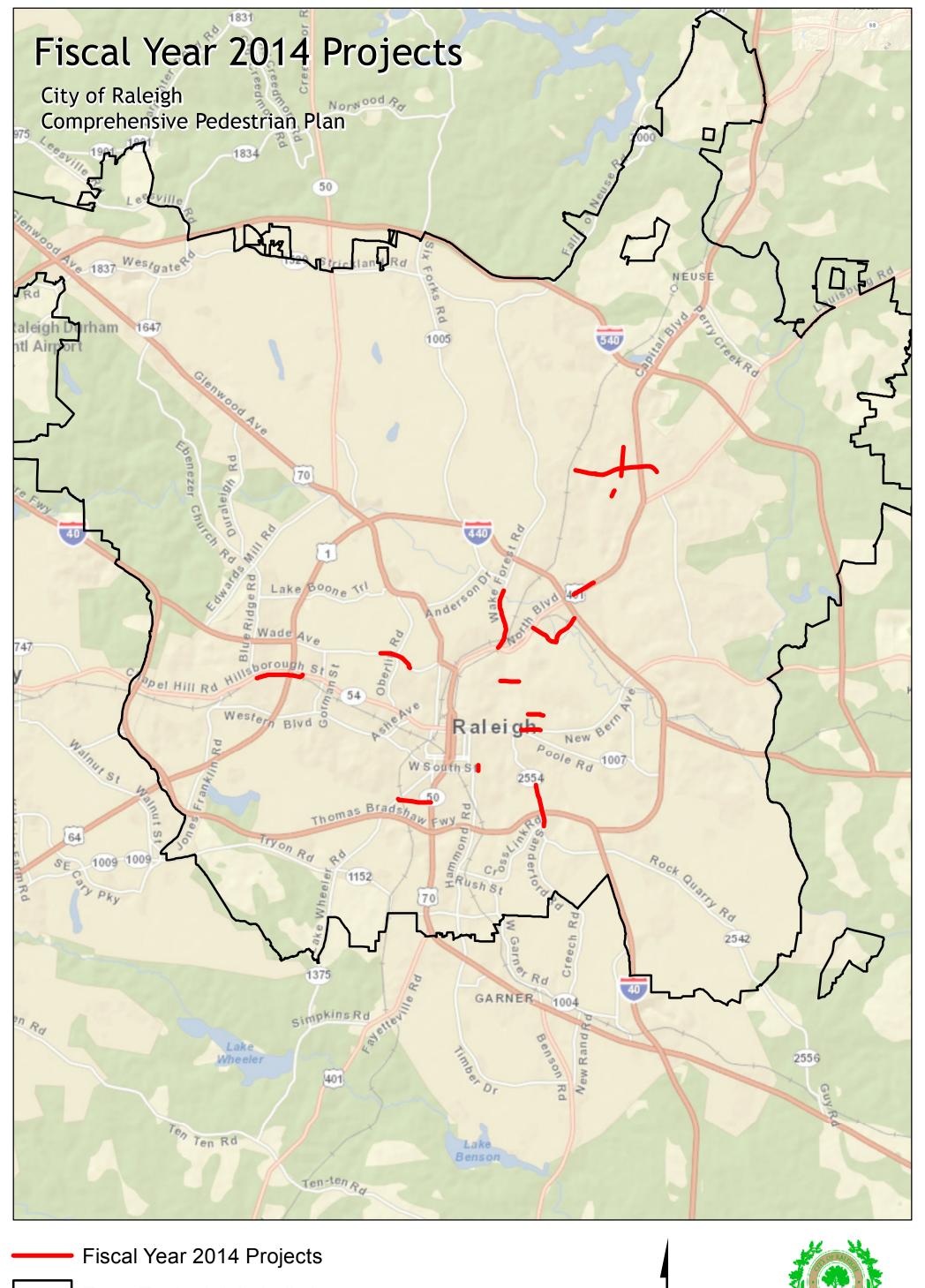




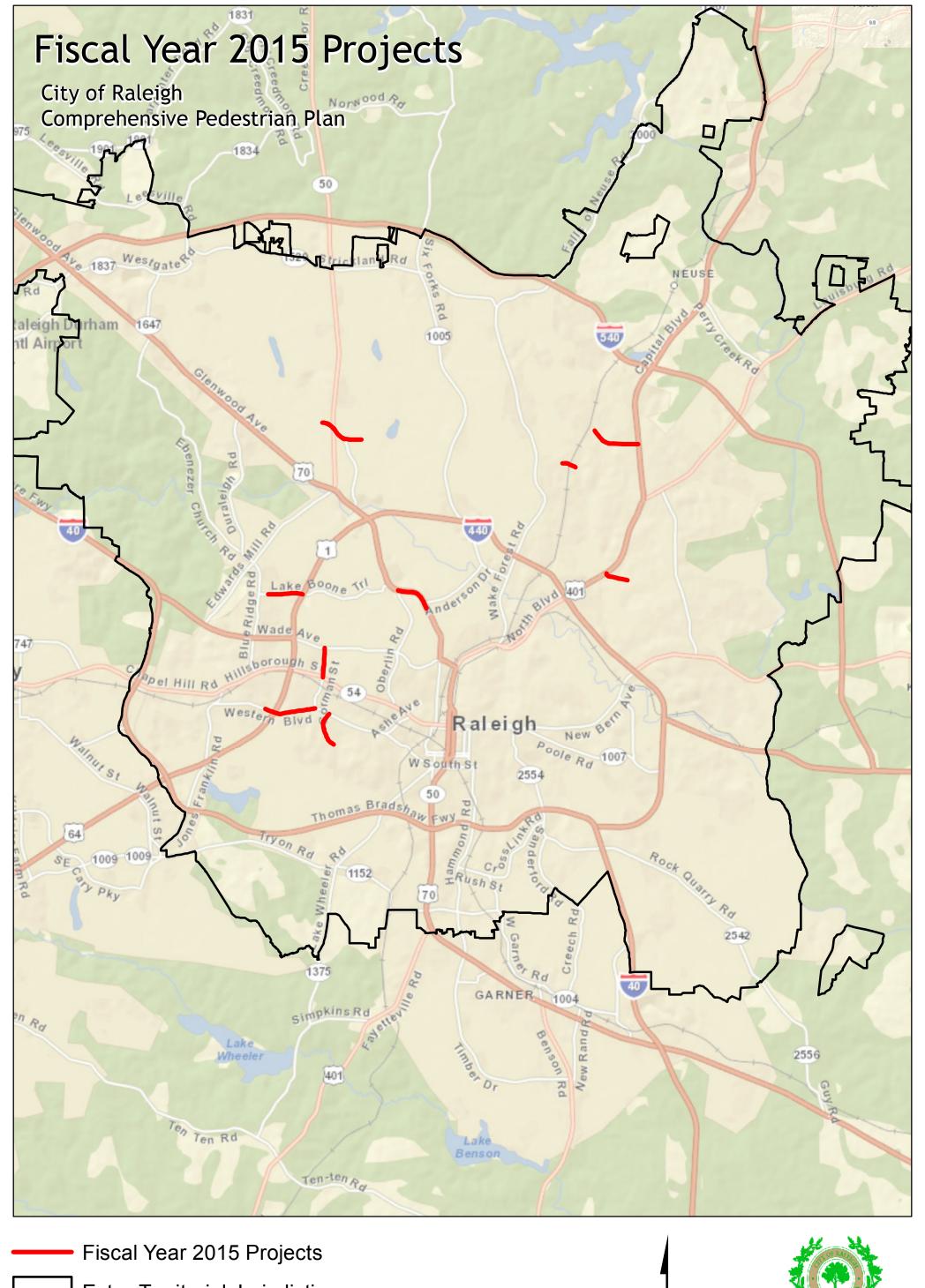




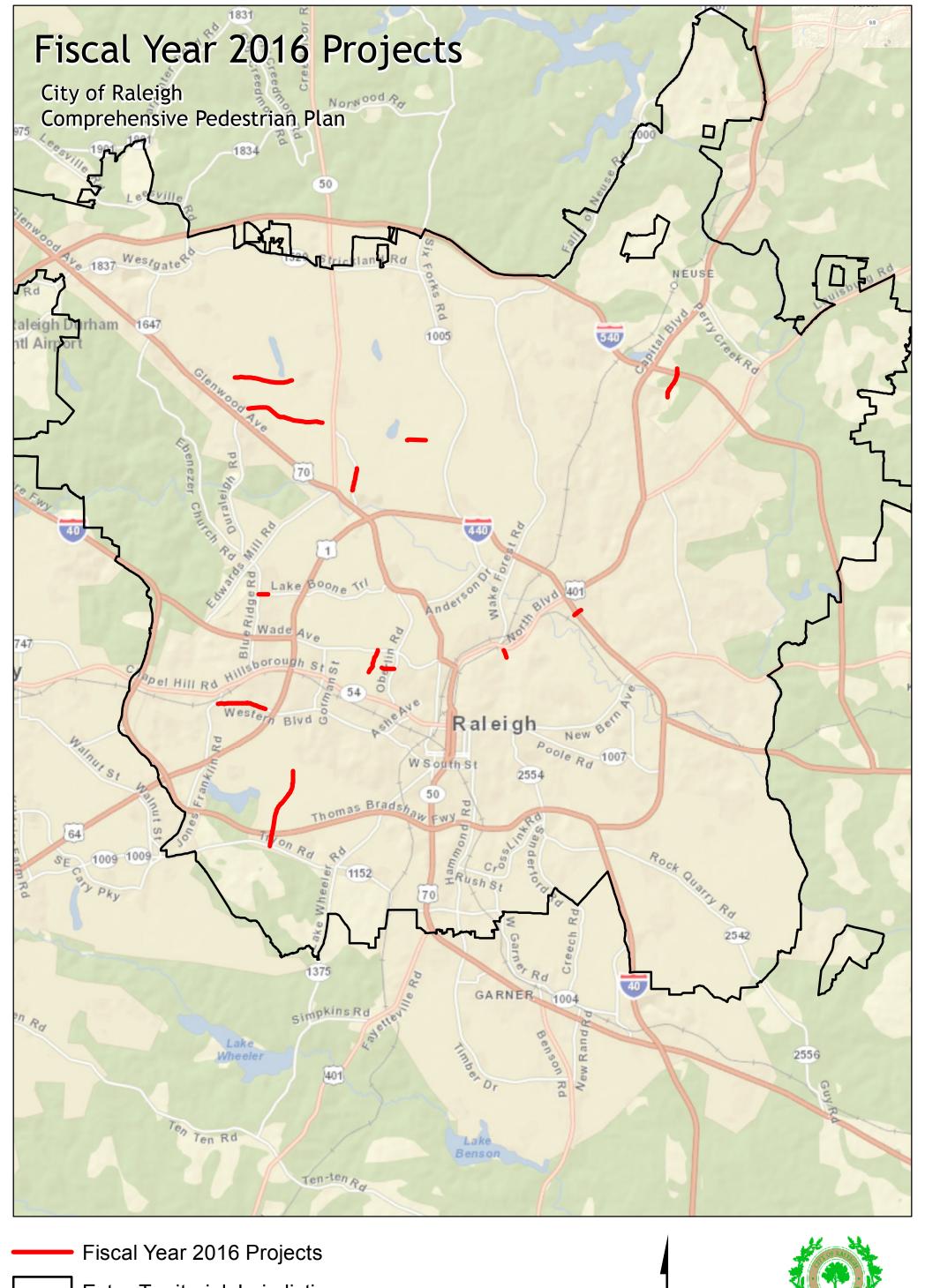




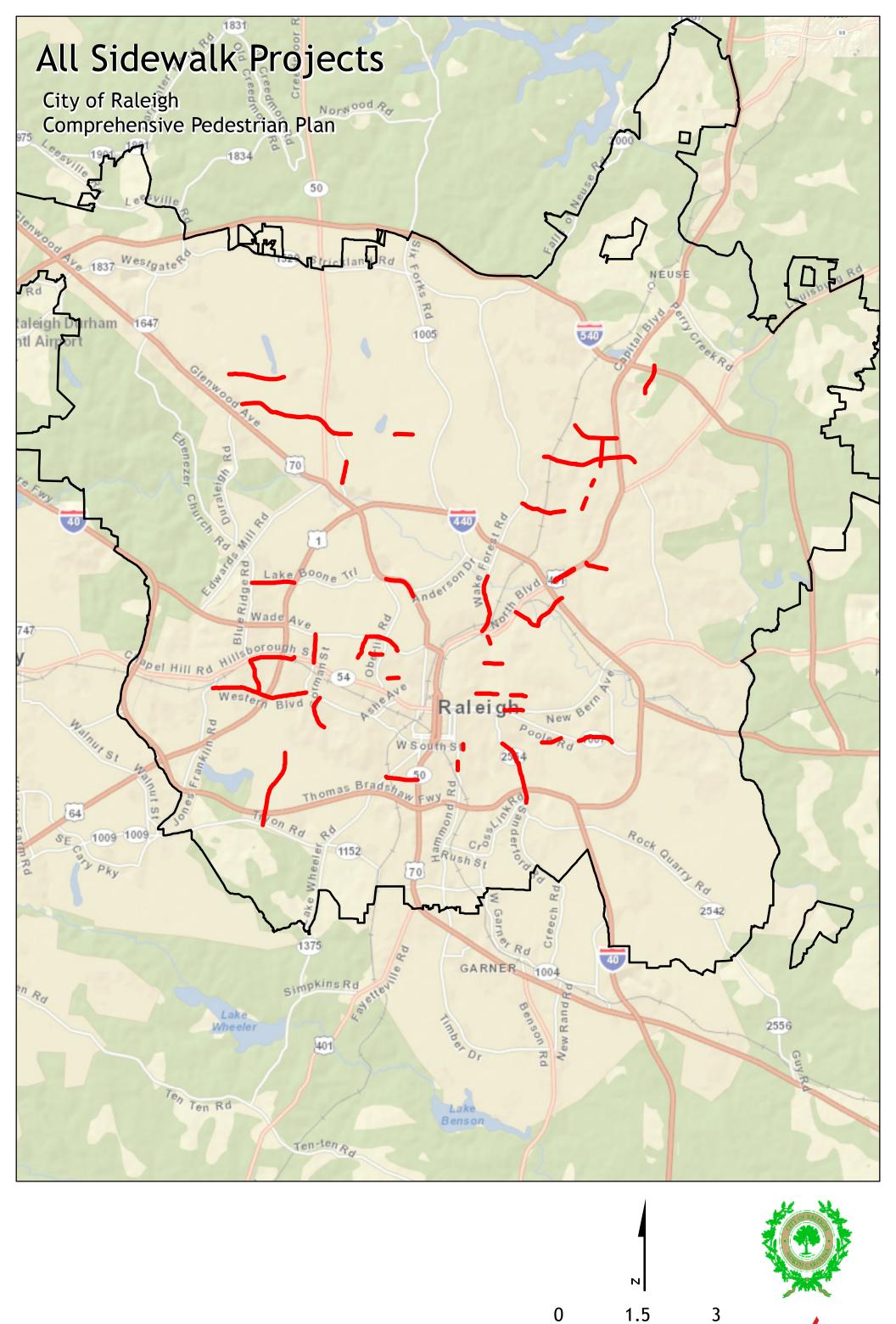












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# **Recommendations by Timeframe**

Plan recommendations are included in the three tables below by the appropriate timeframe. They represent implementation guidance for recommendations summarized in Chapter 6; and included in Chapter 3, Best Practices; Chapter 4, Pedestrian Infrastructure; and Chapter 5, Programs and Initiatives for Walkable Raleigh. A lead agency for each recommendation is identified, although it is recognized that implementation will require collaboration between multiple public, private and even non-profit