

Ref: 9298

March 11, 2022

Richard A. Salvo, P.E.
Engineering Alliance, Inc.
194 Central Street
Saugus, MA 01906

Re: Traffic Assessment for Proposed Manufacturing Development
105 Sam Fonzo Drive & 10 L.P. Henderson Road
Beverly, Massachusetts

Dear Rick:

Vanasse & Associates, Inc. (VAI) has prepared this traffic assessment in order to determine the anticipated trip generation of the proposed manufacturing development to be located within the Cherry Hill Corporate Center in Beverly, Massachusetts. The Project involves the construction of approximately 95,800 square feet (sf) of manufacturing space for Axcelis Technologies, Inc., an existing tenant within the Center. Access will be provided via one driveway to L. P. Henderson Road and two driveways to Sam Fonzo Drive. The southern driveway is expected to accommodate delivery and truck traffic. Approximately 76 parking spaces are proposed with six loading docks and separate pads for two dumpsters. Based on information provided by Axcelis, a total of 40 employees are expected at the site.

In order to develop the traffic characteristics of the existing and proposed sites, trip-generation statistics published by the Institute of Transportation Engineers (ITE)¹ for Land Use Code (LUC) 140, Manufacturing was used. Table 1 summarizes the anticipated trip generation of the proposed development.

Table 1
TRIP-GENERATION SUMMARY^a

Time Period/ Directional Distribution	Projected Vehicle Trips ^a
Weekday Daily	144
<i>Weekday Morning Peak Hour:</i>	
Entering	28
<u>Exiting</u>	<u>11</u>
Total	39
<i>Weekday Evening Peak Hour:</i>	
Entering	15
<u>Exiting</u>	<u>27</u>
Total	42

^aBased on ITE LUC 140, Manufacturing, and 95,800 sf.

¹*Trip Generation*, 11th Edition; Institute of Transportation Engineers; Washington, DC; 2021.

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As shown in Table 1, the project is expected to generate 144 vehicle trips on an average weekday (two-way, 24-hour volume), with 39 trips (28 entering and 11 exiting) expected during the weekday morning peak hour and 42 trips (15 entering and 27 exiting) during the weekday evening peak hour.

It should be noted that the Project represents an expansion of manufacturing space from the existing Axcelis Technologies, Inc. facility located at 108 Cherry Hill Drive. Initially, employees from the existing facility are expected to populate the Project building; therefore, the trips identified in Table 1 may already be on the road network and would therefore not represent new trips to the system.

Based on the above, VAI has concluded that the proposed manufacturing development to be located at 105 Sam Fonzo Drive & 10 L.P. Henderson Road is expected to produce a minor increase in traffic levels within the Corporate Center and on adjacent roadways.

If you have any questions on the conclusions reached herein, feel free to contact me at sthornton@rdva.com.

Sincerely,

VANASSE & ASSOCIATES, INC.

A handwritten signature in blue ink, appearing to read "Scott W. Thornton".

Scott W. Thornton, P.E.

Principal

cc: File

Attachment: Trip Calculations

Manufacturing (140)

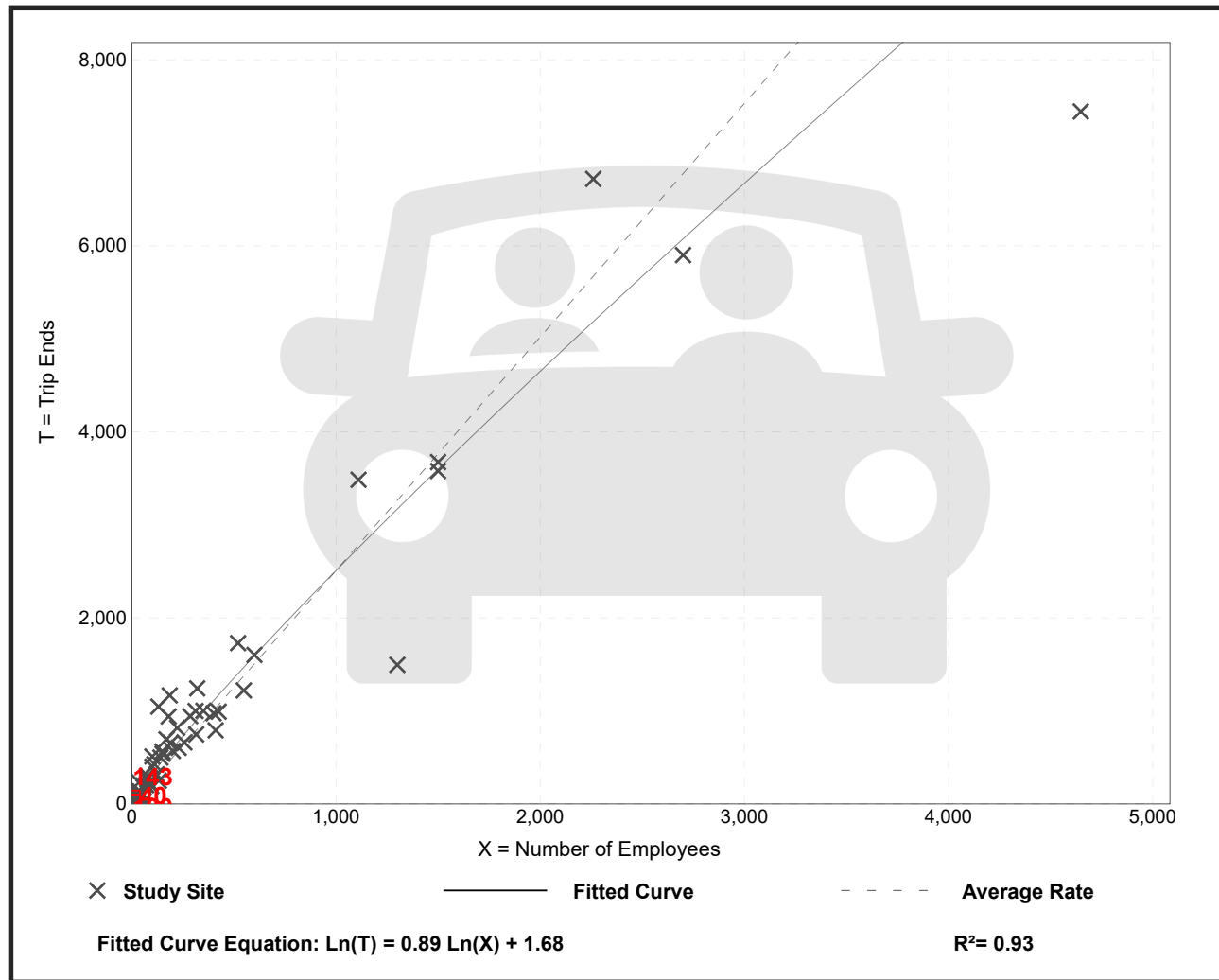
Vehicle Trip Ends vs: Employees
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 53
Avg. Num. of Employees: 437
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
2.51	1.15 - 8.05	0.96

