Village of Bensenville
Board Room
12 South Center Street
DuPage and Cook Counties
Bensenville, IL, 60106

MINUTES OF THE SPECIAL COMMUNITY DEVELOPMENT COMMISSION

November 10, 2020

CALL TO ORDER: The meeting was called to order by Chairman Rowe at 6:30p.m.

ROLL CALL : Upon roll call the following Commissioners were present:
Rowe, Ciula, King, Wasowicz
Absent: Czarnecki, Marcotte, Rodriguez
A quorum was present.

STAFF PRESENT: K. Fawell, E. Summers, C. Williamsen

JOURNAL OF PROCEEDINGS: The minutes of the Community Development Commission Meeting of the October 6, 2020 were presented.

Motion: Commissioner King made a motion to approve the minutes as presented. Commissioner Ciula seconded the motion.

All were in favor. Motion carried.

Village Manager, Evan Summers and Village Planner, Kelsey Fawell, were present and sworn in by Chairman Rowe.

PUBLIC COMMENT: There was no Public Comment.

Public Hearing: CDC Case Number 2020-15
Petitioner: Scott Sanda and Michael Pesch
Location: 810 East George Street
Request: Variation, Minimum Rear Setback
Municipal Code Section 10 – 6 – 8 – 1
Variation, Garage Location
Municipal Code Section 10 – 7 – 4C – 9.a.2

Motion: Commissioner Wasowicz made a motion to open CDC Case No. 2020-15. Commissioner Ciula seconded the motion.

ROLL CALL : Upon roll call the following Commissioners were present:
Rowe, Ciula, King, Wasowicz
Absent: Czarnecki, Marcotte, Rodriguez,
A quorum was present.

Chairman Rowe opened CDC Case No. 2020-15 at 6:32 p.m.

Village Planner, Kelsey Fawell was present and sworn in by Chairman Rowe. Ms. Fawell stated a Legal Notice was published in the Bensenville Independent on September 17, 2020. Ms. Fawell stated a certified copy of the Legal Notice is maintained in the CDC file and is available for viewing and inspection at the Community & Economic Development Department during regular business hours. Ms. Fawell stated Village personnel posted a Notice of Public Hearing sign on the property, visible from the public way on September 14, 2020. Ms. Fawell stated on September 14, 2020 Village personnel mailed from the Bensenville Post Office via First Class Mail a Notice of Public Hearing to taxpayers of record within 250' of the property in question. Ms. Fawell stated an affidavit of mailing executed by C & ED personnel and the list of recipients are maintained in the CDC file and are available for viewing and inspection at the Community & Economic Development department during regular business hours.

Ms. Fawell stated the Petitioner is requesting two variations in order to construct a single-family home at 810 E. George Street. Ms. Fawell stated the proposed building encroaches into the 25' rear yard setback by approximately 10' (proposed rear façade is 15' from rear property line). Ms. Fawell stated the home also features an attached garage on the front façade. Ms. Fawell stated the Village Zoning Ordinance requires all front-facing garages to be set back a minimum of five feet from the front elevation of the principal structure; proposed garage is set back zero feet. Ms. Fawell stated this item appeared in front of the Community Development Commission on October 6, 2020 and was remanded back to the Commission by the Village Board on October 27, 2020 to address engineering concerns. Ms. Fawell stated Staff has yet to receive revised plans.

Chairman Rowe asked if the petitioner was present to give testimony. There was no petitioner present.

Public Comment:

Bill Perry – 814 George Street
Mr. Perry was present and sworn in by Chairman Rowe. Mr. Perry asked what would happened if the proposed plans were revised.

Ms. Fawell explained that if the plans changed, and the requests stayed the same; a new CDC Case would not be required, but would still need to appear before the CDC. Ms. Fawell stated should the petitioner ask for different variances, a new CDC Case presented at a Public Hearing would be required.

Mr. Perry stated no other homes in the area have variances and were built to Village Code.

Daniel Schneider - 741 John Street
Mr. Schneider was present and sworn in by Chairman Rowe. Mr. Schneider stated he agrees with Mr. Perry's comments regarding the character of the houses in the area.

Barbara Lysy – 751 John Street (Online Public Comment)
Ms. Fawell read a Public Comment into the Record on behalf of. Ms. Lysy. The Public Comment has been attached to the minutes as "Exhibit A".

Motion: Commissioner King made a motion to continue CDC Case No. 2020-15 until December 1, 2020. Commissioner Ciula seconded the motion.

ROLL CALL: Ayes: Rowe, Ciula, King, Wasowicz

Nays: None

All were in favor. Motion carried.

Public Hearing: CDC Case Number 2020-16
Petitioner: Heidi Shaefer & Eric Schmid
Location: 1180 West Industrial Drive
Request: Special Use Permit, Gun Sales Establishment
Municipal Code Section 10 – 7 – 2 – 1

Motion: Commissioner Wasowicz made a motion to open CDC Case No. 2020-16. Commissioner King seconded the motion.

ROLL CALL : Upon roll call the following Commissioners were present:
Rowe, Ciula, King, Wasowicz
Absent: Czarnecki, Marcotte, Rodriguez
A quorum was present.

Chairman Rowe opened CDC Case No. 2020-16 at 6:39 p.m.

Village Planner, Kelsey Fawell was present and sworn in by Chairman Rowe. Ms. Fawell stated a Legal Notice was published in the Bensenville Independent on October 22, 2020. Ms. Fawell stated a certified copy of the Legal Notice is maintained in the CDC file and is available for viewing and inspection at the Community & Economic Development Department during regular business hours. Ms. Fawell stated Village personnel posted a Notice of Public Hearing sign on the property, visible from the public way on October 19, 2020. Ms. Fawell stated on October 19, 2020 Village personnel mailed from the Bensenville Post Office via First Class Mail a Notice of Public Hearing to taxpayers of record within 250' of the property in question. Ms. Fawell stated an affidavit of mailing executed by C & ED personnel and the list of recipients are maintained in the CDC file and are available for viewing and inspection at the Community & Economic Development department during regular business hours.

Ms. Fawell stated the Petitioners, Schmid Tools, currently operate a machine shop, which contracts with the Federal government to produce gun parts at the subject property. Ms. Fawell stated the business received a Special Use Permit to operate a gunsmith use in 2018. Ms. Fawell stated the Petitioners are looking to operate a second business in this space, Wee 1 Tactical, with the same use of manufacturing FFL parts as well as fully completed firearms for sale to distributors. Ms. Fawell stated no retail sales will be occurring at this location.

Heidi Shaefer, owner, was present and sworn in by Chairman Rowe. Ms. Shaefer provided an explanation for the request and stated there would be no general sales to the public.

There were no questions from the Commission.

Ms. Fawell reviewed the Findings of Fact as presented in the Staff Report consisting of:

1) **Public Welfare:** The proposed special use will not endanger the health, safety, comfort, convenience and general welfare of the public.

   Applicant's Response: The proposed special use will not endanger the health, safety, comfort, convenience and general welfare of the public. This request is not to operate a range, nor will weapons be sold for retail use.

2) **Neighborhood Character:** The proposed special use is compatible with the character of adjacent properties and other property within the immediate vicinity of the proposed special use.

   Applicant's Response: The proposed use will fit harmoniously with the existing character of existing permitted uses in its environs. Any adverse effects on environmental quality, property values or neighborhood character beyond those normally associated with permitted uses in the district have been minimized. Our current use for our other business, Schmid Tools, has not impacted neighborhood character since its SUP approval in 2018 and we expect Wee 1 Tactical, LLC to also fit in with neighborhood character.

3) **Orderly Development:** The proposed special use will not impede the normal and orderly development and improvement of adjacent properties and other property within the immediate vicinity of the proposed special use.

   Applicant's Response: The proposed special use will not impede the normal and orderly development and improvement of adjacent properties and other property within the immediate vicinity of the proposed special use. This is an expansion of our current use, which has fit in with surrounding uses in the industrial district.

4) **Use of Public Services and Facilities:** The proposed special use will not require utilities, access roads, drainage and/or other facilities or services to a degree disproportionate to that normally expected of permitted uses in the district, nor generate disproportionate demand for new services or facilities in such a way as to place undue burdens upon existing development in the area.

   Applicant's Response: No additional public services or facilities will be required.

5) **Consistent with Title and Plan:** The proposed special use is consistent with the intent of the Comprehensive Plan, this title, and the other land use policies of the Village.

Applicant's Response: The proposed special use is consistent with the intent of the Comprehensive Plan, this title, and the other land use policies of the Village.

Public Comment:

Chairman Rowe asked if there was any member of the Public that would like to speak on behalf of the case. There were none.

