

Place: Carrboro Century Center Hall

Date: April 29, 2019

Notes Taken by: VHB

Project #: NC 54 Corridor Safety Study

Re: Community Open House #1

Meeting Input Summary

This document includes a summary of the feedback from the first round of community feedback during the April 29th community open house at the Carrboro Century Center. The meeting's purpose was to review preliminary findings with the public, answer attendees' questions, and gather valuable first-hand perspectives from attendees for improving safety and mobility along the study corridor. Approximately 25 people attended the open house.

General Themes

The April 29th open house produced several high level themes that address existing conditions and potential improvements. These include:

- The **pedestrian facilities** along the corridor are inadequate and incomplete, and this includes facilities for crossing NC 54 at signalized and unsignalized locations;
- **Lighting** could be improved across the corridor, and it would serve as a benefit for all roadway users;
- Pedestrians cross NC 54 at uncontrolled crossing locations, often to access **transit service** (bus stops). Drivers and pedestrians note that crossings in the eastern end of the corridor are especially unsafe.
- The **bicycle infrastructure** along NC 54 is seen as inadequate and unsafe, and there is interest in creating bicycle facilities to connect to and travel across NC 54;
- There are numerous locations across the study area where lane configurations, signal timing, roadway speed, and roadway geometry combine to create **hazardous conditions for roadway users**. The locations include on and off ramps, turning lanes, main intersections, and acceleration and deceleration lanes.

Corridor Segment Activity Stations

The 4.5 mile long study corridor was separated into five segments for the purposes of evaluation, and each segment was represented with a large detailed poster and accompanying notepad to capture comments. Each poster included information on that segment's traffic volumes, land use, socioeconomic conditions, crashes, pedestrian crossing volumes, and other transportation performance metrics (the posters are included at the end of this summary). Members of the Study Team asked attendees to note their safety concerns and ideas for each segment. These notes are identified below.



1 - Study Team members discuss NC 54 existing conditions findings with open house attendees

I. Old Fayetteville Road to Poplar Avenue

- There should be pedestrian crossings to and from the ABC Store.
- The crossing at Poplar has improved.
 - Is there any way to get a longer crossing time during the day?
- The signals are timed well and feel right.
- Why are there not highly visible crosswalks everywhere?
- Mark all four legs of the intersection at West Poplar [with crosswalk markings].
- Sidewalks are needed along NC54 from W. Main to Poplar.
- Improve internal connectivity so people don't have to cross NC54.
- People who live close to the Carrboro Shopping Center want to be able to walk or bike to it.
- More bike infrastructure is needed at West Main Street.
- Add separated bike lanes for the entire corridor.
- There's a lot of wrong way bike riding because crossing is not possible
- The Main Street intersection has too much asphalt and activity. Make it tighter.
- The turning signals at Main St. into Carrboro Plaza are confusing.
- Straighten out the intersection at Old Fayetteville.
- How will Lloyd Farm be incorporated in the safety study?
 - There will be a crossing from the development South.
- Lighting is poor.
- Narrow the lanes and drop the speed limit.

II. Poplar Avenue to Walden Drive

- There are a lot of pedestrians crossing during rush hour.
- It's not safe for slower walkers.
- The median is not designed as a refuge.

- The west-bound right turn to Oleander is very dangerous for all users.
- The east-bound right turn onto Westbrook Dr. is the same.
- The corridor is not bike friendly.
- It is unsafe at the ramps on NC54 and Jones Ferry Road.
- There are no bike detectors at signals.
- Many pedestrians use NC54 to get to Jones Ferry from the north side of Westbrook Dr. There is no connectivity to the apartments.
- More lighting for pedestrians between Oleander and Poplar is needed.

III. Walden Drive to Kingswood Apartment

- Pedestrians have to run or walk quickly between Laurel Ridge and Kingswood Apartments. (2x)
- The median is used for crossing but is not easily accessible.
- There should be added crossings for pedestrians at bus stops.
 - Improve the connectivity for pedestrians (sidewalks) so that transit stops can be moved to safer locations.
- Can transit routes be adjusted?
- What about shuttles to supplement the buses?
- Bike crossing to Laurel Ridge on 54 is difficult.
- The corridor is not bike friendly.
- The south side of Smith Level/54 East has a lack of signs and crossings.
- The spacing southbound by F.P.G. School is dangerous, especially during the drop-off from 7:20 to 7:40. (Refer to drawing on original for more information.)
- There should be a dual light westbound at Merrit Mill.
- The speed should decelerate on the northbound shoulder of Laurel Ridge.
- Improved lighting for pedestrians is desired.(2x)

IV. Kingswood Apartments to Oteys Road

- There should be an opportunity to educate all drivers about safe following distances. Is there a need to separate users for safety? Are there ways for comingling safely?
- The intersection of 15, 501, Columbia, Mt Carmel Church, and Culbreth is very dangerous. (see drawing)
- The northbound bike route access is unsafe.
- Widen the sidewalk on the bridge. There is dangerous movement on the bridge
- Merritt's Pasture Recreation Area is an important destination but is hard to get to.
- You can't get to the sidewalk or path from the highway
- This passage has dark conditions and heavy traffic.
- There's no crossing and heavy pedestrian traffic.
- There are potholes eastbound of 86.
- There is heavy congestion at lights getting off NC54 at South Columbia.
- Is there a stop access on the bridge north of 54 in the BRT Plan?
- Morgan Creek Trail to Kingswood; The only shoulder is dangerous. There should be traffic deceleration on the shoulder for the off ramp and entrance for MC lot and westbound towards Laurel Park Ridge. It's not well lit.
- On all segments there is debris on the shoulder.

V. Oteys Road to Manning Drive

- The corridor is not well lit.
- There is a lack of bike and pedestrian infrastructure.
- There is a lot of impromptu use of paved shoulders as a right turn lane. This conflicts with bikes.
- What are the concerns of first responder agencies?
 - Their main concern is congestions versus response time.
- Consider a grade separated pedestrian crossing at Oteys.
- People use the right lane of 54/Fordham eastbound as a through lane.
 - This is outside of the study area and currently being addressed by the DOT.
- Poor markings.

Next Steps

The Study Team will interpret the comments from the first community open house and incorporate the findings in the existing conditions phase of the study. Next, the Study Team will begin developing an array of safety improvements for pedestrians, bicyclists, transit users, and motorists. After evaluating the effectiveness of potential improvements and the tradeoffs of critical issues like safety and mobility, the Study Team will present improvement concepts during a second community open house planned for late Summer 2019. A draft report will follow in Fall 2019.

Old Fayetteville Road to West Poplar Avenue

4-lane median divided roadway along a commercial and multifamily corridor with 20,000 daily vehicles

Bus

ON THE MAP

X DAILY BOARDING & OFFBOARDING

ROUTES SERVED:

CARRBORO PLAZA EXPRESS (CPX)
JONES FERRY ROAD EXPRESS (JFX)
CARRBORO/WEAVER STREET (CW)
CARRBORO/MERRITT MILL RD (CM)

Level of Service

Old Fayetteville Road to Main Street

EASTBOUND
WESTBOUND

D

What is Level of Service?
Level of service measures
the flow of vehicle traffic
in a given segment.
Higher scores are given to
segments with free-flowing
traffic with little to no wait
time.

