



**Date:** July 25, 2017

**To:** Thomas J. Bonfield, City Manager  
**Through:** Keith Chadwell, Deputy City Manager  
**From:** Terry Bellamy, Transportation Director  
**Subject:** I-40 Westbound at US 15-501 Interchange Project

### **Executive Summary**

The NC Department of Transportation (NCDOT) is constructing a project to improve safety on I-40 westbound at the US 15-501 interchange in the City of Durham. The project will overlay, restripe, and provide additional signage on westbound I-40 to provide an exit only ramp to US 15-501. According to NC General Statute 136-11.1, NCDOT is required to request a resolution from the City of Durham expressing the City's view on the project.

### **Recommendation**

The Transportation Department recommends that the City Council adopt a resolution in support of the westbound I-40 at US 15-501 interchange project.

### **Background**

In Durham County, westbound I-40 is currently three lanes that merge to two lanes just west of the US 15-501 interchange in Orange County. The inside left lane drops adjacent to a median wall and guardrail. The lane drop occurs just past the merge for the I-40 on-ramp from US 15-501. Thus vehicles are merging from both the right and the left in close proximity to each other. There have been numerous crashes at this location as motorists are not expecting a left lane drop, and the lane drop is the site of recurring congestion during peak travel times.

The City Council is not routinely required to approve resolutions in support of small-scale NCDOT operational improvement or safety projects. However, this project is expected to cost more than \$250,000, and NC GS 136-11.1 states that NCDOT must request a resolution from the affected local government expressing their views on the project. NCDOT's Division 7 Office (Orange County) is managing this project and has requested resolutions from the Durham City Council and the Orange County Board of Commissioners.

### **Issues and Analysis**

There was a fatal crash in 2011 that prompted NCDOT's Transportation Mobility and Safety Unit to investigate the crashes occurring on I-40 at the lane drop. They noted a higher frequency of crashes in the area after reviewing a 5-year crash history report. They found that the overwhelming majority of motorists are moving out of the left lane in the last 350 feet even with multiple "left lane ends ahead" signs in advance of the lane ending. NCDOT do not believe that additional signage would improve the merging behavior by motorists.

NCDOT has proposed eliminating the existing lane drop that is adjacent to the median wall and guard rail for westbound I-40. Instead the third westbound lane will drop at the US 15-501 exit. The project will require replacement of the signage on I-40 to indicate the new exit only lane to US 15-501. It will require overlaying the pavement with new asphalt and restriping the lanes with the new markings.

NCDOT staff state that this change will improve safety by providing a more commonly used and predictable lane configuration for motorists. Motorists are not expecting a left lane drop on a high speed Interstate route, and this is the only location in the State where a motorist encounters a lane drop that is adjacent to a median wall and guardrail. City of Durham Transportation staff agrees with their assessment and recommend that the City Council support the project.

**Alternatives**

The City of Durham could express an alternative viewpoint in the resolution on the project or decide not to send any resolution to NCDOT. NC GS 136-11.1 states that NCDOT and the Board of Transportation shall consider, but shall not be bound by, the views of the affected municipalities and counties and that the failure of a municipality or county to express its views shall not prevent them from taking action.

**Financial Impact**

There is no financial impact to the City of Durham. NCDOT will construct the project using state funding.

**UBE Summary**

This is a NCDOT project that will be subject to their contracting procedures. The Department of Equal Opportunity/Equity Assurance did not review this item for compliance with the Ordinance to Promote Equal Business Opportunities in City Contracting.

**Attachments**

Resolution