Raleigh Bicycle & Pedestrian Advisory Commission

P.O. Box 590•Raleigh, NC 27602
(919) 996-2155

Monday, August 18, 2014, 6:00pm
Council Chambers, Raleigh Municipal Building
222 W. Hargett Street, Raleigh NC 27602

AGENDA

I. Introductions

II. Approval of Minutes from July 28, 2014

III. Public Comments

This is an opportunity for public comment on items or issues that are otherwise not on the agenda. Please limit comments to three minutes per speaker.

IV. Annual Elections

Nominations and elections of Chair and Vice-Chair positions, to serve until August 2015

V. Staff Report

- City Project Updates

VI. Committee & Member Reports

- **Chair's Report**
- **Community Outreach Committee**
  - Anti-Speeding Campaign/Watch for Me, NC
  - BikeRaleigh Mobile App Development
  - Let's Go NC! Review
- **Bicycle Planning Committee**
  - Bicycle Design Standards
  - On-road and Greenway Wayfinding
  - Bicycle Plan Implementation Public Outreach
- **Pedestrian Planning Committee**
  - WalkRaleigh Implementation
  - City Code Evaluation for Pedestrians
- **Joint Bicycle & Pedestrian Planning Committee Items**
  - Parks & Recreation System Plan Update
  - Art to the Heart Corridor

VII. New Business

- **Raleigh Bike Share Feasibility Report—**Review the findings of the bike share feasibility report and discuss the development of an implementation plan

VIII. Announcements

- **Upcoming Events –** Please announce any events here
- **Confirmation of Next BPAC meeting –** Monday, September 15, 2014

IX. Adjournment

P.O. Box 590•Raleigh, NC 27602
(919) 996-2155

DRAFT Meeting Minutes – July 21, 2014

The City of Raleigh Bicycle & Pedestrian Advisory Commission met on Monday, July 21, 2014 at 6:00 p.m. at the Raleigh Municipal Building, 222 West Hargett St., Raleigh, NC, with the following members present:

Commission Members:
Alan Wiggs, Chair
Dr. Linda Butler
Mike Dayton
Paul Nevill
Aaron Peeler
Amy Simes

Staff:
Eric Lamb, Transportation Planning Manager
Jennifer Baldwin, Bike/Ped Coordinator
Amanda Driscoll, Administrative Support
Jason Myers, Transportation Planner
Ken Dunn, Senior Project Engineer
Chris Johnson, Design/Construction Manager
Sylvester Percival, Project Engineer
Lt. Timothy Tomzcak, Raleigh Police Department

Absent:
Corey Bates (excused)
Sig Hutchinson (excused)
Charlotte Mitchell, Vice-Chair (excused)
Harry Johnson (unexcused)

I. Introductions
Mr. Wiggs called the meeting to order at 6:05 p.m. and asked everyone to introduce themselves.

II. Approval of Minutes
Mr. Nevill requested that the minutes from the May 19, 2014 meeting be amended to reflect that Mr. Nevill noted that only one of the eleven fatalities was during the daylight hours and there should be focus on night time safety education. Mr. Peeler moved for approval of the minutes as amended, which was properly seconded by Mr. Nevill and approved by unanimous voice vote.

III. Public Comments
Mr. Adam Howler, 4504 Pitt Street, commented that progress on bicycle and pedestrian improvements is slower than the community would like to see. He added that there are great projects like Green Road, New Hope Road, and Capital Boulevard. Mr. Howler emphasized safety at intersections and the failure of cars to stop at stop signs and clearly placed crosswalks and greenway connections.

Lieutenant Tomczak with the Raleigh Police Department stated that stop sign issues are general enforcement. He added that units are given special assignments to reduce speeding and that the special operations division along with patrol officers would handle the issues of motorists not yielding. Lieutenant Tomczak stated that these types of issues should be reported to local police districts.

Mr. Dayton discussed the need for better improvements at the greenway crossing of Blue Ridge Road, near Crabtree Valley Mall. Ms. Baldwin stated that both the BPAC and Greenway and Urban Tree committee would be discussing greenway crossing improvements during their next meeting to review the Draft Greenway Design Guidelines.

Ms. Laurie Mitchell, 2550 Glenwood Avenue, stated that there needs to be enforcement to reduce the number of vehicles parking in bike lanes, specifically St. Mary's Street and Lassiter Mill Road.

Mr. Wiggs requested more information on the design standards for mid-block crossings and pedestrian refuge islands, referencing the new improvements along Strickland Rd. Mr. Wiggs also inquired about landscaping maintenance on Wake Forest Road, under the railroad bridge. Mr. Lamb stated staff would investigate both inquiries and report back to Mr. Wiggs.

IV. Special Presentation

Mr. Jason Myers, Transportation Planner, gave a photo presentation about his recent trip to Montreal, Quebec. Mr. Myers stated that Montreal had the first bike share system in North America, adding that most stations are located in an on-street parking space. Mr. Myers reported that the downtown streetscape included a two-way cycle track that was on the left side of a one-way road and included no special signals and that there were several parklets for outdoor dining that would be removed in the winter months. He stated that cyclists are viewed more similarly to pedestrians that motorized vehicles.

V. Staff Report

City Project Updates: Mr. Lamb provided an update on city projects, stating that the project spreadsheet has been completely updated, alphabetized and includes the addition of all sidewalk projects currently programmed. Ms. Baldwin reported that staff is preparing to release an RFP for the bike plan update.

Ms. Baldwin also reported that phase one of the bikeshare study is complete and bikeshare has been determined to be feasible in Raleigh. Phase two will kick off in the next few weeks, which will start the development of an implementation plan.

Abandoned Bicycle Policy: Lieutenant Tomczak provided a report on the City's abandoned bicycle policy. Lt. Tomczak requested that the non-emergency number be called to report an abandoned bicycle. He reported that the property must be made available for 60 days, if no report is made, the officer can call the person back who made the report and can claim ownership. He stated that if a bicycle is found by an officer and unclaimed within 60 days the bicycle is donated to a charity organization.

Mr. Wiggs mentioned the case in Orange County where a bicycle and car collided and asked how best to report aggressive driving towards bicyclists. Lt. Tomczak recommended calling police with a license plate number if possible to report a problem He provided his desk number – 919-996-1231 as a resource for reporting an issue.

V. Committee & Member Reports

Chair's Report: No report.

Community Outreach Committee Report: Mr. Dayton reported that the committee is having an on-going discussion about the BikeRaleigh Mobile App Development. He stated that the committee is waiting to see what is developed by the City Camp participants before making any decisions on a possible BikeRaleigh application.

Bicycle Planning Committee Report: Mr. Wiggs reported that the joint bicycle and pedestrian committee met with the greenway and urban tree committee of the Parks Recreation and Greenway Advisory Board to review the Draft Greenway Design Guidelines. He added that there will be another joint meeting on July 31 at 6 p.m. Mr. Nevill added that the committee discussed the possibility of including a new trail category for special loop and cultural trails.

Pedestrian Planning Committee Report: Mr. Peeler reported that the committee met to discuss WalkRaleigh pilot implementation and determine pilot locations for the campaigns. Ms. Baldwin stated that the committee will be doing research with the Walk[Your City] team to finalize the list.

Mr. George Sharpely shared his concern about bicycle infrastructure and the amount of taxpayer dollars being used for bike projects.

VII. New Business

I-40 Overpass Pedestrian Accessibility Project: Mr. Lamb provided background on the project for the pedestrian accessibility retrofits of bridges over I-40 on Buck Jones Road, Avent Ferry Road, and Rock Quarry Road. Mr. Dunn provided an overview of the design and projected costs for each project. Mr. Dunn reported that there will be a public hearing at City Council during the evening session on August 5.

VIII. Announcements

Mr. Wiggs announced that the annual commission elections for Chair and Vice-Chair will occur during the August meeting.

Ms. Baldwin announced that the Downtown Plan will be holding a public meeting on September 11 at Marbles Kids Museum and September 12 at the City Museum.

Ms. Baldwin announced that staff has submitted an application for the EPA Greening America's Capital Program for a Downtown Districts trail concept.

Mr. Nevill mentioned there is a new Special Events calendar that has been added to the City's website.

Mr. Tim Pflaum thanked Todd Milam, Jennifer Baldwin, and Amanda Driscoll for their assistance providing him with greenway and BikeRaleigh maps for his map stations along several greenway trails.

IX. Adjournment

With no further business, the meeting was adjourned at 7:22 p.m.