Main Street to Poplar Avenue

EASTBOUND
WESTBOUND

A

D



Pedestrian



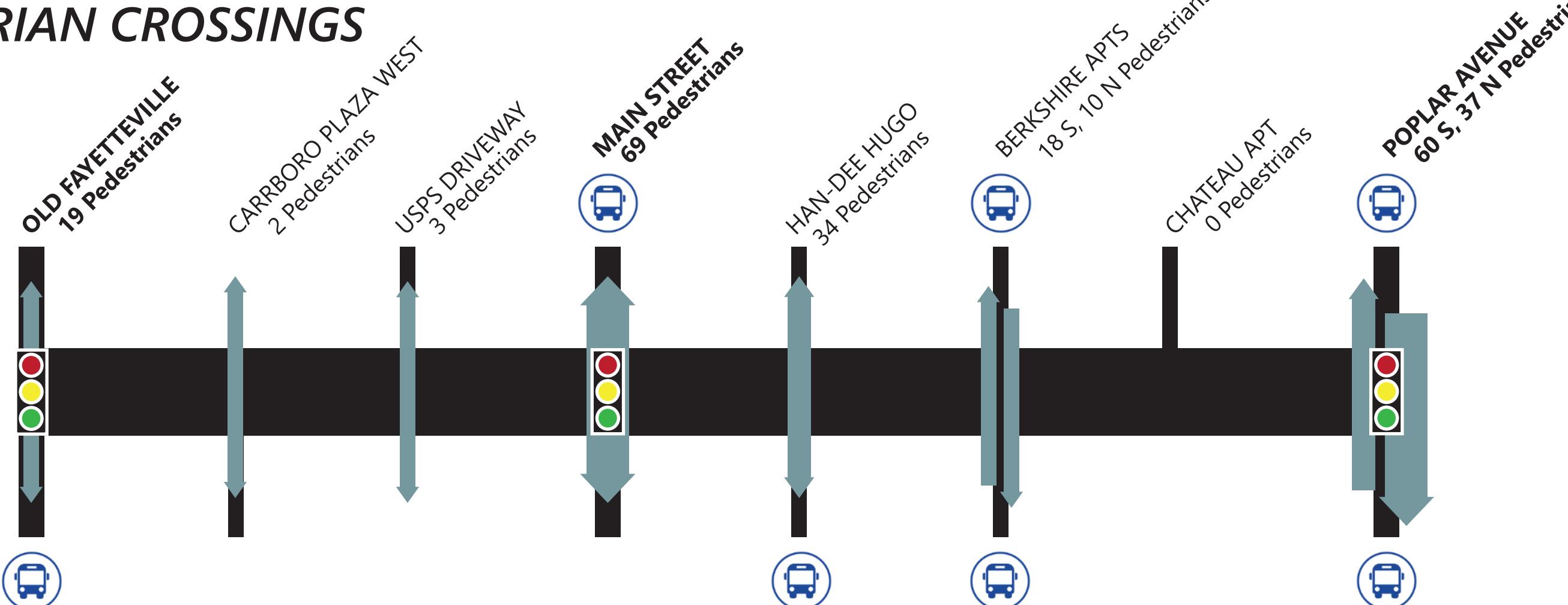
PEDESTRIAN CRASHES

ON THE MAP

5 hurt, 0 killed

DAILY PEDESTRIAN CROSSINGS

100 or more
50 to 99
25 to 49
1 to 24



Bicycle



BICYCLE CRASHES

ON THE MAP

3 hurt, 0 killed

BICYCLE COUNTS AT:

BERKSHIRE MANOR

EASTBOUND
WESTBOUND

10

7

POPLAR AVENUE

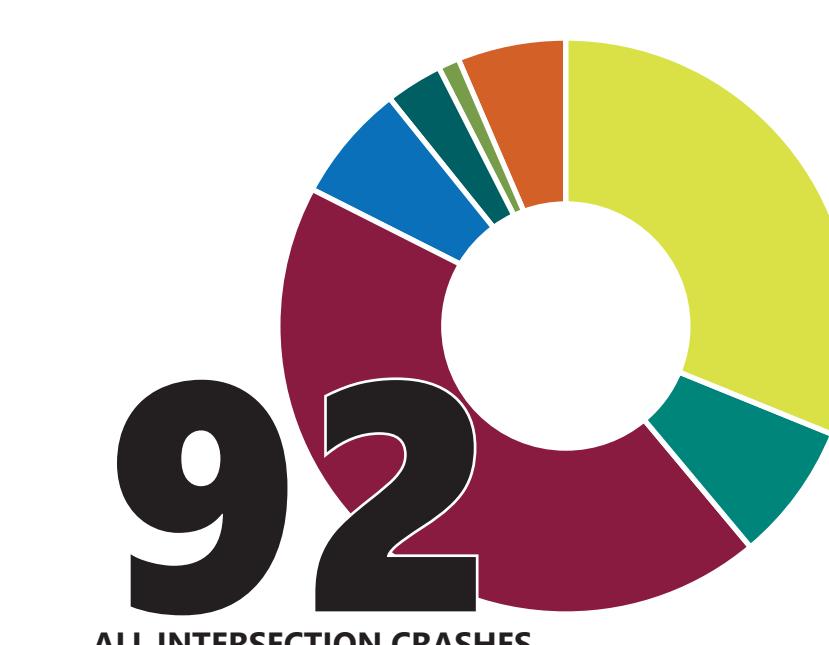
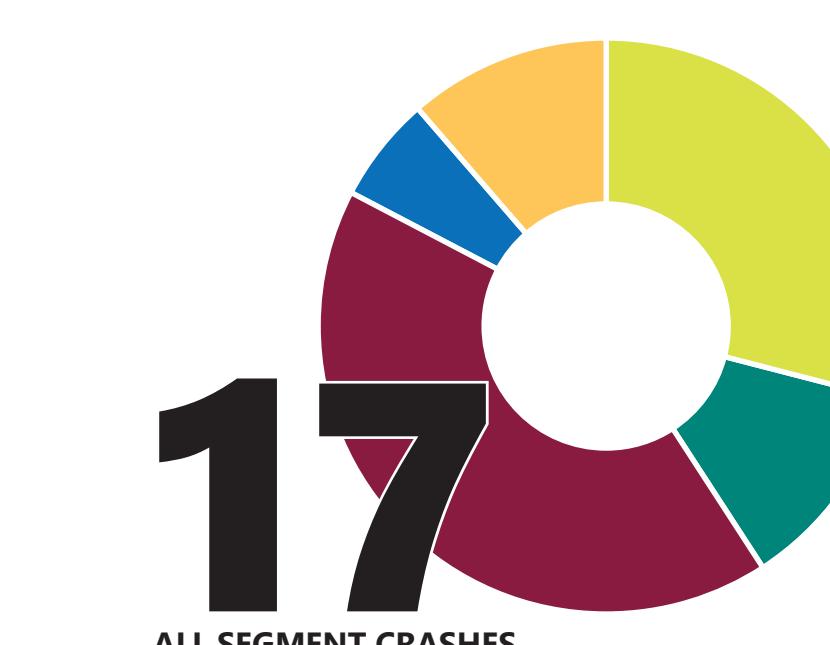
EASTBOUND
WESTBOUND

4

8

Safety

All crashes between December 1st 2008 and November 30th 2018



FRONTAL IMPACT
SIDESWIPE
REAR END
LANE DEPARTURE
ANIMAL
PEDESTRIAN
CYCLIST
OTHER

West Poplar Avenue to Walden Drive

4-lane median divided roadway along a commercial and multifamily corridor with 20,000 to 31,000 daily vehicles

Bus

ON THE MAP

X DAILY BOARDING & OFFBOARDING

ROUTES SERVED:

CARRBORO PLAZA EXPRESS (CPX)
JONES FERRY ROAD EXPRESS (JFX)
CARRBORO/DOWNTOWN CHAPEL HILL (J)
CARRBORO/MERRITT MILL RD (CM)

Level of Service

Poplar Avenue to Oleander Road

EASTBOUND
WESTBOUND

B
B

What is Level of Service?
Level of service measures
the flow of vehicle traffic
in a given segment.
Higher scores are given to
segments with free-flowing
traffic with little to no wait
time.

