

Summary



Lumberton Loop Feasibility Study

Advisory Committee
Meeting #2

September 28, 202 @ 11 AM (Town Hall &/or Virtual)

Attendees

Brandon Love, Deputy City Manager
Sarah Beth Ward, Downtown Development
Atriel Kirchner, Planning Director

Leslie Bertlebaugh, NCSU (virtual)
Kim Nguyen, NCDOT-IMD (virtual)
Timothy Tresohlavy, Stantec

Summary

Welcome / Recap / Outreach to Date – (Stantec)

Timothy welcomed members to AC meeting #2. Stantec reviewed the project schedule, public outreach to date, and upcoming tasks. The project website (www.LumbertonLoop.com) is live, and ready to be shared by ALL committee members.

Field Review - Observations – (Stantec)

Timothy walked through photos of field conditions to 'define our project challenges' highlighted by:

- Pedestrian treatments to cross the street (missing)
- Overlooked pedestrian infrastructure (sidewalks to nothing)
- Maintenance of sidewalks
- Constrained rights-of-way (ROW), notably topography, utilities, stormwater, private development, and trees / landscaping
- Large trucks making wide turns (rear of Biggs Mall)
- Shifting curblines, sometimes 3-lanes narrowing to 2-lanes; other locations the curblines shifts <3' between blocks
- Multimodal projects mean walking + biking, however, with limited ROW above the curb there are some locations near Downtown where <8' width are available, meaning that bikes must be accommodated between the existing curblines
- Traffic calming opportunities to reduce vehicle speeds, and improve safety – notably between Downtown and 24th Street
- Extra wide pavement sections, notably south of the railroad tracks
- Very constrained ROW, notably the 23rd Street block with 3-lanes of traffic, as well as the actual railroad crossing location
- Lumber River Bridge width is not wide enough to support walking or biking

Discussion from AC members:

- City is interested in locations where shifting one curblines may be advantageous for the most appropriate roadway redesign
 - Agreed, this may be most appropriate for Roberts Ave (NC 211), Second St (NC 72/41), Fayetteville St, and/or Chestnut St south of Downtown --- All of which are maintained by NCDOT, and could be part of a Capital Improvement project
 - Shifting curblines for the residential portions of Walnut Street may NOT be a desirable expense
- City mentioned that paving the gutter pan has occurred along Chestnut St (and others), which may be a sign of future need to repave / redesign the entire street.
- City referenced small turn radii at curbs along Walnut St (residential blocks), with a 5' radius arc – very tight turning – which may impact the potential for Neighborhood Traffic Circles / Mini Roundabouts to be properly installed

- Excellent point; also a great opportunity for a 'Demonstration Project' to test-fit some of these intersections and be sure that vehicles or small delivery trucks can navigate the intersections before designing the treatment.
- City mentioned a previous **Utility Pole Audit**, which have been digitized into GIS – to be shared
 - Many electrical utility poles may be easily moved by the city, unless they contain telecom lines

Strategies & Discussion – (Stantec)

Timothy walked through Sections 1-5 along the corridor, citing the unique treatments that seem feasible at this stage of the project:

- **Section 1 – Roberts Ave / NC 211:** Sidepath above the curb, with intersection crosswalks; fit within the existing 150' ROW, and tie into two NCDOT project designs
- **Section 2 – Biggs Mall / Cemetery:** Road diet from 3-lanes to 2-lanes, and repropotion this pavement for a two-way walking and biking path along the east side – between the curbs.
- **Section 3 – Residential North:** various Traffic Calming Treatments to slow vehicle speeds by reducing the travel lane width, and reducing the posted speed to 20 mph. Traffic Calming allows for Shared Lane Markings for bikes to operate within the travel lane. Extend sidewalks to connect – considerations for one-side or two-sided
- **Section 4 – South of Downtown:** Reproportion existing (wide) pavement for a two-way walking and biking path along the east side – between the curbs. This will impact on-street parking. Special attention needed at the railroad crossing, and avoiding existing utilities. Multiple alignments are possible between Noir St and Hines St for Sidepath connections and crossing locations. The perceived safest option for crossing is at Noir St intersection, where a Pedestrian Refuge Island is feasible/reasonable.
- **Section 5 – Lumber River Bridge:** Structure engineering review suggests that the most cost effective strategy here is a free-standing pedestrian/bicycle bridge that is separate from the existing bridge – UNLESS there is a grant opportunity to fund a full replacement with multimodal bridge.

Discussion from AC members:

- City agrees with Section 1 sidepath on both sides, as long as it fits within the 150' ROW
- City agrees with Section 2 reproportion, however, would like traffic engineering review of turning movements, if available
- City agrees with Section 3 traffic calming strategies. Demonstration projects may be good opportunity to 'test-fit' some concepts.
 - City would like to consider alternative alignment(s) along 15th Street – Elm Street into Downtown, to evaluate the benefits or constraints – Stantec to include this within the Evaluation Matrix options
- City will review Section 4 options for west / east side of Chestnut St, and crossing location(s)
- City would like to know if environmental permitting would be more challenging along the west / east side of the existing Lumber River Bridge, considering the river, wetlands, and structures needed to span the wider/longer section on the west (upstream)

Action Items/ Next Steps –

- **ALL:** please review and comment on attached materials, containing CONCEPTS / DRAFT only
- **City** to share resources relating with:
 - Utility Pole Audit
 - Fayetteville Street Quadrant Redesign (NCDOT)
 - Fayetteville Street @ 24th St / Godwin Ave roundabout Redesign (NCDOT)
 - Potential bridge replacement over Meadow Branch
- **City** to check whether existing traffic / turning movement counts are available along Walnut Street near Biggs Mall / Cemetery entrances.
- **City** to check with NCDOT Div Engineers on whether the Lumber River Bridge was 'over topped' during Hurricane Matthews or Florence – which may help decide whether near-term replacement is warranted / cost effective.
- **City** to confirm property ownership along the Lumber River Bridge.
- **City** to review Summary / Guiding Principles to be sure these design considerations are accurate, and before Stantec proceeds with further concept design details.
- **Stantec** to check on permitting constraints that would impact a potential pedestrian bridge to the West / East of the current bridge.
- **Stantec** to consider a 15th Street – Elm Street alignment into Downtown, and provide Evaluation summary
- **Stantec** to attend this evening's Downtown Master Plan public meeting, and discuss this feasibility study with attendees.