Ms. Fawell stated Staff recommends the Approval of the above Findings of Fact and therefore the Approval of the Special Use Permit at 1180 W. Industrial Drive with the following condition:

1) The Special Use Permit be granted solely to Wee 1 Tactical, LLC and shall be transferred only after a review by the Community Development Commission (CDC) and approval of the Village Board. In the event of the sale or lease of this property, the proprietors shall appear before a public meeting of the CDC. The CDC shall review the request and in its sole discretion, shall either; recommend that the Village Board approve of the transfer of the lease and/or ownership to the new proprietor without amendment to the Special Use Permit, or if the CDC deems that the new proprietor contemplates a change in use which is inconsistent with the Special Use Permit, the new proprietor shall be required to petition for a new public hearing before the CDC for a new Special Use Permit;

2) The Special Use Permit shall not be used to operate retail gun store.

There were no questions from the Commission.

Motion: Commissioner King made a motion to close CDC Case No. 2020-16. Commissioner Wasowicz seconded the motion.

ROLL CALL: Ayes: Rowe, Ciula, King, Wasowicz

Nays: None

All were in favor. Motion carried.

Chairman Rowe closed CDC Case No. 2020-16 at 6:44 p.m.

Motion: Commissioner Wasowicz made a combined motion to approve the Findings of Fact and Special Use Permit, Gun Sales Establishment. Chairman Rowe seconded the motion.

ROLL CALL: Ayes: Rowe, Ciula, King, Wasowicz

Nays: None

All were in favor. Motion carried.

Public Hearing: CDC Case Number 2020-17
Petitioner: Tomasz Sosnowski
Location: 1040 Waveland Avenue
Request: Special Use Permit, Motor Vehicle Repair
Municipal Code Section 10 – 7 – 2 – 1
Variation, Industrial District Parking Location
Municipal Code Section 10 – 6 – 19.B.4
Variation, Off-Street Parking Encroachment
Municipal Code Section 10 – 8 – 1.C.4
Variation, Minimum Parking Requirements
Municipal Code Section 10 – 8 – 2 – 1
Variation, Off-Street Parking Access
Municipal Code Section 10 – 8 – 6.C

Motion: Commissioner Wasowicz made a motion to open CDC Case No. 2020-17. Commissioner Ciula seconded the motion.

ROLL CALL : Upon roll call the following Commissioners were present:
Rowe, Ciula, King, Wasowicz
Absent: Czarnecki, Marcotte, Rodriguez
A quorum was present.

Chairman Rowe opened CDC Case No. 2020-17 at 6:46 p.m.

Village Planner, Kelsey Fawell was present and sworn in by Chairman Rowe. Ms. Fawell stated a Legal Notice was published in the Bensenville Independent on October 22, 2020. Ms. Fawell stated a certified copy of the Legal Notice is maintained in the CDC file and is available for viewing and inspection at the Community & Economic Development Department during regular business hours. Ms. Fawell stated Village personnel posted a Notice of Public Hearing sign on the property, visible from the public way on October 19, 2020. Ms. Fawell stated on October 19, 2020 Village personnel mailed from the Bensenville Post Office

via First Class Mail a Notice of Public Hearing to taxpayers of record within 250' of the property in question. Ms. Fawell stated an affidavit of mailing executed by C & ED personnel and the list of recipients are maintained in the CDC file and are available for viewing and inspection at the Community & Economic Development department during regular business hours.

Ms. Fawell stated the Petitioner is seeking approval of a Special Use Permit to operate a motor vehicle repair business at 1040 Waveland Avenue. Ms. Fawell stated Village Zoning Code requires this use to provide a minimum of 8 parking spaces; the site currently provides 7. Code also mandates that such parking facilities shall not be the dominant visual element of the site when in a corner side yard, be at least 1-foot from all lot lines, and be designed with spaces opening directly into a drive aisle and to allow the driver to proceed forward into traffic rather than backing out. Ms. Fawell stated parking facility abuts the corner side lot line with no drive aisle provided for adequate means of vehicular access.

Tomasz Sosnowski, applicant, was present and sworn in by Chairman Rowe. Mr. Sosnowski stated he is applying for the Special Use to open a business to work on vehicles both mechanical and body repair.

Commissioner Ciula asked if Mr. Sosnowski was currently operating a business on the proposed site. Mr. Sosnowski stated no.

Commissioner King asked how many vehicles would be worked on at a time. Mr. Sosnowski stated he can work on three to four vehicles at once inside and the work is short term.

Commissioner Ciula asked what type of vehicles would be worked on. Mr. Sosnowski stated standard vehicles; no trucks.

Ms. Fawell reviewed the Findings of Fact as presented in the Staff Report regarding the Special Use Request consisting of:

1. **Public Welfare:** The proposed special use will not endanger the health, safety, comfort, convenience and general welfare of the public.

Applicant's Response: The proposed special use will not endanger the health, safety, comfort, convenience and general welfare of the public. The use will be conducted inside a building and will not generate noise or polluting.

2. **Neighborhood Character:** The proposed special use is compatible with the character of adjacent properties and other property within the immediate vicinity of the proposed special use.

   Applicant's Response: The proposed special use is compatible with the character of adjacent properties and other property within the immediate vicinity of the proposed special use. The building exists in an industrial and older neighborhood. I am reusing an existing building and the use is compatible with the surrounding area.

3. **Orderly Development:** The proposed special use will not impede the normal and orderly development and improvement of adjacent properties and other property within the immediate vicinity of the proposed special use.

   Applicant's Response: The proposed special use will not impede the normal and orderly development and improvement of the adjacent properties and other property within the immediate vicinity of the proposed special use. I am using an existing building and will have no effect on the area or the neighborhood.

4. **Use of Public Services and Facilities:** The proposed special use will not require utilities, access roads, drainage and/or other facilities or services to a degree disproportionate to that normally expected of permitted uses in the district, nor generate disproportionate demand for new services or facilities in such a way as to place undue burdens upon existing development in the area.

   Applicant's Response: The proposed special use will not require utilities, access roads, drainage and or other facilities or services to a degree disproportionate to the normally expected of permitted uses in the district, nor generate disproportionate demand for new services or facilities in such a way as to place undue burdens upon existing development in the area. The existing utilities are in place to support this use.

5. **Consistent with Title and Plan:** The proposed special use is consistent with the intent of the Comprehensive Plan, this title, and the other land use policies of the Village.

   Applicant's Response: The proposed special use is consistent with the intent of the Comprehensive Plan, this title, and the other land use policies of the Village. As a motor vehicle repair shop the Triple Basin is required the use complies with the plan of the industrial building.

Ms. Fawell reviewed the Findings of Fact as presented in the Staff Report regarding the Variances Request consisting of:

1) **Public Welfare:** The proposed Variation will not endanger the health, safety, comfort, convenience, and general welfare of the public.

   Applicant's Response: The proposed variation will not endanger the health, safety, comfort, convenience and general welfare of the public. As it is a very low profile area and not highly traffic.

2) **Compatible with Surrounding Character:** The proposed Variation is compatible with the character of adjacent properties and other property within the immediate vicinity of the proposed Variation.

   Applicant's Response: The proposed variation is compatible with the character of adjacent properties and other property within the immediate vicinity of the proposed variation. The building exists in an industrial and older neighborhood. I am reusing an existing building and the proposed variation is compatible with the surrounding area.

3) **Undue Hardship**: The proposed Variation alleviates an undue hardship created by the literal enforcement of this title.

   Applicant's Response: The proposed variation alleviates an undue hardship created by literal enforcement of this title. The normal and orderly development and improvement of the additional parking space will not endure an undue hardship by using an existing parking space in the back of the building and will have no effect on the low traffic area

4) **Unique Physical Attributes:** The proposed Variation is necessary due to the unique physical attributes of the subject property, which were not deliberately created by the applicant.

   Applicant's Response: The proposed variation is necessary due to the unique physical attributes of the subject property, which were not deliberately created by the applicant. It a very small site that is fairly developed

5) **Minimum Deviation Needed:** The proposed Variation represents the minimum deviation from the regulations of this title necessary to accomplish the desired improvement of the subject property.

   Applicant's Response: The proposed variation represents the minimum deviation from the regulation of this necessary to accomplish the desired improvement of the subject property. The Variation code represents the minimum variation for this subject property.

6) **Consistent with Ordinance and Plan:** The proposed Variation is consistent with the intent of the Comprehensive Plan, this title, and the other land use policies of the Village.

   Applicant's Response: The proposed variation is consistent with the intent of the comprehensive plan, this title and other land use policies of the village. As a motor vehicle repair shop the variation is existing with the intent.

Public Comment:

Chairman Rowe asked if there was any member of the Public that would like to speak on behalf of the case. There were none.

