



May 28, 2025

Dear Ms. Delbert:

Reference: Wash-Rite Car Wash
Mount De Chantal Rd.
Wheeling, WV 26003
Ohio County

J.B. Turman Engineering PLLC (JBT) has performed a trip generation evaluation for the project referenced above. Proposed trip generation estimates have been calculated for the Wash-Rite Car Wash development project in Wheeling, WV. The purpose of this correspondence is to summarize our findings of the trip generation evaluation.

Project Description

The Project consists of a proposed one-story car wash facility that will have a single automatic wash tunnel, 20 vacuum bays and include office space for employees. The proposed facility will have the capacity to queue approximately 22 vehicles in line for the automatic wash tunnel. The proposed land use is summarized in Table I below.

Trip Generation Methodology

Our estimates of trip generation are based on the trip generation rates found in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition. The trips generated by the proposed land use were estimated based on the following land use codes (LUCs):

- **LUC 948** – Car Wash: An automated car wash is a facility that allows for the mechanical cleaning of the exterior of vehicles. Manual cleaning service may also be available at the facility. Trip generation estimates for this land use are based on the number of car wash tunnels available or the gross floor area of the facility.

Trip generation was estimated based on 100% vehicle mode share utilizing the ITETripGen Web-based App. Calculations for the estimations are attached to this letter.

Project-Generated Trips

Table I summarizes the estimated Project-generated trips for the Project using LUC 948. Trip generation was estimated using LUC 948 since there are no manual car wash bays and it is a fully automatic facility. Due to the nature of the provided service, trip generation is expected to be influenced by weather and seasonality. It is anticipated that these results reflect temperate conditions.

Table I

LUC #948 - Automated Car Wash ⁽¹⁾			
Time Period	Estimated Trip Generation		
	In	Out	Total
Weekday AM Peak Hour	-	-	-
Weekday PM Peak Hour	39	39	78
Saturday Peak Hour	19	22	41

1. Estimated trip generation calculated using the ITE Trip Generation Manual, Eleventh Edition, 2021.

If you have any questions or need additional information, please feel free to contact our office at 304-733-1335 or via e-mail bmorton@jbtengineering.com.

Respectfully Submitted,
J.B. Turman Engineering, PLLC



Brian Morton, P.E.
Project Manager

Attachments:
ITE Trip Generation Calculations



Automated Car Wash (948)

Vehicle Trip Ends vs: Car Wash Tunnels

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 3

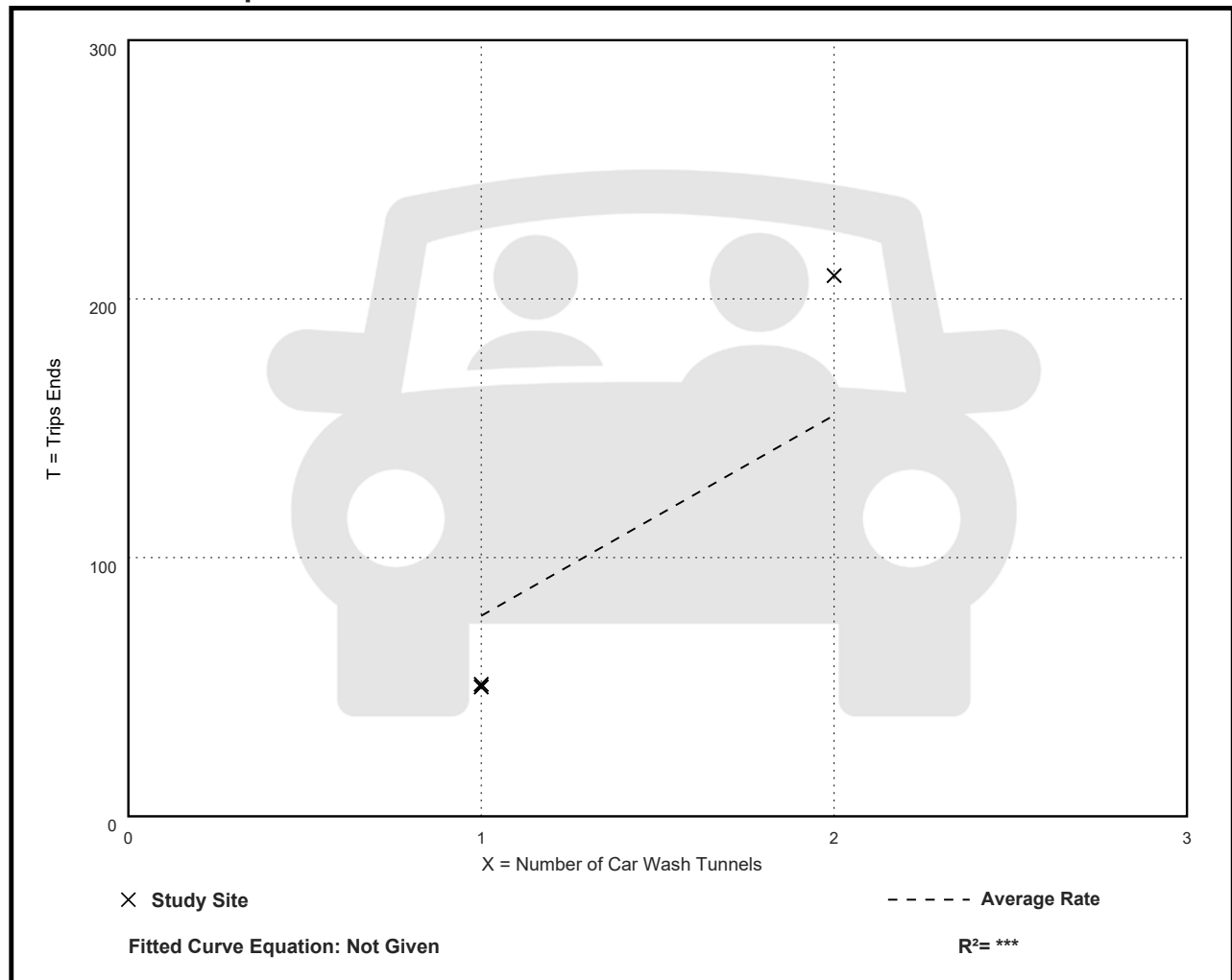
Avg. Num. of Car Wash Tunnels: 1

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Car Wash Tunnel

Average Rate	Range of Rates	Standard Deviation
77.50	50.00 - 104.50	33.07

Data Plot and Equation



Automated Car Wash (948)

Vehicle Trip Ends vs: Car Wash Tunnels

On a: Saturday, Peak Hour of Generator

Setting/Location: General Urban/Suburban

Number of Studies: 1

Avg. Num. of Car Wash Tunnels: 1

Directional Distribution: 46% entering, 54% exiting

Vehicle Trip Generation per Car Wash Tunnel

Average Rate	Range of Rates	Standard Deviation
41.00	41.00 - 41.00	***

Data Plot and Equation

Caution – Small Sample Size