ATTACHMENTS:

- **Presentation Slides**
- **Issues and Opportunities Map** (34x60)

Project Contacts

Project Manager

Brandon Love, Deputy City Manager

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Project Manager

Joseph Furstenberg, Program and PM branch

NCDOT

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Project Consultants

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Timothy Tresohlavsky, Project Manager

Stantec Project Team

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919.532.2333 — timothy.tresohlavsky@stantec.com



Stantec

Lumberton Loop Feasibility Study

Advisory Committee Mtg #2
September 28, 2023

Integrated Mobility Division
N.C. DEPARTMENT OF TRANSPORTATION



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Agenda

- Welcome & Recap
- Outreach to Date
- Field Review – Observations
- Strategies & Discussion
- Next Steps

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Project Team



Lumberton, NC

Brandon Love

Deputy City Manager
blove@ci.Lumberton.nc.us



Integrated Mobility Division
N.C. DEPARTMENT OF TRANSPORTATION

NCDOT

Joseph Furstenberg

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jcfurstenberg@ncdot.gov



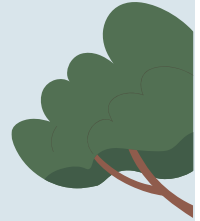
Stantec

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Timothy Tresohlavy, Project Manager

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(919) 532-2333



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General Timeline



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Tools for Outreach

Requires your help to share, post, promote



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Project Website

www.LumbertonLoop.com

Launched in September 2023

- Online Survey
- Interactive Map



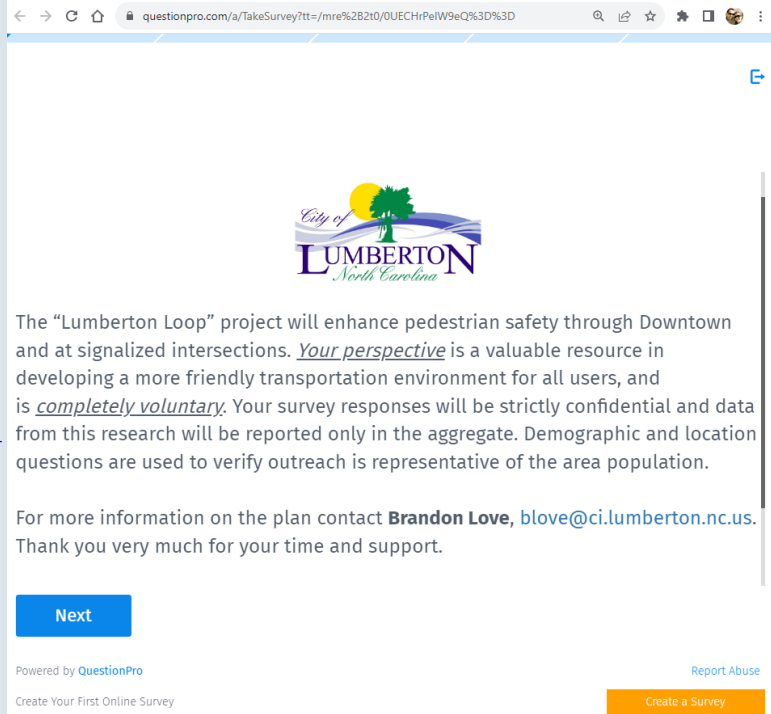
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Online Survey

- Issue identification
- Motivation for walking / biking
- Future use of Loop / network

Access from our website

www.LumbertonLoop.com/Outreach



The "Lumberton Loop" project will enhance pedestrian safety through Downtown and at signalized intersections. Your perspective is a valuable resource in developing a more friendly transportation environment for all users, and is completely voluntary. Your survey responses will be strictly confidential and data from this research will be reported only in the aggregate. Demographic and location questions are used to verify outreach is representative of the area population.

For more information on the plan contact **Brandon Love**, blove@ci.lumberton.nc.us. Thank you very much for your time and support.

[Next](#)

Powered by [QuestionPro](#) [Report Abuse](#)

Create Your First Online Survey [Create a Survey](#)

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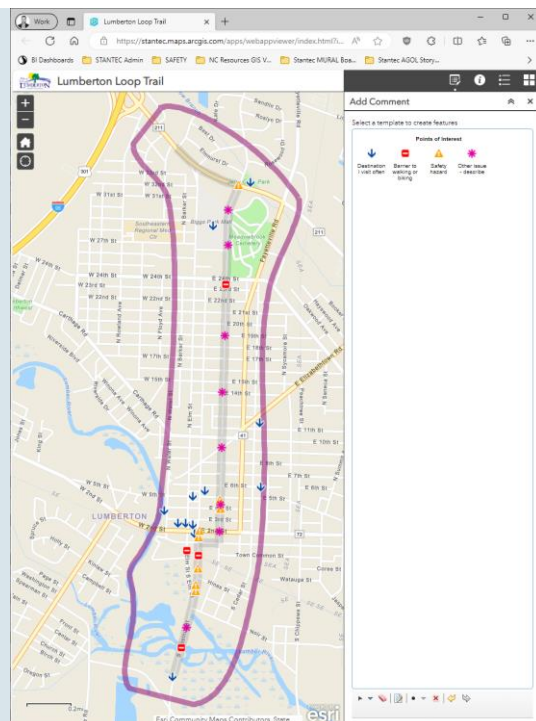
Interactive Map

Local knowledge is KEY

- Destinations
- Barriers
- Safety Hazards
- Other(s)



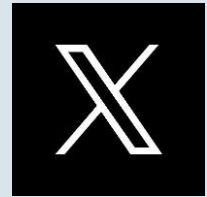
Points Added



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We NEED Your Help to Share

- Website link with friends / neighbors / work colleagues
 - Survey
 - Interactive Map



Access from our website

www.LumbertonLoop.com/Outreach

Communications Office
Economic Development
Email / Listserv(s)

