STAFF REPORT Transportation Plan Amendments

August 8, 2023 Town Council Meeting



The Thoroughfare and Collector Street Plan map, Transit Plan map, and Bicycle and Pedestrian System Plan map collectively represent a network of current and future facilities that provide guidance on what is likely to be suitable for long term growth, connectivity, recreation, and multimodal travel. The Transportation Plan does not provide a schedule for implementation, nor does it set aside funding for improvements. The purpose of the public hearing is to consider proposed amendments to the Transportation Plan along and adjacent to East Williams Street between future Jessie Drive and Reunion Creek Parkway, in order to make a decision.

Proposed Bicycle and Pedestrian System Plan Map Amendment

The proposed amendment to the Bicycle and Pedestrian System Plan map is to add a future grade-separated bicycle and pedestrian crossing of East Williams Street north of Technology Drive (see Figure 1). Based on the public meeting draft of the proposed changes at East Williams Street and Technology Drive associated with the North Carolina Department of Transportation (NCDOT) Project HL-0007, cyclists and pedestrians would be required to traverse nine travel lanes to cross between the east and west sides of East Williams Street. This is an area where substantial development is anticipated and side paths are proposed to accommodate bicycle and pedestrian travel along major corridors. A grade-separated crossing would provide a safe crossing opportunity for cyclists and pedestrians completely separated from conflicts with motor vehicles.



Figure 1. Proposed amendments to the Bicycle and Pedestrian System Plan map

Proposed Thoroughfare and Collector Street Plan Map Amendments

The proposed amendments to the Thoroughfare and Collector Street Plan map are shown in Figure 2, and are explained further in Table 1.



Figure 2. Proposed amendments to the Thoroughfare and Collector Street Plan map

Table 1. Summary of Proposed	Amendments to the	Thoroughfare and	Collector Street Plan Man
Tuble 1. Summary of Troposed	Amenuments to the	morougnjure unu	conceror street run mup

No	Amendment	Explanation		
1	Remove future	As part of project HL-0007, NCDOT evaluated multiple alternatives, including		
	interchange at East	interchange concepts, to address current and projected traffic capacity needs.		
	Williams Street and	The interchange concepts would have cost an estimated \$50 million, far		
	Technology Drive	exceeding the available budget for improvements at this location, and would		
		have substantially restricted access for surrounding residents. Instead, NCDOT		
		intends to move forward with a Reduced Conflict Intersection (RCI) for this		
		location. Given the investment of approximately \$30 million for the RCI		
		project, and the impacts associated with the interchange concepts evaluated,		
		staff are proposing to remove the future interchange from the Transportation		
		Plan in this location.		
2	Remove future	Staff received requests to bring forward this amendment from development		
	interchange at East	interests on the east side of East Williams Street. Reasons cited include: the		
	Williams Street and	impact on future development of right of way dedication needed to		
	future Jessie Drive	accommodate an interchange, the impact of an interchange on access for		
	extension	future development, and the anticipated lack of available funding for a future		
		interchange in this location, given the results of project HL-0007. In addition, it		

No	Amendment	Explanation	
		was noted that the Jessie Drive Capacity Analysis report developed by Kimley Horn for the Jessie Drive Feasibility Study (available at: <u>https://www.apexnc.org/371/Transportation-Projects</u>) indicates an RCI (similar to project HL-0007) would operate acceptably in the 2045 Build Scenario.	
3	Add future major collector street between Colby Chase Drive and Reunion Creek Parkway	Based on the first public meeting map, Project HL-0007 would restrict access so that the only full-movement access point to East Williams Street from the neighborhoods between Reunion Creek Parkway and Bobbitt Road would be located at Reunion Creek Parkway. Public comments on the proposed plans for project HL-0007 from adjacent residential neighborhoods included substantial concern about changes to access and an anticipated increase in cut-through traffic on residential streets. The major collector street is proposed to facilitate access to and from East Williams Street from surrounding neighborhoods to reduce the use of residential streets for this purpose. The proposed alignment maximizes area for redevelopment and minimizes impacts to existing residential neighborhoods. The major collector designation would eliminate the possibility of direct access to this future roadway by residential driveways.	
4	Realign and upgrade Colby Chase Drive extension	The Transportation Plan currently shows Colby Chase Drive extending as a minor collector street to East Williams Street at an angle that would conflict with the major collector street proposed with amendment #3. This amendment would realign the future extension to create a right-angle intersection with the new major collector street, align with The Hub convenience store driveway across East Williams Street, and upgrade the Colby Chase extension to a major collector street to eliminate the possibility of additional residential driveways as this roadway approaches East Williams Street.	
5	Add future major collector street between future Jessie Drive extension and future Gladsong Drive	East Williams Street is shown on the Transportation Plan as a future Superstreet, or RCI, corridor. Access and turning movements onto and off-of East Williams Street will be restricted to U-turns, left-turn crossover medians, and right-in/right-out based on this designation. This makes connectivity between uses along the corridor, and especially between frontage uses, critical. If the future interchange at Jessie Drive is removed from the Transportation Plan, connectivity adjacent to East Williams Street will be even more important, given the anticipated congestion that would occur along East Williams Street.	
6	Realign future Jessie Drive extension	The proposed amendment shows a shift in the future extension of Jessie Drive for consistency with the recommendations from the Jessie Drive Feasibility Study Final Report completed by the Town.	

Programmed Projects:

NCDOT Project HL-0007, Improvements at NC 55/East Williams Street/Technology Drive, is currently in design and will modify the intersection and complete corridor improvements along East Williams Street between Sunset Lake Road and south of future Jessie Drive. No other municipal or state projects are programmed to complete the facilities addressed by these amendments.

Staff Recommendation:

Planning staff recommend approval of all of the proposed amendments with the exception of Amendment #2, Remove future interchange at East Williams Street and future Jessie Drive extension. These proposed amendments are also supported by staff representing Transportation, Infrastructure and Development; Fire; Police; and Parks, Recreation, and Cultural Resources.

Regarding Amendment #2, staff do not have sufficient information to support a recommendation of approval and suggest that it may be premature to proactively remove this interchange from the Town's plans. Based on historical annual growth in traffic, staff anticipate that the capacity analysis completed for the Jessie Drive Feasibility Study underestimated annual growth. While the study anticipated 0.5% annual growth in traffic along the corridor, historical growth between 2005 to 2021 has been 1.5%. If this growth trend continues, superstreet operations at future Jessie Drive would fail. Failed traffic operations and resulting congestion on an important corridor may create an issue for emergency services and travel in general. There is little to no connectivity or alternate routes to East Williams Street at this time, and while the impact of the completion of NC 540 has been included in models, the way it will function in reality has not yet been tested. In addition, while planning-level concepts for an interchange at this location have been considered through the Southwest Area Study, there is no functional design available that informs the actual land area impacts. Finally, while the potential for a future interchange in this location may discourage or alter opportunities for development, staff do not have enough information about the community's or Town Council's tolerance for congestion along this section of East Williams Street as a potential tradeoff.

Planning Board Recommendation:

The Planning Board supported the staff recommendation in a vote of six in favor and two against at their July 10, 2023 meeting.