Respectfully Submitted,

Amanda Driscoll

Name	***Description***	***Status***
Major City Capital Improvement Projects		
Buck Jones Road Widening	Widen street to four lanes with curb & gutter, sidewalks, striped bike lanes, and median refuges from Farmgate Road to Xebec Way (1.4 miles)	95% design complete; construction scheduled in 2015
Capital Boulevard Improvements	Improve from Spring Forest Rd to Old Wake Forest Rd for multimodal accessibility. Funded for Preliminary Engineering and Design only.	Feasibility assessment complete; Design agreement in progress with consultant
Hillsborough Street Phase II	Improve from Gardner Street to the Rosemary Street/Shepherd Street intersection, including converting it to two lanes with a raised median. Funded for Design Only.	65% design complete; next public meeting to be scheduled September 2014
Leesville Road Widening	Widen street to four lanes with curb & gutter, sidewalks, striped bike lanes, and median refuges from I-540 to New Leesville Boulevard	Under construction; to be complete by October 2015
Lumley/Westgate Corridor Improvements	Construct sidepath on Lumley Rd from Brier Creek Parkway to Glenwood Ave, and widen shoulders for bike lanes along Westgate Rd from Glenwood Ave to Leesville Rd	In design; schedule pending contract negotiations
Mitchell Mill Road Widening	Widen street to four lanes with curb & gutter, sidewalks, striped bike lanes, and median refuges from US 401 to Watkins Road (1.4 miles)	65% design complete; Schedule for public meeting on 9/11/14. Construction scheduled in 2016
Peace Street West Streetscape	Roadway improvements, sidewalk repairs/replacement; street trees, utility cleanup	75% design complete; schedule pending
Sandy Forks Road Widening	Widen to 3-Lane with curb, gutter and sidewalks from Six Forks Rd to Falls of Neuse Road	70% design complete; City Council approved design on 7/15/14
South/Lenoir Two-Way Conversion	Convert remaining one-way portions of Lenoir Street and South Street to two way operation from S. Saunders Street to East Street	65% design complete; construction scheduled 2015
Transportation Plans		
Bicycle Plan Update	Update the 2009 Comprehensive Bicycle Plan	Request for Proposals under development
Bike Share Feasibility Study & Implementation Plan	Analysis of the bike share concept and will determine the likely success of a bike-sharing program in Raleigh.	Final Feasibility Study Report available online; Implementation Plan under development
Cameron Village Vicinity Plan	Land use and transportation in the study between Wade Ave and Hillsborough St, and between Chamberlain St and St. Mary's St	Executing contract with consultants; project to kick off late Fall 2014
Oberlin Road Streetscape	Oberlin Rd from Clark Ave to Bedford Rd; Study will include: on-street parking, medians, enhanced pedestrian and bicycle access, public transit, lighting and landscape features	Draft final report available for review; public comments due August 8th
Raleigh Downtown Plan	Study area will cover the entire Downtown as outlined in the 2030 Comprehensive Plan; Analysis of development, public realm, infrastructure, and connectivity improvements.	Issues & Opportunities report to be released early August; on-line survey available, next round of public meetings to be held early September
Six Forks Corridor Study	Long range multimodal transportation study and streetscape plan from Ramblewood Dr to Sandy Forks Rd	In design; 2nd public meeting to be held late August
Southern Gateway Corridor Study	Long range area study from South Street to just south of Tryon Road (formerly S. Saunders/Wilmington St Corridor Study)	Request for Proposals issued
West CAMPO Rail Study	Examine future street network in east Cary and west Raleigh with respect to a future sealed rail corridor scenario. Joint project with CAMPO, Town of Cary, TTA, and NCDOT Rail.	Study underway
West Street Extension Study	NEPA study for proposed West Street Extension from Martin Street to Cabarrus Street	NEPA study underway

Name	***Description***	***Status***
Traffic Calming Projects		
Brookside Drive	Watauga St. to Glasscock St: Add bike lanes, median islands, curb ext and bulb-outs	Schedule pending coordination with Public Utilities
Cross Link Road South	Dandridge Rd to Garner Rd	Currently under conceptual design
Currituck Drive	Lassiter Mill Rd to Tyrrell Rd	Currently under conceptual design
Glascock Street	Norris Street to Raleigh Blvd: add median islands, curb extensions, and new sidewalk on north side west of State Street	Construction estimated to begin Spring 2015
Kaplan Drive	Melbourne Rd to Kent Rd: Add bike lanes, sidewalks, curb extensions, bulb-outs, median islands, and speed humps	Construction estimated to begin Fall 2014
Milburnie Road	Raleigh Blvd to Chatham Ln	Construction estimated to begin summer 2015
Greenway Improvement Projects		
Crabtree Creek Trail Extension	From Milburnie Road to the Neuse River Trail - 4.1 miles	Under construction; complete by late November 2014.
Crabtree Creek Trail West Extension	From Lindsey Dr to Umstead Park - 4 miles	Executing contract with consultants
Honeycutt Creek Trail	From the Mine Creek Greenway Corridor to the South Shore Trail at Falls Lake - 5.7 miles	Under construction; complete by September 2014.
Neuse River Trail	From the WRAL Soccer Complex off Perry Creek Rd. Horseshoe Farm Park - 1 mile	In design; construction to be complete by late October 2014.
Rosengarten Trail	From Cabarrus St to S. Saunders/Lake Wheeler at Rocky Branch Trail - 0.5 miles	Under design
SEHSR Greenway Options	Assess possible parallel bike/ped corridors along High Speed Rail project	On hold
Bicycle Projects		
Bicycle Pavement Marking Project	Design and install 27 miles of bicycle facilities Citywide (FY13 CMAQ Grant Project)	Striping plans, rights-of-way certification, and environmental documents submitted to NCDOT for approval
City Resurfacing Program	Resurface City-maintained streets and restripe per the Bike Plan	
	Salisbury Street from Lane Street to Morgan St	Complete; Permanent markings, including bike lanes, to be installed as part of CMAQ funded bicycle project
	Lassiter Mill Rd from Six Forks Rd to Camelot	Under construction; Road diet implemented to create a two lane section with bicycle lanes
NCDOT Resurfacing Program	Resurface State-maintained streets and restripe per the Bike Plan	
	Raleigh Blvd from Crabtree Blvd to New Bern Ave	Under NCDOT review; Bicycle lanes
	Spring Forest Rd from Falls of Neuse Rd to Dixie Forest Rd	Under NCDOT review; Bicycle lanes

Name	***Description***	***Status***
Sidewalk and Pedestrian Improvement Projects		
Bloodworth Street	Construct sidewalks from Martin Luther King Jr. Blvd to Worth St on the east side	Design underway
Blount Street/Hoke Street/Person Street	Construct sidewalks from north of Branch Street to Bragg Street	Design underway
Capital Boulevard	Construct sidewalks from I-40 Ramps to Brentwood Rd on both sides	Schedule pending consultant assignment
Capital Boulevard	Construct sidewalks and transit amenities from Spring Forest Rd to Old Wake Forest Rd on both sides	Under design
Chapanoke Road	Construct sidewalks, intersection improvements, and transit amenities from Illeagnes Rd to Wilmington Service Rd	Construction to begin 2015
Clark Avenue	Construct sidewalks from Woodburn to Bellwood on the north side	Construction to begin 2015
Crabtree Boulevard	Construct sidewalks from Capital Blvd to Timber Dr on the south side	Design Underway
Downtown Pedestrian Safety Improvements	Design and install pedestrian signals at several downtown intersections (FY12 STP-DA Grant Project)	Under design; Installation to begin late fall 2014
E. Millbrook Road	Construct sidewalks from Atlantic Ave to Capital Blvd on the north side	Schedule pending consultant assignment
Freedom Dr/Rhyne Court	Construct sidewalk from south of New Bern Ave to End of cul-de-sac	Under construction; Schedule to be complete early 2015
Green Road	Construct sidewalks from New Hope Church Rd to Spring Forest Rd on both sides	Construction to begin 2015
I-40 Overpass Pedestrian Retrofits	Construct new pedestrian access on bridges over I-40 at Avent Ferry Rd, Rock Quarry Rd, and Buck Jones Road (FY13 STP-DA Grant Project)	Under design; Scheduled for Council review on August 5
Lake Wheeler Road	Construct sidewalks from Maywood Ave to Centennial Parkway; asphalt path construction on the west side	Schedule pending consultant assignment
Maywood Avenue	Construct sidewalks from S. Saunders St to Lake Wheeler Rd on both sides	Schedule pending consultant assignment
Millbrook Road	Construct sidewalks from Lead Mine Rd to Bennettwood on the south side	Schedule pending consultant assignment
New Hope Church Road	Construct sidewalks from Atlantic Avenue to Wake Forest Rd on both sides	Design underway
New Hope Road	Construct sidewalks from Capital Blvd to Wallingford Dr on both sides	Schedule pending consultant assignment
Oakwood Avenue	Construct sidewalks from Hill St to Raleigh Blvd on the north side	Schedule pending consultant assignment
Poole Road	Construct sidewalks from Donald Ross Drive to Sunnybrook Road on the north side	Design underway
Raleigh Boulevard	Construct sidewalks from Crabtree Creek Bridge to 350' north of Yonkers Rd on both sides	Schedule pending consultant assignment
Rock Quarry Road	Construct sidewalks from MLK Blvd to Bart Street on the east side; also includes Rock Quarry Rd/Blazing Star Way intersection improvements	Design underway
Sanderford Road	Construct sidewalk from 2401 Sanderford Rd to Elk Park Dr	Construction complete

Name	***Description***	***Status***
Six Forks Road	Construct sidewalks from Coleridge Dr to Wake Forest Rd (CMAQ Grant Project)	Design underway; Referred to Public Works Committee--Tuesday, July 22 at 5pm in Council Chambers
Spring Forest Road	Construct sidewalks from McHines Place to Capital Blvd on both sides	Schedule pending consultant assignment
Wade Avenue	Construct sidewalks from Hobson Court to Daniels Street on both sides	Schedule pending consultant assignment
Wake Forest Road	Construct sidewalks from Creekside Drive to Georgetown Road on the west side	Schedule pending contract execution
Active NCDOT Projects		
B-4437 - Blue Ridge Rd/Hillsborough St/NCRR grade separation	Convert existing at-grade intersection to grade separation. Improve access for bicycles and pedestrians and provide access to future proposed TTA light rail station	EA/FONSI complete; funding under review
B-5121 - Capital Blvd/Peace St Bridge Replacement	Replace existing bridge on Capital Boulevard at Peace Street	NEPA study underway; construction planned for FFY16
B-5130 - Avent Ferry Rd/Lake Johnson bridge replacement	Replace existing bridge on Avent Ferry Road over Lake Johnson; improve causeway and bridge to include bike lanes and sidewalks.	Under Design; NEPA study underway
B-5317 - Capital Blvd/Wade Ave Bridge Replacement	Replace existing bridge on Wade Avenue at Capital Boulevard	NEPA study underway; construction planned for 2016.
FS-1005A I-40 Widening	Evaluate widening of I-40 to eight lanes from I-440/US 1 to Lake Wheeler Road	Feasibility study in progress
P-3819 Southeast High Speed Rail	Implement high speed rail service from Raleigh to Petersburg, VA. Includes multiple grade separation conversions at existing railroad crossings.	Final EIS to be complete by Fall 2014
R-2829 - Eastern Wake Expressway	Construct new freeway from I-40/US 70 Bypass in Johnston County to US 264/I-540 interchange	Draft EIS underway
Trailwood Rd bridge replacement	Replace existing bridge on Trailwood Road over Walnut Creek; includes bike lane and greenway link improvements.	Design/build project; contruction to begin January 2015
Trinity Rd Pedestrian Tunnels	Evaluate the feasibility for constructing pedestrian tunnels under Trinity Road near Carter-Finley Stadium	Feasibility study complete
U-2719 - I-440 Widening	Widen the I-440 Beltline from I-40 to Wade Avenue; will include reconstruction and improvement of multiple existing interchanges.	NEPA study underway; funding under review
U-2823 - US 70 Improvements	Widen US 70 to six lanes and construct parallel streets from Lumley Road/Westgate Road to Duraleigh Road/Millbrook Road. Includes sidewalk and greenway improvements.	NEPA study underway; funding under review
U-4432 - Tryon Rd Widening/Improvements	Widen and realign Tryon Road from Par Drive to S. Wilmington Street and replace the existing bridge over the Norfolk-Southern Railroad	Under construction, complete by 2016
U-4721 - Aviation Parkway Extension	Extend Aviation Parkway as a proposed four-lane freeway from I-540 to US 70 at the Durham County line	Feasibility study complete
U-5518 Brier Creek Parkway/US 70 Interchange	Convert intersection of US 70 and Brier Creek parkway to a grade-separated interchange	NEPA study underway; funding under review