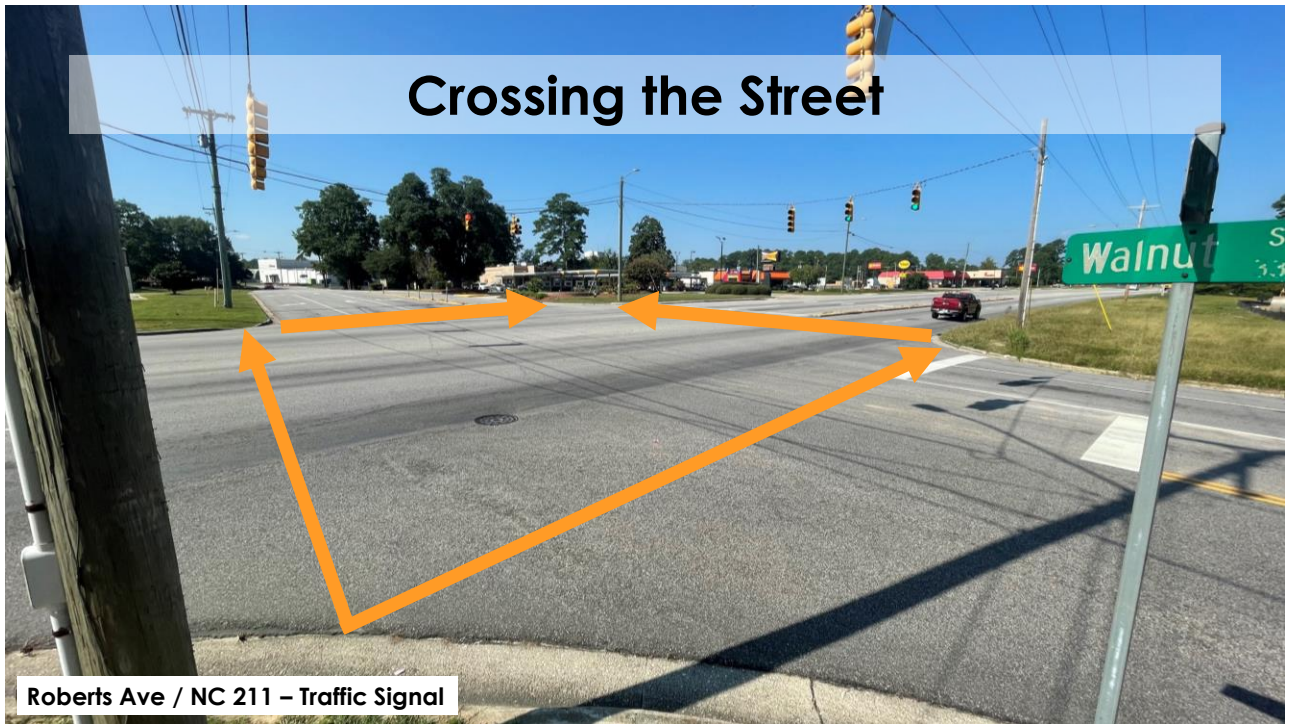
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FIELD REVIEW – OBSERVATIONS



Let's **define** our project challenge(s)

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Maintenance of Infrastructure



2nd Street / NC 72

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Constrained Right-of-Way



- Topo/slope
- Utilities
- Stormwater inlets
- Private development
- Trees / vegetation

Biggs Mall – Rear

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18



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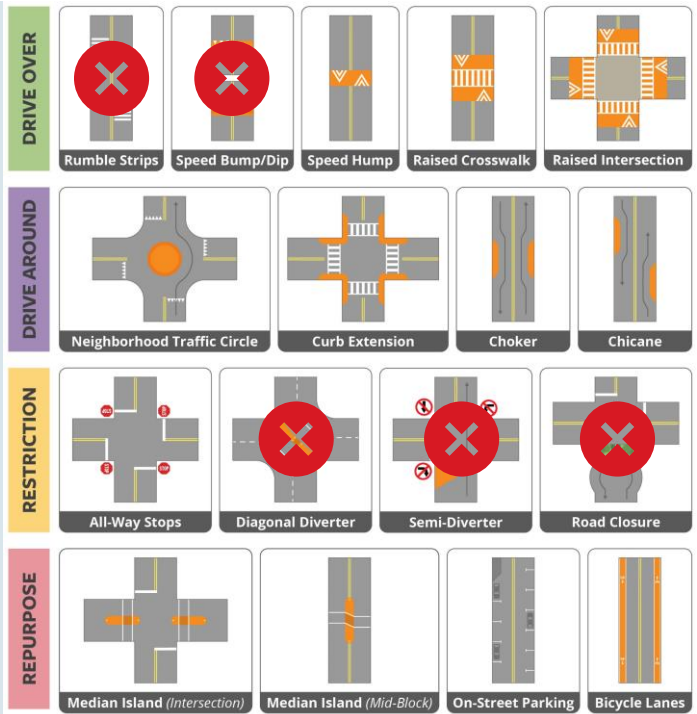
**Multimodal =
Accommodating Bikes
(on-road)**

**10' Multi-use Path
not possible
in some sections**

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Traffic Calming Opportunities

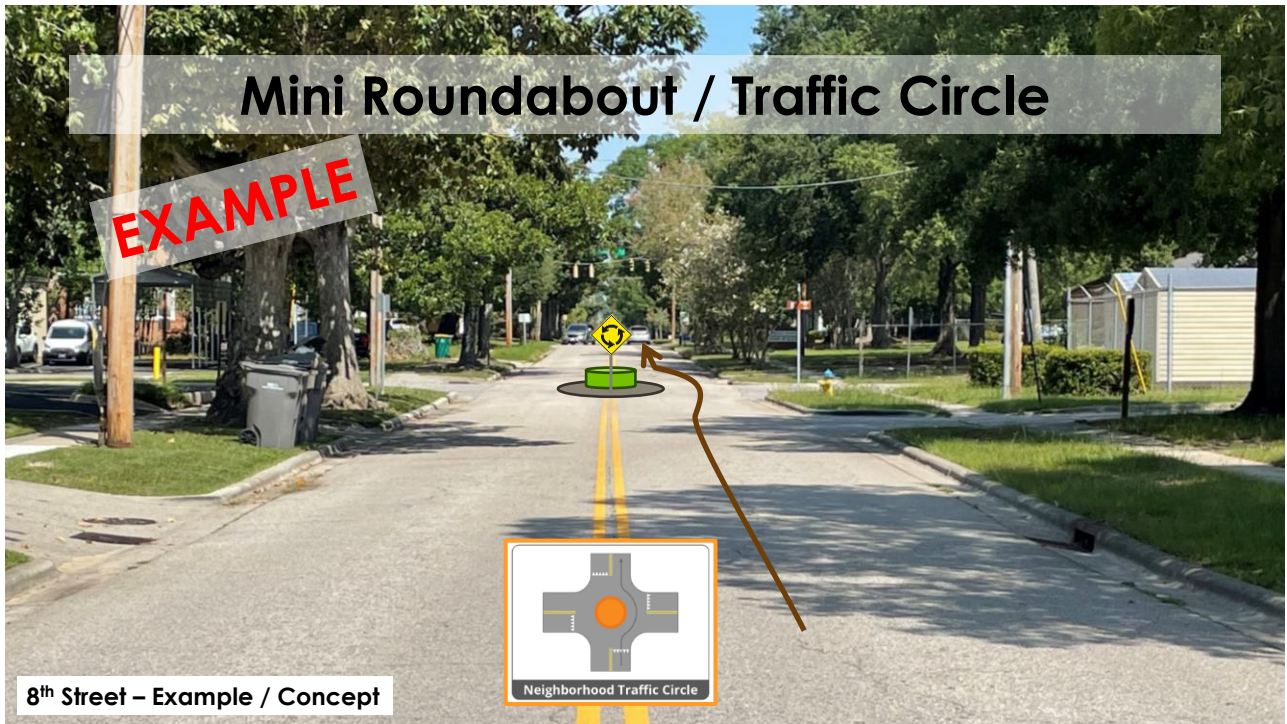
- **Slowing vehicle speeds** is most effective for safe walking-biking
- Traffic calming treatments
 - intersection crossings (point)
 - along streets (linear)