Ms. Fawell stated Staff recommends the Approval of the above Findings of Fact and therefore the Approval of the Special Use Permit at 1040 Waveland Ave. with the following conditions:

1) The Special Use Permit be granted solely to Passion Auto Body and shall be transferred only after a review by the Community Development Commission (CDC) and approval of the Village Board. In the event of the sale or lease of this property, the proprietors shall appear before a public meeting of the CDC. The CDC shall review the request and in its sole discretion, shall either; recommend that the Village Board approve of the transfer of the lease and/or ownership to the new proprietor without amendment to the Special Use Permit, or if the CDC deems that the new proprietor contemplates a change in use which is inconsistent with the Special Use Permit, the new proprietor shall be required to petition for a new public hearing before the CDC for a new Special Use Permit; and
2) This Special Use Permit shall be used for Motor Vehicle Repair only: only repair/service on passenger vehicles and light trucks only; and
3) Property shall install a triple catch basin that shall discharge to sanitary; and
4) Mechanical ventilation is required in accordance with the 2015 International Mechanical Code. All equipment, such as lifts and spray booth, shall be in accordance with Village adopted codes. Permit(s) are required; and
5) Spray booth shall be installed per International Fire Code 2015 (IFC) Section 2404, NFPA 33, and International Building Code 2015 (IBC) Section 416.2. The area requires a sprinkler system. Permit(s) are required; and
6) Outdoor Storage Area shall remain under 25% of gross lot area; and
7) The 7 parking spaces along Waveland shall be for drive up customer and employee parking only. No vehicles waiting to be serviced shall be parked in this front yard or on the public street.

Ms. Fawell stated Staff recommends the Approval of the above Findings of Fact and therefore the Approval of the Industrial District Parking Location Variation at 1040 Waveland.

Ms. Fawell stated Staff recommends the Approval of the above Findings of Fact and therefore the Approval of the Off-Street Parking Encroachment Variation at 1040 Waveland.

Ms. Fawell stated Staff recommends the Approval of the above Findings of Fact and therefore the Approval of the Minimum Parking Requirements Variation at 1040 Waveland.

Ms. Fawell stated Staff recommends the Approval of the above Findings of Fact and therefore the Approval of the Off-Street Parking Access Variation at 1040 Waveland.

There were no questions from the Commission.

Motion: Commissioner Wasowicz made a motion to close CDC Case No. 2020-17. Commissioner King seconded the motion.

ROLL CALL: Ayes: Rowe, Ciula, King, Wasowicz

Nays: None

All were in favor. Motion carried.

Chairman Rowe closed CDC Case No. 2020-17 at 6:56 p.m.

Motion: Commissioner King made a combined motion to approve the Findings of Fact and Special Use Permit, Motor Vehicle Repair. Commissioner Wasowicz seconded the motion.

ROLL CALL: Ayes: Rowe, Ciula, King, Wasowicz

Nays: None

All were in favor. Motion carried.

Motion: Commissioner Wasowicz made a combined motion to approve the Findings of Fact and Variation, Industrial District Parking Location. Commissioner King seconded the motion.

ROLL CALL: Ayes: Rowe, Ciula, King, Wasowicz

Nays: None

All were in favor. Motion carried.

Motion: Commissioner Wasowicz made a combined motion to approve the Findings of Fact and Variation, Off-Street Parking Encroachment. Commissioner King seconded the motion.

ROLL CALL: Ayes: Rowe, Ciula, King, Wasowicz

Nays: None

All were in favor. Motion carried.

Motion:	Commissioner King made a combined motion to approve the Findings of Fact and Variation, Minimum Parking Requirements. Commissioner Ciula seconded the motion.
ROLL CALL:	Ayes: Rowe, Ciula, King, Wasowicz
	Nays: None
	All were in favor. Motion carried.
Motion:	Commissioner Wasowicz made a combined motion to approve the Findings of Fact and Variation, Off-Street Parking Access. Chairman Rowe seconded the motion.
ROLL CALL:	Ayes: Rowe, Ciula, King, Wasowicz
	Nays: None
	All were in favor. Motion carried.
Public Hearing:	CDC Case Number 2020-18
Petitioner:	ML Realty & Prologis (Contract Purchasers)
Location:	Mohawk Terrace Subdivision
Request:	**Site Plan Review** Municipal Code Section 10 – 3 – 2 **Preliminary Plat of Subdivision** Municipal Code Section 11 – 3 **Zoning Map Amendment** Municipal Code Section 10 – 3 – 6 **Preliminary Planned Unit Development** Municipal Code Section 10 – 4 *With the following code departures*: **Industrial District Parking Location** Municipal Code Section 10 – 6 – 19.B.4 **Maximum Number of Parking Spaces** Municipal Code Section 10 – 8 – 2 – B.6 **Maximum Driveway Width** Municipal Code Section 10 – 8 – 8 – 1 **Driveway Apron Width** Municipal Code Section 10 – 8 – 8 – F **Tree Replacement Standards** Municipal Code Section 10 – 9 – 2 – B
Motion:	Commissioner Kinga made a motion to open CDC Case No. 2020-18. Commissioner Wasowicz seconded the motion.

ROLL CALL : Upon roll call the following Commissioners were present:
Rowe, Ciula, King, Wasowicz
Absent: Czarnecki, Marcotte, Rodriguez
A quorum was present.

Chairman Rowe opened CDC Case No. 2020-18 at 7:00 p.m.

Village Planner, Kelsey Fawell was present and sworn in by Chairman Rowe. Ms. Fawell stated a Legal Notice was published in the Bensenville Independent on October 22, 2020. Ms. Fawell stated a certified copy of the Legal Notice is maintained in the CDC file and is available for viewing and inspection at the Community & Economic Development Department during regular business hours. Ms. Fawell stated Village personnel posted a Notice of Public Hearing sign on the property, visible from the public way on October 19, 2020. Ms. Fawell stated on October 19, 2020 Village personnel mailed from the Bensenville Post Office via First Class Mail a Notice of Public Hearing to taxpayers of record within 250' of the property in question. Ms. Fawell stated an affidavit of mailing executed by C & ED personnel and the list of recipients are maintained in the CDC file and are available for viewing and inspection at the Community & Economic Development department during regular business hours.

Ms. Fawell stated the Petitioners, ML Realty and Prologis, Inc., are seeking the above zoning requests in order to assemble the residentially-zoned properties in the Mohawk Terrace Subdivision (southwest corner of Devon Avenue and Illinois Route 83) into an industrial use business park. Ms. Fawell stated the Petitioners recently approached the residents of the subject site in order to acquire their properties and currently have contracts signed with all lots.

Ms. Fawell stated the Petitioners are requesting the approval of a Preliminary Plat of Subdivision in order to subdivide the site into four north/south lots. Ms. Fawell stated these existing individual lots in Mohawk Terrace Subdivision are zoned R – 1 Single-Unit Dwelling District. Ms. Fawell stated the requested Zoning Map Amendment is to rezone these lots from R – 1 to I – 2 General Industrial District. Ms. Fawell stated the proposed industrial park requires the approval of a Preliminary Planned Unit Development, in hand with a Site Plan Review of the proposed plans.

Ms. Fawell stated the site plan features four industrial buildings, each on one of the proposed subdivided lot, with parking for both trucks and passenger vehicles. Ms. Fawell stated in conjunction with the Preliminary Planned Unit Development, the Petitioners are requesting code departures, as certain aspects of the site do not meet the following Village Zoning Ordinance requirements. Ms. Fawell stated in industrial districts, parking areas in the front and corner side yards shall not be the dominant point of view from the right-of-way and shall consist of less than 50 parking stalls. Ms. Fawell stated the entirety of the parking facilities, including those areas that fall into interior side yards and rear yards, exceed the maximum required of parking spaces required by code, which states that the number of parking stall shall not exceed the minimum required amount by 125%. Ms. Fawell stated two driveways on the north side of the lot exceed the maximum required width of 30 feet. Ms. Fawell stated it is important to note these driveways are intended to be shared between the respective two lots that they serve. Ms. Fawell stated proposed driveway aprons exceed the width of the driveways by more than three feet on either side, which is prohibited by the Zoning Ordinance. Ms. Fawell stated in order to construct this proposed site plan, 408 existing trees will need to be removed. Ms. Fawell stated the proposed tree replacement plan does not meet the amount of replacement trees as required by Code.

Ms. Fawell stated the Petitioners will have to appear before the Community Development Commission and the Village Board of Trustees in the future to request approval of both the Final Plat of Subdivision and Final Planned Unit Development, should these preliminary requests be approved.

Tim Geisler of ML Realty Partners and Jess Knigge of Prologis, were both present and sworn in by Chairman Rowe. Mr. Geisler stated there were there to answer any questions should the Commission have any. Mr. Geisler distributed the traffic Study to the Commission. The traffic study has been attached to the minutes as "Exhibit B".

Commissioner Ciula asked for a timeframe of the work. Mr. Geisler stated closing on properties would occur at the start of 2021; demolition by summer of 2021 and hoping to be operating by 2022.

Ms. Fawell reviewed the Findings of Fact as presented in the Staff Report for the Site Plan Review consisting of:

1. **Surrounding Character:** The site plan for the proposed development is consistent with the existing character and zoning of adjacent properties and other property within the immediate vicinity of the proposed development.

   Applicant's Response: The site is a natural fit for an industrial park and will be consistent with the existing surroundings, which is comprised of industrial, commercial or data centers. The property is surrounded by Devon Avenue to the north, commercial properties and Route 83 to the east, and industrial properties to the west and south. It should be noted that ML Realty Partners and Prologis own most of the industrial buildings adjacent to the property lines on the west and south.

