



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

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SECRETARY

MEMO TO: Public Meeting Attendees

FROM: Greg Davis, PE
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DATE: January 21, 2025

SUBJECT: Project: 45964.1.1 (U-5976) Moore County
Improvements to the Pinehurst Traffic Circle

Public Meetings

The North Carolina Department of Transportation (NCDOT) Division 8 held three public meetings on July 16th, July 18th, and July 23rd, 2024. The meeting on July 16th was held at the Pinehurst Elementary School, the meeting on July 18th was held at the Moore County Agriculture Center, and the meeting on July 23rd was held at the Aberdeen First Baptist Church.

One Local Officials Informational Meeting (LOIM) was held on July 16th from 3pm to 4pm. The LOIM kicked off with a PowerPoint presentation followed by a question-and-answer session, providing the attendees the opportunity to have their questions and concerns addressed by the project team. The project team consisted of representatives from NCDOT Division 8, NCDOT Public Involvement, Community Studies & Visualization (PICSViz) and HNTB. Eight local officials were in attendance.

The three public meetings were held on July 16th, July 18th, and July 23rd from 5pm to 7pm. The public meetings were hosted in an open house style where participants could drop in any time between 5pm to 7pm. Attendees had the opportunity to view public meeting maps and informational boards to learn about the proposed project and ask questions to project team members. Five printed maps were provided that showed the proposed project design in detail. A minimum of two staff were stationed at each map, with additional "floater" staff available. In addition to the printed maps, a visualization station provided attendees a 3-dimensional "fly over" video and static renderings of the proposed project design.

The purpose of these meetings was to provide project information and gather feedback from local officials and the general public on the proposed improvements. The public comment period began at the first meeting on July 16th and ended on August 23rd. A total of 669 comments were received. The responses provided in this summary are applicable at the time this memorandum was drafted; however, updated information will be included in the Environmental Document as it becomes available.

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PROJECT SUMMARY

- The purpose of the project is to improve traffic safety and operations and increase the intersection capacity and efficiency.
- The project length is one mile.
- The current proposed design is a Continuous Flow Intersection (CFI).
- The CFI would create a single major intersection of U.S. 15-501 and N.C. 211 / N.C. 2 in the middle of the existing Pinehurst Traffic Circle that separately serves through movements along with bi-directional left-turn and right-turn movements at a single coordinated two-phase traffic signal. A free-flow southbound merge lane area for N.C. 211/N.C. 2 eastbound to southbound U.S. 15-501 traffic and an unsignalized U-turn median break along U.S. 15-501 south of Pinehurst Manor Drive are included in the current design.

STATISTICAL OVERVIEW OF COMMENTS

A total of 847 people attended the public meetings based on sign-in sheets provided.

Comments Received

- 669 public comments were received.

Comment Types

- Project Website: 244
- Comment cards received during public meetings: 226
- Email: 177
- Voicemail: 17
- Mail: 5

Comment Subjects*

Opposition to the Project: 548	Other: 46
Design Recommendations: 148	Support the Project: 41
Environmental/Aesthetic Concerns: 113	Design Alternatives (previously considered): 28
Right of Way (Relocations): 87	Traffic Noise Concerns: 20
Cost Concerns: 66	Public Meeting-Specific Comments: 17
Safety Concerns: 64	Historic Resource Concerns: 10
Speed Limits: 54	Bicycle/Pedestrian Concerns: 7

*The total number of comments in this table is not equal to the total comments received because some comments fall into multiple categories.

General Project Opinions

- Negative: 81.9%
- Positive: 6.1%
- Neutral: 12.0%

GENERAL RESPONSE TO COMMENTS

Opposition to the Project

Five hundred and forty-eight comments were received that oppose the proposed project. Comments received were related to impacting the character of the Village of Pinehurst, cutting down Longleaf Pine Trees, project costs, questions about growth estimates, desire to limit growth, and the proposed CFI design being overkill and/or too drastic.

Response

Thank you for your interest in the NCDOT STIP Project U-5976, Improvements to the Pinehurst Traffic Circle. NCDOT recognizes the importance of public input and will consider each comment as the project continues to progress.