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22



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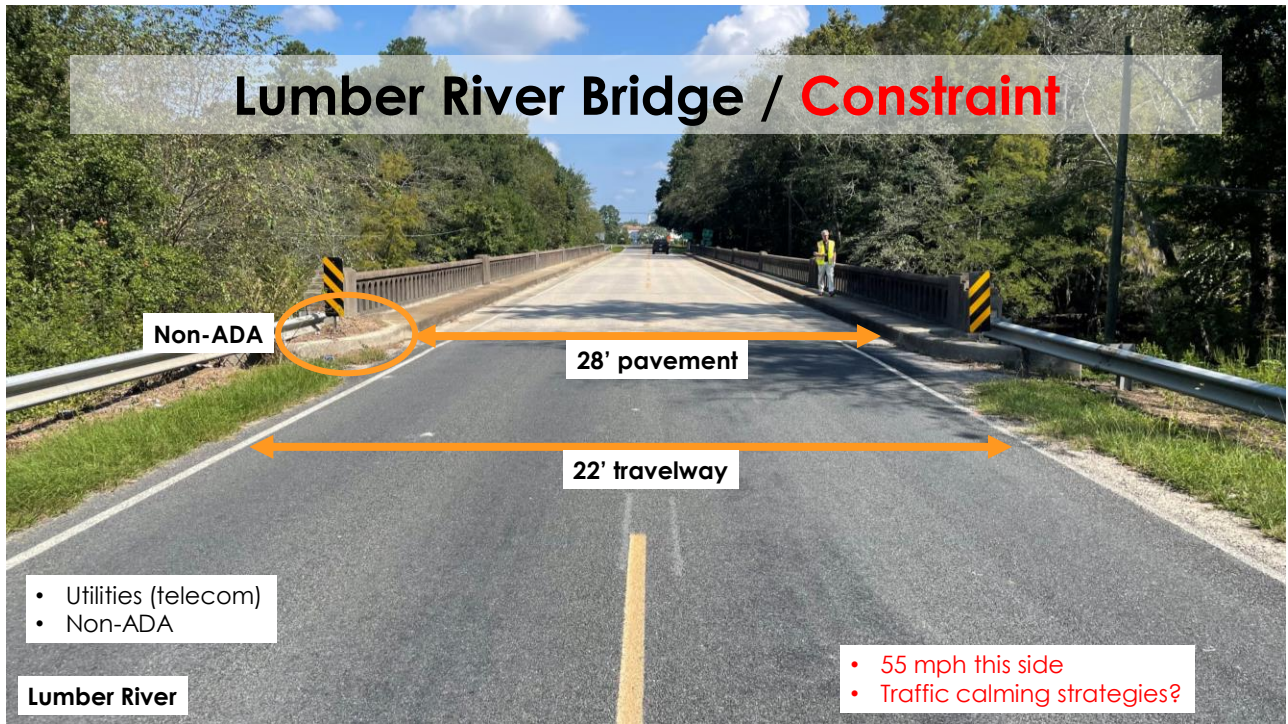
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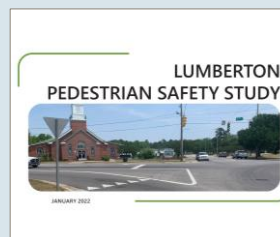
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Coordinating with Other Initiatives

- 2nd Street / NC 72 RAISE Grant
 - Bridge Replacements (2nd, 5th St)
- Downtown Master Plan Update
- I-95 widening / interchange
- Fayetteville Rd widening
- Neighborhood Access & Equity (NAE) Grant opportunity



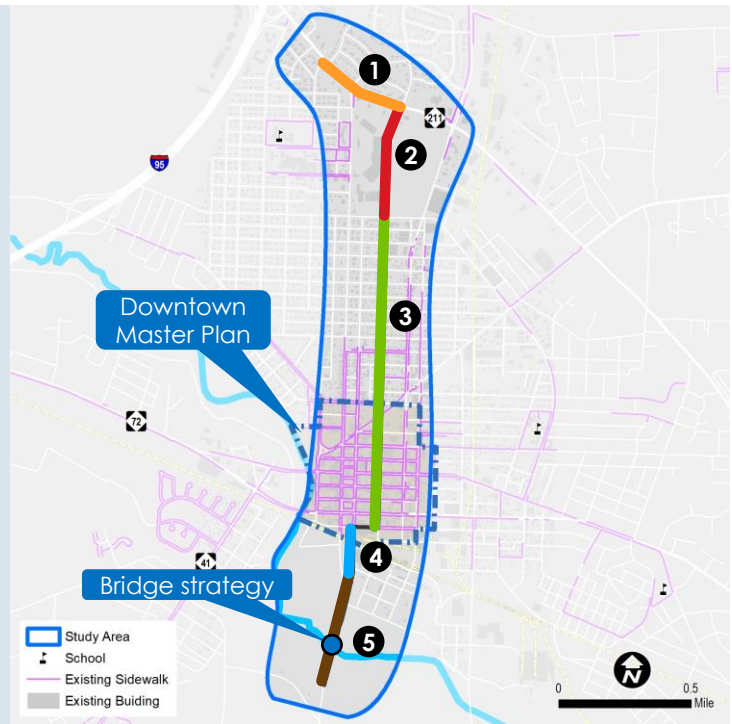
Consistency is key

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So... What's our Strategy?

Depends on the section

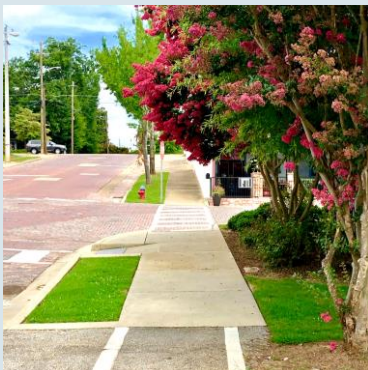
1. Roberts Ave / NC 211
2. Biggs Mall / Cemetery
3. Residential North
4. South of Downtown
5. Lumber River



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What Improvements Are We Suggesting?