2. **Neighborhood Impact:** The site plan for the proposed development will not adversely impact adjacent properties and other properties within the immediate vicinity of the proposed development.

   Applicant's Response: As the proposed use of the site is harmonious with surrounding properties, the site plan for the proposed development will not adversely impact adjacent properties and other properties within the immediate vicinity of the proposed development.

3. **Public Facilities:** The site plan for the proposed development will be provided with adequate utilities, access roads, parking, loading, drainage, stormwater flow paths, exterior lighting, and/or other necessary facilities.

   Applicant's Response: All buildings will have ample parking for cars and adequate trailer parking for trucks. The existing subdivision is currently on well and septic systems so the redevelopment will include bringing water and sanitary sewers from the southeast corner of the site. All stormwater will be accounted for and contained on site via underground detention and water feature and released at the required rate. All new franchise utilities (ComEd, Nicor, AT&T, etc.) will be installed underground for the new park. We are requesting that we relocate the four existing full access curb-cuts and add two new full access curb cuts along Devon Avenue and plan on utilizing the existing full access at Route 83. The curb cuts have been

designed by a traffic engineer to account for traffic flow, separation of cars and trucks, adjacent driveways, and existing grades. The final locations of the curb-cuts will ultimately be up to the County on Devon Avenue and IDOT on Route 83.

4. **Environmental Preservation:** The site plan for the proposed development is designed to preserve the environmental resources of the zoning lot.

   Applicant's Response: To enhance the aesthetics and create some amenities within the park we have increased green space areas from the I-2 zoning requirements. While we do fall short for the total number of trees required to be replaced for the large established residential subdivision, our landscape plan will exceed the code required plantings for any typical industrial developments. A water feature has been included at the park entry on Route 83 to showcase this first-class industrial park.

5. **On-site Pedestrian Circulation System:** The site plan shall accommodate on-site pedestrian circulation from parking areas, plazas, open space, and public rights-of-way. Pedestrian and vehicular circulation shall be separated to the greatest extent possible.

   Applicant's Response: We have included public sidewalks along both Devon Avenue and Route 83 to provide safe access to the Pace Bus Stop which is located at the southeast corner of the site. Additionally, we have included walking paths and sidewalks west of building 1, in the center median between buildings 1 and 3, and along the access drive south of buildings 3 and 4 to tie into all public walks. A water feature has been included at the park entry on Route 83 to showcase this first-class industrial park.

6. **Vehicle Ingress and Egress:** The site plan shall locate curb cuts for safe and efficient ingress and egress of vehicles. The use of shared curb cuts and cross-access easements shall be provided when appropriate.

   Applicant's Response: We are requesting that we relocate the four existing full access curb-cuts and add two new full access curb cuts along Devon Avenue and

plan on utilizing the existing full access at Route 83. The curb cuts have been designed by a traffic engineer to account for traffic flow, separation of cars and trucks, adjacent driveways, and existing grades. The final locations of the curb-cuts will ultimately be up to the County on Devon Avenue and IDOT on Route 83.

7. **Architectural Design:** The site plan for the proposed development includes architectural design that contributes positively to the Village's aesthetic appearance.

   Applicant's Response: The four proposed buildings will have rear loading and will be constructed on a speculative basis meaning they do not have any specific tenants at this time. The buildings are designed for maximum flexibility and could be leased to tenants from 40,000 SF to 350,000 SF. We have included architectural elements constructed from glass, aluminum and precast at the corner entries and at the center entry of the buildings. All buildings will have ample parking for cars and adequate trailer parking for trucks.

8. **Consistent with Title and Plan:** The site plan for the proposed development is consistent with the intent of the Comprehensive Plan, this title, and the other land use policies of the Village.

   Applicant's Response: The site plan for the proposed development is consistent with the intent of the Comprehensive Plan, this title, and the other land use policies of the Village.

Ms. Fawell reviewed the Findings of Fact as presented in the Staff Report for the Zoning Map Amendments consisting of:

1) **Public Welfare:** The proposed amendment will not endanger the health, safety, comfort, convenience, and general welfare of the public.

   Applicant's Response: The proposed amendment will not endanger the health, safety, comfort, convenience, and general welfare of the public.

2) **Neighborhood Character:** The proposed amendment is compatible with the existing uses, character, and zoning of adjacent properties and other property within the immediate vicinity of the proposed amendment.

   Applicant's Response: The site is a natural fit for an industrial park and will be consistent with the existing surroundings, which is comprised of industrial, commercial or data centers. The property is surrounded by Devon Avenue to the north, commercial properties and Route 83 to the east, and industrial properties to the west and south. It should be noted that ML Realty Partners and Prologis own most of the industrial buildings adjacent to the property lines on the west and south.

3) **Public Gain:** The proposed amendment provides a relative gain to the public, as compared to any hardship imposed upon an individual property owner.

   Applicant's Response: Including the potential to add new jobs to the community, this project will have other direct financial gains to the Village of Bensenville. Currently, Mohawk Terrace generates approximately $670,000 in property taxes annually. Once completed and stabilized this park could generate upwards of $2,000,000 in property taxes. Additionally, by vacating the streets and right of ways, the Village will also save on road maintenance and snow plowing costs.

4) **Community Need:** The proposed amendment addresses the community need for a specific use.

   Applicant's Response: Proposed amendment to re-zone to I-2 will be consistent with the existing surroundings, which is comprised of industrial, commercial or data centers. The property is surrounded by Devon Avenue to the north, commercial properties and Route 83 to the east, and industrial properties to the west and south. This development has the potential to add new jobs to the community.

5) **Amendment Objective:** The proposed amendment corrects an error, adds clarification, or reflects a change in policy.

   Applicant's Response: Proposed amendment to re-zone to I-2 will be consistent with the existing surroundings, which is comprised of industrial, commercial or data centers. The proposed use is a better fit than the current residential use.

6) **Consistent with Title and Plan:** The proposed amendment is consistent with the intent of the Comprehensive Plan, this title, and the other land use policies of the Village.

   Applicant's Response: The site plan for the proposed development is consistent with the intent of the Comprehensive Plan, this title, and the other land use policies of the Village.

Ms. Fawell reviewed the Findings of Fact as presented in the Staff Report for the Special Uses consisting of:

1) **Public Welfare:** The proposed special use will not endanger the health, safety, comfort, convenience and general welfare of the public.

   Applicant's Response: The proposed amendment will not endanger the health, safety, comfort, convenience, and general welfare of the public.

2) **Neighborhood Character:** The proposed special use is compatible with the character of adjacent properties and other property within the immediate vicinity of the proposed special use.

   Applicant's Response: The site is a natural fit for an industrial park and will be consistent with the existing surroundings, which is comprised of industrial, commercial or data centers. The property is surrounded by Devon Avenue to the north, commercial properties and Route 83 to the east, and industrial properties to the west and south. It should be noted that ML Realty Partners and Prologis own most of the industrial buildings adjacent to the property lines on the west and south.

3) **Orderly Development:** The proposed special use will not impede the normal and orderly development and improvement of adjacent properties and other property within the immediate vicinity of the proposed special use.

Applicant's Response: The site is a natural fit for an industrial park and will be consistent with the existing surroundings, which is comprised of industrial, commercial or data centers. The property is surrounded by Devon Avenue to the north, commercial properties and Route 83 to the east, and industrial properties to the west and south. It should be noted that ML Realty Partners and Prologis own most of the industrial buildings adjacent to the property lines on the west and south.

4) **Use of Public Services and Facilities:** The proposed special use will not require utilities, access roads, drainage and/or other facilities or services to a degree disproportionate to that normally expected of permitted uses in the district, nor generate disproportionate demand for new services or facilities in such a way as to place undue burdens upon existing development in the area.

Applicant's Response: We have included public sidewalks along both Devon Avenue and Route 83 to provide safe access to the Pace Bus Stop which is located at the southeast corner of the site. Additionally, we have included walking paths and sidewalks west of building 1, in the center median between buildings 1 and 3, and along the access drive south of buildings 3 and 4 to tie into all public walks. We are requesting that we relocate the four existing full access curb-cuts and add two new full access curb cuts along Devon Avenue and plan on utilizing the existing full access at Route 83. The curb cuts have been designed by a traffic engineer to account for traffic flow, separation of cars and trucks, adjacent driveways, and existing grades. The final locations of the curb-cuts will ultimately be up to the County on Devon Avenue and IDOT on Route 83. Additionally, we have submitted an executive summary of a traffic impact study conducted by Kimley-Horn and Associations. This summary expects minimal impacts to traffic conditions.

5) **Consistent with Title and Plan:** The proposed special use is consistent with the intent of the Comprehensive Plan, this title, and the other land use policies of the Village.

Applicant's Response: The site plan for the proposed development is consistent with the intent of the Comprehensive Plan, this title, and the other land use policies of the Village.

Ms. Fawell reviewed the Findings of Fact as presented in the Staff Report for the Planned Unit Developments consisting of:

1) **Comprehensive Plan:** The proposed planned unit development fulfills the objectives of the Comprehensive Plan, and other land use policies of the Village, through an innovative and creative approach to the development of land.

