

## Trip Generation Letter

### ADDOZ ENGINEERING INC

*Clients are Our First Priority*

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October 7, 2024

Temitayo Ajibade, Architect, AAA, MRAIC  
Green Birch Architecture Inc.  
260 Livingston View NW  
Calgary, AB T3P 1R5  
Email: temitayo@grnbarch.com

**Subject: Trip Generation Report for the Proposed Child Care Facility to be Located at  
313 Main Street NW, Airdrie, Alberta. (Application Number PL2400170)**

Dear Mr. Ajibade:

Addoz Engineering Inc. (AEI) completed a revised trip generation analysis for the proposed Child Care Development to be located at 313 Main Street NW, Airdrie, Alberta. The revised Child Care development will accommodate a total of 20 children as per the updated proposed site plan. Also, parents will transport their children to and from the Child Care facility utilizing the Lane to access drop-off / pick-up parking area.

To estimate the number of vehicle trips expected to be generated by a development, trip generation rates are applied based on the proposed land uses and intensity. The number of trips that would be generated by a proposed development are based on the rates published in ***Trip Generation, 11<sup>th</sup> Edition*** by the Institute of Transportation Engineers (ITE).

AEI reviewed thoroughly the proposed land use and compared them with the applicable ITE land uses. The most appropriate ITE land use was selected for the proposed development, also note that the "Peak Hour of Adjacent Street Traffic" charts were utilized for all estimates. The trip generation rates along with the proposed land use and the corresponding ITE land use codes are presented in **Table 1**. The projected development's peak-hours and daily site-generated traffic volumes are presented in Table 2. Copies of ITE trip generation charts utilized for these estimates are attached in **Attachment #1**.



**Table 1: Trip Generation Rates ITE 11<sup>th</sup> Edition Trip Generation Manual**

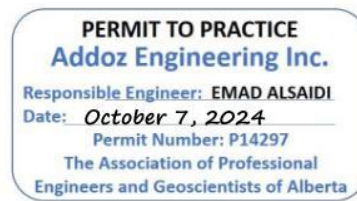
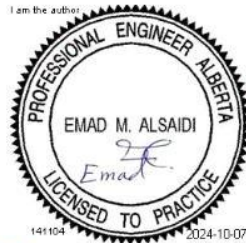
Land Use	ITE Code	Unit	AM Peak Hour			PM Peak Hour			Daily Trips
			In	out	total	in	out	total	total
Day Care Centre	565	Students	53%	47%	0.78	47%	53%	0.79	4.09

**Table 2: Projected Site-Generated Peak-Hour and Daily Traffic Volumes**

Proposed Development	ITE Code	Density (No. of Students)	AM Peak Hour			PM Peak Hour			Daily Trips total
			in	out	total	in	out	total	
Proposed Child Care Facility	565	20	8	8	16	8	8	16	82

A review of **Table 2** indicates that the numbers of peak hour generated trips are relatively small. Also, the daily total trips generated by the development would be 82 trips. Please note that a maximum of 80 daily trips would be utilizing the Lane to access drop-off / pick-up parking area. The Child Care staff would carpool and would only utilize the two existing parking stalls that are accessed directly from Main Street. We trust the above details satisfy the City of Airdrie requirements for trip generation estimation. Please do not hesitate to contact the undersigned if you have questions.

Sincerely yours,



**ADDOZ ENGINEERING INC**

**Prepared by:**  
 Emad Alsaidi, PhD, PEng  
 Cell1: 587-703-5222  
 Cell2: 578-703-9321



**Attachment # 1**

**Copies of ITE Trip Generation Charts Utilized for the Estimation**

11/15/22, 11:46 AM

<https://tetrigen.org/query/PrintGraph2?code=565&iVlabel=TOTSTUD&timeperiod=TASIDE&x=&edition=639&locationCode=G...>