Sidewalk



5' wide
concrete

Sidepath / Shared Use Path



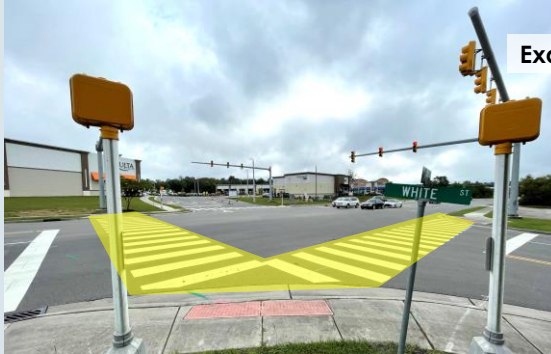
10' – 12' wide
asphalt

Example

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What Improvements Are We Suggesting?

Crosswalks



Traditional or High Visibility
ADA curb ramps

Pedestrian Refuge Islands



Raised concrete island (4" – 6" high)

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What Improvements Are We Suggesting?

Shared Lane Markings



Bike with cars (<14' wide lanes)
Speeds < 25 mph

Separated Bike (& Walk) Lanes



Narrow the travel lane & repropotion asphalt
Vertical separation from cars
Two-way walking & biking
Speeds > 25 mph

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What Improvements Are We Suggesting?

Mini Roundabout / Traffic Circle



Small, 4" – 6" high raised concrete object to slow vehicles

Curb Extensions



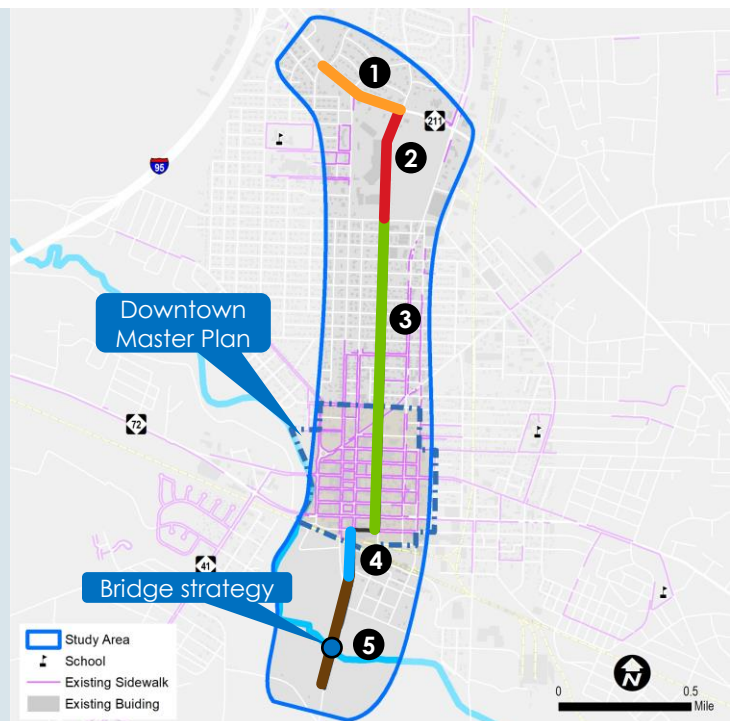
Reducing turning radii to slow vehicles using paint, bollards, concrete, planters, or other objects

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So... What's our Strategy?

Depends on the section

1. Roberts Ave / NC 211
2. Biggs Mall / Cemetery
3. Residential North
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1

Roberts Ave / NC 211

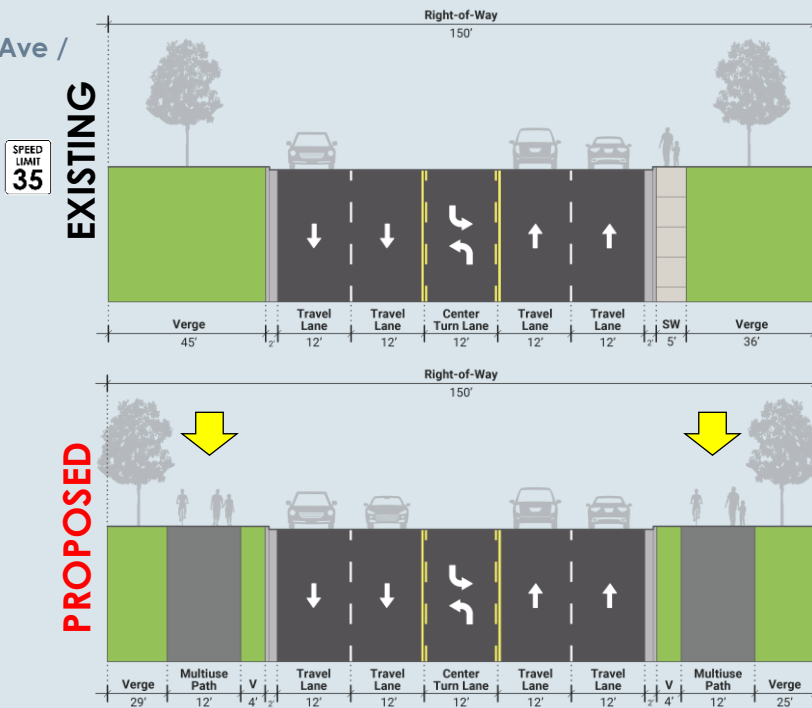
- 12' wide Shared Use path – north side (**YELLOW**)
- connect with existing 5' wide Sidewalks (**PINK**) or replace with SUP
- Marked Crosswalks (**BLACK**)
- Alternative (**BLUE**) to use extra southbound lane



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1

Roberts Ave / NC 211

**DRAFT**

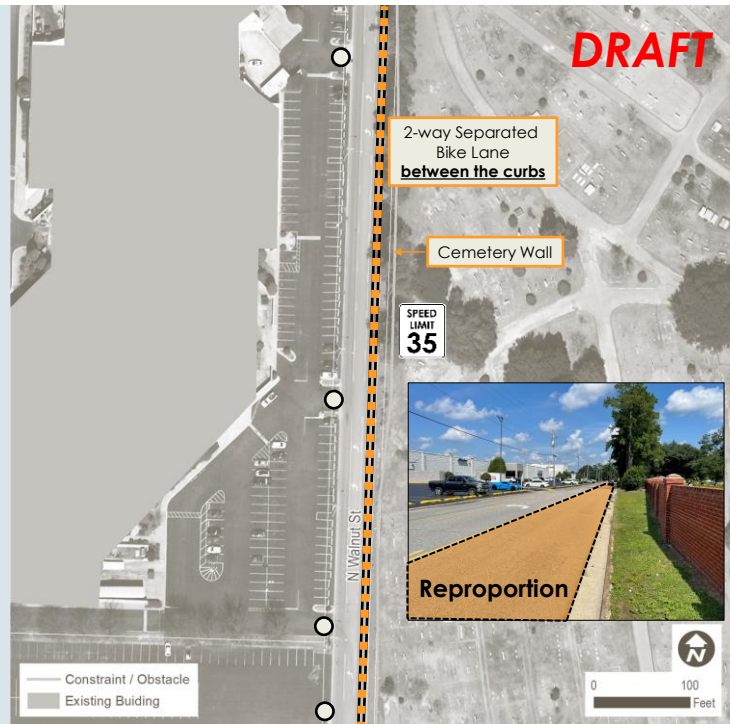
... or 5' wide
sidewalks
(south side)