Jones Ferry Road to Greensboro Street

EASTBOUND
WESTBOUND

C
C



Pedestrian

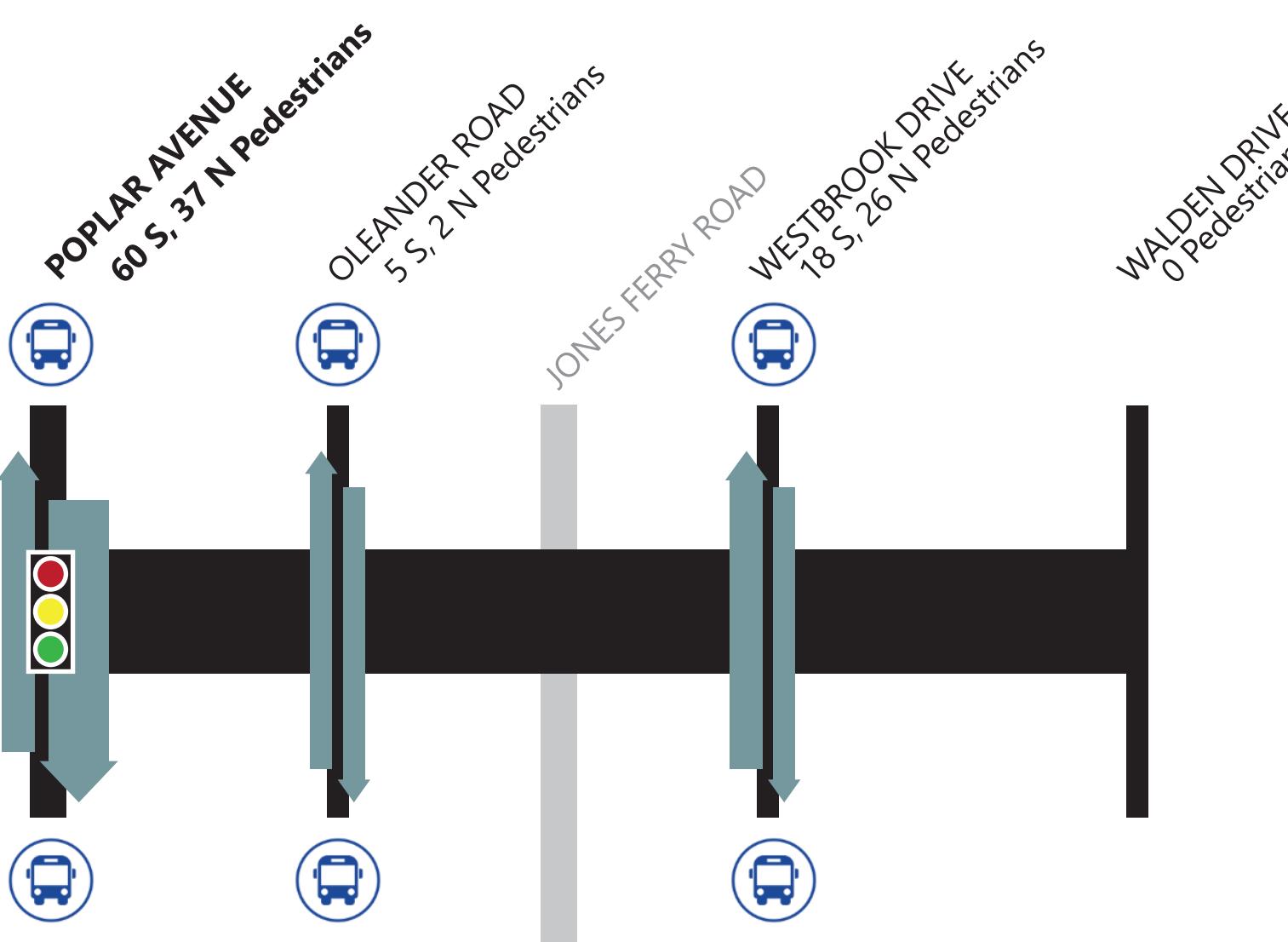
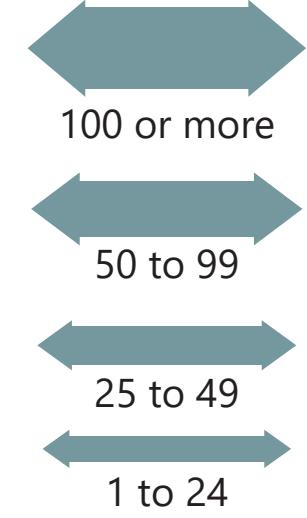


PEDESTRIAN CRASHES

ON THE MAP

2 hurt, 1 killed

DAILY PEDESTRIAN CROSSINGS



Bicycle



BICYCLE CRASHES

ON THE MAP

1 hurt, 0 killed

BICYCLE COUNTS AT:

POPLAR AVENUE

EASTBOUND
WESTBOUND

4
8

OLEANDER ROAD

EASTBOUND
WESTBOUND

2
4

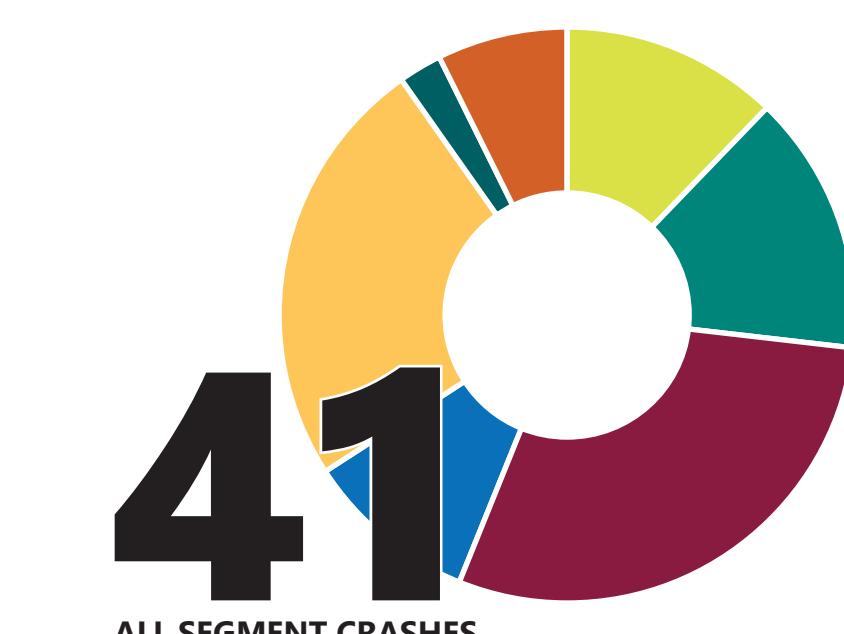
WESTBROOK DRIVE

EASTBOUND
WESTBOUND

5
4

Safety

All crashes between December 1st 2008 and November 30th 2018



41
ALL SEGMENT CRASHES



57
ALL INTERSECTION CRASHES



Walden Drive to West of Kingswood Apartments

4-lane median divided roadway along a multifamily corridor with 31,000 daily vehicles

