NC 107 Work Session with ADC
1/31/19

General Project Questions

1) Can NCDOT provide a brief overview of your Complete Streets policy?

The NC Board of Transportation adopted a Complete Streets Policy in July 2009. This policy directs the NCDOT to consider and incorporate all modes of transportation when building new projects or making improvements to existing infrastructure. Under this policy, NCDOT collaborates with cities, towns, and communities during the planning and design phases of projects. Together, we decide how to provide the transportation options needed to serve the community and complement the context of the area. Jackson County's Comprehensive Transportation Plan (CTP) recommends bicycle and pedestrian facilities along NC 107.

2) Can NCDOT provide a brief overview of Right-of-Way (ROW) negotiation timeline?

The project is currently in the preliminary design phase. The current schedule calls for right-of-way acquisition to begin in January 2020. The right-of-way acquisition is expected to take two to three years to complete. Most of the above ground utilities will be relocated during this phase of the project.

3) Has NCDOT considered narrowing travel lanes down from 12' to 11'? Would this net a reduction of 4' ROW? At what functional cost?

Following the February 23, 2017 Pubic Meeting, NCDOT considered narrowing the travel lanes to 11' and had discussions with the Town and the Rural Planning Organization (RPO) to weigh the pros and cons of doing so. Narrowing the travel lanes would reduce the width of the roadway by 2' on each side. This could reduce the impacts to some adjacent properties, however; those reductions could be offset by easements necessary to relocate the utilities. The wider travel lanes will enhance safety and mobility for the 34,000 vehicles that currently travel the road daily, assist with emergency response, snow removal and routine maintenance. After considering all these factors, we concluded that the lane width should remain at 12'.

4) Can NCDOT combine the southern sidewalk & bike lane into single 10' multi-use path? Has this been explored? If we employed this approach on both sides of NC 107, would we reduce ROW?

Combining the sidewalk and bike lane into a 10' multi-use path would not reduce the right-of-way. The minimum flat shoulder width behind the curb is 10' for a standard 5' sidewalk. The shoulder width would increase to 15' to accommodate a 10' path. To comply with Complete Streets; a 14' outside lane is required; therefore, this would increase ROW width by 2'. A multi-use path was explored early in the design process but was considered to be less safe because of all the driveways along NC 107. Vehicles waiting to exit the driveways often block the sidewalk area and drivers are less likely to see bicycles riding on the sidewalk. Bicyclist would have the right-of-way crossing the driveways on the MUP. The local government cost share is greater to construct a multi-use path.

5) Would the Town of Sylva be willing to create an access management plan to reduce curb cuts?

Our current design will reduce the number of curb cuts currently out there. Facilities within the limits of State Transportation Improvement Program (STIP) projects are automatically evaluated to comply with the NCDOT current driveway and street policy. ADC NOTE: Sylva developed an access management plan in 2011, and our team will review it in the context of this project.

6) Would NCDOT be willing to adjust timeline/budget to fully evaluate a center bike lane in median?

We are willing to consider it, but it is our belief that it would result in a wider footprint and more impacts than the current design. The proposed 17.5' median includes many 12' turn lanes. This only leaves 5.5' for the island and striping. A center bike lane would require 5' for each travel direction plus 5' of buffer on each side (20' total). This would require the curbs to extend 5' wider on each side of the road. There are also safety concerns to consider with center bike lanes, such as issues with bicyclist access to goods and services between intersections. Each time a bicycle enters or exits the roadway it must cross two lanes of vehicular traffic. This would also include a dedicated bike phase in each of the signals.

7) Has NCDOT analyzed u-turns for Vehicle Miles Traveled (VMT) generation? Can NCDOT communicate how improvements impact travel time, emissions, VMT, & delay?

The Department has conducted in-depth traffic studies for this project. The current U-turn locations were analyzed based on travel demand and the proposed locations were selected in an effort to balance mobility for motorists and impacts to commercial properties. We are willing to explore shifting locations for some of the bulb-outs.