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2

Biggs Mall / Cemetery

- Reproportion existing pavement (3L→2L)
- Two-way Separated Bike Lane between curbs – east side
 - Fewer driveways / utilities to impact than west side



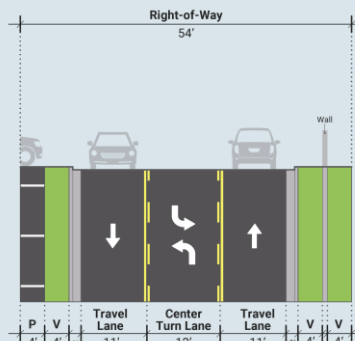
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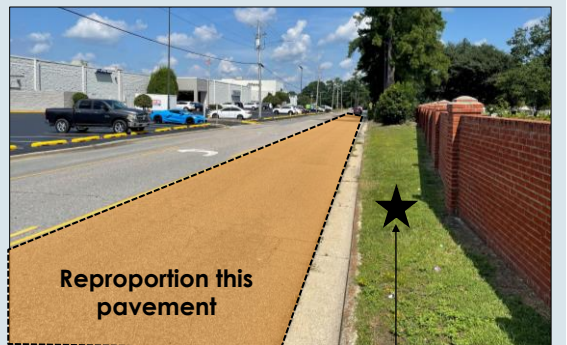
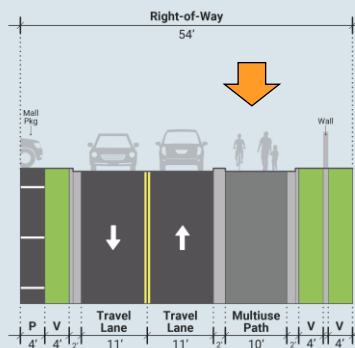
Biggs Mall / Cemetery

SPEED
LIMIT
35

EXISTING

Too many
driveways

PROPOSED



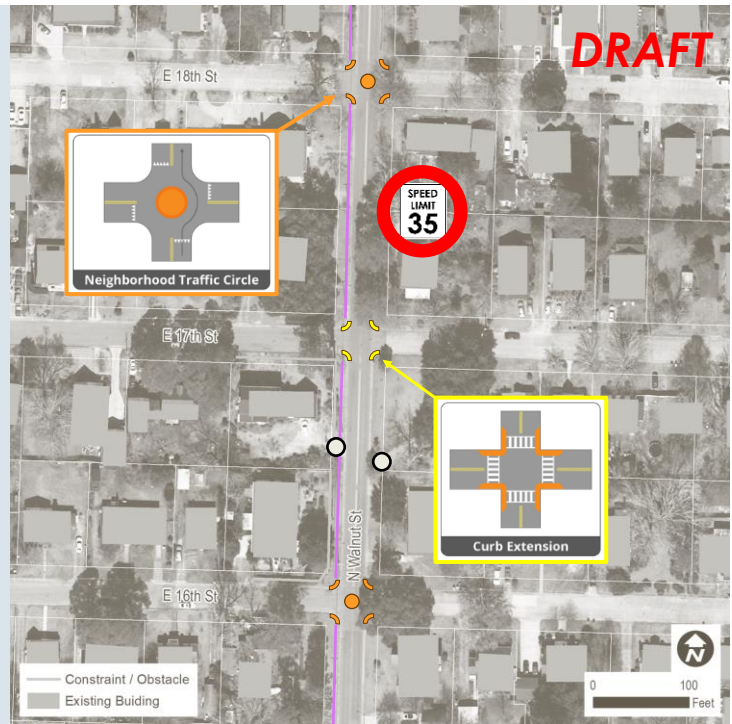
Cemetery wall is <4' from curb

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Residential North

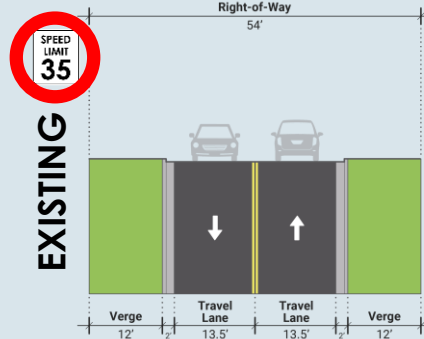
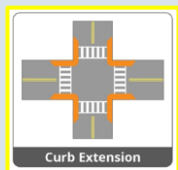
- **Traffic Calming** to slow vehicles @ intersections
- 5' wide sidewalks for peds
 - **one or both sides?**
- Marked Crosswalks
- Shared Lake Markings for bikes



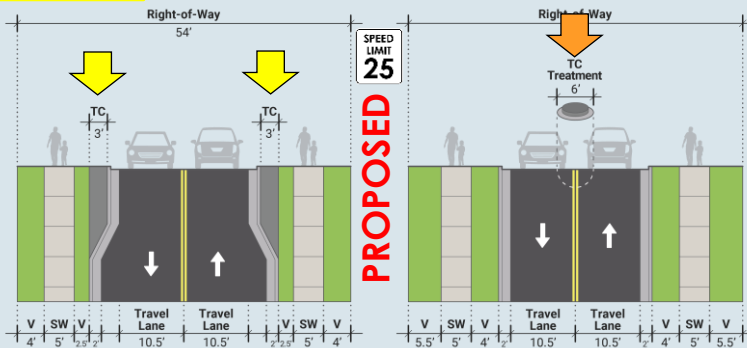
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Residential North



