U-5860 15th Street Widening and Access Management Project
Frequently Asked Questions (FAQs)

Design Recommendations

25 comments were received relating to design recommendations. Frequently asked questions and associated responses are provided below.

- Why are we not implementing the Stantec design developed for the City in 2021?

Response:

The 15th Street Complete Streets Conceptual Designs prepared by Stantec does not fully meet the project's purpose and need to improve mobility and safety, as it failed to accommodate the Average Annual Daily Traffic (AADT) anticipated in 2050 (the project's design year). The Stantec design was analyzed using existing and projected traffic and was proven to create substantial delays and queueing within the project limits.

- Remove the proposed medians and implement a continuous center turn lane

Response:

Raised medians are innovative solutions to manage access to main roads effectively. This design lowers crash rates, enhances safety and improves traffic flow, even as traffic volumes increase. NCDOT's goal is to propose the safest and most efficient improvements for communities after careful evaluation of alternatives. A continuous center turn lane is unlikely to improve mobility and would introduce additional safety concerns.

- Can the median be narrowed?

Response:

Median widths are determined based on road types and posted speed limits. The 2024 NCDOT Roadway Design Manual recommends a 23-foot median, where practical, on corridors like 15th Street to accommodate left turn lanes with a 4-foot offset for visibility and sight distance purposes. A 17.5-foot median without the 4-foot offset can be considered when minimizing a roadway's footprint. In accordance with these standards, the median has been narrowed to the greatest extent possible.

- Would this location be suitable for a Road Diet?

Response:

A Road Diet typically involves converting an existing four-lane undivided (no median section) roadway to a three-lane roadway consisting of two through lanes and a center two-way left-turn lane. While Road Diets can improve safety and accommodate motorized and nonmotorized transportation modes along a corridor, they may not be appropriate or feasible in all locations. According to Federal Highway Administration guidance, the existing and proposed Average Annual Daily Traffic (AADT) along this corridor make it an unsuitable candidate for a Road Diet. Additionally, Road Diets become ineffective along corridors with multiple access points and left-turn volumes due to queuing in the center lane that can impair sight distance and create additional conflict points, which is also seen along this corridor. Lastly, Road Diets can cause diversion of traffic to parallel routes particularly if the corridor is experiencing congestion. In this case, this could result in additional traffic along residential streets as "cut-through" traffic.

- What is a Reduced Conflict Intersection (RCI)?

Response:

Corridors with growing traffic volumes and high crash rates in rural areas are good candidates for reduced-conflict intersections (RCI). A reduced conflict intersection is sometimes referred to as a superstreet, a synchronized street, or a median U-turn. Along 15th Street the median U-turn intersections modify direct left turns onto 15th Street. Instead, vehicles proceed onto 15th Street with a right turn and make a U-turn a short distance downstream.

These types of intersection treatments were selected for the 15th Street corridor for its ability to maintain the flow of traffic while reducing the risk of crashes. According to Federal Highway Administration guidance, the existing and proposed AADT along this corridor make it a good candidate for RCI treatments at its intersections.

- Consider a traffic signal at N. Pierce Street instead of Van Norden Street

Response:

Left turn lanes are proposed on both eastbound and westbound 15th Street onto Van Norden Street. Turns onto 15th Street from Van Norden Street will be right turn only. A new traffic signal is proposed at Pierce Street and 15th Street with the removal of the existing signal at Washington Street. At the intersection of Pierce Street and 15th Street, a through-movement/right-turn lane and a dedicated left-turn lane have been added to improve operational efficiency and reduce congestion during peak travel times. The proposed Pierce Street traffic signal also provides a safe crossing for pedestrians to access the Midtown Crossing Shopping Center.

- How will people access businesses with the median?

Response:

While access will be modified, ingress and egress to businesses along 15th Street will continue with the implementation of the project. The proposed medians provide opportunities for dedicated left-turn lanes that eliminate traffic back-ups into through lanes. The existing four-lane undivided (no median section) roadway causes through traffic to back up while waiting for vehicles to make left turns. This situation can cause traffic congestion and crashes. The project will primarily include a Reduced Conflict Intersection (RCI) design, which allows right turns out of properties and side streets and provides U-turn bulbs of sufficient size to accommodate trucks. An RCI design redirects minor movements to improve the overall safety and efficiency of the corridor. RCIs have been constructed in multiple states (including North Carolina) and have been shown to help alleviate congestion while increasing travel capacity, reducing travel time during peak travel times, reducing collisions at intersections, and maintaining access to properties.

Click here to learn more about Reduced Conflict Intersections: NCDOT: Reduced Conflict Intersections

- Will the Reduced Conflict Intersection effect my business?

Response:

Economic researchers for the University of North Carolina at Wilmington spent over two years studying more than 400 reduced conflict intersections around the state for a report sponsored by NCDOT and published in 2022.

