



## ATTACHMENT 7: SUMMARY OF DEVELOPMENT IMPACTS

This attachment provides a summary of the potential infrastructure impacts associated with the proposed request in terms of how it affects the transportation system, utilities (water, sewer systems, and stormwater) and schools.

### 1. Transportation Impacts

Leesville Road is the major road impacted by the proposed zoning change. The North Carolina Department of Transportation has project #U-5720 along US 70 that will upgrade US 70 to a freeway from Lynn Road in Durham to west of T.W. Alexander Drive in Raleigh. The freeway classification means that there would no longer be driveways or intersections along this portion of US 70 and access to US 70 would be provided at interchange locations. New frontage roads, service roads or other local roadway connections would be evaluated to serve surrounding properties. This project, which is currently in the planning and design stage, is funded for the purchase of right-of-way in the year 2022 and construction beginning in the year 2024. During the fall of 2018, the NCDOT conducted public meetings for two proposed alignments associated with the freeway conversion. The selection of the preferred alternative is scheduled for the fall/winter of 2019.

NCDOT reviewed this application and offered the following advisory comments:

- NCDOT TIP Project U-5720 proposes to convert US 70 to a freeway. The subject property may be impacted by the design and construction.
- Any proposed driveway connection is subject to meeting minimum sight distance requirements.
- Roadway improvement may be required as part of any proposed driveway connection to Leesville Road. This need will be evaluated during the site plan process.
- No direct access to US 70 should be considered in the site design.

Table 1: Existing Roadway Characteristics	
Affected Segment	Leesville Road
Type of Roadway	2-lane undivided Class I roadway without left-turn lanes
Current Roadway Capacity (LOS D) (AADT)*	14,200
Latest Traffic Volume (AADT)**	4,900

Source of LOS Capacity: FDOT Generalized Level of Service Volume Table 4-1 (2012)

Source of Latest Traffic Volume: 2017 NCDOT Traffic Count Map

Table 2, below, shows the projected vehicle trips generated under the proposed rezoning compared to the present zoning designation.

<b>Table 2: Traffic Generation</b>	
<b>Traffic Generated by Present Designation (average 24 hour)*</b>	193
<b>Traffic Generated by Proposed Designation (average 24 hour)**</b>	146
<b>Impact of Proposed Designation</b>	-47

\*Assumption- (Max Use of Existing Zoning) – RR: 16 single family homes

\*\*Assumption- (Max Use of Proposed Zoning) – CG(D): Boat & RV storage

Transit service is provided along eastbound US 70 via GoDurham Routes 2 and 2A.

## **2. Water and Sewer Impacts**

Water Management has reviewed the impact the proposed zoning will have on the following utilities:

1. Drinking water supply, treatment and distribution infrastructure, including available fire flow capacity
2. Waste water collection and treatment infrastructure, including downstream lift station capacity.

Water Management has reviewed the Utilities Statement Application for the Leesville Road Boat & RV Storage and determined that a Summary Utilities Development Statement is not required. The property was previously assessed for water and may connect to the existing water main in Leesville Road without annexation. Sewer is not required for the proposed use.

## **3. Stormwater Impacts**

The Durham Stormwater Engineering Department reviewed the proposed zoning and determined that adequate riparian buffers, floodplain requirements and the appropriate impervious surface limitations have been addressed, where required.

All other impacts associated with the application would be addressed at the time of site plan review, because that requires a level of detail is not required at the time of rezoning.

## **4. School System Impact**

Durham Public Schools serving the area are Spring Valley Elementary, Neal Middle, and Southern High School. Table 3 provides a summary of the current building capacity for the elementary, middle and high schools, as well as the current enrollment and the available capacity.

Table 3: School Enrollment and Capacity Figures			
	Elementary School Students	Middle School Students	High School Students
Current Building Capacity	16,221	7,830	10,516
Maximum Building Capacity (110% of Building Capacity)	17,843	8,613	11,568
20 <sup>th</sup> Day Attendance (2017-2018 School Year)	15,574	6,856	10,432
Committed to Date, Based on Recent Approvals (April 2015-March 2018)	(4)	0	(33)
Available Capacity	2,273	1,757	1,169

As shown in Table 4, the proposed zoning will generate no school aged children, compared to the existing zoning, since the project is non-residential.

Table 4: Number of Projected Students Under Rezoning			
	Elementary School Students	Middle School Students	High School Students
Potential Students Generated – Current Zoning*	2	1	2
Potential Students Generated – Proposed Zoning**	0	0	0
Impact of Proposed Zoning	-1	0	0

\*Assumption- (Max Use of Existing Zoning) – RR: 16 single family homes

\*\*Assumption- (Max Use of Proposed Zoning) – CG(D): Boat & RV storage

### 3. Summary

The proposed CG(D) district is consistent with *Comprehensive Plan* policies regarding the infrastructure impacts of the transportation system, utilities, and schools.