Clermont Walgreens Relocation– Trip Generation Analysis

A Walgreens store is requesting relocation from the east side of Bloxam Avenue to the west side. As a result, five buildings will be demolished to make room for a proposed 14,820 SF store. The proposed location has the following current uses: a 4,080 SF Gas Station & Convenience Store, a 1,140 SF Retail Store, a 1,662 SF Single-family Home, and a 1,914 SF Single-family Home.

This analysis will look at the trip generation from the previously land uses and compare them to the proposed Walgreens store.

Trip Generation Rates

The number of vehicle trips that will originate from, or are destined to, a development is dependent upon the type and amount of land uses contained within that development. Trip rates used in this analysis were taken from the ITE publication, Trip Generation, 9th Edition and from the FDOT Trip Generation Characteristics of Small Box Stores (dated February 2, 2001). Table 1 summarizes the land use types, land use codes and trip rates for the development.

Table 1 - ITE Trip Rates

		ITE TRIP RATES									
			24 HOURS			AM PEAK HOUR			PM PEAK HOUR		
LAND USE	ITE LUC	UNIT RATE	EQUATION	%VOL IN	%VOL OUT	EQUATION	%VOL IN	%VOL OUT	EQUATION	%VOL IN	%VOL OUT
Single-Family Detached Housing	210	Trips/Dwelling Units	Average Rate = 9.52	50%	50%	Average Rate = 0.75	25%	75%	Average Rate = 1.00	63%	37%
Specialty Retail	814	Trips/1,000 SF GFA	T = 42.78(x)+37.66	50%	50%	T = 4.91(x)+115.59	48%	52%	T = 2.40(x)+21.48	44%	56%
Small Box (Discount Store)	---	Trips/1,000 SF GFA	Average Rate = 64.01	50%	50%	---		100%	Average Rate = 6.82	50%	50%
Convenience Market with Gas Pumps	853	Trips/1,000 SF GFA	Average Rate = 845.60	50%	50%	Average Rate = 40.92	50%	50%	Average Rate = 50.92	50%	50%

Trip Generation – Existing

Once trip generation rates are established, trip generation volumes can be calculated based upon the size and extent of the development. Table 2 summarizes the trip generation for the existing land uses.

Table 2 - Trip Generation Volumes (existing)

	TRIP GENERATION VOLUMES								
	24 HOURS VOLUME			AM PEAK HOUR VOLUME			PM PEAK HOUR VOLUME		
LAND USE	TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT
Single-Family Detached Housing	19	10	9	2	1	1	2	1	1
Specialty Retail	86	43	43	126	60	66	24	11	13
Convenience Market with Gas Pumps	3,450	1,725	1,725	167	84	83	208	104	104
TOTAL	**3,555**	**1,778**	**1,777**	**295**	**145**	**150**	**234**	**116**	**118**

Trip Generation – Proposed

Table 3 summarizes the trip generation for the proposed project.

Table 3 - Trip Generation Volumes (Proposed)

	TRIP GENERATION VOLUMES								
	24 HOURS VOLUME			AM PEAK HOUR VOLUME			PM PEAK HOUR VOLUME		
LAND USE	TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT
Small Box (Discount Store)	949	475	474	0	0	0	101	51	50

Net New Trips

Net new trips are determined by calculating the difference in the trip volumes between the existing and the proposed uses. Table 4 summarizes the estimated trip generation net increase (or decrease) due to the proposed development.

Table 4 - Net New Trips

	TRIP GENERATION VOLUMES								
	24 HOURS VOLUME			AM PEAK HOUR VOLUME			PM PEAK HOUR VOLUME		
CONDITION	TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT
Exsiting	3,555	1,778	1,777	295	145	150	234	116	118
Proposed	949	475	474	0	0	0	101	51	50
Net New Trips	**-2,606**	**-1,303**	**-1,303**	**-295**	**-145**	**-150**	**-133**	**-65**	**-68**

Conclusion

This analysis shows that the proposed changes to the Walgreens relocation will not exceed the trip volume of the existing commercial/residential development.