NC 107 is currently congested and during the busiest hours the major intersections operate at unacceptable levels of service. Congestion and traffic delays will continue to worsen if no improvements are made. Current travel times range from 5 to 10 minutes. If no improvements are made, travel times are expected to increase to 13 to 28 minutes by 2035. With the proposed design, travel times are expected to be between 8 and 15 minutes by 2035. The proposed design results in significantly less delay than doing nothing, which will reduce vehicle emissions.

Signal warrants (conditions that an intersection must meet to justify a signal installation) have been evaluated at the bulb outs and some have the potential to meet warrants in the design year (2035). NCDOT will evaluate at which year the warrants are met.

8) Have you analyzed the community proposal to develop a one-way road parallel to NC 107?

A parallel road concept was analyzed during the development of Jackson County's Comprehensive Transportation Plan (CTP) that was completed in 2017. Due to the terrain, it is not feasible to construct a road on either side of NC 107 that closely parallels the existing road. To achieve an acceptable grade without moving vast amounts of earth, a new road would need to curve around the ridges. This would result in longer travel times and less acceptable service than existing NC 107. There would also be substantial right-of-way impacts necessary to construct a parallel road. Additional impacts would be necessary to construct appropriate connections to NC 107.

9) Does NCDOT plans call for improvements to wayfinding?

The proposed project will upgrade the highway signage along the corridor. The Town has existing wayfinding signage within the right of way that will continue to be accommodated.

<u>Project Sheet Questions</u>

ADC NOTE: A link to Project Sheets with community feedback can be found here.

<u>Sheet 1</u>

Q: Has NCDOT analyzed where Municipal Drive enters West Main? Can it get a spot safety improvement? Can NCDOT remove or reshape the traffic islands? Can NCDOT provide a pedestrian refuge?

This is a challenging intersection due to the geometry of the existing roads, the railroad and the close proximity of buildings on both sides of the intersection. All intersections are evaluated as part of the project development. A roundabout has been conceptually considered. The design would increase property impacts. Additionally, the intersection would be closed during train movements.

Q: Would Sylva/NCDOT like ADC to sketch out a pedestrian crossing plan for this intersection?

Pedestrian crossings are not shown on the plans at this stage of the design but will be incorporated as the design work progresses. We would welcome input from ADC on pedestrian crossing design for the project.

Q: The westbound left turn lane across from Speedy's Pizza is awkward—has it been eliminated or converted into a 2nd lane eastbound? Could NCDOT clarify the intersection of West Main and Municipal Dr.?

Currently there is a left turn lane from US 23 Business onto Municipal Dr./Chipper Curve Road and a left turn lane from US 23 Business into the Valero gas station. The proposed design includes the left turn lane for Municipal Drive/Chipper Curve but eliminates the left turn lane into Valero. We have asked our design consultant to evaluate the need for the left turn lane at Valero to remain. It potentially could be extended to serve the Speedy's/Family Dollar driveway.

Q: Is West Main still part of the plan? Is there a plan to taper West Main between the bridges?

The project includes pedestrian improvements to West Main Street out to The Coffee Shop and Innovation Brewing. To maintain lane continuity, the two westbound lanes need to continue to Municipal Drive/Chipper Curve Road.

Q: Is NCDOT planning to include sidewalks on both sides?

Yes. There are pedestrian destinations on both sides of the corridor. Sidewalks only on one side would not adequately serve all pedestrians. Removing sidewalk from one side would not reduce the right of way width because it is part of the vehicle clear recovery area.

<u>Sheet 2</u>

Q: Has NCDOT considered stacking in right turn lane beyond Dunkin Donuts? Does eliminating the left turn out of DD solve the problem?

The access management introduced as a function of the project will improve the traffic operation of the business but will not completely eliminate the delays related to right turns into the business.

Q: Bus 23/Main St. intersection: Has NCDOT modeled a roundabout that we can share? How critical is the Bus 23 Southbound right turn?

A roundabout was modeled for this intersection in the feasibility study. Even a dual-lane roundabout would not be able to handle the traffic volume unless a flyover bridge was included to accommodate the volume of traffic turning left from US 23 Business to NC 107. A roundabout with a flyover bridge would have substantially more property impacts than the current design. The southbound right turn at US 23 Business is essential to maintain an acceptable level of service.