Applicant's Response: The site plan for the proposed development is consistent with the intent of the Comprehensive Plan, this title, and the other land use policies of the Village. Below responses should reflect the innovative and creatives approaches our team has taken in our proposal.

2) **Public Facilities:** The proposed planned unit development will provide walkways, driveways, streets, parking facilities, loading facilities, exterior lighting, and traffic control devices that adequately serve the uses within the development, promote improved access to public transportation, and provide for safe motor vehicle, bicycle, and pedestrian traffic to and from the site.

Applicant's Response: We have included public sidewalks along both Devon Avenue and Route 83 to provide safe access to the Pace Bus Stop which is located at the southeast corner of the site. Additionally, we have included walking paths and sidewalks west of building 1, in the center median between buildings 1 and 3, and along the access drive south of buildings 3 and 4 to tie into all public walks. We are requesting that we relocate the four existing full access curb-cuts and add two new full access curb cuts along Devon Avenue and plan on utilizing the existing full access at Route 83. The curb cuts have been designed by a traffic engineer

to account for traffic flow, separation of cars and trucks, adjacent driveways, and existing grades. The final locations of the curb-cuts will ultimately be up to the County on Devon Avenue and IDOT on Route 83.

3) **Landscaping and Screening:** The proposed planned unit development will provide landscaping and screening that enhances the Village's character and livability, improves air and water quality, reduces noise, provides buffers, and facilitates transitions between different types of uses.

   Applicant's Response: To enhance the aesthetics and create some amenities within the park we have increased green space areas from the I-2 zoning requirements. While we do fall short for the total number of trees required to be replaced for the large established residential subdivision, our landscape plan will exceed the code required plantings for any typical industrial developments. A water feature has been included at the park entry on Route 83 to showcase this first-class industrial park.

4) **Site Design:** The proposed planned unit development will incorporate sustainable and low impact site design and development principles.

   Applicant's Response: The proposed planned unit development will incorporate sustainable and low impact site design and development principles. The four proposed buildings will have rear loading and will be constructed on a speculative basis meaning they do not have any specific tenants at this time. The buildings are designed for maximum flexibility and could be leased to tenants from 40,000 SF to 350,000 SF. We have included architectural elements constructed from glass, aluminum and precast at the corner entries and at the center entry of the buildings. All buildings will have ample parking for cars and adequate trailer parking for trucks.

5) **Natural Environment:** The proposed planned unit development will protect the community's natural environment to the greatest extent practical, including existing natural features, water courses, trees, and native vegetation.

Applicant's Response:. To enhance the aesthetics and create some amenities within the park we have increased green space areas from the I-2 zoning requirements. While we do fall short for the total number of trees required to be replaced for the large established residential subdivision, our landscape plan will exceed the code required plantings for any typical industrial developments. A water feature has been included at the park entry on Route 83 to showcase this first-class industrial park.

6) **Utilities:** The proposed planned unit development will be provided with underground installation of utilities when feasible, including electricity, cable, and telephone, as well as appropriate facilities for storm sewers, stormwater retention, and stormwater detention.

Applicant's Response: The existing subdivision is currently on well and septic systems so the redevelopment will include bringing water and sanitary sewers from the southeast corner of the site. All stormwater will be accounted for and contained on site via underground detention and water feature and released at the required rate. All new franchise utilities (ComEd, Nicor, AT&T, etc.) will be installed underground for the new park.

Public Comment:

Joanna Grabowska 1261 Edgewood Avenue
Ms. Grabowska was present and sworn in by Chairman Rowe. Ms. Grabowska stated the petitioner has failed to deliver materials to her and therefore stated a contract to purchase her property does not exist. Ms. Grabowska asked for the Commission to continue this case.

Mr. Geisler responded by indicating they have proof of delivery and that Ms. Grabowska's Attorney has failed to return their calls. Mr. Geisler stated the agreement between the two is valid.

Ms. Fawell stated Staff recommends the Approval of the above Findings of Fact and therefore the Approval of the Site Plan Review.

Ms. Fawell stated Staff recommends the Approval of the above Findings of Fact and therefore the Approval of the Zoning Map Amendment: Rezoning Mohawk Terrace Subdivision lots from R – 1 Single-Unit Dwelling District to I – 2 General Industrial District.

Ms. Fawell stated Staff recommends the Approval of the above Findings of Fact and therefore the Approval of the Special Use Permit to allow a PUD at the subject site.

Ms. Fawell stated Staff recommends the Approval of the above Findings of Fact and therefore the Approval of the Preliminary Planned Unit Development with the following conditions:

a. A DuPage County Stormwater Management Certification will be required for this project as the total land disturbing activity exceeds 5,000 SF. The developer must meet all other DuPage County Floodplain and Stormwater Ordinance requirements including submittal of a stormwater report;
b. An Illinois Department of Transportation (IDOT) permit will be required for the proposed entrance within IL-83 right-of-way;
c. An IEPA-Sanitary, IEPA-Water, IHPA, IEPA-NOI and IEPA-NOT permits will be required for this development;
d. A Cook County Department of Transportation and Highways (CCDOTH) permit will be required for the proposed work in the Devon Ave rights-of-way;
e. The developer shall properly identify and mitigate and special management areas in accordance with applicable rules and regulations;
f. Any retaining wall extending more than 3-feet in height will require structural engineering calculations and drawings signed and sealed by licensed structural engineer;
g. A 10-feet wide ADA compliant public shared use path will be required along the IL-83 frontage of the site;
h. The driveway openings along Devon Ave shall line up as best as possible with curb opening on opposite side of Devon Avenue. The Petitioners shall coordinate with CCDOTH;
i. Sanitary Manholes will be required every 300-feet;
j. Individual water services for the building shall be equipped with a shut-off valve outside of the building (valve vault inside 60-inch diameter vault);
k. Petitioners shall receive final approval from CCDOTH on proposed detention basin storm sewer connections;

l. Petitioner shall build a secondary source of water, either by expanding the Village watermain along Devon Ave to Ellis St or by making an emergency connection with the Elk Grove Village;
m. A written agreement for land-banked parking shall be executed between the applicant and the Village in a format satisfactory to the Village Attorney and shall be recorded in the Office of the Recorder of Deeds of Cook or DuPage County, as applicable;
n. The requested code departure from Section 10 – 6 – 19.B.4, Industrial District Parking Location, be approved;
o. The requested code departure from Section 10 – 8 – 2 – B.6, Maximum Number of Parking Spaces, be approved;
p. The requested code departure from Section 10 – 8 – 8 – 1, Maximum Driveway Width, be approved;
q. The requested code departure from Section 10 – 8 – 8 – F, Driveway Apron Width, be approved;
r. The requested code departure from Section 10 – 9 – 2 – B, Tree Replacement Standards, be approved. The Petitioners shall work with Staff to determine an appropriate tree replacement plan, to be approved by the Zoning Administrator;
s. The Petitioners shall work with Staff to submit a revised on-site pedestrian circulation system plan to be approved by the Zoning Administrator;
t. A final landscape plan, to be approved by the Zoning Administrator, is required upon Final Preliminary Planned Unit Development;
u. The Petitioners shall coordinate with Village Staff to submit revised and additional architectural plans with aesthetic design to be approved by the Zoning Administrator;
v. Full review of traffic study may include requirements for off-site traffic improvements. The Petitioners and the Village shall coordinate with IDOT and CCDOTH as necessary.

There were no questions from the Commission.

Motion:	Commissioner Wasowicz made a motion to close CDC Case No. 2020-18. Commissioner King seconded the motion.
ROLL CALL:	Ayes: Rowe, Ciula, King, Wasowicz
	Nays: None
	All were in favor. Motion carried.
	Chairman Rowe closed CDC Case No. 2020-18 at 6:44 p.m.
Motion:	Commissioner Wasowicz made a combined motion to approve the Findings of Fact and Site Plan Review. Commissioner Ciula seconded the motion.
ROLL CALL:	Ayes: Rowe, Ciula, King, Wasowicz
	Nays: None
	All were in favor. Motion carried.
Motion:	Commissioner Wasowicz made a combined motion to approve the Findings of Fact and Preliminary Plat of Subdivision. Commissioner Ciula seconded the motion.
ROLL CALL:	Ayes: Rowe, Ciula, King, Wasowicz
	Nays: None
	All were in favor. Motion carried.
Motion:	Commissioner King made a combined motion to approve the Findings of Fact and Zoning Map Amendment. Commissioner Ciula seconded the motion.
ROLL CALL:	Ayes: Rowe, Ciula, King, Wasowicz
	Nays: None
	All were in favor. Motion carried.

Motion: Chairman Rowe made a combined motion to approve the Findings of Fact and Preliminary Planned Unit Development with the following code departures: Industrial District Parking Location; Maximum Number of Parking Spaces; Maximum Driveway Width; Driveway Apron Width; and Tree Replacement Standards. Commissioner Ciula seconded the motion.