Bus

ON THE MAP

X DAILY BOARDING & OFFBOARDING

ROUTES SERVED:

CARRBORO/MERRITT MILL RD (CM)
CARRBORO/DOWNTOWN CHAPEL HILL (J)
ESTES PARK/UNC HOSPITALS (JN)

Level of Service

Jones Ferry Road to Greensboro Street

EASTBOUND
WESTBOUND

C
C

What is Level of Service?
Level of service measures
the flow of vehicle traffic
in a given segment.
Higher scores are given to
segments with free-flowing
traffic with little to no wait
time.

Greensboro Street to NC 86

EASTBOUND
WESTBOUND

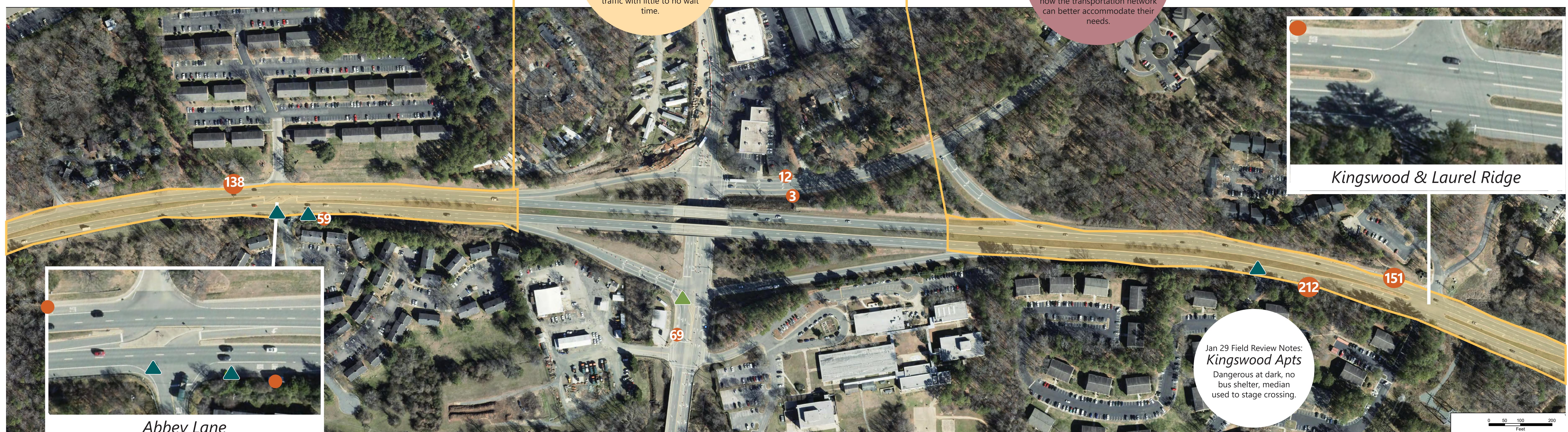
C
F

Socioeconomic

Low English Proficiency **between 15% and 25%**

Zero-car Household **less than 20%**

Households below Poverty Line **between 20% and 50%**



Pedestrian



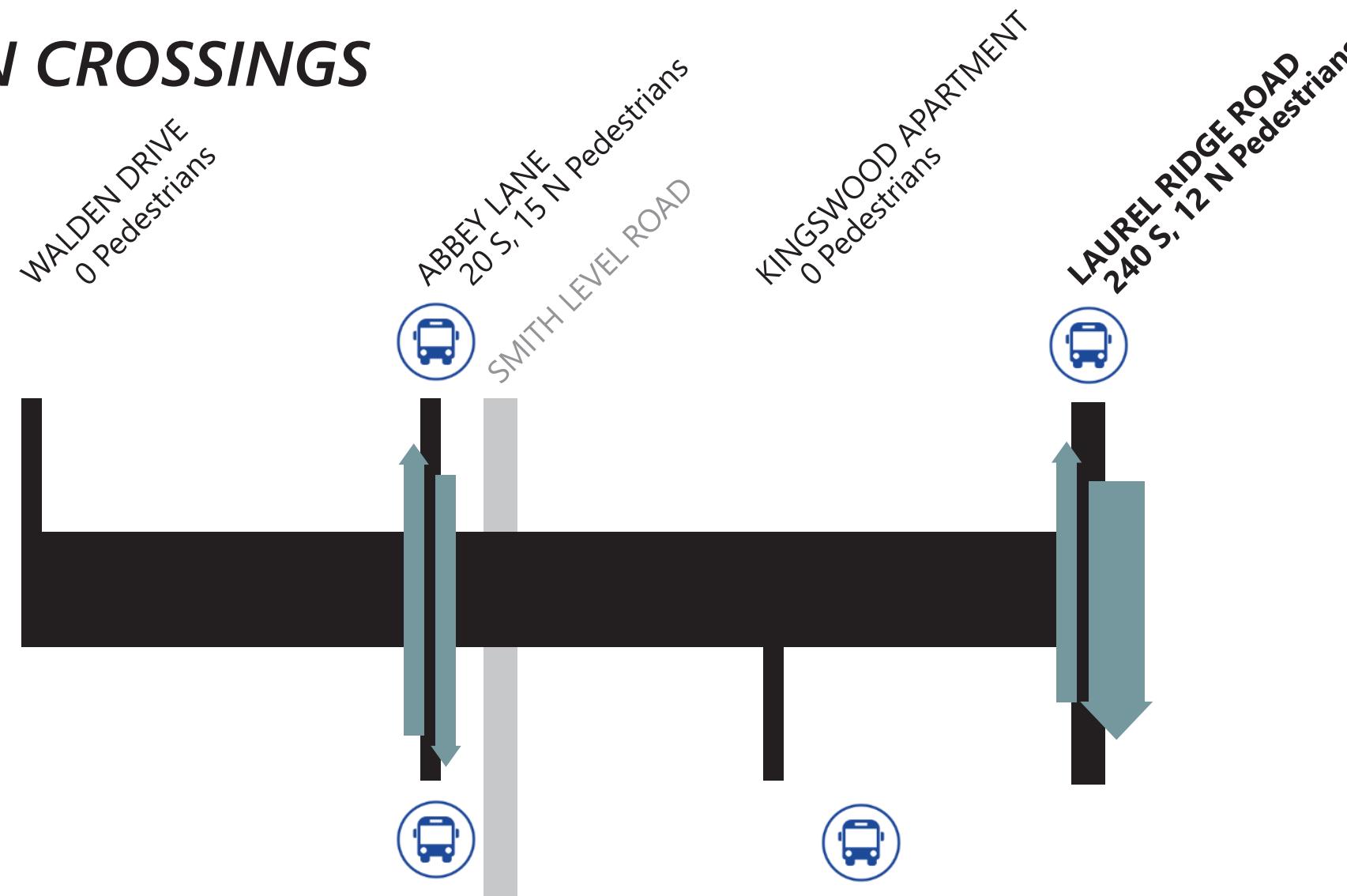
PEDESTRIAN CRASHES

ON THE MAP

3 hurt, 0 killed

DAILY PEDESTRIAN CROSSINGS

100 or more
50 to 99
25 to 49
1 to 24



Bicycle



BICYCLE CRASHES

ON THE MAP

1 hurt, 0 killed

BICYCLE COUNTS AT:

ABBEY LANE

EASTBOUND
WESTBOUND

6

5

KINGSWOOD APARTMENT

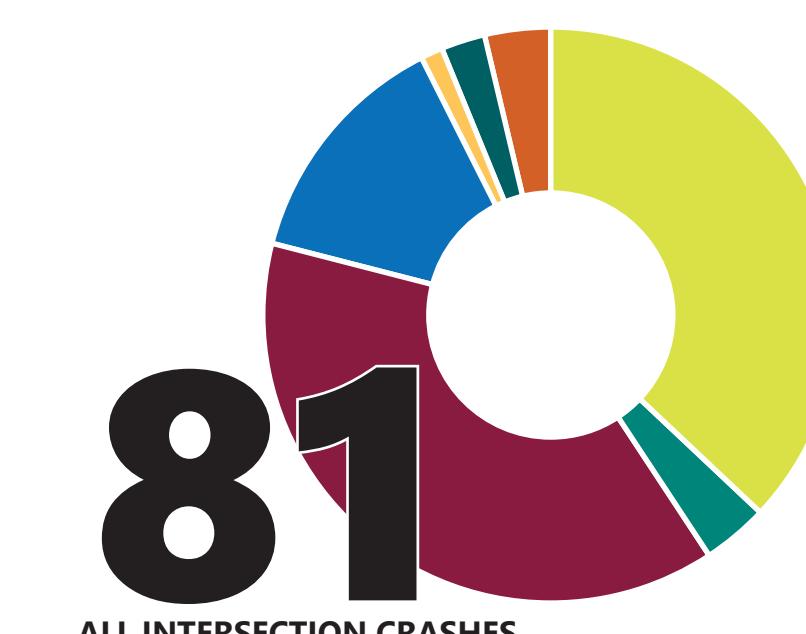
EASTBOUND
WESTBOUND

3

0

Safety

All crashes between December 1st 2008 and November 30th 2018



FRONTAL IMPACT
SIDESWIPE
REAR END
LANE DEPARTURE
ANIMAL
PEDESTRIAN
CYCLIST
OTHER

West of Kingswood Apartments to Oteys Road

4-lane median divided roadway along a recreational and single family home corridor with 31,000 daily vehicles

Bus

ON THE MAP

 DAILY BOARDING & OFFBOARDING

ROUTES SERVED:

CULBRETH ROAD/FRANKLIN STREET (D)
CARRBORO/DOWNTOWN CHAPEL HILL (J)
EUBANKS ROAD/SOUTHERN VILLAGE (NS)
SOUTHERN VILLAGE/MEADOWMONT (V)
ESTES PARK/UNC HOSPITALS (JN)

Level of Service

Greensboro Street to NC 86

EASTBOUND
WESTBOUND

C
F

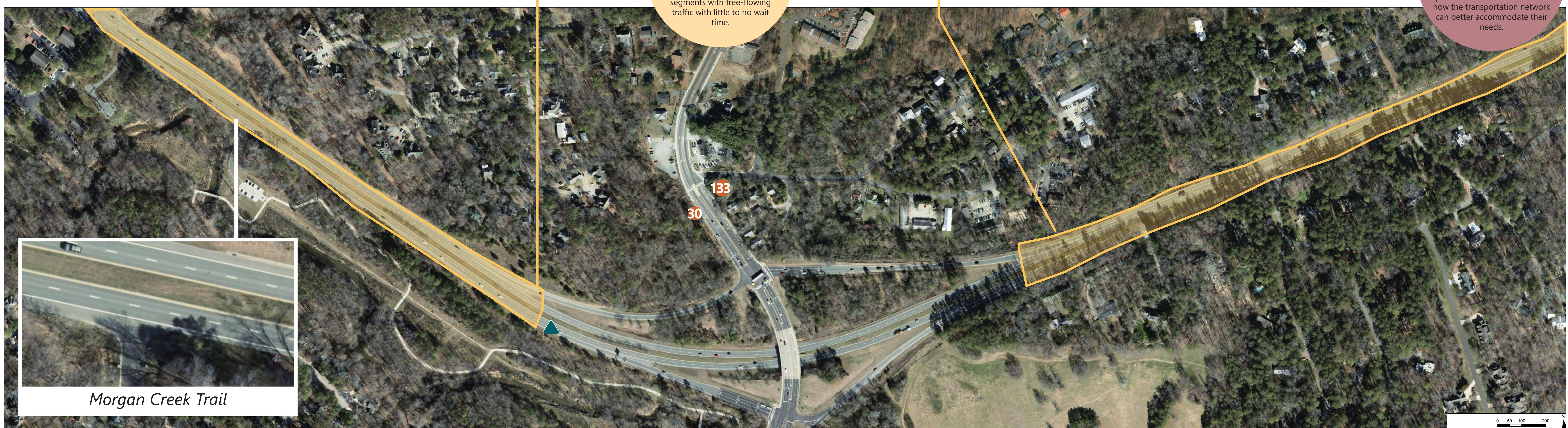
What is Level of Service?

Level of service measures the flow of vehicle traffic in a given segment. Higher scores are given to segments with free-flowing traffic with little to no wait time.

NC 86 to Manning Drive

EASTBOUND
WESTBOUND

B
C



Pedestrian

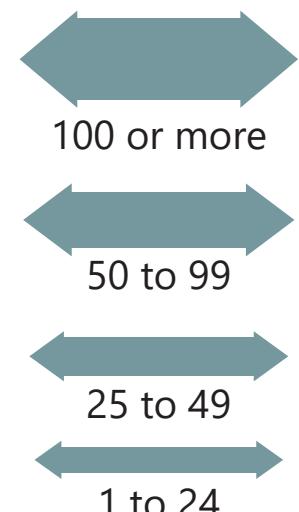


PEDESTRIAN CRASHES

ON THE MAP

0 hurt, 1 killed

DAILY PEDESTRIAN CROSSINGS



MORGAN CREEK TRAIL
37 Pedestrians
WINTER DRIVE
0 Pedestrians
MORGAN CREEK ROAD
3 Pedestrians
OTEYS ROAD
15 Pedestrians

