



Mannik and Smith Group has performed an initial traffic quantity estimate for the 10 E Auburn Road carwash project. We have used ITE Trip Generation 11th Edition Land Use 934, Fast Food w/Drive Through & Indoor Seating.

Culvers Traffic counts that may leave through the Auburn exit and be removed from Culver's on-site traffic flow.

During the AM peak hour, the Culvers may generate 196 trips, with 100 entering and 96 exiting. During the PM peak hour, the Culvers may generate 145 trips, with 76 entering and 69 exiting.

Using a trip distribution on Auburn Road based on MDOT 2023 traffic counts at the Meijer full entrance: for the AM there are approximately 45% of traffic heading EB and 55% heading WB. Applying that ratio to the AM trip generation, of the 96 vehicles exiting Culvers, 44 vehicles will go EB on Auburn.

Even if we assume only 50% of those EB vehicles will try to use the Express Clean exit, which would be about **22 vehicles during the AM peak hour.**

For the PM peak hour, there are approximately 54% of traffic heading EB and 46% heading WB on Auburn Road. Applying that ratio to the PM trip generation, of the 69 vehicles exiting Culvers, 31 will go EB on Auburn. Assuming 50% of those EB vehicles try to use the Express Clean exit, you're looking at about **16 vehicles during the PM peak hour.**

We estimate 50% will try to use the Express Clean exit, because the right-out onto Auburn Road for the Express Clean entrance is not that far away from the right-out for the Meijer, so people visiting Culvers will not find it a big hassle to use either exit.

Carwash numbers entering from Meijer through Culvers lot:

For the Carwash ITE estimates a peak hour volume of 70 vehicles.

For Vehicles Leaving the carwash the ITE Trip Generation Manual predicts that the number of vehicles entering and leaving an automated car wash during the Peak Hour is 50% entering and 50% exiting. This is because most of the time, people enter the wash, queue for a short time, go through a 35-second car wash cycle, and then leave. A few people stop to vacuum, but they don't spend a full hour doing so.

So, if you have 70 total vehicles in the peak hour, 35 of them are exiting to Auburn Road. Of the remaining 35 entering the site, if you split that number in half, 18 would enter from Auburn Road and 17 would enter from Culvers after visiting Meijer.

Conclusion:

Even with the fairly conservative 50% estimate, the amount of vehicles that will be leaving the culvers drive-through via the new cross connection to travel east on Auburn road will be greater than the amount of new traffic introduced traveling north through their lot from Meijer to get to the Carwash, therefor reducing the total amount of vehicles passing through their drive aisle.

At the previous planning commission meeting Culver's claimed that the implementation of the cross connection would introduce a new traffic direction would be harmful to the site and



dangerous to their employees who were unaccustomed to vehicles travelling North through their drive aisle. However, anyone wanting to eat inside the restaurant must travel north through the lot to access the parking spaces, and the spaces furthest north are the ones closest to the entrance where people most frequently want to park. Vehicles already travel north through this drive aisle all the way to the point where this cross connection would be located every single day.

From an estimated traffic count and traffic flow direction standpoint there isn't evidence to the claim that this would be harmful to the Culver's site.