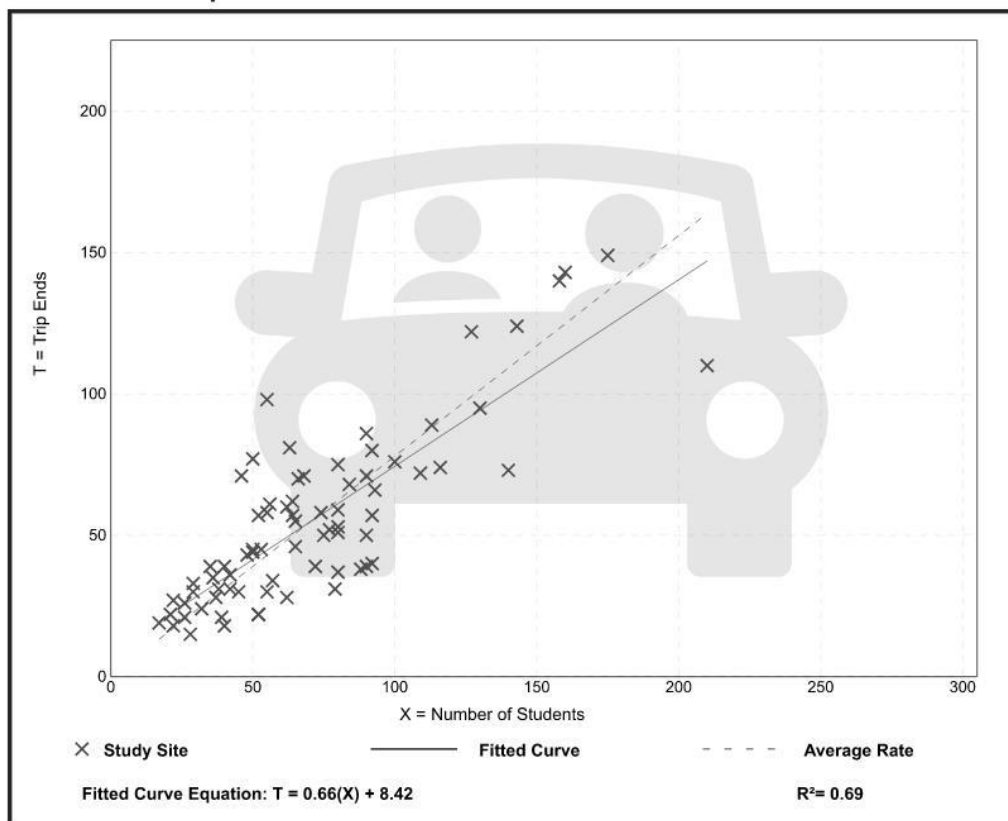
## Day Care Center (565)

**Vehicle Trip Ends vs: Students**  
**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: 75  
 Avg. Num. of Students: 71  
 Directional Distribution: 53% entering, 47% exiting

### Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.78	0.39 - 1.78	0.25

### Data Plot and Equation



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11/15/22, 11:47 AM

<https://itetripgen.org/query/PrintGraph2?code=565&ivlabel=TOTSTUD&timeperiod=TPSIDE&x=&edition=639&locationCode=G...>

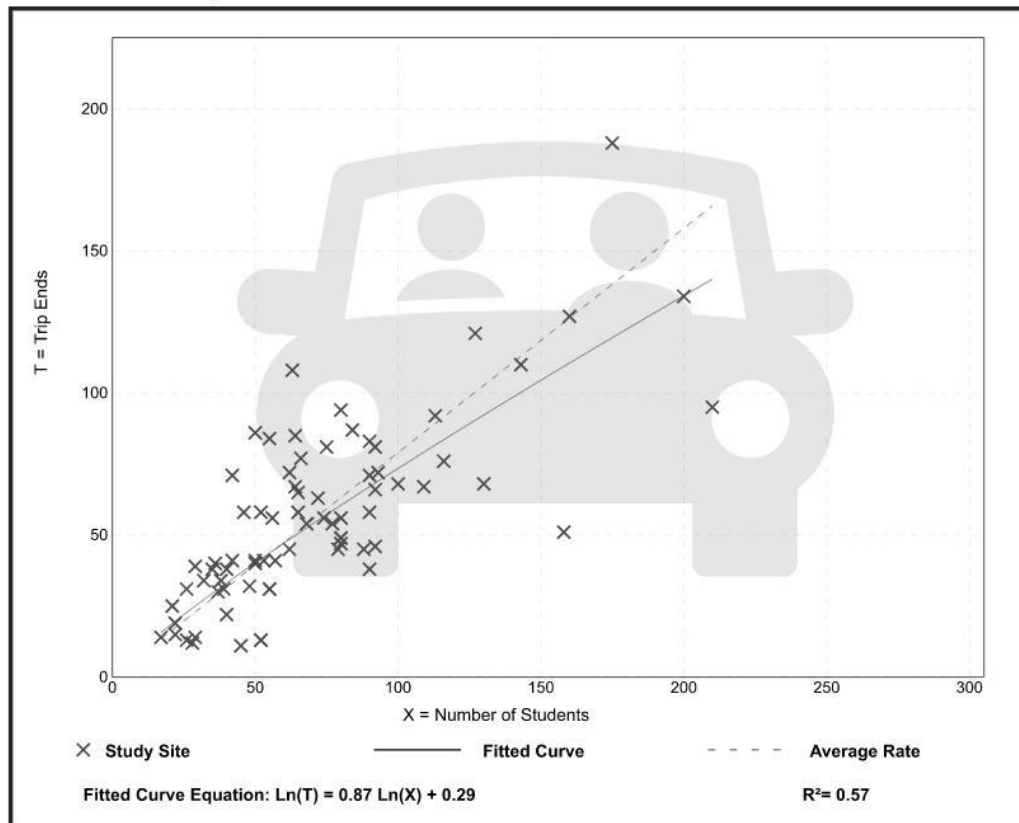
## Day Care Center (565)