entities. The table also illustrates how specific recommendations support the four existing conditions findings and are one of the Initiatives for Walkable Raleigh described in Chapter 5. General recommendations are also noted as such.

Action Items (1 - 3 years)	Lead Agency	Support	Plan Reference
Use the new sidewalk prioritization system to determine sidewalk implementation phasing.	Transportation Planning	City Planning, Public Works	Chapter 3, Best Practices, Sidewalk Program
Make the best use of the funding for sidewalk projects.	Transportation Planning	Transportation Planning	Chapter 2, Existing Conditions
Maintain the missing sidewalk GIS layer to establish other attributes.	Transportation Planning	Information Technology	Chapter 2, Existing Conditions
Use new intersection design templates for intersection and mid-block crossing changes.	Public works	Transportation Planning	Chapter 3, Best Practices, Intersection Templates
Establish and use criteria to determine intersection improvements.	Transportation Planning	Public Works	Chapter 3, Best Practices, Intersection Improvements
Develop criteria for using in-street bollards that alert motorists of pedestrian crossing.	Transportation Planning	Public Works	Chapter 3, Best Practices, Intersection Templates
Develop criteria for installing curb extensions and other pedestrian-related features.	Transportation Planning	Public Works	Chapter 3, Best Practices, Intersection Templates
Create a separate Pedestrian Advisory Commission.	Transportation Planning	City Planning	Chapter 2, Existing Conditions
Expand and enrich the Pedestrian Program landing page.	Transportation Planning	City Planning	General Recommendation
Conduct regular pedestrian Counts in areas with high pedestrian demand	Transportation Planning	City Planning/ Public Works	General Recommendation
Ensure new development projects include sidewalks that support existing or anticipated pedestrian demand.	Public Works	Transportation Planning/City Planning	Chapter 2, Existing Conditions
Conduct Police Officer and Bus Operator Pedestrian Safety Training	Police and CAT	Transportation Planning	Chapter 5, Initiatives for Walkable Raleigh
Establish a Raleigh-specific Safe Routes to School (SRTS) program.	Transportation Planning	City Planning/ Public Works	Chapter 5, Initiatives for Walkable Raleigh