Data Plot and Equation



Manufacturing (140)

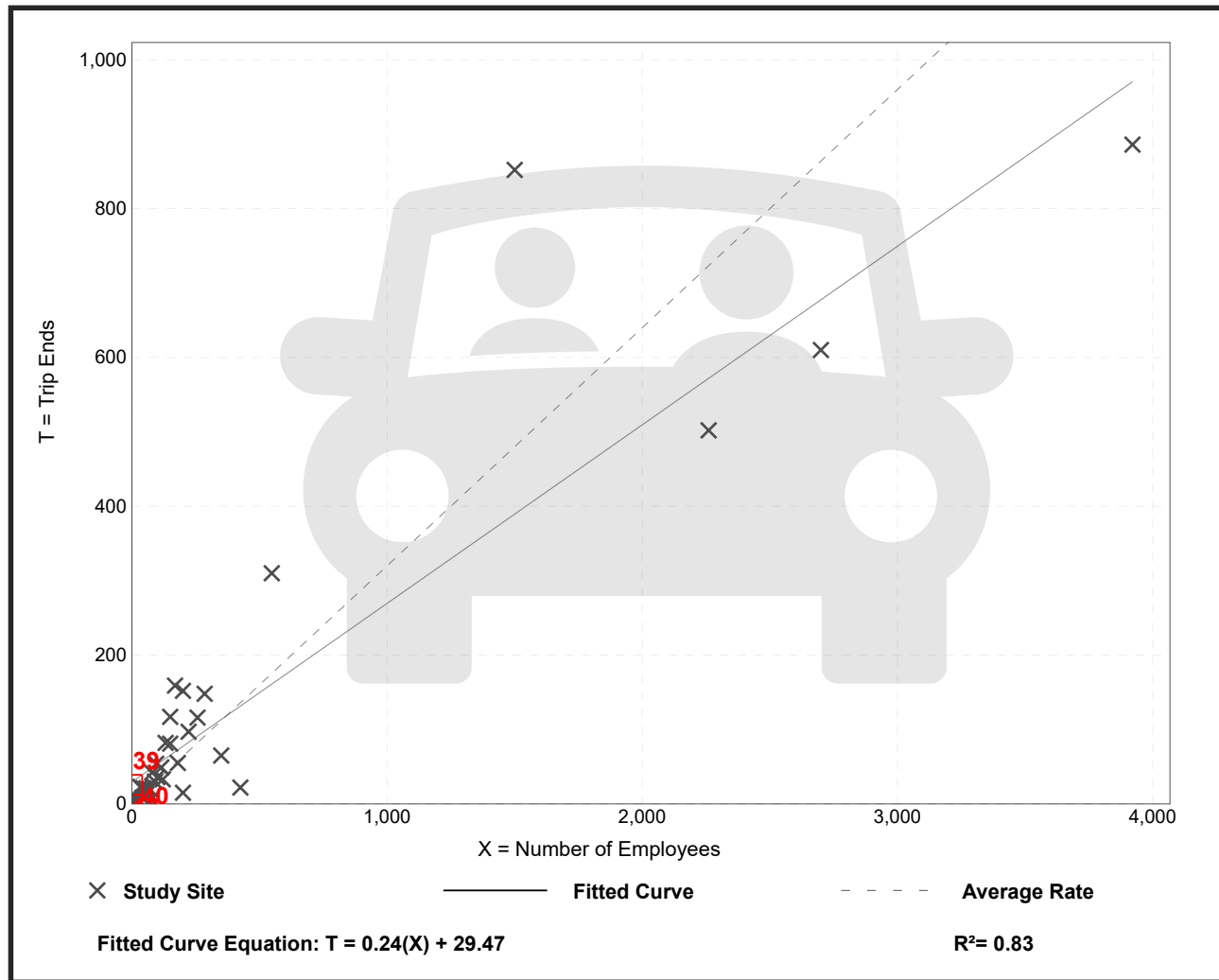
Vehicle Trip Ends vs: Employees
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban
 Number of Studies: 37
 Avg. Num. of Employees: 400
 Directional Distribution: 73% entering, 27% exiting

Vehicle Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.32	0.03 - 0.94	0.18

Data Plot and Equation



Manufacturing (140)

Vehicle Trip Ends vs: Employees
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: 37
 Avg. Num. of Employees: 334
 Directional Distribution: 37% entering, 63% exiting

Vehicle Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.31	0.06 - 1.18	0.17

Data Plot and Equation