Bicycle



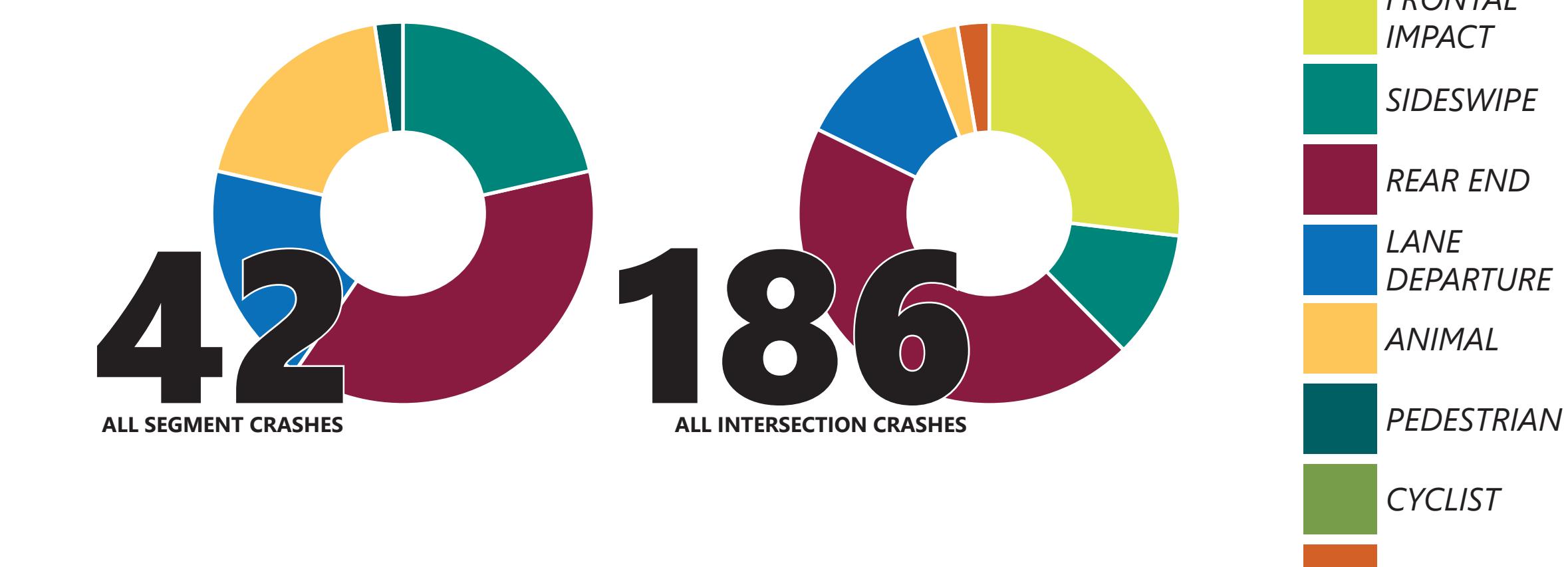
BICYCLE CRASHES

ON THE MAP

0 hurt, 0 killed

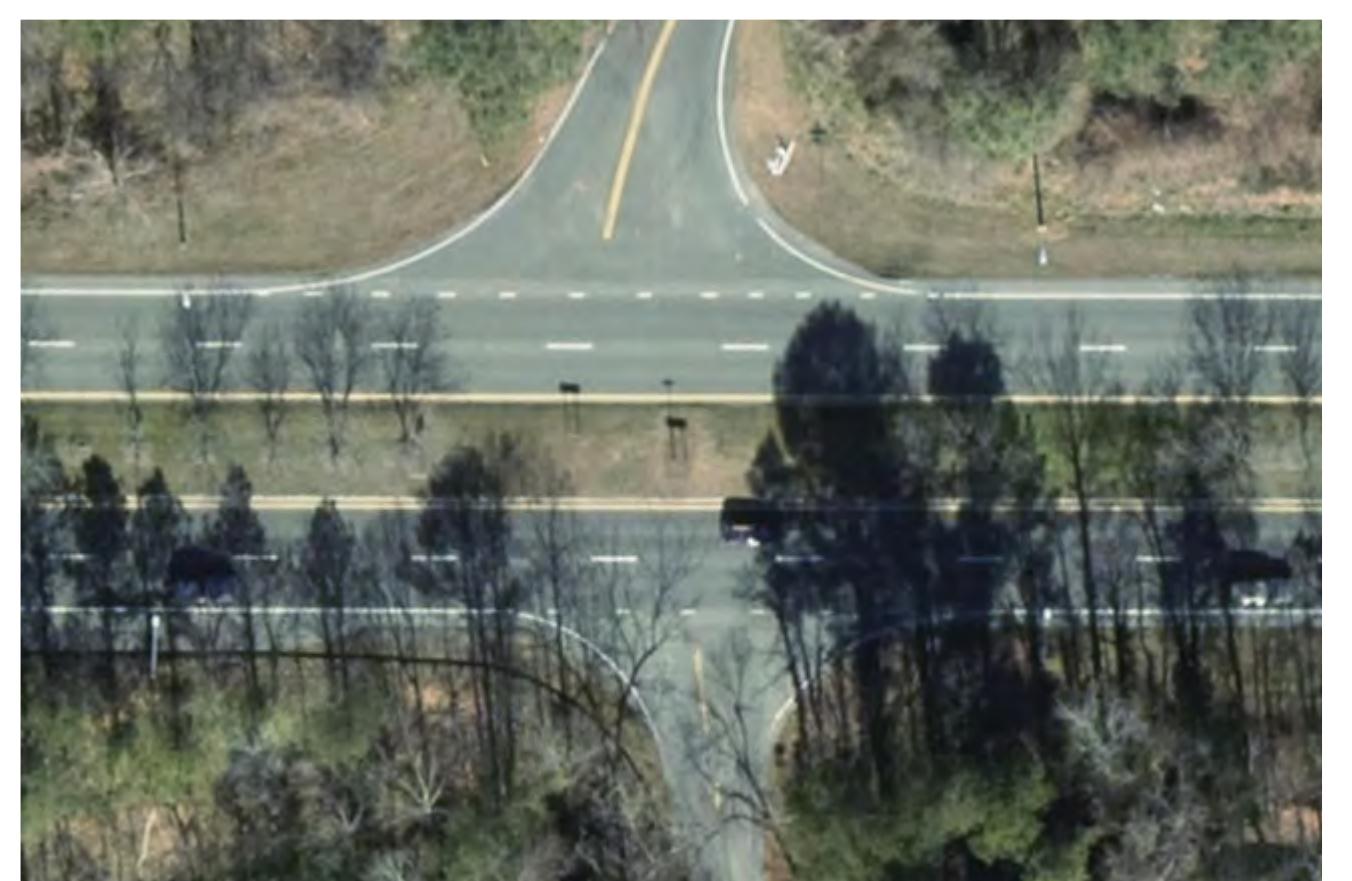
Safety

All crashes between December 1st 2008 and November 30th 2018



Oteys Road to Manning Drive

4-lane median divided roadway along an institutional and single family home corridor with 40,000 daily vehicles



Oteys Road

Level of Service

NC 86 to Manning Drive

EASTBOUND
WESTBOUND

B
C

What is Level of Service?
Level of service measures the flow of vehicle traffic in a given segment. Higher scores are given to segments with free-flowing traffic with little to no wait time.