Design Recommendations

One hundred and forty-eight comments were received related to design recommendations. Comments received were related to the following topics:

- i. Adding traffic lights, adding lanes, constructing a turbo roundabout
- ii. Adding speed bumps and/or adding rumble strips
- iii. Improving signage
- iv. Constructing a bypass
- v. Eliminating the Midland Road connection

Responses

- i. *At least 18 concepts, including metering signals and a multi-lane traffic circle, have been evaluated to provide a long-term, comprehensive solution to the mobility and safety issues caused by the Pinehurst Traffic Circle. Concepts to retain the circle have so far failed to provide adequate levels of mobility over the long-term, while the CFI design has consistently done so. NCDOT will continue to evaluate low cost/low impact improvements that can be made at the existing Pinehurst Traffic Circle, knowing that a more robust long-term solution to handle additional traffic growth and congestion is still necessary.*
- ii. *Our analysis has shown that adding speed bumps and/or rumble strips (or any other speed reduction measure) within the circle will not alleviate the traffic mobility and safety concerns that are driving this project.*
- iii. *Improved signage has been implemented to try to reduce illegal movements (queue jumping) and provide clear way-finding through the existing Circle. Implementations were done as a means of improving safety but do not add any additional capacity benefit nor increase the level of service for the traffic circle. Reducing congestion and improving traffic capacity and level of service are primary goals of this project.*
- iv. *The current 2024-2033 State Transportation Improvement Program doesn't include a bypass project. Sandhills Metropolitan Planning Organization (MPO) could submit a potential bypass project in the next round of Prioritization which is P8.0 for the future 2028-2037 State Transportation Improvement Program.*
- v. *Closing the Midland Road leg is not beneficial to traffic mobility in the vicinity of the existing Pinehurst Traffic Circle. The majority of the current 14,000 vehicles per day on Midland Road would likely divert to Page Road between the village center and NC 211 to access NC 211 to the west, NC 2 to the east and*

US 15-501 to the north and south. Page Road already carries about 5,000 vehicles per day on a narrow two-lane facility better suited to local traffic. Combining those traffic volumes would cause substantial congestion in the vicinity of the NC 211 and Page Road intersection adjacent to the hospital area that would necessitate large scale improvements to this intersection, in addition to local street and neighborhood driveway access issues along Page Road with the increase in traffic volume. The removal of the Midland Road leg to the circle would allow NC 211 eastbound traffic that is headed for US 15-501 southbound to fully utilize the outer lane approaching the circle. The remaining Midland Road traffic bound for NC 2 eastbound, and US 15-501 northbound destinations would still add to the queuing for NC 211 traffic that is already headed to those destinations. Most of the traffic after this potential change would still have to use the circle anyway for access to downstream destinations and the total benefit might be small, if at all, and still would be offset by the increase in congestion at the intersection of NC 211 and Page Road.

Environmental/Aesthetic Concerns

One hundred and thirteen comments were received related to environmental/aesthetic concerns. Comments received were related to the impact on six acres of longleaf pine, the habitat of red-cockaded woodpeckers, and concerns regarding the balance between natural landscapes and concrete aesthetics.

Response

The total proposed green space for the four quadrants outside of the CFI design (outside the roadway clear zone and sight distance) is 5.8 acres. If the area is used for landscaping (not large trees), the potential area for planting is increased and moved closer to the travel lanes, maintaining a gateway entrance to Pinehurst. NCDOT is also committed to coordinating with Pinehurst for landscaping the area as appropriate.

Right of Way (Relocations)

Eighty-seven comments were received related to property relocations. Comments received were related to the use of Eminent Domain and questioning the need to relocate any homes.

Response

NCDOT has provided a conservative, worst-case scenario design to show what the maximum extent of potential effects might be. As we move forward, NCDOT will develop plans to minimize property impacts and tree removal, as much as possible. NCDOT is also committed to working with Pinehurst to landscape the area as appropriate. Project impact minimization has not occurred at this time and does not occur until a preferred alternative is selected and moves forward with design. NCDOT will be transparent in providing information on potential relocations as the project moves forward and has a standard ROW procedure that it will follow, if any relocations are required.