ROLL CALL: Ayes: Rowe, Ciula, King, Wasowicz

Nays: None

All were in favor. Motion carried.

Report from Community Development: Ms. Fawell reviewed both recent CDC cases along with upcoming cases.

ADJOURNMENT: There being no further business before the Community Development Commission, Commissioner Wasowicz made a motion to adjourn the meeting. Commissioner King seconded the motion.

All were in favor. Motion carried.

The meeting was adjourned at 7:25 p.m.

Ronald Rowe, Chairman
Community Development Commission

From: noreply@civicplus.com
Sent: Monday, November 9, 2020 6:36 PM
To: Corey Williamsen; Anthony G. Sumner
Subject: Online Form Submittal: Bensenville Public Comment Form

Bensenville Public Comment Form

If you wish to offer Public Comment for one of our Board Meetings or if you would like your name read into the record with a stated position, please complete this form. Questions must be received by 6pm on the day of the meeting.

Meeting Date	11/10/2020
Meeting Name	Community Development Commission
First Name	Barbara
Last Name	Lysy
Organization	*Field not completed.*
Address1	751 John Street
Address2	*Field not completed.*
City	Bensenville
State	IL
Zip	60106
Phone Number	[redacted]
Email Address	[redacted]
Comment Type	Public Comment
Question / Comment	Dear Community Development Commission, In reference to CDC Case #2020-15 – vacant lot on 810 E. George Street variation requests. Our comment is regarding the approximately 10' setback encroachment variation (Municipal Code Section 10-6-8-1). Our concern lies specifically with how the setback of the home will affect the drainage and runoff of the proposed property and those surrounding it. Neither the contractor nor the village have been able to provide the surrounding residents a clear assessment

of the land and what mitigation efforts would be pursued to prevent any drainage issues. With minimal consequences and recovery options available post-approval, we are concerned. Perhaps the 10' setback is the difference between an effective and appealing drainage solution and one that is not. With an area known for its drainage problems we ask for a degree of scientific assurance that they will be managed properly. Providing an engineering assessment and recommendation prior to the approval of the variation would alleviate these concerns. Your consideration is appreciated.

INDUSTRIAL REDEVELOPMENT

Traffic Impact Study

Village of Bensenville, Illinois

November, 2020

Prepared for:

ML Realty Partners

Kimley»Horn

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LIST OF EXHIBITS

EXECUTIVE SUMMARY

Kimley-Horn and Associates, Inc., (Kimley-Horn) was retained by ML Realty Partners to prepare a traffic impact study for an industrial redevelopment proposed in the Village of Bensenville, Illinois. The proposed redevelopment located in the southwest quadrant of the intersection of Busse Road (IL 83) and Devon Avenue includes four industrial-use buildings totaling approximately 1,257,600 square feet. Access to the site is proposed via seven driveways (Access 1-7). Access 1-6 will be located along Devon Avenue. Access 7 will be located along Busse Road (IL 83) approximately 1,000 feet south of the intersection of Busse Road (IL 83) and Devon Avenue.

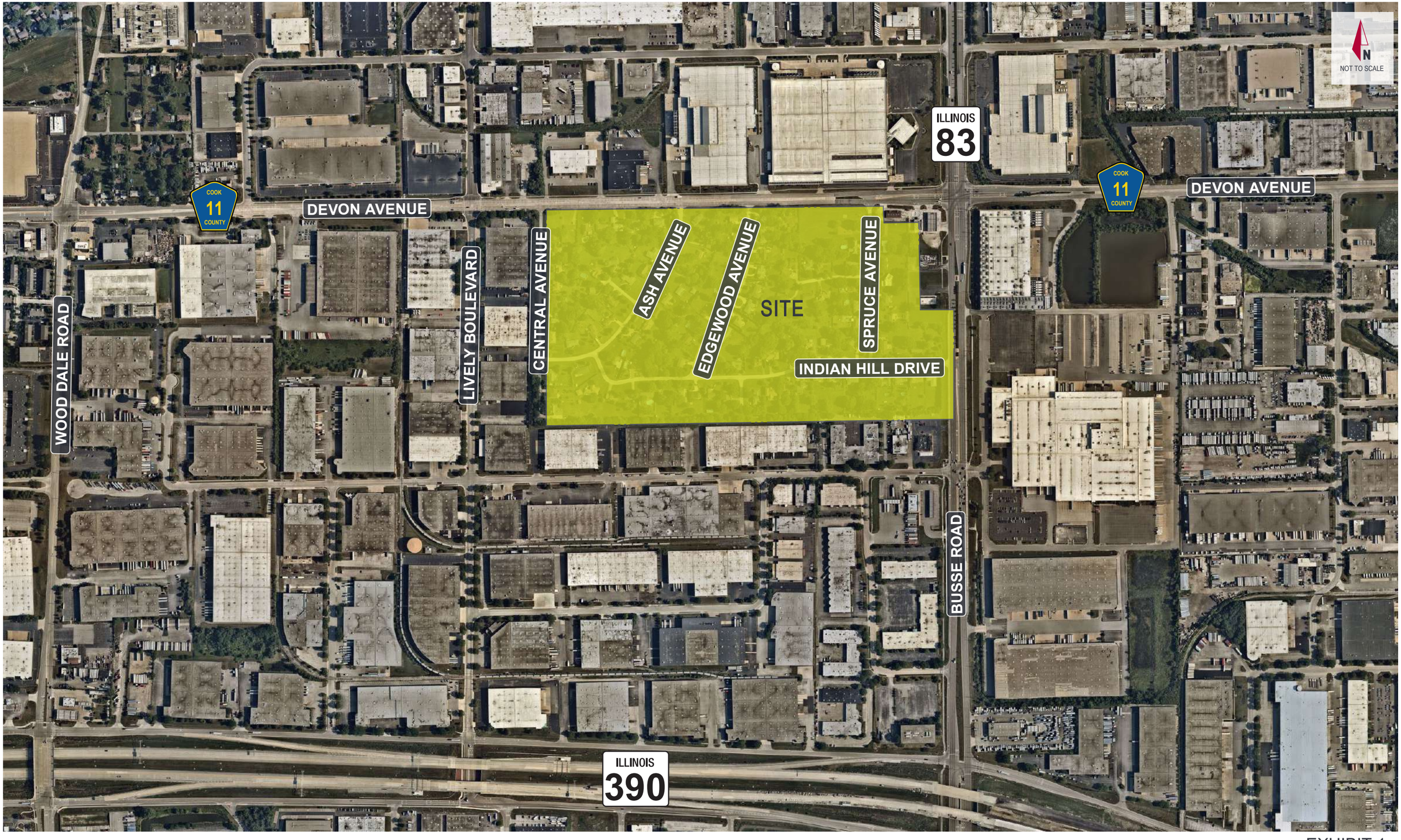
As part of this traffic impact study, existing and future traffic conditions were evaluated for the existing intersections of Busse Road (IL 83) and Devon Avenue, Busse Road (IL 83) and Indian Hill Drive, Devon Avenue and Lively Boulevard, Devon Avenue and Central Avenue, Devon Avenue and Ash Avenue, Devon Avenue and Edgewood Avenue, and Devon Avenue and Spruce Avenue. It is anticipated that background traffic growth and site-generated traffic would be accommodated at the study intersections. At Access 1-6 (along Devon Avenue), a single inbound lane and two outbound lanes including a left-turn lane and a right-turn lane are recommended for the south legs of the intersections. At Access 7 (along Busse Road), a single inbound lane and a single outbound lane is recommended for the west leg. Stop-control should be posted for outbound traffic at Access 1-7. The existing signalized intersections of Busse Road (IL 83) and Devon Avenue and of Devon Avenue and Lively Boulevard are anticipated to have minimal impact in delay and level-of-service from existing to future build conditions. The minor-leg stop-controlled study intersections are also anticipated to have minimal impact in delay and level-of-service from existing to future build conditions. All north-south through movements along Busse Road (IL 83) are projected to operate at or above LOS C in the AM and PM peak hours, consistent with IDOT requirements for a Strategic Regional Arterial (SRA) route. Therefore, no improvements are recommended for the existing study intersections. The access driveways are expected to operate with acceptable delay and limited 95th percentile queues that can be accommodated internal to the site. Additional details related to the improvements identified above are provided in the *Recommendations & Conclusion* section of this report.

1. INTRODUCTION

Kimley-Horn and Associates, Inc., (Kimley-Horn) was retained by ML Realty Partners to prepare a traffic impact study for an industrial redevelopment proposed in the southwest quadrant of the intersection of Busse Road (IL 83) and Devon Avenue in the Village of Bensenville, Illinois. The site is currently a single-family residential neighborhood. The proposed redevelopment plan includes four industrial-use buildings, totaling approximately 1,257,600 square feet.

Access to the redevelopment is proposed at seven full access driveways; six are proposed for the site's north frontage along Devon Avenue, and one is proposed for the site's east frontage along Busse Road (IL 83). An aerial view of the study location and the surrounding roadway network is presented in **Exhibit 1**.