**Vehicle Trip Ends vs: Students**  
**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: 75  
 Avg. Num. of Students: 72  
 Directional Distribution: 47% entering, 53% exiting

### Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.79	0.24 - 1.72	0.30

### Data Plot and Equation



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11/15/22, 11:45 AM

<https://itetripgen.org/query/PrintGraph2?code=565&ivlabel=TOTSTUD&timeperiod=AWDVTE&x=&edition=639&locationCode=...>

## Day Care Center (565)

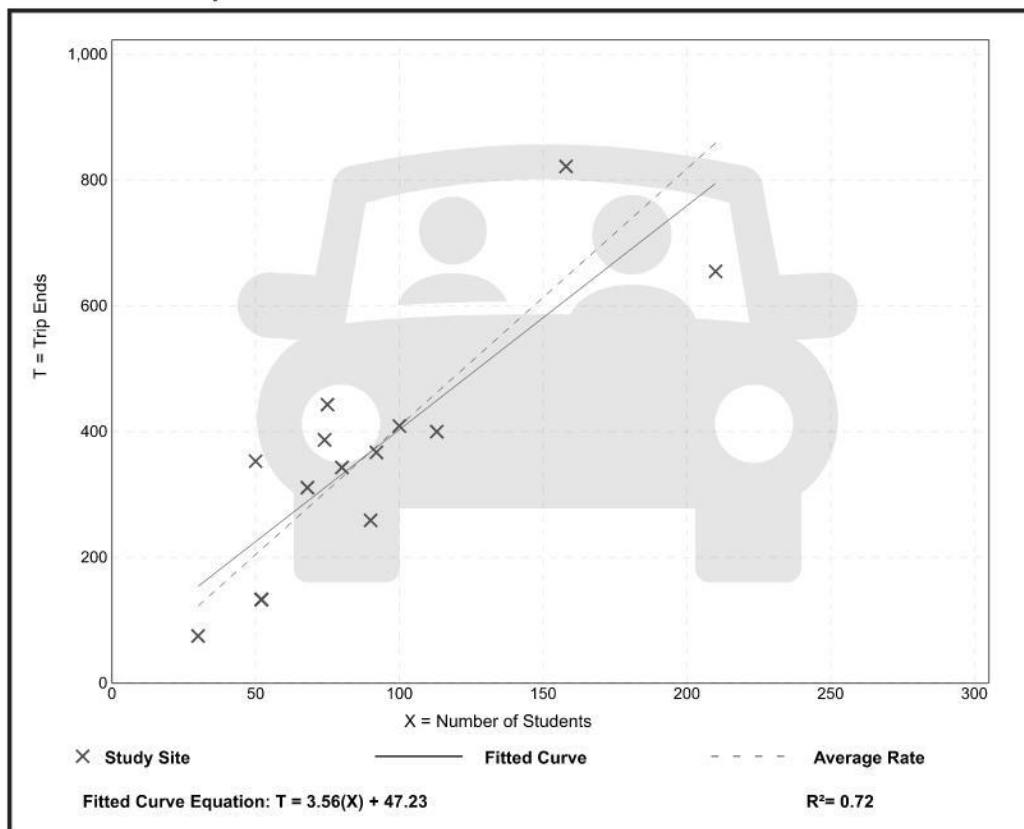
**Vehicle Trip Ends vs: Students**  
**On a: Weekday**

**Setting/Location: General Urban/Suburban**  
Number of Studies: 14  
Avg. Num. of Students: 89  
Directional Distribution: 50% entering, 50% exiting

### Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
4.09	2.50 - 7.06	1.21

### Data Plot and Equation



*Trip Gen Manual, 11th Edition*

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