City of Raleigh Bicycle & Pedestrian Advisory Commission
Office of Transportation Planning
P.O. Box 590 · Raleigh, North Carolina 27602 · (919) 996-2155

BICYCLE PLANNING COMMITTEE MEETING MINUTES

DATE: August 12, 2014
PRESENT: Alan Wiggs, Charlotte Mitchell, Paul Nevill
STAFF: Jennifer Baldwin, Eric Lamb
LOCATION: Raleigh Municipal Building, Room 303, 222 W. Hargett Street

START: 6:10pm

Bicycle Plan Implementation Public Outreach
Ms. Baldwin reviewed the project cut sheet format used for the bicycle pavement marking design project. After discussion about the use of the cut sheet, the committee recommended that staff develop a project cut sheet for every future bicycle project.

This item will be removed from committee with no action required.

On-road Bicycle and Greenway Wayfinding
This item will be held for discussion in November after an evaluation has been conducted of the pilot bicycle wayfinding signage installation along the Art to Heart Corridor. Staff will develop a Draft On-road Bicycle and Greenway Policy for committee review. The committee discussed the possibility of private sponsorship for bicycle signage and an Adopt-a-Sign program.

Bicycle Design Standards
Ms. Baldwin provided an overview of the bicycle design standards adopted in the new Raleigh Street Design Guide. After discussion, the committee recommends the following changes to the standards:

- Provide mini skips at intersections to facilitate left turn bicycle movement in a bike lane
- Include an image of a diagonal bike rack installation
- Clarify that the curb can also mean edge of pavement in the bike rack placement standard

The committee also discussed the need to develop following new standards:

- Protected bicycle facilities
    - Buffered bicycle lanes
    - Cycle Tracks (One-way and two-way)
    - Bike box installation
    - Green pavement markings
    - Bike share station
    - Bicycle signal detection pavement markings
    - Separate signal call for bicycles
        - Existing example in Chapel Hill

The update to the bicycle plan will also be conducting a comprehensive review of the City's bicycle facility design guidelines and standards.

No action is required on this item at this time.

END: 7:35pm

Raleigh Bicycle & Pedestrian Advisory Commission

P.O. Box 590•Raleigh, NC 27602
(919) 996-2155

PEDESTRIAN PLANNING COMMITTEE MEETING MINUTES

DATE: August 14, 2014

PRESENT: Aaron Peeler , Amy Simes, Harry Johnson
STAFF: Jennifer Baldwin, Eric Lamb, Jason Myers, Jong Lee, Amanda Driscoll
LOCATION: Urban Design Center

START: 1:10pm

WalkRaleigh Signage Pilot Locations

Ms. Baldwin provided a map of the eight proposed pilot WalkRaleigh signage locations. She reported that the Walk[YourCity] team is currently working with the Public Works Sign Shop to develop new signs that will be smaller than the original WalkRaleigh signs and made of metal, rather than corrugated board. The Walk[YourCity] team will attend the next pedestrian planning committee meeting to showcase the new sign design and material and also discuss public outreach efforts.

ACTION:
1.) Recommend approval of the eight proposed pilot locations for the WalkRaleigh implementation.

City Code Review

Ms. Baldwin provided an overview of the City Code pedestrian reference review process and highlighting staff recommendations. Ms. Baldwin noted that all of the recommendations are pending approval of the City Attorney office. Mr. Peeler moved to recommend approval of the City Code to the BPAC.

ACTION:
1.) Recommend approval of the City Code updates for pedestrians.

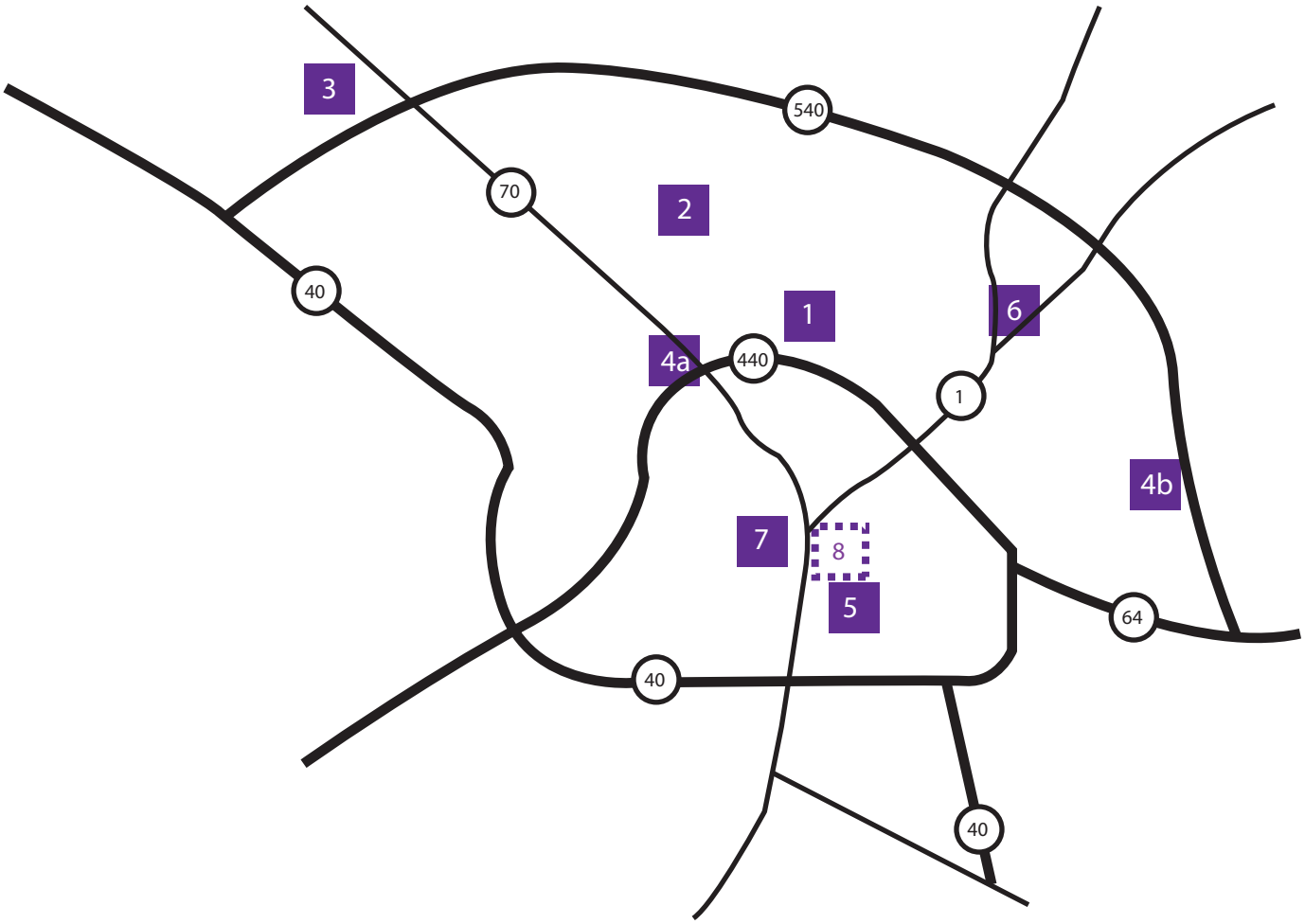
Walkability Maps

Ms. Lee provided a map of walkability conditions around the NC State Fairgrounds including existing conditions and missing sidewalks identified in the Pedestrian Plan. Ms. Baldwin stated that Ms. Lee will also develop a walkability map for the Wake Med Hospital area along New Bern Avenue. The committee agreed with the components included in the map and will review the completed maps during their September meeting.