Cost Concerns

Sixty-six comments were received related to cost concerns. Comments received were related to the \$53 million high-cost concern, with feedback highlighting it as financial overreach and raising issues regarding the use of taxpayer funds.

Response

Thank you for your interest in the NCDOT STIP Project U-5976, Improvements to the Pinehurst Traffic Circle. NCDOT recognizes the importance of public input and will consider each comment as the project continues to progress. Unfortunately, due to inflation, labor and material shortages the NCDOT has realized large cost increases. As plans are further developed NCDOT is committed to minimizing project costs.

Safety Concerns

Sixty-four comments were received relating to safety concerns. Comments received were related to drivers running through traffic lights, increase in car accidents, and increase in severity of car accidents as a result of the proposed design.

Response:

Current crash rates at the Pinehurst Traffic Circle are substantially higher than those that would be found at a similar traditional signalized intersection with the same daily demand, and they are increasing as time goes on, due to increased traffic demand and congestion at the traffic circle.

While there are no comparisons that directly contrast a CFI and a traffic circle, studies have shown that the CFI design produces crash reduction benefits over other traditional intersection alternative designs, including:

- *CFIs were found to provide a positive, and significant, safety benefit over conventional signalized intersections of 12 % when looking at total crashes.*
- *CFIs were found to significantly reduce fatal and injury as well as property damage only (PDO) crashes by 14% and 12%, respectively.*

Right-turns were accommodated in the CFI design was the predominant determining factor for whether a CFI site would be safe. The findings showed that parallel right turns (like those proposed in this design) reduced total crashes by 30%; whereas sites with standard right turns increased crashes by 16%.

Speed Limits

Fifty-four comments were received relating to Speed Limits. Comments were received requesting reduced speed limits in the traffic circle and in the area immediately surrounding the traffic circle.

Response

As a general rule, lowering the operating speed of a facility will reduce its capacity to move traffic, dependent on the variation of individual vehicle speeds. Lowering the speed within the circle will reduce the headways between vehicles and decrease the potential gap size/time that entering vehicles need to accept a given gap in circulating traffic. The operating speed of a facility is governed by its geometric design, not a posted speed limit. This is true for the circulating speed of the Pinehurst Traffic Circle. Lowering the speed limit would not increase the throughput of vehicles being able to move through the traffic circle.

Other

Forty-six comments were received related to various other topics. Other comments received were related to requesting implementation of education for using the traffic circle, general statements, landscaping, use of Artificial Intelligence (AI), and anecdotal references to roundabouts in other countries.

Response

Thank you for your interest in the NCDOT STIP Project U-5976, Improvements to the Pinehurst Traffic Circle. NCDOT recognizes the importance of public input and will consider each comment as the project continues to progress.

Support the Project

Forty-one comments were received that supported the proposed project. Comments were received were related to wanting to improve safety, wanting to improve traffic flow, stating that the current traffic circle is dated and/or can no longer serve its purpose, and other general support for constructing a new and improved roadway configuration.

Response

Thank you for your interest in the NCDOT STIP Project U-5976, Improvements to the Pinehurst Traffic Circle. NCDOT recognizes the importance of public input and will consider each comment as the project continues to progress.

Design Alternatives (previously considered)

Twenty-eight comments were received related to design Alternatives. Comments received were related to the following design Alternatives previously under consideration:

- Construction of a tunnel
- Diverging Diamond
- Flyover Interchange
- Bridge over the traffic circle

Response

NCDOT evaluated multiple options to find a solution that would meet current and future projected traffic and safety needs. A 2014 study looked at 10 concept options and additional variations, including a tunnel option. Additional studies were evaluated in 2017. In 2018, 8 additional options were evaluated, including a diverging diamond interchange, at-grade intersections, and other grade separated interchange concepts. Concepts to retain the circle have so far failed to provide adequate levels of mobility over the long-term, while the CFI design has consistently done so. NCDOT will continue to evaluate low cost/low impact improvements that can be made at the existing Pinehurst Traffic Circle, knowing that a more robust long-term solution to handle additional traffic growth and congestion is still necessary.