Q: Business access questions: Kel-Save, Rite-Aid… When does NCDOT come out and address individual concerns surrounding these properties? When do you address issues that become apparent during ROW negotiations?

We held a public meeting in February 2017 to receive input on the conceptual designs and answer questions from the public and business/property owners. The next time we initiate contact with individual business/property owners is when right-of-way plans are complete and we can show exactly what the impacts to their property will be. We are available to meet with business/property owners anytime at their request.

Sheet 4

Q: Has NCDOT considered narrowing the 17' median in between signalized intersections?

We have considered this also. In many locations the median includes a left turn lane. Most of the stretches between turn lanes are relatively short and don't afford an opportunity to narrow the median.

Q: Has NCDOT analyzed the parallel connector road concept?

This has already been addressed above. The grading impacts would exceed a 60' ROW so additional easements would be needed.

Sheet 5

Q: Has NCDOT analyzed installation of a roundabout at the Cope Creek intersection?

A roundabout would have more property impacts than the current design. It would also require more stream impacts (more culvert length) to Cope Creek.

Q: If a separated multi-use path were developed along creek—outside the NCDOT project area—does the Town have to pay for it?

A separated multi-use path along the creek would be beyond the scope of project R-5600. It could be submitted to Strategic Transportation Prioritization (SPOT) as a standalone bike/ped project. If it scored well and got funded the Town would have to pay a percentage of the entire cost, including right-of-way. It would be expensive, impactful and may not even be feasible. The rest of this question is already addressed above.

Q: Has NCDOT considered converting the center turn lane as a reversible lane to accommodate high school traffic?

That space is better utilized as a left turn lane for moving traffic. This would increase impacts at intersections because an additional lane is needed to accommodate left turning movements.

Q: Can NCDOT address the site-specific issues surrounding Dollar Tree?

Driveway at Dollar Tree will become right in/right out. This will improve the safety of vehicles accessing the business.

Sheet 6

Q: Can NCDOT address the site-specific issues surrounding Hensley Circle, Citrus Drive and Liberty Drive?

This entrance to Hensley Circle is proposed to be closed and a turn-around is proposed. Citrus Drive and Liberty Drive are at different elevations and it would be difficult to combine them.

Q: Community feedback expressed concerns that the proposed U-turn near the Print Shak poses a danger considering the grade lack of a traffic signal. Can NCDOT take a second look at this bulb-out?

The sight distance appears to be adequate, but we will look at this location again. This location could potentially meet signal warrants in the design year.

Sheet 7

Q: Can NCDOT address the site-specific issues surrounding private driveway north of Andy Shaw Ford?

This residential driveway is designed to accommodate a right in and a right out. Southbound vehicles would need to U-turn and come back to access the driveway.

Sheet 8

Q: Can NCDOT address the possibility of a center bike lane in the median?

Center bike lane addressed above (General Project Questions #6).

Sheet 9

Q: Can NCDOT address the site-specific issues surrounding access to existing business after a median has been installed?

We understand that the median can be an inconvenience, particularly during off-peak times. During peak hours it is often about as quick to go passed a driveway and make a U-turn. The median will reduce crashes and improve traffic flow.

Q: Can NCDOT address the site-specific issues surrounding impacts to existing parking for businesses?

There are certainly parking impacts to some businesses. That will be considered and compensated for during ROW negotiations.

Sheet 10

Q: Can NCDOT address the pedestrian crossings at the East Main/Webster Rd. intersection?

Pedestrian crossing will be incorporated into the final plans at all signalized intersections.
A pick-up lane should be incorporated on the school campus.
The proposed design includes bicycle and pedestrian accommodations.

Q: Would Sylva/NCDOT like ADC to propose a pedestrian crossing and gateway plan?

Pedestrian crossings are not shown on the plans at this stage of the design but will be incorporated as the design work progresses. We would welcome input from ADC on pedestrian crossing design for the project.

Q: Can NCDOT help address school campus circulation issues outside the project area? Can on-campus improvements address circulation?

There is a NCDOT unit in Raleigh called the Municipal & School Transportation Assistance (MSTA) unit that looks at these issues upon request of the school. We would be happy to refer the school to MSTA.