END: 1:55pm

Walk [Raleigh] powered by Walk [Your City]™ w/ BCBSNC

update: 8/14/14



Planned Locations

1. **Corridor - Six Forks Corridor**: links up with existing corridor study + planning process
2. **Sidewalk - Creedmoor Road**: site of Raleigh's longest sidewalk project
3. **Dense Residential - Brier Creek**: residential area with a retail core and active HOA

4a. **Greenway - Crabtree Creek and House Creek**: well-used greenway, opportunity to have bike focus

4b. **Greenway - Neuse River**: well-used greenway, opportunity to have bike focus

5. **City Park + Neighborhoods - Chavis Park/Southpark**: , recently adopted master plan, citizen interest
6. **Bilingual - Mini City**: large Spanish-speaking population, street improvements
7. **Downtown Neighborhood - Cameron Park/Glenwood South**: walking audit, volitile area, linkage
8. **Transit - R Line**: could tie in transit, highlight what's near each stop (on bus partner programing)

Contact Info: Matt Tomasulo / Chief Instigator / matt@walkyourcity.org / (860) 836-4891

City of Raleigh Bicycle & Pedestrian Advisory Commission

Office of Transportation Planning
P.O. Box 590 · Raleigh, North Carolina 27602 · (919) 996-2155

MEMORANDUM

TO: Aaron Peeler, Chair BPAC Pedestrian Planning Committee

FROM: Jong Lee, Intern Office of Transportation Planning

RE: Proposed Updates to City Code of Ordinances for Pedestrians

DATE: 8/14/2014

The BPAC Fiscal Year 2015 work plan directs the pedestrian planning committee to review the city code of ordinances for pedestrian, sidewalk, crosswalk and moped references. Staff has reviewed the city of ordinances and below is the summary of recommendations:

1. Sec. 6-2011. SPECIFICATIONS FOR CONSTRUCTION
   - Replaced the Central Engineering references with Public Works Department.

2. Sec. 6-2012 – 6-2013. CLASSIFICATION OF STREET/ STREET WIDTHS
   - Removed due to the adoption of Unified Development Ordinance and a new street classification system.

3. Sec. 6-2014. SIDEWALKS
   - Removed due to the adoption of Unified Development Ordinance, and merged into Sec. 6-2015.

4. Sec. 6-2015. VARIANCES
   - Title was changed to Design Adjustments.
   - Added references to the Raleigh Street Design Manual.
   - Transfer authority from City Council to Public Works Director.
   - Removed and modified conditions of design adjustment.

5. Sec. 6-2016. ASPHALT SIDEWALKS
   - Clarified the language that determines when an asphalt sidewalk can be used.
   - Transfer authority from City Council to Public Works Director.
   - Added references to the Raleigh Street Design Manual.

6. Sec. 6-2022. SIDEWALK ASSESSMENTS FOR CONSTRUCTING OR EXTENDING NEW SIDEWALKS
   - Deleted the section to reflect the city's current policy not to assess the cost of sidewalk construction to property owners.

7. Sec. 6-2023. ASSESSMENT FOR REPAIRING, RECONSTRUCTING, AND OTHERWISE IMPROVING EXISTING SIDEWALKS, DRIVEWAYS, CURBS, GUTTERS, OR DRAINS.
   - Changed references of sidewalk improvement to sidewalk maintenance or repair.

8. Sec. 9-8007. TREES AND OTHER VEGETATION TO BE KEPT TRIMMED; RESPONSIBILITY OF OWNER AND URBAN FORESTER.
   - Added sidewalk reference.
   - Referenced to the Raleigh City Tree Manual.

9. Sec. 11-2001. DEFINITIONS
   - Replaced crosswalk definition with the definition of Uniform Vehicle Code.
   - Added the definition of major street.

10. Sec. 11-2094. SPEED LIMIT ON SIDEWALK
    - Added new section on speed limit on sidewalk that makes unlawful to travel on a sidewalk at a speed greater than is reasonable and prudent under existing conditions.
    - Added state law reference about reckless driving.

11. Sec. 11-2121. DRIVING ON SIDEWALK
    - Included moped reference.

12. Sec. 11-2123. USE OF ROADWAY BY NONMOTORIZED OR TOY VEHICLES
    - Replaced the “roadway” to “major street” to limit the use of nonmotorized only in the major streets with more than two lanes.
    - Removed the play or sledding streets due to the ordinance repeal.

13. Sec. 11-2151.PEDESTRIAN STREETS
    - Deleted due to redundancy with Park and Recreation Part 9, Chapter 7, Pedestrian Malls.

14. Sec. 11-2171. PARKING PROHIBITED IN CERTAIN PLACES
    - Clarified parking restriction at marked or unmarked crosswalks.

15. Sec. 11-2231. DEFINITIONS
    - Included sidewalk reference in the definition of obstruction.

16. Sec. 11-6006. REPAIR OF SIDEWALK AFTER POLE REMOVAL
    - Added clarification to owner responsibility to repair sidewalk after removing poles.

17. Sec. 11-6008. CITY RESPONSIBILITY FOR SIDEWALK REPAIR AND/OR REPLACEMENT OF SIDEWALKS RAISED, BROKEN, ETC
    - Clarified that property owners are relieved from the cost of sidewalk repair and replacement.
    - Gave authority of the Public Works Director to approve design adjustment.
    - Clarified the condition of tree preservation.

18. Sec. 12-1037.1. REPAIR OF SIDEWALKS AND DRIVEWAYS BY PROPERTY OWNERS
    - Clarified property owner responsibility in all-weather condition.

19. Sec. 12-4001. CONSUMPTION AND POSSESSION OF ALCOHOLIC BEVERAGES ON CITY PROPERTY OR PUBLIC VEHICULAR AREAS
    - Included sidewalk references alcohol consumption and possession on the city property.

City of Raleigh Pedestrian-Related Laws & Codes

Keywords: pedestrian; sidewalk; moped (0); scooter; motorcycle; crosswalk; walk,

PART 6 - ~~CENTRAL ENGINEERING~~PUBLIC WORKS DEPARTMENT >> CHAPTER 2. - STREET AND SIDEWALK IMPROVEMENTS >> ARTICLE B. STREET AND SIDEWALK STANDARDS>>

Sec. 6-2011. SPECIFICATIONS FOR CONSTRUCTION.

The ~~City Council~~Public Works Director *shall* determine the character and type of construction and materials to be used in the construction of any *street* or sidewalk improvement, and it *shall* determine whether any or all of the work *shall* be done by contract or by *City* forces. All *street* and sidewalk improvements *shall* be constructed in accordance with the standards of this Code and the specifications of the Public Works Department ~~of Central Engineering~~ as approved by the City Council.

Sec. 6-2012 – 6.2014. ~~CLASSIFICATION OF STREETS.~~RESERVED

~~The *streets* of Raleigh, other than state highways, are classified as principal thoroughfares and residential *streets*. The designation or redesignation and classification or reclassification of the *streets* of the *City shall* from time to time be made by the City Council.~~

~~(a) A principal thoroughfare is a *street* which because of the traffic it carries or will carry, is or should be wider or of more substantial construction than is necessary to provide access and service to residential *property*. Principal thoroughfares *shall* consist of:~~

~~**(1) Major thoroughfares.**~~

~~Major thoroughfares are roadways with considerable *City* wide continuity. These roadways are designed to accommodate large volumes of traffic from one area of the *City* to another.~~

~~**(2) Minor thoroughfares.**~~

~~Minor thoroughfares are roadways leading to or connecting to arterials and major thoroughfares. These roadways are designed to accommodate large volumes of traffic, but not of major thoroughfare importance.~~

~~**(3) Collector *streets*.**~~

~~*Streets* which collect traffic from three hundred and fifty-one (351) or more dwelling units, schools, libraries, art galleries or other residential institutions with similar vehicle trip generation and peak loading characteristics. Collector *streets* have continuity of more than one-half (½) mile in length, or they provide a connection either between thoroughfare system roads or between major traffic generators which would encourage through traffic on any *street* not classified as a thoroughfare system~~

~~roadway. Other *streets* can be regarded as a collector *street* if the roadway is so illustrated on the *City*'s Comprehensive Plan.~~

~~**(4) Commercial *streets*.**~~

~~A *street*, the predominant use of which is to provide access for abutting commercial, industrial or other nonresidential *properties*.~~

~~In lieu of the above definitions, principal thoroughfares *may* also consist of collector *streets* as they appear on the "Thoroughfare Plan, Raleigh, Cary, Garner." A copy of this map is on file in the office of the City Clerk and Treasurer.~~

~~(b) Residential *streets shall* consist of:~~

~~**(1) Residential collector *streets*.**~~

~~*Streets* which collect traffic from more than one hundred and fifty (150) dwelling units, but less than three hundred and fifty-one (351) dwelling units or from day care facilities of more than seventy (70) enrollees; or *streets* which collect traffic from schools, museums, libraries, art galleries, or other residential institutions that generate traffic volumes or peak loading characteristics equivalent to less than three hundred and fifty-one (351) dwelling units. Residential collector *streets* have continuity of more than one-half (½) mile in length, or they provide connection between either thoroughfare system roadways or major traffic generators which would encourage through traffic on any *street* not classified as a thoroughfare system roadway.~~

~~**(2) Residential *streets*.**~~

~~*Streets* that collect traffic from no more than one hundred and fifty (150) dwelling units or from day care facilities with no more than seventy (70) enrollees; or *streets* which collect traffic from schools, museums, libraries, art galleries or other residential institutions that generate traffic volumes or peak loading characteristics equivalent to one hundred and fifty (150) dwelling units. Residential *streets* are not more than one-half (½) mile in length; nor do they provide a collection between thoroughfare system roadways, nor do they provide a connection between major traffic generators which would encourage through traffic movements.~~

~~**(3) Minor residential *streets*.**~~

~~*Streets* that collect traffic from no more than forty (40) dwelling units. Minor residential *streets* have continuity of less than one-half (½) mile in length, and they do not provide a connection either between thoroughfare system roadways or between major traffic generators which would encourage through traffic on any *street* not classified as a thoroughfare system roadway.~~

~~*(Ord. No. 1982-971-TC-168, §2, 9-7-82; Ord. No. 1982-5, §1, 10-19-82; Ord. No. 1987-69, §§2, 3, 10-20-87; Ord. No. 1995-760-TC-122, §§3, 4, TC-20C-95, 11-21-95)*~~

~~Sec. 6-2013. STREET WIDTHS.~~

~~*Street* widths, from back of curbs and paving widths on *streets* without curbs *shall* be as follows:~~

~~(a) Major and minor thoroughfares, fifty-three (53) feet (16.6 meters) or more;~~