Below are some key findings of the study:

- *While some locations showed a positive and significant increase in economic activity, many others had neither a negative nor positive effect, suggesting the traffic safety benefits gained by the design do not generally harm a business.*
- *Businesses with a large number of customers and that are busiest later in the day are more likely to believe the design makes it easier for customers to reach them.*
- *Reduced conflict intersections have the potential to support home values.*

Residents and homeowners tended to value the improved traffic flow and traffic safety that result from a reduced conflict intersection.

- Will this design negatively impact emergency response times?

Response:

The design team will continue to coordinate with Beaufort Health and any concerns related to emergency access are being vetted to ensure the project does not inhibit response times during construction or after implementation.

Information Request

9 comments were received relating to information requests. Comments covered questions relating to potential impacts, stormwater, and trees.

- Will the trees be preserved?

Response:

Some tree removal is anticipated throughout construction. The Department will coordinate with the City to discuss specific requests for landscaping and aesthetics. Landscaping in and around medians will be designed in accordance with DOT guidelines and contingent upon a municipal agreement.

- How will stormwater be addressed with this project?

Response:

Stormwater and drainage improvements are proposed as a part of this project within the project limits (15th Street from US 17 Business to US 264). Following construction of the U-5860 project, the stormwater system is anticipated to continue to operate similarly and within the acceptable limits established by the NCDOT Hydraulics Unit. Without improvements to the existing downstream infrastructure, improving the existing flooding conditions is unlikely and heavy rainfall events may still result in flooding similar to today. NCDOT will continue to work closely with the City to implement solutions to flooding along the corridor in conjunction with ongoing improvements.

- Are roundabouts proposed on 15th Street?

Response:

No roundabouts are proposed along 15th Street.

- Was the 380-unit housing development proposed on N Market Street considered?

Response:

NCDOT is aware of the future housing development proposed on N Market Street. The Washington Travel Demand Model was used when projecting future traffic along the 15th Street corridor. A travel demand forecasting model predicts future travel patterns by modeling how many trips will be made, their destinations, and the modes and routes taken, based on factors like land use, demographics, and transportation infrastructure. The project design team will continue to coordinate with the City and Mid-East Rural Planning Organization to ensure all applicable future development is considered in the planning and design of the 15th Street project.

- Will the basketball court be impacted?

Response:

The basketball court located at N Bonner Street/15th Street was identified early in the process as a community resource that would be impacted. The project team has coordinated with the City to determine that the court is able to be relocated on the same property. NCDOT will continue to coordinate with the City to limit disruptions during construction.

General Opinion of the Project

8 comments were received relating to opinions of the project. In these comments, several voiced either support or opposition, and their respective reasons involving safety improvements, impacts on businesses and neighborhoods, and concerns over design elements like medians and the potential for property loss.

- How did this project begin?

Response:

NCDOT uses a transparent, systematic and data-driven process for prioritizing the major transportation in North Carolina and making investment decisions.

Projects are evaluated based on their merit through an analysis of the existing and future conditions, the benefits the project is expected to provide, the project's multi-modal characteristics and how the project fits in with local priorities. The outcome of the strategic prioritization process serves as input to the Draft State Transportation Improvement Program.

Click here to learn more about the prioritization process: NCDOT: What is Strategic Prioritization?

- What happens if the project is stopped?

Response:

If the project is cancelled at this point, funding for any new project is unlikely until at least 2040, as reprioritization will likely be required due to state law. NCDOT uses a transparent, systematic and data-driven process for prioritizing the major transportation in North Carolina and making investment decisions. Projects are evaluated based on their merit through an analysis of the existing and future conditions, the benefits the project is expected to provide, the project's multi-modal characteristics and how the project fits in with local priorities.

Right of Way

6 comments were received relating to right of way. Comments covered questions relating to specific property impacts. These comments included:

- How will this project affect my property?

Response:

If right-of-way or an easement is required, NCDOT will offer fair market value for the property. A right-of-way agent will contact property owners and work with them directly during the right-of-way acquisition phase of the project, which is anticipated to begin in August 2025.

Click here for more information on the NCDOT right-of-way process: Understanding the Right of Way Process

- How many buildings will be relocated by the project?

Response:

Based on current preliminary designs and estimates, sixteen relocations are anticipated out of the 129 properties located within the project design area. Designs are not yet final.

The project team is working to determine the location of permanent easements for relocated utilities. Once this has been further refined, there will be a better understanding of property impacts. Avoidance and minimization efforts will continue to be considered as the project progresses through final design.

Bicycle / Pedestrian

5 comments were received relating to bicycle and pedestrians. Comments requested crosswalks or provided opinions on the multi-modal elements of the design, such as:

- Ensure crosswalks and lighting are included in the design

Response:

A multi-use path, sidewalk, and crosswalks are being added to enhance bicycle and pedestrian safety. The locations for crosswalks, ADA-compliant median cut-throughs, and pedestrian signals will be determined as the design progresses and incorporates ongoing public input. Any lighting measures beyond the DOT guidelines would be considered a betterment and the City would be responsible for the cost of the materials, installation, and maintenance.

