



Date: February 13, 2024

To: Shelbyville Board of Zoning Appeals Members
From: Adam Rude, Planning and Building Director

RE: Traffic Considerations for BZA 2024-02; DG Market, Special Exception Use

In preparing for this meeting and reviewing public comments that have already been received by the office, a common concern that was brought up was the potential impacts to traffic in the area. I sought out advice from our City Engineer and he was able to provide a few resources that could provide the board and the public with more context as to what the current conditions are and what the impact to the area could be. This memo is not intended to provide any recommendations, but rather it is intended to provide additional insight into this one specific topic so that the board can make the most informed decision.

To provide context of the current traffic counts in the area, the City Engineer provided a few different resources, the first of these was a recent traffic study from 2021, commissioned by the City, to look at traffic volume projections on Amos Road, McKay Road, and Progress Parkway due to current and potential residential growth in the area. The segment of Amos Road, between McKay Road and Howard Street, where the Twin Lakes neighborhood exits onto Amos Road, currently has an Annual Average Daily Traffic (AADT) of **5,988**. Similarly, the segment of McKay Road between Amos Road and Progress Parkway, where the Twin Lakes neighborhood exits onto McKay, currently has an AADT of **4,459**.

We do not have traffic counts from any of the roadways within the Twin Lakes Neighborhood, but we can use some resources to estimate what amount of traffic is likely generated with the current land uses within Twin Lakes. The two resources that were shared to us by the City Engineer were (1) the *ITE (Institute of Transportation Engineers) Trip Generation Manual* and (2) the 2009 National Household Travel Survey (NHTC), completed by the US Department of Transportation and the Federal Highway Administration. These two reports provide estimated trips that are generated by specific land uses, which we can then use to estimate the number of vehicular trips currently generated by the existing land uses within the Twin Lakes Neighborhood, allowing us to better understand the impact that the proposed development could have on the area. The table on the following page shows the estimated trips that are currently being generated within the Twin Lakes Neighborhood:

Land Use Category	No. of Units	NHTS Trips per Unit	NHTS Trips Generated	ITE Trips per Unit	ITE Trips Generated	Average
Single-Family Detached	130	4.45	578.5	9.52	1,237.6	908.05
Single-family Attached	32	2.87	91.84	5.81	185.92	138.88
Apartments	172	3.27	562.44	6.65	1,143.8	853.12
Total Estimated Trips:		-	1,232.78	-	2,567.32	1,900.05

While these are just estimates, it shows us that the existing development within the Twin Lakes Neighborhood generates approximately **1,900 daily vehicular trips in the area**.

When asked for an estimated trip generation number, the petitioner provided that this development is expected to generate approximately **125 - 130 trips per day**. The City Engineer agreed with the petitioner’s estimate given the land use and the size of the facility.