~~(b) Collector *street*, forty-one (41) feet (12.50 meters);~~

~~(c) Commercial *street*, forty-one (41) feet (12.50 meters);~~

~~(d) Residential collector *street*, thirty-six (36) feet (10.97 meters), but forty-one (41) feet (12.50 meters) within three hundred (300) feet of a collector *street* or thoroughfare system roadway intersection.~~

~~(e) Residential *street*, thirty-one (31) feet (9.45 meters);~~

~~(f) Minor residential *street*, twenty-six (26) feet (7.92 meters).~~

~~*(Ord. No. 1987-69, §4, 10-20-87; Ord. No. 1995-760-TC-122, §5, TC-20C-95, 11-21-95)*~~

~~Sec. 6-2014. SIDEWALKS.~~

~~*Street* improvements made pursuant to this chapter *shall* contain sidewalks in accordance with the provisions contained in Street, Sidewalk and Driveway Access Handbook on file with the City Clerk. The City Council *may* authorize the construction of sidewalks on both sides of a *street* improvement if pedestrian generators (churches, schools, bus routes, shopping and office areas, etc.) create public need for additional sidewalks. The *Council* may also vary this standard and authorize the construction of no sidewalks pursuant to §6-2015 or asphalt sidewalks pursuant to §6-2016.~~

Sec. 6-2015. ~~VARIANCES~~DESIGN ADJUSTMENTS

Street improvements made pursuant to this chapter *shall* contain sidewalks in accordance with the provisions contained in the Raleigh Street Design Manual on file with the City Clerk. The Public Works Director may approve a design adjustment to the standards of Article in accordance with Sec. 10.2.18 of the Unified Development Ordinance or as otherwise specified in the Raleigh Street Design Manual.

(a) It is recognized that the construction and design standards and specifications provided in this article *may* not safely and sensitively handle all situations in an area as diverse as the *City*. Therefore, the ~~City Council~~ Public Works Director, ~~for existing residential *streets*,~~ *may* vary the standards and specifications for *street* and sidewalk improvements, including but not limited to width of paving; horizontal and vertical alignment; shoulder design and treatment; pavement edge; drainage structures; grading; and elimination of sidewalks, if in the opinion of the *Public Works Director~~Council~~*, application of the standard is substantially injurious to the character or the environment of the ~~neighborhood~~general area, and if ~~all of the *following* conditions exist:~~

~~(1) The *street* must be classified as residential *street*;~~

~~(2) The~~ the *street* is existing and abutting *property* is substantially developed~~;~~.

~~(3) The *street* must serve a predominantly single family area; and~~

~~(4) The *street* by actual count does not carry more than approximately fifteen hundred (1,500) vehicles per day.~~

(b) When ~~variances~~ design adjustments are requested, the *Public Works Director~~Council~~* *shall* consider the *following*:

(1) Safety to pedestrians, vehicular movement, and abutting *properties*;

(2) Collection of significant amounts of water from other *streets*;

(3) Availability of off-street parking; and

(4) Pedestrian generators (schools, office and shopping areas, bus routes, churches, etc.) and the availability of pedestrian walkways outside the public rights-of-way.

In no event shall the travelled portion of the street be less than ~~eighteen~~ twenty (~~18~~20) feet (~~5.49~~6.10 meters) in width.

(c) Design and construction ~~variances~~ design adjustment *may* include but are not limited to the *following*:

(1) Curb and gutter on one side and shoulder on the other side;

(2) ~~Header~~ Modified curbs;

(3) Shoulder and swale design; and

(4) Pedestrian walkways on public *property* outside the *street* right-of-way.

(Ord. No. 1987-69, §5, 10-20-87; Ord. No. 1999-619, §1, 8-3-99)

Sec. 6-2016. ASPHALT SIDEWALKS.

~~**(a) Installation.**~~

Installation of temporary or permanent asphalt sidewalks *shall* be permitted by the Public Works Director~~City Council~~ only where all of the *following* are present:

(1) No curb or gutter exists on the *street* immediately parallel to the proposed sidewalk, unless otherwise specified by Section 8.5.2. in Unified Development Ordinance or an adopted streetscape plan.

(2) Prior to construction, sufficient rights-of-way ~~,~~ or pedestrian easements~~existing or dedicated, is~~ shall be available to place the sidewalk in a safe location. If sufficient rights-of-way or easements do not exist, the city may consider acquisition of such to construct a sidewalk.

(3) There are no existing or projected stormwater deficiencies.

(4) No part of the proposed sidewalk extends into or over a proposed *street* or parallel utility improvement as shown on the amended five-*year* capital improvement~~s~~ program of any governmental authority.

(5) ~~The proposed sidewalk is either within an area that meets the linear distances established in §10-3051(a)(3) of this Code or~~ T~~t~~he ~~City Council~~Public Works Director finds that there is ~~substantial~~ sufficient pedestrian demand and/or sidewalk connectivity to make temporary or permenant sidewalks beneficial.

(6) ~~(b) Construction standards.~~

All asphalt sidewalks shall be constructed in accordance with ~~all of the following standards~~the Raleigh Street Design Manual.~~:~~

~~(1) The minimum stone base *shall* be four (4) inches.~~

~~(2) The asphalt *shall* be a minimum thickness of one and one-half (1/2) inches.~~

~~(3) The asphalt sidewalk is designed and installed in accordance with the standards of the engineering department.~~

(Ord. No. 1991-716, §2, 1-15-91)

Sec. 6-2022. ~~SIDEWALK ASSESSMENTS FOR CONSTRUCTING OR EXTENDING NEW SIDEWALKS.~~ RESERVED

~~(a) The cost of new sidewalk construction or extensions *shall* be assessed at six dollars ($6.00) per front foot against the *property* abutting on both sides of the *street*. If there already exists a sidewalk on the other side of the *street*, the total cost of which was assessed against the abutting *property*, the *owner* of the *property* requiring the new sidewalk *shall* pay an assessment of six dollars ($6.00) per front foot, the remaining cost of the sidewalk to be borne by the *City*. If the City Council decides pursuant to §6-2014 that there is a public need for a sidewalk on both sides of the *street*, and no sidewalk assessment has been previously levied, the full cost of the second sidewalk *shall* be borne by the *City*.~~

~~(b) Notwithstanding the charges established in §6-2022(a), the *City shall* make the *following* sidewalk improvements without assessment:~~

~~(1) If sidewalk improvements are made simultaneously to both *streets* on which a lot abuts, assessment of the costs of the installations *shall* be based upon the entire frontage of one *street* (short side) plus the frontage of the other *street* in excess of one hundred fifty (150) feet.~~

~~(2) If the lot is already served by a sidewalk which meets all *City* standards, any improvements to another abutting sidewalk *shall* be assessed against the lot *owner* to the extent that the frontage to be assessed exceeds one hundred fifty (150) feet in length.~~

~~(3) If a lot fronts on an existing sidewalk which meets *City* standards and abuts at the rear on another *street* to be built or improved, no assessment *shall* be made if it *shall* appear that no reasonable subdivision of the lot can be made by which the new arrangement of lots will benefit from the new or improved sidewalk.~~

~~(4) If a lot abuts on a sidewalk to be built or improved but physical or topographic restrictions prevent reasonable access thereto from the lot, then no assessment *shall* be made. In the event that such a lot later gains access formerly though impossible to the sidewalk which was improved, no driveway permit *shall* be issued until the lot *owner* has paid a fee equivalent to the amount the lot would have been previously assessed.~~

~~(5) Sidewalk improvements within redevelopment areas as delineated pursuant to *G.S.* 160A-500 *et seq.*, provided the cost of such work is exclusively paid from community development funds.~~

Sec. 6-2023. ASSESSMENT FOR REPAIRING, RECONSTRUCTING, AND OTHERWISE ~~IMPROVING~~ MAINTAINING EXISTING SIDEWALKS, DRIVEWAYS, CURBS, GUTTERS, OR DRAINS.

The *Council* may, without petition of abutting *property owners*, require the reconstruction, alteration or repair of sidewalks, driveways, curbs, gutters or drains in conformity with the provisions of §6.44(a) of the Charter. If any of such ~~improvements~~ maintenance ~~are~~ is required of a *property owner* and the *property owner shall* fail or refuse to make the same within thirty (30) days after notice thereof, the *Council* may cause such ~~improvements~~ repair to be made and assess the total cost thereof against the *property* abutting the ~~improvement~~repair. In making and collecting assessments for such ~~improvements~~repair, the procedure outlined in *G.S.* 160A-216 *et seq.* *shall* be followed to the extent that the same is not in conflict with §6.44 of the Charter. In the event of conflict in the provisions of the General Statutes and the Charter, the provisions of the Charter *shall* control. The total cost of the

repairing, reconstructing or altering of driveways, curbs, gutters, drains, or sidewalks, including the cost of grading and the construction of retaining walls necessary to provide lateral support for abutting *property*, *shall* be assessed against the *property* abutting the ~~improvement~~repair. The cost of relocation and construction of driveways, steps, or other means of access to his *property* from the *street* as he *may* deem necessary, *shall* be borne by the *property owner*.

(Code 1959 , §19-27; Ord. No. 1983-245-TC-205, §6, 12-6-83; Ord. No. 1985-613, §4, 7-16-85)

Charter references: Authority for exemptions from special assessments, §2.14(71); *street* improvements without petition, §6.44(a).

Cross reference: Responsibility for sidewalk and curb repair, maintenance, and replacement, §§~~7-2008~~11-6008, ~~10-7002(f)(2)~~ 12-1037.1.

State law reference: Authority and procedures for special assessments, *G.S.* 160A-216 *et seq.*

PART 9 PARKS, RECREATION AND CULTURAL AFFAIRS >> CHAPTER 8. TREES AND VEGETATION >>

Sec. 9-8007. TREES AND OTHER VEGETATION TO BE KEPT TRIMMED; RESPONSIBILITY OF OWNER AND URBAN FORESTER.