Socioeconomic

Low English Proficiency	less than 5%
Zero-car Household	between 20% and 50%
Households below Poverty Line	between 20% and 50%

Why are socioeconomic measures important?

Along with community input, socioeconomic measures help provide a snapshot of the potential users in the area and how the transportation network can better accommodate their needs.



Pedestrian

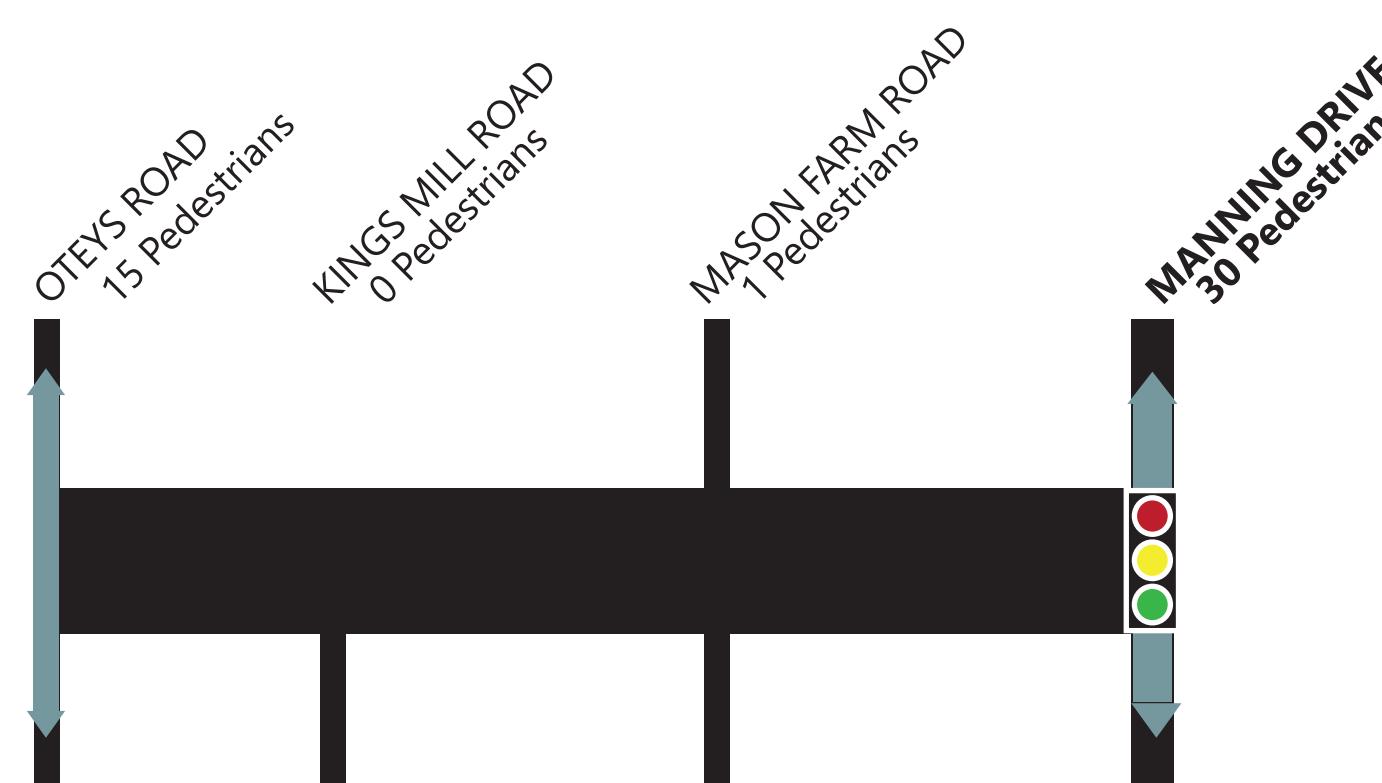
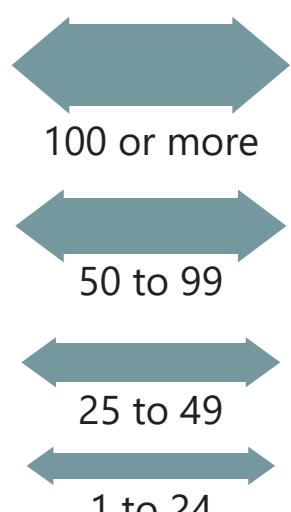


