

**TRAFFIC GENERATION COMPARISON  
BETWEEN  
CURRENTLY APPROVED VERSUS PROPOSED**

**Central Park**

*PREPARED FOR:*

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**September 2019**



**DEAN MARTIN  
FLORIDA P.E. #52022  
VALID ONLY WITH EMBOSSED SEAL**

# 1. PURPOSE

## ***OBJECTIVE***

This report has been prepared in accordance with Lee County Department of Community Development and Lee County TIS Guidelines criteria for projects seeking a Comprehensive Plan Amendment. This report compares the anticipated traffic generation of the currently approved development versus the proposed development in order to determine any adverse roadway impacts associated with the addition of **Central Park** to the Mixed-Use Overlay.

The subject parcel per the most recent boundary survey is 6.439 acres.

## 2. SITE DESCRIPTION

### *SITE LOCATION*

**Central Park** is a 6.439-acre project located on the west side of U.S. 41 in Section 23, Township 45 South, Range 24 East, Lee County, Florida (see Exhibit 1). The existing zoning for the property allows construction of one hundred sixty-six (166) multi-family residential units on the site or 64,390 square feet of commercial offices.

### 3. OBSERVATIONS

#### 3.1 TRIP GENERATION CALCULATIONS

Vehicular trips generated by the currently approved development were calculated by using the equations provided by the Institute of Transportation Engineers, 10<sup>th</sup> Edition of the Trip Generation Manual, Land Use Code 221 (Multifamily Housing Mid-Rise) and Land Use Code 710 (General Office Building) using the average rates or the fitted curve equations shown in the tables.

**Table 1. Raw Trip Generation – Approved Mid-Rise (LUC 221)**

<b><u>166 Dwelling Units:</u></b>	
<b>A.</b>	Daily Average Vehicle Trip Ends, Weekday $T = 5.45 (166) - 1.75 = \mathbf{902 (451 \text{ entering, } 451 \text{ exiting})}$
<b>B.</b>	A.M. Peak Hour Average Vehicle Trip Ends (Adjacent Street) $\text{Ln}(T) = 0.98 \text{ Ln}(166) - 0.98 = \mathbf{56 (15 \text{ entering, } 41 \text{ exiting})}$
<b>C.</b>	P.M. Peak Hour Average Vehicle Trip Ends (Adjacent Street) $\text{Ln}(T) = 0.96 \text{ Ln}(166) - 0.63 = \mathbf{72 (44 \text{ entering, } 28 \text{ exiting})}$

Source: TDM, 2019

**Table 2. Raw Trip Generation – Approved Offices (LUC 710)**

<b><u>64,390 Square Feet of Gross Floor Area:</u></b>	
<b>A.</b>	Daily Average Vehicle Trip Ends, Weekday $\text{Ln}(T) = 0.97 \text{ Ln}(64.390) + 2.50 = \mathbf{692 (346 \text{ entering, } 346 \text{ exiting})}$
<b>B.</b>	A.M. Peak Hour Average Vehicle Trip Ends (Adjacent Street) $T = 0.94 (64.390) + 26.49 = \mathbf{87 (75 \text{ entering, } 12 \text{ exiting})}$
<b>C.</b>	P.M. Peak Hour Average Vehicle Trip Ends (Adjacent Street) $\text{Ln}(T) = 0.95 \text{ Ln}(64.390) + 0.36 = \mathbf{75 (12 \text{ entering, } 63 \text{ exiting})}$

Source: TDM, 2019

It is assumed that the proposed parcel is not large enough to accommodate both uses; therefore, the approved trip generation will be either Table 1 or Table 2, not the sum of both.

As shown below, vehicular trips generated by the proposed development are identical to the currently approved development since the proposed amendment will not alter the allowable residential density or commercial intensity.

**Table 3. Raw Trip Generation – Proposed Mid-Rise (LUC 221)**

<b><u>166 Dwelling Units:</u></b>	
<b>A.</b>	Daily Average Vehicle Trip Ends, Weekday $T = 5.45 (166) - 1.75 = \mathbf{902 (451 \text{ entering, } 451 \text{ exiting})}$
<b>B.</b>	A.M. Peak Hour Average Vehicle Trip Ends (Adjacent Street) $\text{Ln}(T) = 0.98 \text{ Ln}(166) - 0.98 = \mathbf{56 (15 \text{ entering, } 41 \text{ exiting})}$
<b>C.</b>	P.M. Peak Hour Average Vehicle Trip Ends (Adjacent Street) $\text{Ln}(T) = 0.96 \text{ Ln}(166) - 0.63 = \mathbf{72 (44 \text{ entering, } 28 \text{ exiting})}$

Source: TDM, 2019

**Table 4. Raw Trip Generation – Proposed Offices (LUC 710)**

<b><u>64,390 Square Feet of Gross Floor Area:</u></b>	
<b>A.</b>	Daily Average Vehicle Trip Ends, Weekday $\text{Ln}(T) = 0.97 \text{ Ln}(64.390) + 2.50 = \mathbf{692 (346 \text{ entering, } 346 \text{ exiting})}$
<b>B.</b>	A.M. Peak Hour Average Vehicle Trip Ends (Adjacent Street) $T = 0.94 (64.390) + 26.49 = \mathbf{87 (75 \text{ entering, } 12 \text{ exiting})}$
<b>C.</b>	P.M. Peak Hour Average Vehicle Trip Ends (Adjacent Street) $\text{Ln}(T) = 0.95 \text{ Ln}(64.390) + 0.36 = \mathbf{75 (12 \text{ entering, } 63 \text{ exiting})}$

Source: TDM, 2019

### **3.2 CONCLUSION**

The proposed amendment will not result in an increase in vehicle trips; therefore, the surrounding roadway network will continue to operate at acceptable Levels of Service both with and without the trips generated by the development. No roadway capacity improvements will be warranted as a result of the traffic expected to be generated by the development.