(a) Trees, vines, bushes, shrubbery or flowers standing in or upon any lot or land adjacent to any public *street, sidewalk* or public place and having branches, limbs, trunks, or other parts projecting into the public *street, sidewalk* or place *shall* be kept trimmed by the *owner* or occupant of the *property* on which such vines, trees, shrubbery or flowers are growing so as not to interfere with the free and safe passage along the public way by pedestrians and vehicular traffic. Vegetation shall be maintained in accordance with the Raleigh City Tree Manual.

(b) If the *owner* or occupant of the *property* does not keep this growth from projecting into or on public ground, then the Urban Forester *shall* have the authority to order its removal. The order *shall* be acted upon within fifteen (15) days from the time of the receipt of the notice which *shall* be sent by registered mail, return receipt requested. If, after fifteen (15) days, the *owner* has not responded or acted to remove the projecting growth from said vines, trees, bushes, shrubbery, or flowers, then the Urban Forester or any member of his staff *shall* have the authority to enter upon the *owner's property* to perform the work. The cost of such action *may* be charged against the *property* owner pursuant to the procedures set forth in Chapter 6 of Part 12 of this Code.

Cross reference: Abatement of public nuisances, §12-6001 *et seq.*

PART 11 TRANSPORTATION >> CHAPTER 2. - MOTOR VEHICLES AND TRAFFIC >> ARTICLE A. GENERAL PROVISIONS >>

Sec. 11-2001. DEFINITIONS.

Whenever in this chapter the words hereinafter defined in this section are used they *shall*, unless the context requires otherwise, be deemed to have the *following* meanings:

Authorized emergency vehicle. An ***authorized emergency vehicle*** is any vehicle owned by a Federal, state, *County*, or municipal law enforcement *agency* and operated by a member thereof, any vehicle owned and operated by a Fire Department or rescue squad, or any ambulance.

Block. A **block** is the part of a *street* lying between the nearest intersecting *streets* on either side.

Car sharing. ***Car sharing*** is a membership based service available to all qualified drivers in the community who choose to become members. Members must be offered access to a dispersed network of shared vehicles twenty-four (24) hours a day, seven (7) days a week at unattended self service locations. Car usage is provided without restriction at hourly or per mile rates that include fuel, insurance, and maintenance. Any car sharing service using a parking space reserved for car share vehicles must belong to an organization approved by the Raleigh Public Works Director or his designee.

~~**Crosswalk.**~~ A ***crosswalk*** is (a) the part of a roadway at an intersection ~~ordinarily~~ included within the ~~prolongation or~~ connection of the lateral ~~boundary~~ lines of the ~~adjacent~~ sidewalks ~~at the end of a block~~on opposite sides of the highway measured from the curbs, or in the absence of curbs, from the edges of the traversable roadway; and in the absence of a sidewalk on one side of the roadway, the part of a roadway included within the extension of the lateral lines of the existing sidewalk at right angles to the centerline.

(b) Any portion of a roadway at an intersection or elsewhere distinctly indicated for pedestrian crossing by lines or other markings on the surface.

~~, or any part of a roadway indicated for pedestrian crossing by official traffic-control devices.~~

Driveway. A way leading from a public *street* to a place on private *property* suitable to and regularly *used for* the passage or standing of motor vehicles when passage to such area of private *property* is not permanently impeded by any wall, building, or other such structure. A driveway *shall* consist of a curb cut or other such modification and a regularly accessible suitable area of private *property*. A curb cut alone, without such area of private *property* or with access to such area of private *property* permanently obstructed, *shall* not constitute a driveway.

Intersection. An ***intersection*** is the area embraced within the prolongation of the lateral curb lines or, if none, then the lateral boundary lines of two (2) or more highways which join one another at any angle whether or not one (1) such highway crosses the other.

Lane. A lane is a section of roadway between marked lines or between a marked line and the edge of a roadway, which section is set aside for a single file of vehicular traffic, except a section reserved for parking.

Major Street. Any thoroughfare classified as an Avenue, Parkway or Boulevard in the City's adopted comprehensive plan.

Median. A ***median*** is that portion of public right-of-way lying between two (2) roadways and *used for* the separation of vehicular traffic. A median *may* be paved or unpaved and *may* or *may* not have a raised curb.

Motor vehicle. A ***motor vehicle*** is a vehicle which is self-propelled and designed to run upon the highways, and every vehicle which is pulled by a self propelled vehicle.

Official time standard. The hours designated in time limitations set by this chapter refer to eastern standard time or eastern daylight saving time as *may* be in current use within the *City* by the action of the governing body, the North Carolina General Assembly, or the Congress of the United States.

Official traffic-control device. An ***official traffic-control device*** is a sign, signal, marking, or device, including a parking meter, placed by authority of the governing body of the *City* for the purpose of regulating vehicular and pedestrian traffic, including parking.

Parking. ***Park*** or ***parking*** is the standing of a vehicle, whether occupied or not, on a public highway or *street*, otherwise than temporarily for the purpose of and while actually engaged in receiving or discharging passengers or in obedience to traffic regulations.

Parking citation. A ***parking citation*** is a printed notice issued by authority of the governing body of this *City*, informing the individual designated that he or she has violated a provision of this chapter.

Parking meter. A ***parking meter*** is a coin-operated mechanical device used in regulating parking.

Private road or **driveway.** A ***private road*** or ***driveway*** is a road or driveway not open to the use of the public as a matter of right for the purpose of vehicular traffic.

Roadway. A ***roadway*** is the part of a *street* improved, designed, or ordinarily *used for* vehicular traffic.

Sidewalk. A ***sidewalk*** is the part of a *street* improved for pedestrian traffic.

Street or **highway.** A ***street*** or ***highway*** is the entire width between *property* or right-of-way lines of every way or place of whatever nature, when any part thereof is open to the use of the public as a matter of right for the purpose of vehicular traffic.

Traffic schedule. A ***traffic schedule*** is a separate schedule which is incorporated into by reference and made a part of this chapter, and which designates certain *streets*, parts of *streets*, *street* areas, or times to which a provision of this chapter applies.

Vehicle. A ***vehicle*** is a device in, upon, or by which any *person* or *property* is or *may* be transported or drawn upon a highway, excepting devices moved by human power or used exclusively upon fixed rails or tracks; provided, that for the purposes of this chapter bicycles *shall* be deemed vehicles.

(Ord. No. 2012-122, §1, 11-20-12, eff. 11-27-12)

PART 11 - TRANSPORTATION >> CHAPTER 2. - MOTOR VEHICLES AND TRAFFIC >> ARTICLE E. SPEED REGULATIONS >>

Sec. 11-2094. SPEED LIMIT ON SIDEWALK

It shall be unlawful to travel on a sidewalk at a speed greater than is reasonable and prudent under existing conditions.

State law reference: Reckless driving [§20-140(b)]

Sec. 11-~~2094~~ 2095 — 11-2100. RESERVED.

PART 11 - TRANSPORTATION >>CHAPTER 2. - MOTOR VEHICLES AND TRAFFIC >> ARTICLE H. MISCELLANEOUS DRIVING RULES >>

Sec. 11-2121. DRIVING ON SIDEWALK.

The driver of a *motorized vehicle* *or a moped* *shall* not drive within any *sidewalk* except at a permanent or temporary *driveway*.

Sec. 11-2123. USE OF ~~ROADWAY~~ MAJOR STREET BY NONMOTORIZED OR TOY VEHICLES.

It *shall* be unlawful for any *person* to go upon any *roadway* of a major *street* while moving or riding in or by means of roller skates, coaster, sled or any other nonmotorized or toy *vehicle* or other similar

device; except, while crossing a *street* at a *crosswalk*, ~~upon *streets* and portions thereof properly designated as play or sledding *streets*,~~ or when such *vehicle* is a bicycle.

(Code 1959 , §21-21)

~~**Cross reference:** Sledding *streets* listed, §9-2001.~~

PART 11 - TRANSPORTATION >> CHAPTER 2. - MOTOR VEHICLES AND TRAFFIC >> ARTICLE I.PEDESTRIANS' RIGHTS AND DUTIES >>

Sec. 11-2151. ~~PEDESTRIAN STREETS.~~RESERVED

~~The *following* streets *shall* be *used for* pedestrian traffic only, and it *shall* be unlawful to operate any *vehicle* over or along such *streets* except ambulance, rescue squad, Police or Fire Department *vehicles* being operated on an emergency mission, or other *vehicles* pursuant to a permit issued under Part 9, Chapter 7 of the Code.~~

~~(a) Exchange Street from Fayetteville Street to South Wilmington Street.~~

~~(b) Fayetteville Street, from its *intersection* with the southern boundary of Morgan Street to its *intersection* with the northern boundary of Davie Street, but excluding the *intersections* of Martin Street and Hargett Street.~~

~~**Cross reference:** Pedestrian malls generally, Part 9, Chapter 7.~~

PART 11 - TRANSPORTATION >>CHAPTER 2. - MOTOR VEHICLES AND TRAFFIC >> ARTICLE J. PARKING AND STANDING >>

Sec. 11-2171. PARKING PROHIBITED IN CERTAIN PLACES.

(a) Obstructing traffic.

It shall be unlawful for any person to stop, stand or park any motor vehicle upon a street, or alley, in such manner or under such conditions as to obstruct the free movement of vehicular traffic, except that a driver may stop temporarily during the actual unloading of passengers or when necessary to obey traffic regulations or signs or signals, or signals of a police officer.

(b) Designated places.

No *person shall* stop, stand or *park* a motor *vehicle* (attended or unattended) except when necessary to avoid conflict with other traffic or in compliance with the directions of a police *officer* or traffic-control device in any of the *following* places:

(1) On a *sidewalk*, in the area between the *roadway* and the *sidewalk*, in the area between the right-of-way line and the *roadway* or in the *median* area of a divided *roadway*.

(2) On or within twelve (12) feet of a marked or unmarked *crosswalk*.

(3) Within an *intersection*.

(4) Within twenty-five (25) feet upon the approach to any flashing beacon, stop sign or traffic-control signal located at the side of a *street* or *roadway*.