As a part of this study, the existing network was analyzed to determine current operations at the study intersections. Future background traffic volumes were estimated in order to quantify regional growth without construction of the proposed redevelopment. Future traffic conditions were evaluated for a Year 2026 design horizon (build-plus-five conditions). Net trip generation characteristics were then established for the proposed redevelopment. These trips were added to future background traffic volumes to evaluate the impact of the proposed redevelopment on area study intersections under the design horizon. This report presents and documents Kimley-Horn's data collection, summarizes the evaluation of traffic conditions on the surrounding roadways, and identifies recommendations to address the potential impact of site-generated traffic on the adjacent roadway network.



Kimley»Horn

EXHIBIT 1

SITE LOCATION MAP

2. EXISTING CONDITIONS

Kimley-Horn conducted a site evaluation in September 2020 to collect relevant information pertaining to existing land uses in the surrounding area, the adjacent street system, current traffic volumes and operating conditions, lane configurations and traffic controls at nearby intersections, and other key roadway characteristics. The findings of this investigation are detailed as follows.

2.1. Area Connectivity & Land Uses

The subject site is currently a single-family residential neighborhood. The area immediately surrounding the property is primarily industrial and commercial.

Busse Road (IL 83) is a principal arterial located along the property's east frontage, providing regional connectivity to the north and south. Devon Avenue is a minor arterial located along the property's north frontage, providing regional connectivity to the east and west.

2.2. Existing Roadway Characteristics

The primary study area roadways within the vicinity of the proposed development include Busse Road (IL 83), Devon Avenue, and Lively Boulevard. Descriptions of each study roadway are summarized below.

Busse Road (IL 83) is a north-south roadway located directly east of the subject site and is classified by the Illinois Department of Transportation (IDOT) as a principal arterial. At its signalized intersection with Devon Avenue, Busse Road (IL 83) provides dual left-turn lanes, three through lanes, and one dedicated right-turn lane on both the north and south legs. At its unsignalized intersection with Indian Hill Drive, Busse Road (IL 83) provides one dedicated left-turn lane and three through lanes on the south leg and two through lanes and one shared through/right-turn lane on the north leg. IDOT classifies Busse Road (IL 83) as a Strategic Regional Arterial (SRA) roadway. The SRA system was established by IDOT to promote mobility on key routes throughout the Chicago area by applying various strategies, such as access control and limited signalization. The posted speed limit of Busse Road (IL 83) is 45 miles per hour (MPH). Busse Road (IL 83) is under IDOT jurisdiction.

Devon Avenue is an east-west roadway located directly north of the subject property and provides two travel lanes in each direction. At its signalized intersection with Lively Boulevard, Devon Avenue provides one dedicated left-turn lane, one through lane, and one shared through/right-turn lane on both the east and west legs. It each of its unsignalized intersections with Central Avenue/Private Driveway A, Ash Avenue/Private Driveway B, and Edgewood Avenue/Private Driveway C, Devon Avenue provides one dedicated through lane, one shared through/right-turn lane, and a two-way left-turn lane (TWLTL) on both the east and west legs. At its unsignalized intersection with Spruce Avenue, Devon Avenue provides one dedicated through lane and one shared through/right-turn lane on the west leg and two through lanes and one dedicated left-turn lane on the east leg. At its signalized intersection with Busse Road (IL 83), Devon Avenue provides dual left-turn lanes, two through lanes, and one dedicated right-turn lane on both the east and west legs. Devon Avenue is classified by IDOT as a minor arterial and provides connectivity to the east and west. The posted speed limit on Devon Avenue is 40 MPH. Devon Avenue is under Cook County jurisdiction.

Lively Boulevard is a north-south roadway located west of the subject site and provides one travel lane and a TWLTL in each direction. At its signalized intersection with Devon Avenue, Lively boulevard provides one dedicated left-turn lane and one shared through/right-turn lane on the south leg and one dedicated left-turn lane, one through lane, and one right-turn lane on the north leg. Lively Avenue is classified by IDOT as a minor collector and has a posted speed limit of 30 MPH. Lively Boulevard is under the jurisdiction of the Village of Bensenville.

Central Avenue/Private Driveway A is a north-south existing local road south of Devon Avenue and a private access driveway north of Devon Avenue. At its unsignalized intersection with Devon Avenue, Central Avenue operates under minor-leg stop-control and provides one shared left/through/right-turn lane on the south leg. The north leg (Private Driveway A) is an exit-only private access driveway operating under minor-leg stop-control and providing one shared left/through/right-turn lane. Central Avenue and Private Driveway A are offset by approximately 30 feet, with Private Driveway A located further east. Central Avenue has a posted speed limit of 25 MPH. There is no posted speed limit for Private Driveway A; therefore, a speed limit of 25 MPH was assumed for the purpose of this analysis. Central Avenue is classified by IDOT as a local road and is under the jurisdiction of the Village of Bensenville. Note: Central Avenue is currently a public roadway, but the municipality will vacate the right-of-way in the future, and it will be incorporated into the development.

Ash Avenue/Private Driveway B is a north-south existing local road south of Devon Avenue and a private access driveway north of Devon Avenue. At its unsignalized intersection with Devon Avenue, Ash Avenue/Private Driveway B operates under minor-leg stop-control and provides one shared left/through/right-turn lane on both the north and south legs. Ash Avenue and Private Driveway B are offset by approximately 50 feet, with Ash Avenue located further east. Ash Avenue has a posted speed limit of 25 MPH. There is no posted speed limit for Private Driveway B; therefore, a speed limit of 25 MPH was assumed for the purpose of this analysis. Ash Avenue is classified by IDOT as a local road and is under the jurisdiction of the Village of Bensenville.

Edgewood Avenue/Private Driveway C is a north-south existing local road south of Devon Avenue and a private access driveway north of Devon Avenue. At its unsignalized intersection with Devon Avenue, Edgewood Avenue/Private Driveway C operates under minor-leg stop-control and provides one shared left/through/right-turn lane on both the north and south legs. Edgewood Avenue and Private Driveway C are offset by approximately 90 feet, with Private Driveway C located further east. Edgewood Avenue has a posted speed limit of 25 MPH. There is no posted speed limit for Private Driveway C; therefore, a speed limit of 25 MPH was assumed for the purpose of this analysis. Edgewood Avenue is classified by IDOT as a local road and is under the jurisdiction of the Village of Bensenville.

Spruce Avenue is a north-south existing local road south of Devon Avenue. At its unsignalized intersection with Devon Avenue, Spruce Avenue operates under minor-leg stop-control and provides one shared left/right-turn lane on its south leg. Spruce Avenue has a posted speed limit of 25 MPH. Spruce Avenue is classified by IDOT as a local road and is under the jurisdiction of the Village of Bensenville.

Indian Hill Drive is an east-west existing local road west of Busse Road (IL 83). At its unsignalized intersection with Busse Road (IL 83), Indian Hill Drive operates under minor-leg stop-control and provides one shared left/right-turn lane on its south leg. Indian Hill Drive has a posted speed limit of 25 MPH. Indian Hill Drive is classified by IDOT as a local road and is under the jurisdiction of the Village of Bensenville.