DRAFT



TC: Traffic Calming

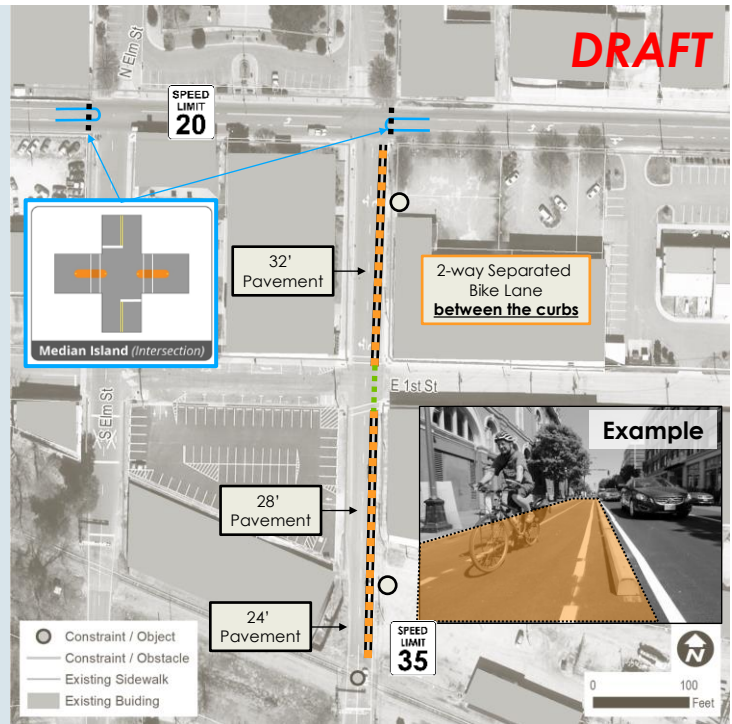


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South of Downtown

- Reproportion existing pavement (~30' wide, with on-street parking)
- Two-way Shared Use Path (**ORANGE**) between curbs – **east / west side?**
- Pedestrian Refuge Islands (**BLUE**) with 2nd Street project
- Need to slow vehicles
- On-street parking disruption
- Crossing opportunities?

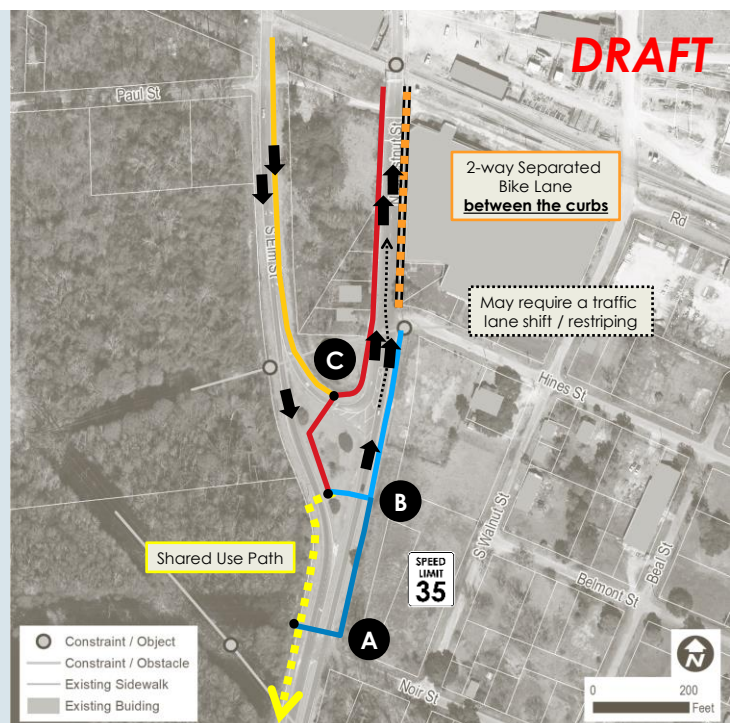


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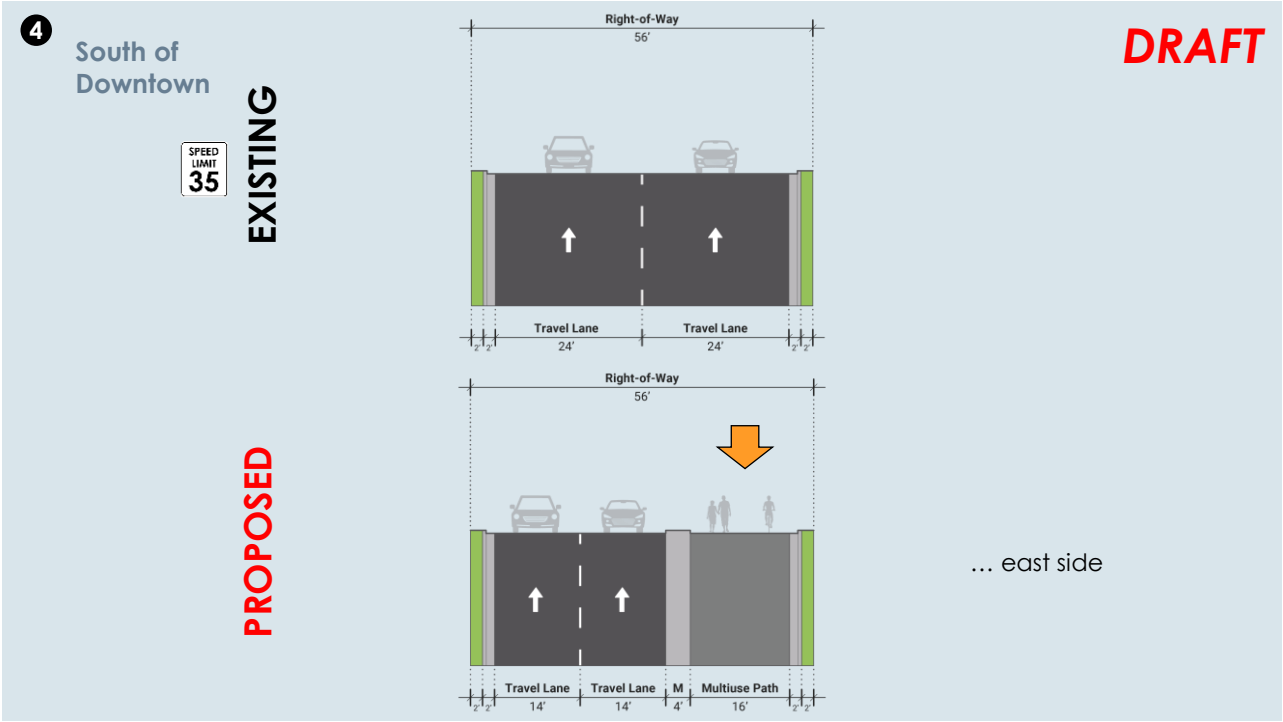
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South of Downtown