(5) Underpass approaches. No motor *vehicle shall park* on either side of any *street* approaching a railroad underpass or overhead bridge within fifty (50) feet in any direction of the outer edge of such underpass or overhead bridge.

(6) Grade crossing approaches. No *vehicle shall park* on either side of any *street* approaching a grade crossing within fifty (50) feet of the closest rail; provided, that where existing permanent structures are located along the *street* and closer than fifty (50) feet, *parking may* be permitted in front of such structures, unless otherwise prohibited, if the *parking* does not interfere with the view in either direction of an approaching locomotive or train.

(7) Alongside or opposite any *street* excavation or obstruction when such stopping, standing or *parking* would obstruct traffic.

(8) Upon any bridge or other elevated structure or within any underpass structure.

(9) On the *roadway* side of any *vehicle* stopped, standing or *parked* at the edge or curb of a *street*.

(10) Within fifteen (15) feet in either direction of a fire hydrant, unless a greater or lesser distance is designated by action of the *Council* and appropriate signs or markings are displayed.

(11) Within five (5) feet on either side from a *private road or driveway*, or in such a manner to block the passage of *vehicles* to or from such road or *driveway*.

(12) *City*-owned *parking* areas. It *shall* be unlawful in any off-street lot or area owned by the *City* and provided for general public *parking* to *park* a *motor vehicle*, or for the registered *owner* of a *motor vehicle* to allow such *vehicle* to be *parked*, in any manner other than within properly designated *parking* spaces.

Further, in any such off-street *parking* lot or area owned by the *City* and provided for general public *parking*, it *shall* be unlawful to *park* a *motor vehicle* or for the registered *owner* of a *motor vehicle* to allow such *vehicle* to be *parked*, in such a manner as would block or otherwise obstruct the reasonable ingress to or egress from such *parking* area or lot by other *motor vehicles*, or as would block or obstruct the passage of emergency *vehicles* through such *parking* area or lot.

(13) In any *parking* place designated as a *car share* space unless the *vehicle* belongs to a car sharing agency or company approved by and listed with the *City* of Raleigh pursuant to §11-2001 of this Code.

(Code 1959 , §21-34(a); Ord. No. 1982-821, §1, 1-5-82; Ord. No. 1982-933, §1, 6-29-82; Ord. No. 1990-591, §1, 6-5-90; Ord. No. 2012-122, §2, 11-20-12, eff. 11-27-12)

Cross reference: *Parking* restrictions in *City*-owned parks, Part 9, Ch. 2, Art. B.

State law reference: Stopping on *highway* prohibited, *G.S.* 20-161.

PART 11 - TRANSPORTATION >> CHAPTER 2. - MOTOR VEHICLES AND TRAFFIC >> ARTICLE L. SIGNING AND TRAFFIC ROUTING IN THE EVENT OF STREET OBSTRUCTION >>

Sec. 11-2231. DEFINITIONS.

The *following* words as used in the provisions of this article *shall* have the *following* meanings:

Street *shall* mean any paved portion, including curbing and gutters, located on any right-of-way conveyed to, dedicated to, or purchased by the State of North Carolina or the *City*, and which paved portion is used by the public for the passage of *motor vehicle, vehicle*, and pedestrian traffic. "Street" as herein defined *shall* not include any portion of a *sidewalk*.

Obstruction *shall* mean any object, hole, excavation, spoil from an excavation, stored building material, or other condition which renders any portion of a *street* or sidewalk impassable to *motor vehicle, vehicle* or pedestrian traffic; or, which creates the threat of imminent danger to the health, safety or *property* of any *person* using the *street* or sidewalk for the purpose of *motor vehicle, vehicle* or pedestrian traffic; or, which creates the threat of imminent danger to the health, safety or *property* of any *person* using the *street* or sidewalk for the purpose of *motor vehicle, vehicle* or pedestrian traffic passage; provided that traffic cones or other devices used to protect wet pavement marking *shall* not be considered as obstructions.

Manual *shall* mean the "Traffic Control Manual for Construction and Maintenance, City of Raleigh." This manual *shall* be kept on file at all times in the office of the *City* Clerk.

Emergency situation. An "emergency situation" exists when the obstruction results from or is caused by any unanticipated event or happening which endangers the health or safety of *persons* using or desiring to use the obstructed *street*. Such emergency situation continues for the reasonable length of time necessary for the *person*, *persons*, firm or corporation working to remove the obstruction to comply with the requirements of this article in a manner consistent with providing protection for the health, safety and *property* of *persons* using or desiring to use the obstructed *street*.

(Code 1959 , §19-33)

Cross reference: *Street* responsibilities of the Department of Public Works, Part ~~7~~ 6, Chs. 1, 2.

PART 11 TRANSPORTATION >> CHAPTER 6. STREET MAINTENANCE >>

Sec. 11-6001. PERMIT AND REGULATIONS FOR WORKING IN, UPON, OVER, UNDER OR ADJACENT TO THE STREETS AND SIDEWALKS.

(a) Prohibitions where no certificate of eligibility issued.

Unless and until a *written* certificate of eligibility to receive permits *shall* have been issued pursuant to the provisions of this section by the Director of Transportation, or by an authorized employee in the Department of Transportation, either in the form of an annual certificate or a specific certificate covering a particular project:

(1) No *person shall* make any excavation or opening or dig any ditch, trench, tunnel or hole in, along, across or under any *street*, sidewalk or other public place for the purpose of laying or placing therein any pipe, wires, pole or for any other purposes.

(2) No *person shall* grade, construct, pave or otherwise improve or repair or undertake the grading, construction, paving, improvement or repair of any *street* or sidewalk or other public place, including the construction, extension, paving or repair of any driveway which extends over or within the boundaries of any *street*, sidewalk or *street* right-of-way.

~~**Cross reference:** Driveway Access, Sidewalks, and Streets, Part 10, ch. 7.~~

(3) No *person shall* engage in any work or activity which *shall* in any way obstruct or tend to obstruct any *street*, sidewalk or other public place except those operating according to a valid permit issued pursuant to this Code.

(4) No *person shall* engage in the erection, construction, repair, demolition, renovation, maintenance or any other work or activity in or upon, over, under or adjacent to or within five (5) feet horizontally of any *street*, sidewalk or other public *property* within the *City* outside of any permanent building.

Sec. 11-6006. REPAIR OF SIDEWALK AFTER POLE REMOVAL.

In removing poles, the *owner* or *owners shall* fill in the hole after removal with sand, crushed stone or other suitable material to the ground level, and completed~~ with~~ the installation of concrete to match the equivalent thickness of existing sidewalks, in accordance with requirements of the ~~Transportation Director~~Public Works Director.

(Ord. No. 1998-454, §10, 11-4-98)

Cross reference: Repair of sidewalks and driveways by *property owners*, §12-1037.1.

Sec. 11-6008. CITY RESPONSIBILITY FOR SIDEWALK REPAIR AND/OR REPLACEMENT OF SIDEWALKS RAISED, BROKEN, ETC.

(a) Private *properties* will be relieved from the ~~responsibility~~ cost of sidewalk repair and replacement of sidewalks raised, broken or otherwise made uneven by tree trunks located in whole or in part in the public right-of-way. ~~under the *following* conditions:~~

~~(1) The *City* receives either *written* notice or finds that conditions described in the above paragraph exist; and~~

~~(2) The *City* determines that the raised, broken, or uneven sidewalk was caused by tree trunks located in the right-of-way or by the roots of said tree; and~~

~~(3) The *property owners* of tree trunks located partially in the right-of-way, including the roots of said trees, consent to repair or replacement of the sidewalk and the *property owners* hold the *City*, its officials, its employees and its contracts harmless for any damage caused to the tree.~~

(b) In all cases, the Urban Forester *shall* advise the repair crew (*City* or contractor) as to proper care of the trees and determine if the tree *shall* be removed or its roots cut and removed. However, the timing of these repairs will be determined within the sole discretion of the *City* which *shall* be guided in its determinations, among other factors, upon the extent of the offset or damage to the sidewalk, the nature of the character of the sidewalk, its location, the amount of travel over it by pedestrians, and the extent to which the present conditions of the sidewalk would ordinarily be seen or observed by pedestrians. All other sidewalk repairs, maintenance, and replacement *shall* remain in full force as set forth in §12-1037.1 of this Code.

(c) This provision *shall* in no way enlarge the common law duty of the *City* to make repairs to sidewalks.

(d) The sidewalk construction standards imposed by this Code *may* be waived by the ~~*City* Manager~~*Public Works Director* or the ~~*City* Manager's~~*Public Works Director's* designee for the purpose of sidewalk repairs performed under §11-6008 provided that ~~:~~

~~(1) R~~repairs performed according to *City* standards would destroy, or would be likely to destroy, a healthy mature tree.

However, i~~I~~f conditions (~~2~~1) and (~~3~~2) ~~above~~below, cannot be met without the likelihood of serious harm to the tree, the tree will be removed and the sidewalk will be repaired to *City* standards.

(~~2~~1) The repairs will provide a sidewalk that is safe for use by both handicapped and nonhandicapped individuals.

(2~~3~~) The repairs *may* reasonably be assumed to last for at least seven (7) *years*.

~~If conditions (2) and (3) above, cannot be met without the likelihood of serious harm to the tree, the tree will be removed and the sidewalk will be repaired to *City* standards.~~

(Ord. No. 1998-454, §10, 11-4-98; Ord. No. 2002-149-TC-212, §6, TC-12-01, 1-15-02)

Cross reference: Repair of sidewalks and driveways by *property owners*, §12-1037.1

PART 12 - LICENSING AND REGULATION >> CHAPTER 1. - STREETS AND PUBLIC WAYS >> ARTICLE A. STREET OBSTRUCTIONS AND ENCROACHMENTS >>

~~Sec. 12-1006. BICYCLES ON SIDEWALKS.~~

~~No *person shall* ride bicycles on any of the *following* pedestrian ways or sidewalks: Fayetteville Street Mall, Moore Square Station Transit Mall, adjacent to designated bike lanes. This prohibition *shall* not apply to sworn law enforcement *officers* while on duty and to any private security force employed by a non-profit corporation and approved by the *City Council.*~~

~~*(Code 1959 , §19-21(c); Ord. No. 1987-96, §1, 12-1-87; Ord. No. 2000-747, §1, 3-7-00)*~~

~~**Cross reference:** Bicycles generally, Part 11, Ch. 3.~~

Secs. 12-100~~7~~6 — 12-1020. RESERVED.