- Can the multi-use path be narrowed or removed to reduce property impacts?

Response:

A multi-use path, sidewalks, and crosswalks are being added to enhance bicycle and pedestrian safety. Safety is one of the main purposes of this project in response to the crash rate along this corridor exceeding the critical crash rate for North Carolina.

The proposed bicycle and pedestrian accommodations were developed from the 2016 Beaufort County Comprehensive Pedestrian Plan, which includes the incorporation of sidewalks, and the 2020 Beaufort County Bicycle Comprehensive Plan, which includes the incorporation of separated bicycle facilities. The City of Washington requested a sidewalk and multiuse path along this

corridor. This was agreed upon by NCDOT to satisfy local plans with similar multi-modal accommodations that have a reduced roadway width.

NCDOT will continue to work with the City of Washington on efforts to reduce property impacts while retaining these important multimodal accommodations and accommodating the replacement of underground utilities.

Traffic

6 comments were received relating to traffic concerns. These comments included:

- These designs will create additional cut through traffic on side streets.

Response:

The proposed medians provide opportunities for separate left-turn lanes without causing traffic back-ups into through lanes. The existing four-lane undivided (no median section) roadway causes through traffic to back up while waiting for vehicles to make left turns. This situation can cause traffic congestion and crashes. The project will primarily include a Reduced Conflict Intersection (RCI) design, which allows right turns out of properties and side streets and provides U-turn bulbs of sufficient size to accommodate trucks. An RCI design redirects minor movements to improve the overall safety and efficiency of the corridor. RCIs have been constructed in multiple states (including North Carolina) and have been shown to help alleviate congestion while increasing travel capacity, reducing travel time during peak travel times, and reducing collisions at intersections. Traffic signal timing will be optimized during final design based on traffic capacity needs. The design will decrease traffic congestion and crashes along 15th Street, minimizing the perceived need to redirect to side streets to avoid congestion.

Click here to learn more about Reduced Conflict Intersections: NCDOT: Reduced Conflict Intersections

- Making the east end of 12th Street a dead end will burden 12th Street residents.

Response:

The proposed cul-de-sac at 12th Street/15th Street/Brown Street is a safety improvement due to the intersection's existing five-legged geometry. Five-legged intersections have more potential for collisions due to increased conflict points and driver confusion.

The proposed four-legged signalized intersection at 15th Street/Brown Street will allow traffic to move through the 15th Street corridor more efficiently, without the need for additional signal cycles.

- Can traffic signal optimization fix 15th Street without additional improvements?

Response:

The Department previously developed and implemented optimized traffic signal timing plans along US 17 Business and US 264 (West 5th Street), including the signal at 15th Street and Carolina

Avenue in Washington, NC. These improvements have enhanced traffic flow and operational efficiency through better signal coordination to the maximum extent feasible given the existing roadway geometry.

Traffic signal optimization alone is unlikely to fully address the operational and safety concerns on 15th Street. While optimizing signal timing can improve traffic flow and reduce delays at key intersections, it does not resolve underlying issues such as lack of physical separation between opposing traffic streams, unsafe left-turn movements, limited pedestrian and bicycle accommodations, or insufficient capacity for all modes of transportation.

The current configuration of 15th Street as a multi-lane undivided roadway encourages high-speed driving and increases the potential for head-on and angle collisions. Without a raised median to manage turning movements and reduce conflict points, along with dedicated facilities for pedestrians and cyclists, the overall safety and efficiency of the corridor cannot be significantly improved through signal timing alone.

Additionally, access management is a critical component of this project. Controlling driveway locations and improving turning radii help maintain traffic flow and enhance safety for all road users. These physical improvements, combined with traffic signal timing that will be optimized during final design based on traffic capacity needs, are necessary to achieve the desired outcomes for mobility, safety, and accessibility.

Speed Limit

2 comments were received relating to speed limits. These comments included:

- Suggesting speed limits are lowered to prevent accidents.

Response:

The proposed speed limit on 15th Street from US 17 Business to US 264 will be maintained at 35 mph. Raised medians and narrower lanes are both traffic calming measures that will be implemented with the proposed project.

Other Projects

2 comments were received relating to other projects. In these comments, several suggested recommendations outside the scope of the project, such as:

- Leave 15th Street as is and build a bypass.

Response:

A bypass of Washington, NC was previously studied by NCDOT under Project No. H090233 but is not under consideration and will not be carried forward for further study at this time. The current estimated cost for the bypass concept is approximately $600 million in total. Overall funding for a bypass project is unlikely within the next decade and possibly beyond. For information on other

projects in the area or suggestions for new projects, please contact your Mid-East RPO at 252-946-8043.