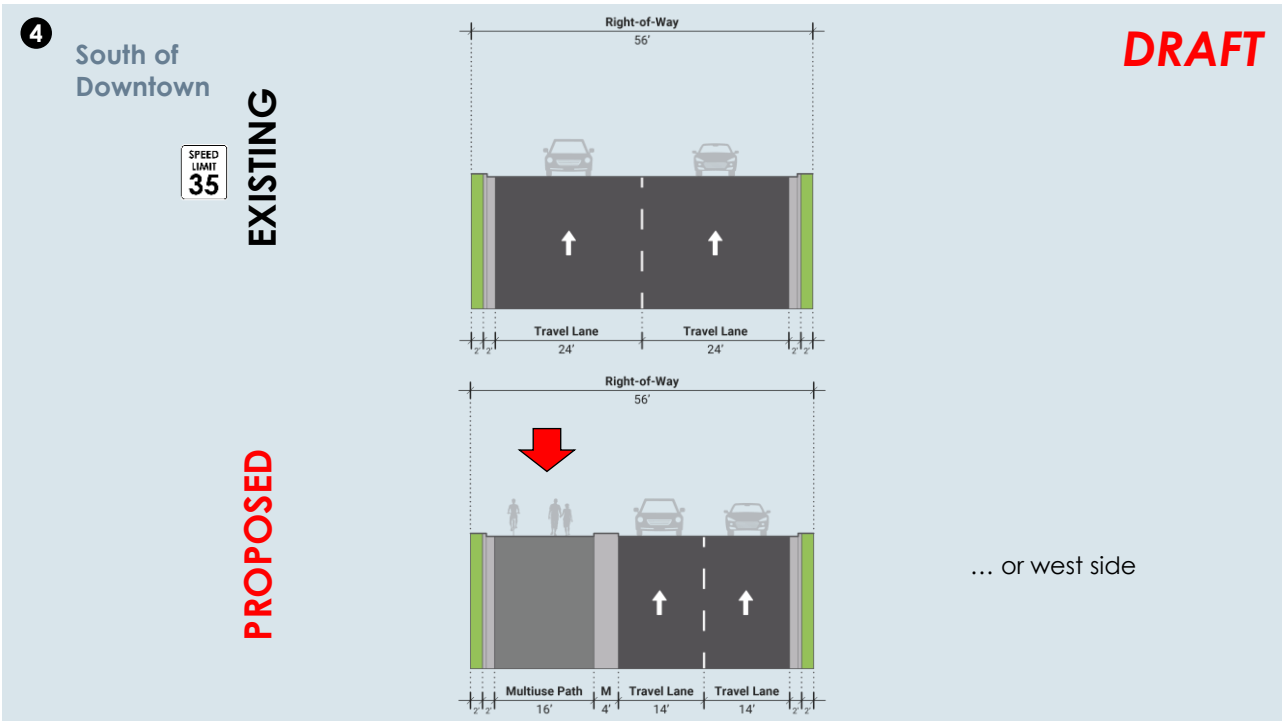
- Reproportion existing pavement (wide 2L)
- Two-way Shared Use Path (**ORANGE**) between curbs – **which side?**
- Safe(est) crossings:
 - C: 1-travel lane
 - B: 1-travel lane
 - A: 3-travel lanes @ Noir St



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Lumber River Bridge

- 12' wide Shared Use Path along west side (**YELLOW**)
- Too expensive to retrofit existing –**pedestrian bridge is lowest-cost option**
- Bridge rating: **sufficient**
 - replacement >25 years
 - **unless grant funding** becomes available



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Summary / Guiding Principles

- Pedestrian and Bicycle connection between Jerry Giles Park and Lumber River Levee Trail (2.6 miles)
 - **Combination of safety improvements:** sidewalk, side path, bicycle treatments, and crosswalk improvements
- Avoid or minimize potential impact to rights-of-way
 - **Reproportion** existing asphalt (between the curbs)
 - May alter existing on-street parking (unmarked)
 - **Traffic calming treatments** along City-maintained streets
 - Extend and connect with existing sidewalks / curbs
 - Avoid stormwater system inlets / drains, utility poles

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DRAFT

Summary / Evaluation of Alternatives

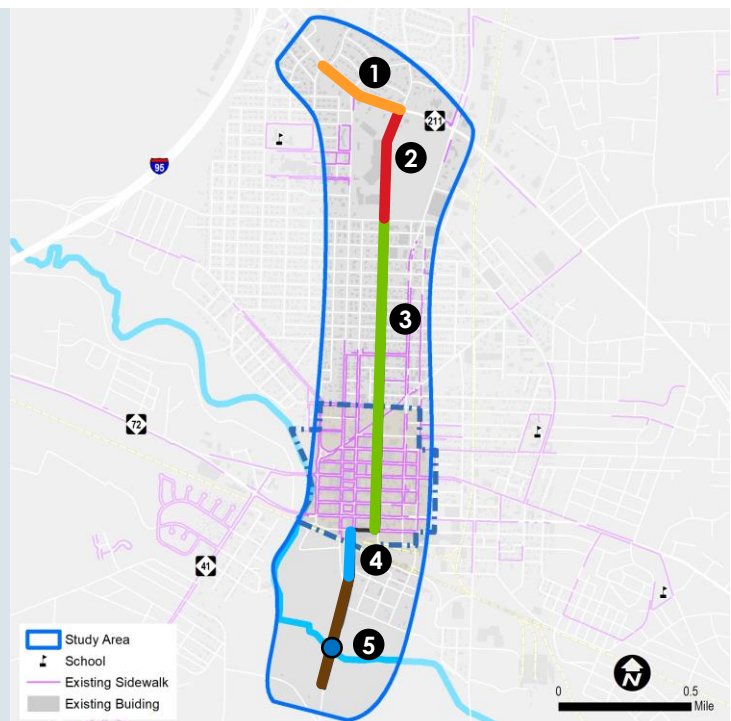
Sections	Strategy	Pedestrian & Bicycle Facility		ROW Impact
1 Roberts Ave / NC 211	Above the curb facilities	Shared Use Path – <u>above</u> the curbs		n/a (150' ROW)
2 Biggs Mall / Cemetery	Road diet (3L → 2L) – use existing pavement	Shared Use Path – between the curbs		n/a (54' ROW) – Cemetery wall is constraint
3 Residential North	Traffic Calming along Walnut Street	Sidewalks	Shared Lane Markings (with cars)	Minimal (landscape and fences) – avoid existing utilities
4 South of Downtown	Lane diet along Chestnut Street to reportion pavement	Shared Use Path – between the curbs		Minimal (56' ROW) – Railroad crossing is constraint
5 Lumber River Bridge	New ped/bike bridge on separate structure (west side)	Connect with Shared Use Path along west side – may require crash barrier		Floodplain / wetland areas

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THOUGHTS? ALTERNATIVES?

Your Turn....

1. Roberts Ave / NC 211
2. Biggs Mall / Cemetery
3. Residential North
4. South of Downtown
5. Lumber River



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Next Steps

Share Website + Survey + Map

www.LumbertonLoop.com/Outreach

Public Event #1 – this evening

Additional Focus Group discussions

Preferred Alignment to avoid/mitigate

Next AC#3 Meeting: virtual