PART 12 - LICENSING AND REGULATION >> CHAPTER 1. - STREETS AND PUBLIC WAYS >> ARTICLE B. STREET USE AND CLEANLINESS >>

Sec. 12-1037.1. ~~REPAIR OF SIDEWALKS AND DRIVEWAYS BY~~ PROPERTY OWNERS' RESPONSIBILITY FOR SIDEWALK REPAIR AND MAINTENANCE.

It *shall* be the duty of every *property* owner in the *City* to maintain in good repair and safe condition, the sidewalk and driveway abutting his *property* for the safe passage of pedestrians over the same in all weather conditions except as otherwise provided in §~~7-2008~~11-6008.

(Code 1959 , §19-25; Ord. No. 1983-245-TC-205, §9, 12-6-83; Ord. No. 1986-735, §4, 2-18-86)

Editor's note: This section was formerly numbered §7-2003.

Cross reference: Repair of sidewalk after removal of poles, §~~7-2006~~11-6006.

PART 12 LICENSING AND REGULATION >> CHAPTER 4. ALCOHOLIC BEVERAGE REGULATION >>

Sec. 12-4001. CONSUMPTION AND POSSESSION OF ALCOHOLIC BEVERAGES ON CITY PROPERTY OR PUBLIC VEHICULAR AREAS.

Except as provided by this chapter, it *shall* be unlawful for any pedestrian to consume malt beverages or unfortified wine on any *City street and sidewalk,* and it *shall* be unlawful for any *person* to possess an open container of malt beverages or unfortified wine on any *property* owned, occupied, or controlled by the *City.* It *shall* also be unlawful to possess malt beverages and unfortified wine on any *street and sidewalk*, alley or parking lot which is temporarily closed to regular traffic for a special event unless the resolution of *City Council* closing the *street*, *sidewalk,* alley, or parking lot makes other provisions for the possession of malt beverages or unfortified wine. An open container is one whose seal has been broken or a container other than the manufacturer's unopened original container.

(Ord. No. 1995-686, §1, 7-18-95)

Cross reference: Beer and wine licenses and taxes, §2-2041 *et seq.*

State law reference: *G.S.* 18B-300(c).

RaleighBikeShare

Feasibility Study

Spring 2014

BIKERALEIGH

that's how we roll

bikeraleigh.org

Toole Design Group

EXECUTIVE SUMMARY

Rising costs in transportation and current population trends focusing on revitalizing various areas throughout many cities, have moved various jurisdictions to increase their sustainable transportation options by offering more bicycle and pedestrian oriented options. Bikeshare represents one such approach, ideal for short distance point-to-point trips. It allows users to easily connect between jobs and destinations through a network of self-serve stations. Bike share has also been recognized to positively impact how visitors, residents, and employees experience a city. It allows for increased connectivity to different parts of the city, replacing single occupancy vehicle trips and promoting an active lifestyle.

Figure 1 - Downtown Raleigh

Active transportation is becoming ever more popular in the City of Raleigh: Its bicycle culture continues to expand, while the demand for healthier and more sustainable alternatives to motor vehicle travel, have become a priority for the City. As a Bronze level Bicycle Friendly Community,[1] the City of Raleigh is poised to continue promoting its active living agenda and the expansion of its existing bicycle infrastructure. Following on its commitment to becoming more bicycle-friendly and making continued bicycle and pedestrian infrastructure investments, the City of Raleigh commissioned this study to explore the feasibility of implementing a bikeshare system throughout the City.

A set of goals were defined by the City and local stakeholders to guide and promote the implementation of such a system. These goals include:

- **Goal 1** – Increase the amount of bicycling in Raleigh while offering transportation options for residents, students, employees, and visitors.
- **Goal 2** – Increase equitable and affordable access to public transportation.
- **Goal 3** – Increase the attractiveness of Raleigh as a place to live, work, visit and do business.
- **Goal 4** – Create a system that is financially self-sustaining over the long-term, with owner and operator incentives aligned to meet this goal.

Based on these guiding principles and through a comprehensive analysis of population and employment trends; evaluation of existing plans and regulations; review of existing conditions; and a comprehensive stakeholder and public engagement process, the implementation of a bike share program has been found to be **FEASIBLE** for the City of Raleigh.

Some of the major benefits that bike share could bring to Raleigh include:

- Augmenting the City's existing transportation options while encouraging active transportation by lowering barriers to entry for minority and low income residents.
- Providing an impetus for further investment in bicycle-friendly facilities.
- Building on the City's reputation as a forward-thinking, bicycle-friendly community.
- Using bike share to promote the City to potential employers, residents, and visitors.

The above recommendation is based on the following existing conditions: a comparatively **higher residential density** throughout Downtown and nearby areas (including high concentrations of students and low income and minority residents); a **high concentration of small, medium and large employers** close to downtown; a **significant tourist market** (including a number of large conventions and special events throughout the City) which may help provide increased ridership for a bike share program; numerous **plans and policies** in place focusing on the promotion of livable, walkable and bicycle friendly places throughout the City; and increased stakeholder and public interest in having bike share serve as a **catalyst for additional bicycle-friendly infrastructure**.

While the above mentioned characteristics are conducive towards implementing a bike share program in Raleigh, the City does face some challenges. A **high dependency on single-occupancy vehicles** (SOV's) and an emerging but **not yet complete network of bicycle-friendly facilities** present

1 Based on the League of American Bicyclist Bicycle Friendly America program rankings.

two of the most significant challenges for bike share implementation. Additionally, a **difficult topography** and **existing development patterns** (dis-incentivizing street connectivity and promoting lower population and employment densities) outside of the urban downtown core will make it difficult for a bike share program to be implemented. To mitigate the effects of these existing conditions, it is recommended that the City:

- Continue its development of a planned network of bicycle facilities and a complete way-finding program in parallel with a potential implementation of a bike share program.
- Review and consider amending local policies related to signage to allow for the placement of sponsorship and/or advertising on bike share stations to potentially help cover costs for program.
- Continue the promotion and funding for alternative forms of transportation to help decrease dependency on SOV's.

A demand analysis was performed utilizing data from the U.S. Census, Bureau of Labor Statistics, North Carolina State University, and the City of Raleigh. The analysis was undertaken to help identify areas with the highest potential demand for bike share.

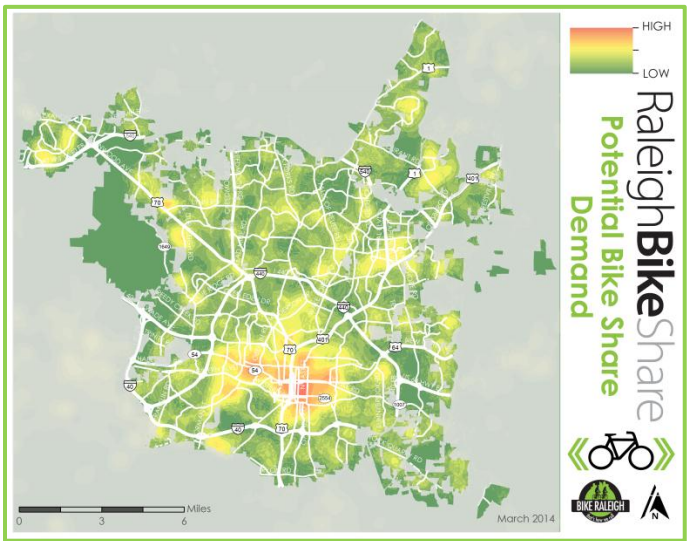


Figure 2 - Potential Bike Share Demand

The resulting "heat map" is shown in Figure 2 above.[2]

The areas of the City with the highest potential for bike share use include:

- Downtown
- Universities & Colleges
- Hillsborough Street Corridor
- Mordecai Neighborhood
- Cameron Village
- Five Points
- College Park

Because of the fairly large and complex set of issues in recommending a governance structure, including regionalism and existence of multiple possible partners (including colleges and universities), a governance and implementation structure has not been recommended as part of this Feasibility Study. However, initial conversations with stakeholders and City Staff identified the major organizations that should be considered and vetted for possible program management. These agencies included the City of Raleigh, Downtown Raleigh Alliance, NC State University, and Triangle Transit. Furthermore, after various meetings with stakeholders and City staff, it was determined that a station-based (smart-dock) bike share system is preferred.

Finally, based on national averages for capital and operating costs, the City can expect the following costs for implementing a bike share program:

Table 1 - Projected Implementation Costs

Station Size	Number of Bicycles	Number of Docks	Capital Costs[3]	Operating Cost Per Month[4]
10	100	170	$500,000	$ 8,500 - 20,400
20	200	340	$1,000,000	$ 17,000 - 40,800
30	300	510	$1,500,000	$ 25,500 - 61,200
50	500	850	$2,500,000	$ 42,500 - 102,000
75	750	1275	$3,750,000	$ 63,750 - 153,000
100	1000	1700	$5,000,000	$ 85,000 - 204,000

It is important to note that these costs are estimates based on national averages from existing bike share programs. Full recommendations and estimates on size, phasing and costs (i.e., capital and operations), will be explored in Phase two of this project under the Raleigh Bike Share Implementation Plan.

2 See Figure 39 for a more detailed view of the areas of the City that are most conducive for bike share implementation.

3 Capital costs developed from an average of $50,000 per station (Cost includes 17 docks and 10 bicycles)

4 Operating costs developed from a national range of $50-$120 per dock per month, and 17 docks per station. Operating costs vary based on station density, business model and level of service.