Action Items (1 - 3 years)	Lead Agency	Support	Plan Reference
Use bond revenue designated for sidewalk repair to improve pedestrian mobility and safety	Public Works	Transportation Planning	Chapter 2, Existing Conditions, Sidewalk Program
Establish a dedicated funding source for the City's Streetscape Program.	Transportation Planning	Public Works	Chapter 2, Existing Conditions

Action Items (3 - 5 years)	Lead Agency	Support	Plan Reference
Update the ADA Transition Plan to reflect current conditions and needs.	Transportation Planning	Transportation Planning	Chapter 2, Existing Conditions
Collaborate with CAT to maintain stops and access to stops.	Transportation Planning	Transportation Planning, CAT, TTA	Chapter 5, Initiatives for Walkable Raleigh
Develop a GIS-based sidewalk inventory and asset management system that includes sidewalk condition, ADA compliance, and bus stop information.	Public works	Transportation Planning, GIS	Chapter 5, Initiatives for Walkable Raleigh
Enforce moving and parking violations at crosswalks with progressive ticketing.	Police	Transportation Planning	Chapter 5, Initiatives for Walkable Raleigh
Start speed feedback signs Program.	Police	Transportation Planning	Chapter 5, Initiatives for Walkable Raleigh
Work with media outlets to provide pedestrian information on media traffic reports.	Public Affairs	Transportation Planning, Public Works	Chapter 5, Initiatives for Walkable Raleigh
Establish a Close Call Reporting system.	Police	Transportation Planning	Chapter 5, Initiatives for Walkable Raleigh
Develop Pedestrian Safety Education programs.	Police	Transportation Planning, Public Works, CAT, NCDOT	Chapter 5, Initiatives for Walkable Raleigh
Develop Driver Education & Awareness programs.	Police	Transportation Planning, Public Works, CAT	Chapter 5, Initiatives for Walkable Raleigh
Provide Walking Routes Maps.	Transportation Planning	Public Works, Parks and Recreation	Chapter 5, Initiatives for Walkable Raleigh
Encourage and support Walking Groups.	Parks and Recreation	Transportation Planning	Chapter 5, Initiatives for Walkable Raleigh
Establish a city-wide marketing campaign: Walk Today in Raleigh!	Parks and Recreation	Transportation Planning	Chapter 5, Initiatives for Walkable Raleigh

Action Items (5 - 10 years)	Lead Agency	Support	Plan Reference
Apply example location concept designs to other areas of the City.	Transportation Planning	Public Works	Chapter 4, Pedestrian Recommendations
Work to update the current school siting policy update.	City Planning	Transporta- tion Planning, Public Works	Chapter 5, Initiatives for Walkable Raleigh

# **Funding Considerations**

There are numerous opportunities for funding these recommendations, such as the City's general fund, bond revenue, developer contributions, assessments and fees, federal and state funds, and donated resources and time. The local economy affects the extent to which funds are available at any given time, to fund capital projects or increase staffing, however. In addition, there remains uncertainty about the future of pedestrian funding in MAP-21, the new federal transportation bill.

North Carolina Department of Transportation's Division of Bicycle and Pedestrian Transportation website includes a landing page of funding resources: http://www.ncdot.gov/bikeped/funding. A summary table of many of these resources is included in Appendix H. The table includes a column identifying funding programs that may be used to support the Programs and Initiatives for Walkable Raleigh.

### **Updating the Pedestrian Plan**

This Plan's recommendations represent the best thinking during a specific timeframe. Raleigh's active pursuit of transportation improvements and development opportunities will make an update of this plan a necessity, perhaps within the next few years. Specific updates to the plan already identified include:

- » A special considerations factor added to the sidewalk project prioritization process. The types of considerations to be included and their effect on the overall score can be established as the plan is implemented.
- » Determine if the pedestrian demands core for K-12 schools needs to be adjusted to reflect the Wake County Public Schools nobusing limit of 1 1/2 mile.

Other items to be considered when updating the plan should be captured in a single place, perhaps through an annotated version of the plan.