PEDESTRIAN CRASHES

ON THE MAP

0 hurt, 0 killed

DAILY PEDESTRIAN CROSSINGS



Bicycle



BICYCLE CRASHES

ON THE MAP

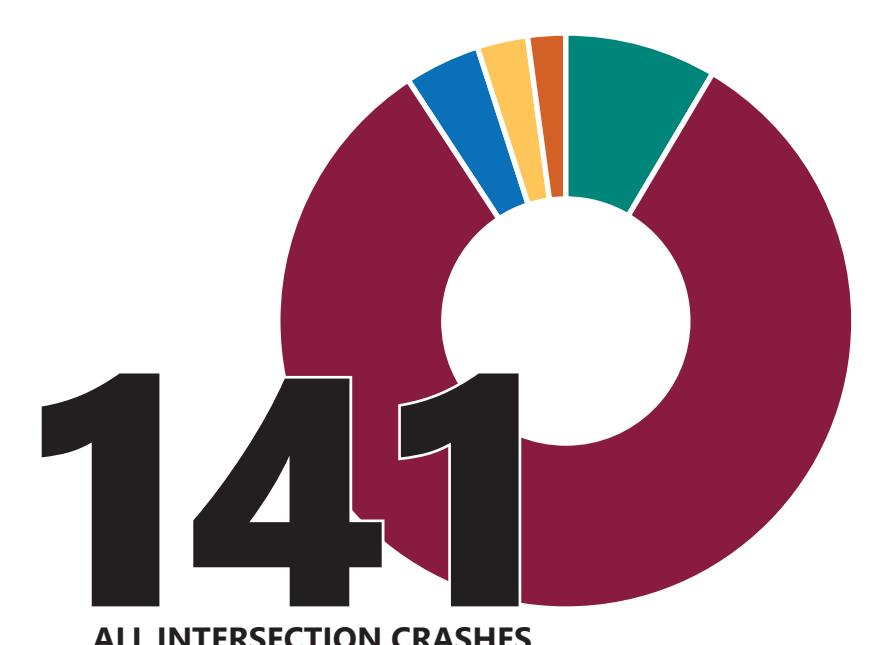
1 hurt, 0 killed

Safety

All crashes between December 1st 2008 and November 30th 2018



101
ALL SEGMENT CRASHES



141
ALL INTERSECTION CRASHES



Location	Station	Questions	Community Workshop 2 - Feedback
Old Fayetteville Road	1	How do you think the changes will improve safety?	A. Add a protected bike intersection from 54 B. Not appreciably Signalize slip lane. Slip lane is not at all safe and cars will not look for pedestrians.
		What concerns do you have?	A. The current design consideration, with the bike lane and right turn lanes blending, are a death trap. It would be safer if the bike lane and right turn lane were separately through the intersection. B. The NRTOR currently stays illuminated five seconds. Not long enough to cross even a single side. C. Needs bike loops. How will RTOR be prohibited on a time basis? Bus stops in-between crosswalks. People cross lanes. Reduce island?
		Why do you feel this way?	A. Cars crossing the bike lane at a 90 degree angle improves visibility of cyclists and reduces pedestrian crossing time. B. I ride my bike through this intersection 3-5 times a week. No sensing loop & RTOR is too short. C. Many people on bikes won't get off to push the pedestrian signal.
W Main Street	1	How do you think the changes will improve safety?	A. Slightly Suggest green lane out of Carrboro Plaza to West Main Street.
		What concerns do you have?	A. Make RTOR mandatory when crosswalk is triggered. Bike loops Must signalize the slip lane from West 54 to Main St. That slip lane is not at all safe and cars will not look for pedestrians. Remove right turn slip lanes
		Why do you feel this way?	A. Very similar to existing crosswalk.
W Poplar Ave	1	How do you think the changes will improve safety?	A. Yes, pedestrian signal heads are needed. B. Big improvement.
		What concerns do you have?	A. No bike lanes at this intersection? B. Crossing time, need to have a button in the median. C. No mention of bicycle detection loops for signals. Is there a bicycle tripping signal?
		Why do you feel this way?	A. The fast traffic on 54 is a ped/bike hazard. B. Slower walkers or people with disabilities will need more time. C. Current loops on Poplar won't trip signals. End us running the red light.
Jones Ferry Road	2	How do you think the changes will improve safety?	A. No bike lane needed. B. Remove the bridge, revest to signalized intersection.
		What concerns do you have?	A. Bikes are vehicles! Are you suggesting bikes need refuge in the center? C. There ought to be some designs to accommodate bike/ped from Westbrook along 54 heading West to Jones Ferry along off-ramp, same for ramp eastbound. D. See pedestrians (especially carrying groceries) using onway/off ramps and 15/501 shoulders as sidewalks. Would recommend sidewalks (especially the North side of the road) connecting to next roads Westbrook and W. Poplar.
		Why do you feel this way?	A. Lane diet needed here. B. Highways do not belong in urban areas. C. May folks (bike/ped) travel in the shoulder here.
Westbrook Drive	2	How do you think the changes will improve safety?	A. Yes
		What concerns do you have?	A. Crossing location & refuge require more time and distance for pedestrians. B. Should have "Hawk" or similar warning lights. Bike loops
		Why do you feel this way?	A. People already cut across. B. Need some way to slow down drivers.
		How do you think the changes will	A. Yes

Location	Station	Questions	Community Workshop 2 - Feedback
Abbey Lane	3	How do you think the changes will improve safety?	B. Stop traffic for much safer pedestrian crossing. C. A signalized intersection is a huge improvement.
		What concerns do you have?	A. Will refuge/median have ability to trigger signal? B. People on bike and foot may cut across and not zig zag. Cars coming out opposite the apartment complex don't have a signal to stop and may encounter bike/ped. C. Long crossing length. D. Should have "hawk" or similar warning lights.
		Why do you feel this way?	A. Any crossing infrastructure is an improvement. B. It's human nature to take the shortest, least resistance, easiest, fastest path. C. May cause conflicts due to length of the traffic stoppage - probably long cycle length. D. Need some way to slow down drivers.
Smith Level Road	3	How do you think the changes will improve safety?	A. Yes B. Some, but not enough. See additional comments. C. Signals should help.
		What concerns do you have?	A. Awareness and alignment of signals with FPG, Merrit Mill bike lanes? B. Cars turning right potentially encounter bike/ped at crosswalk. I'd like to see a delay in the car light change to allow a head start (LPI). In addition, I'd like to see a NRTOR on all turns. There is so much going on with this intersection. Infrastructure needs to be the solution to lessen the distractions. C. Need bicycle lane to extend through intersection. Add "no right turn on red" for ramps to 54 I bike down 54 to Southern Village and the on-ramp from Smith Level Rd is not safe. Do connect the bike paths here. Currently the bike path stops before crossing Smith Level Road, please continue it and connect it to Southern Village. Would like more clear markings to Smith Level, under NC-54 to Greensboro St. Make same as Jones Ferry Rd, or at least add bike lane and sidewalks under the bridge.
		Why do you feel this way?	A. With FPG, improvements for ped/bike are needed! B. It's human nature to take the shortest, least resistance, easiest, fastest path. C. What is there now, is not safe.
Kingswood/Laurel Ridge	4	How do you think the changes will improve safety?	A. It's a big improvement to what we have now. B. A signalized intersection is a huge improvement. C. Controlled intersection is vastly safer. D. Vastly! Pedestrians will have clear time and space to cross and turning vehicles will not have to contend with so many obstacles. E. I think they will address many of the needs of pedestrians; more sidewalk space, protected, and clearly identified crossing areas. F. Yes, crosswalks are necessary. G. Will be better for pedestrians. A necessary change. Good job. Agree with the light for these pedestrians. Yes.
		What concerns do you have?	A. No formal bike facilities in the zig-zag. Make it wider to allow bikes and walkers. B. Lane crossing length. C. Concern pedestrians will not follow the zig-zag but cross one side outside the sidewalk (cross road in a straight line). D. That the changes will not take place soon enough. E. This doesn't address the safety of vehicles coming from the apartments, making them still have to do a U-turn down the road. Also, the median needs to be accessible to humans with mobility issues. F. Timing of project. That will take too long. G. There is high potential for injury and death for peds. The project will take too long. Change needs to happen FAST! Add flashing pedestrian lights immediately. H. Should have "hawk" or similar warning lights.

Location	Station	Questions	Community Workshop 2 - Feedback
			<p>I. Bicycle access to and through this area is unsafe. Not many alternatives for biking to Frank Porter Graham.</p> <p>Bike loops</p>
		Why do you feel this way?	<p>A. Suggestion: make buttons respond to bikes and add NRTOR to the stop lights.</p> <p>B. May cause conflicts due to length of the traffic stoppage - probably long cycle time.</p> <p>C. Pedestrians don't want to take the time to zig-zag. I'm afraid they might get caught in the intersection and wait two light cycles.</p> <p>D. Because bureaucracy is slow and city planning privileges motorists.</p> <p>E. I think it will depend on how things look, but I would encourage you to keep in mind children, people aren't able bodied, and others with mobility issues use this intersection too. Keep their needs in mind as you move forward.</p> <p>F. Big changes needed to fix problem - can there be a temporary fix like a flashing signal until road/intersection can be built? I don't know if people will spend the time zig-zag, rather than cross the other side directly. If the signals are separate this wouldn't be a</p> <p>G. I have almost been hit by a car every day trying to get to Kingswood bus stop from Laurel Ridge.</p> <p>H. Need some way to slow down drivers.</p> <p>I. I biked here.</p>
Manning Drive	5	How do you think the changes will improve safety?	<p>A. Not much but I understand the constraints.</p> <p>B. Yes, marginally.</p> <p>It will help.</p> <p>Remove right turn on red slips.</p>
		What concerns do you have?	<p>A. The Manning to 15-501 slip lane is dangerous.</p> <p>B. Right turn on Manning must have NRTOR during pedestrian cycle. Sidewalk along botanical garden is narrow and guardrail is dangerous.</p>
		Why do you feel this way?	<p>A. There's no guarantee cars will stop, even if the pedestrian tries to make eye contact.</p>