Traffic Noise

Twenty comments were received related to traffic noise. Comments received were related to requesting sound barriers around Pinehurst Trace.

Response

The North Carolina Department of Transportation (NCDOT) established the NCDOT Traffic Noise Policy to comply with Federal Highway Administration (FHWA) rules regarding traffic noise (found in Title 23 Code of Federal Regulations Part 772 - "Procedures for Abatement of Highway Traffic Noise and Construction Noise"). These documents require that traffic noise studies be performed for highway projects of a certain scope, including those that construct highways on new location, that add through traffic lanes to existing highways, or that substantially alter the alignment of existing highways. When noise studies are conducted, NCDOT uses computer models to predict future noise levels along highway projects and, when the predicted traffic noise levels reach certain thresholds, noise reduction options are investigated. All noise reduction methods, such as noise walls, must remain within the constraints of the feasibility, reasonableness, and practicability criteria defined within the NCDOT Policy. When a noise wall is not recommended, it is either because no traffic noise impacts are predicted to occur in the future with the project in place, or an evaluated noise wall did not meet the feasibility, reasonableness, and practicability criteria stipulated by the Traffic Noise Policy. As the U-5976 project development process continues, a traffic noise study will be conducted once a preferred alternative is chosen and any feasible, reasonable, and practicable noise abatement will be constructed as part of the project.

Public Meeting-Specific Comments

Seventeen comments were received related to the public meetings. Comments received were related to desire for a presentation, discontent with accessibility to the meeting, and lack of materials available for comment.

Response

Thank you for participating in the public meetings for the NCDOT STIP Project U-5976, Improvements to the Pinehurst Traffic Circle. All three meetings were "drop-in" style that presented the same information about the project. Five meeting maps with a minimum of two personnel per map were shown at each public meeting to encourage one on one communication. A Local Officials Information Meeting was held on July 16th from 3pm - 4pm. It included a PowerPoint presentation to inform local officials and EMS/Fire personnel in your region about the proposed design. All meeting materials, including the local officials PowerPoint presentation, are available for viewing online at the following URL: <https://publicinput.com/pinehursttrafficcircle>. NCDOT strives to encourage positive and transparent dialogue and will provide updates to the public as the design progresses.

Historic Resource Concerns

Ten comments were received relating to historic concerns. Comments received were related to negatively impacting a historic landmark and/or historic area.

Response

NCDOT consulted with the National Park Service (NPS) and the North Carolina State Historic Preservation Office (NC-HPO) on STIP Project U-5976 during a meeting in Carthage on 2/27/2024. The project is a state-funded project, with no Federal nexus (no money or permits required from Federal entities), therefore the project is subject to North Carolina General Statute (NCGS) 121-12a. This state law requires state agencies to consult with the State Historical Commission (via NC-HPO) to account for the effect of projects or state actions on properties listed on the National Register of Historic Places (or in this case a National Historic Landmark). NCDOT must also consult with the local historic preservation commission with regard to the plans for this intersection. In speaking with the National Park Service, they do not consider the traffic circle a contributing resource within the landmarked district because it falls outside the period of significance for the district (built in 1956). However, there are several contributing

houses in the area where they recommended minimizing our impacts. We are in the process of revising our plans to minimize impacts to contributing properties. NC-HPO will be involved in reviewing the design plans to provide an assessment of effects, as per NCGS 121-12a. We will also provide the plans to the local historic preservation commission for their comments, as well.

Bicycle/Pedestrian

Seven comments were received relating to bicycles and pedestrians. Comments received were related to bike lanes and pedestrian crossings.

Response

Thank you for your interest in the NCDOT STIP Project U-5976, Improvements to the Pinehurst Traffic Circle. NCDOT recognizes the importance of public input and will consider each comment as the project continues to progress. Accommodations for pedestrian/bicycle facilities will be considered as the project continues to develop.