2.3. Traffic Count Data

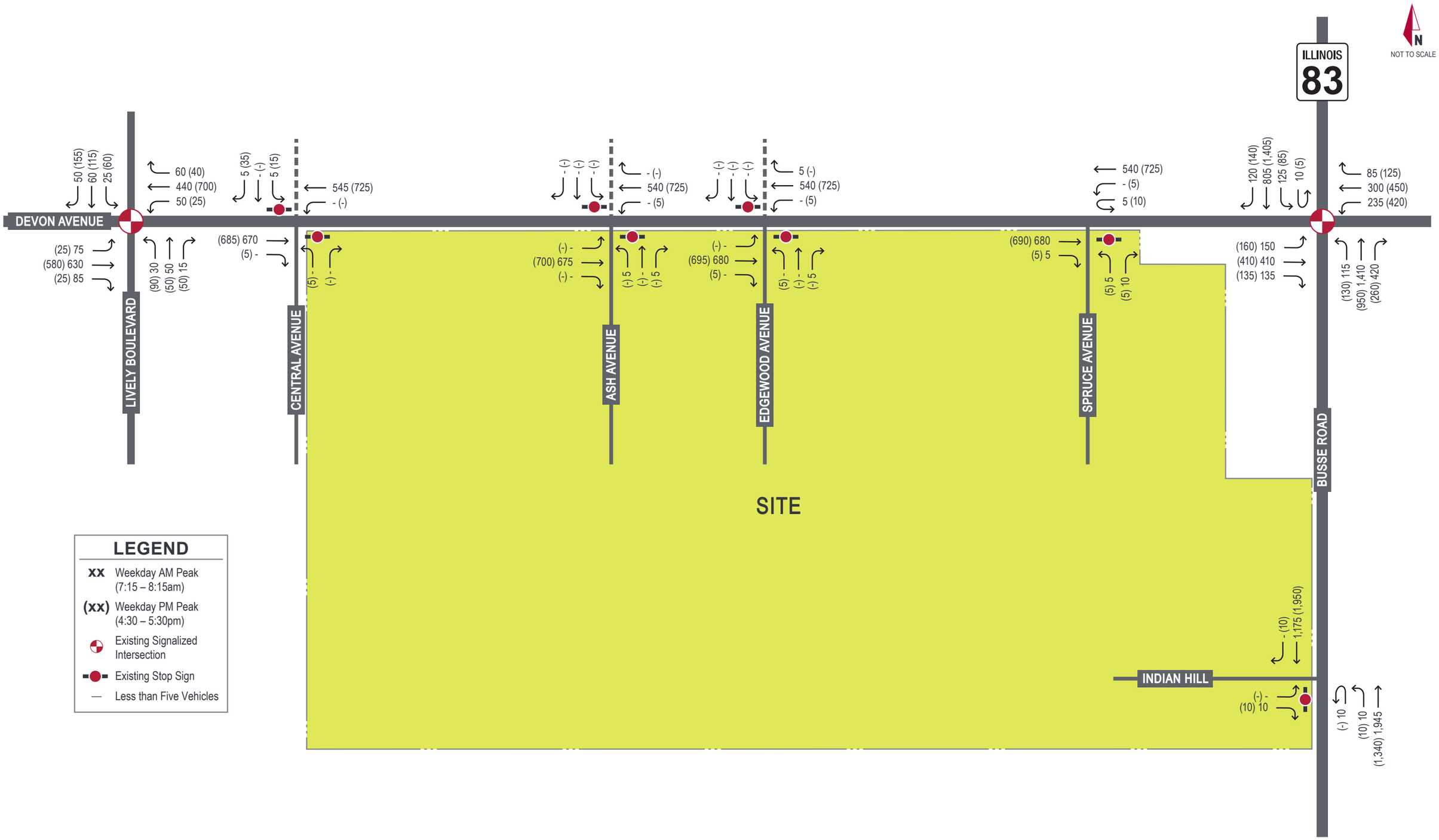
Weekday turning movement count data was collected in September 2020 at the following study intersections:

- Devon Avenue and Lively Boulevard
- Devon Avenue and Central Avenue/Private Driveway A
- Devon Avenue and Ash Avenue/Private Driveway B
- Devon Avenue and Edgewood Avenue/Private Driveway C
- Devon Avenue and Spruce Avenue
- Busse Road (IL 83) and Devon Avenue
- Busse Road (IL 83) and Indian Hill Drive

Counts were performed during the weekday morning and evening peak periods (7:00-9:00AM and 4:00-6:00PM, respectively), revealing that peak traffic conditions take place within the study area from 7:15-8:15AM and 4:30-5:30PM.

Based on a comparison of 24-hour traffic counts collected at the intersection of Busse Road (IL 83) and Devon Avenue and IDOT's recent ADT data, the 2020 traffic counts were adjusted by a factor of 1.13 for all movements to account for the current reduced traffic due to the COVID-19 conditions.

Traffic volumes were rounded to the nearest multiple of five and balanced between intersections. Peak hour traffic volumes are summarized on **Exhibit 2**. A summary of the count data is provided in the appendix.



LEGEND

- **xx** Weekday AM Peak (7:15 – 8:15am)
- **(xx)** Weekday PM Peak (4:30 – 5:30pm)
- Existing Signalized Intersection
- Existing Stop Sign
- — Less than Five Vehicles

Kimley»Horn

EXHIBIT 2

EXISTING (2020) TRAFFIC VOLUMES

2.5. Existing Capacity Analysis

Capacity analyses were conducted to assess existing and future build operating conditions at the study intersections during the weekday peak hours. The capacity of an intersection quantifies its ability to accommodate traffic volumes and is expressed in terms of level of service (LOS), measured in average delay per vehicle. LOS grades range from A to F, with LOS A as the highest (best traffic flow and least delay), LOS E as saturated or at-capacity conditions, and LOS F as the lowest (oversaturated conditions). The lowest LOS grade typically accepted by jurisdictional transportation agencies in Northeastern Illinois is LOS D, and a minimum LOS C is required for through movements on SRA routes such as Busse Road (IL 83).

The LOS grades shown below, which are provided in the Transportation Research Board's Highway Capacity Manual (HCM), quantify and categorize the driver's discomfort, frustration, fuel consumption, and travel times experienced as a result of intersection control and the resulting traffic queuing. A detailed description of each LOS rating can be found in **Table 2.1**.

Table 2.1. Level of Service Grading Descriptions[1]

Level of Service	Description
A	Minimal control delay; traffic operates at primarily free-flow conditions; unimpeded movement within traffic stream.
B	Minor control delay at signalized intersections; traffic operates at a fairly unimpeded level with slightly restricted movement within traffic stream.
C	Moderate control delay; movement within traffic stream more restricted than at LOS B; formation of queues contributes to lower average travel speeds.
D	Considerable control delay that may be substantially increased by small increases in flow; average travel speeds continue to decrease.
E	High control delay; average travel speed no more than 33 percent of free flow speed.
F	Extremely high control delay; extensive queuing and high volumes create exceedingly restricted traffic flow.

1 – Highway Capacity Manual 2010

The range of control delay for each rating (as detailed in the HCM) is shown in **Table 2.2**. Because signalized intersections are expected to carry a larger volume of vehicles and stopping is required during red time, higher delays are tolerated for the corresponding LOS ratings.

Table 2.2. Level of Service Grading Criteria[1]

Level of Service	Average Control Delay (s/veh) at:	
	Unsignalized Intersections	Signalized Intersections
A	0 – 10	0 – 10
B	> 10 – 15	> 10 – 20
C	> 15 – 25	> 20 – 35
D	> 25 – 35	> 35 – 55
E	> 35 – 50	> 55 – 80
F[2]	> 50	> 80

1 – Highway Capacity Manual 2010

2 – All movements with a Volume to Capacity (v/C) ratio greater than 1 receive a rating of LOS F.

Existing capacity results were identified for the study intersections based on the HCM standards, as summarized in **Table 2.3**. In this table, operation on each approach is quantified according to the average delay per vehicle and the corresponding level of service. In order to evaluate existing traffic operation, signal timings for the intersections of Busse Road (IL 83) and Devon Avenue and Devon Avenue and Lively Boulevard were obtained from the local agencies. It should be noted that right-turn on red (RTOR) movements were excluded from the capacity analysis, per IDOT requirements. The capacity analysis results presented in **Table 2.3** are based on Synchro's HCM 6th Edition reports; copies of the reports are provided in the appendix. Note: the study intersection of Busse Road (IL 83) and Devon Avenue was analyzed using HCM 2000 methodology due to phasing conflict limitations in the HCM 6th Edition.

Table 2.3. Existing (Year 2020) Levels of Service

Intersection	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Devon Avenue and Lively Boulevard ★				
Eastbound	11	B	12	B
Westbound	10+	B	13	B
Northbound	24	C	24	C
Southbound	23	C	26	C
Intersection	*12*	*B*	*16*	*B*
Devon Avenue and Central Avenue/Private Driveway A △				
Westbound (Left)	9	A	9	A
Northbound	21	C	26	D
Southbound	22	C	19	C
Devon Avenue and Ash Avenue/Private Driveway B △				
Eastbound (Left)	9	A	9	A
Westbound (Left)	9	A	9	A
Northbound	19	C	25	D
Southbound	20	C	25	D
Devon Avenue and Edgewood Avenue/Private Driveway C △				
Eastbound (Left)	9	A	9	A
Westbound (Left)	9	A	9	A
Northbound	15+	C	28	D
Southbound	20	C	25+	D
Devon Avenue and Spruce Avenue △				
Westbound (Left)	12	B	12	B
Northbound	15-	B	18	C
Busse Road (IL 83) and Devon Avenue ★				
Eastbound	61	E	61	E
Westbound	73	E[1]	83	F
Northbound	31	C[2]	31	C[1]
Southbound	30	C[2]	34	C[2]
Intersection	*42*	*D*	*47*	*D*
Busse Road (IL 83) and Indian Hill Drive △				
Eastbound	19	C	33	D
Northbound (Left)	16	C	38	E

★ – Signalized Intersection
△ – Minor-Leg Stop-Controlled Intersection
1 – Left-turn movement operates at LOS F.
2 – Left-turn movement operates at LOS E.

The signalized study intersection of Devon Avenue and Lively Boulevard currently operates at an overall LOS B during the AM and PM peak hours. All approaches currently operate acceptably at

LOS C or better. For this study intersection, the 95th percentile queues are estimated to be contained in the existing storage lanes.

At the minor-leg stop-controlled intersection of Devon Avenue and Central Avenue/Private Driveway A, all approaches currently operate acceptably at LOS D or better for both the AM and PM peak hours. For this study intersection, the 95th percentile queues estimates are approximately one vehicle (approximately 25 feet) or less for all approaches in the AM and PM peak hour.

At the minor-leg stop-controlled intersection of Devon Avenue and Ash Avenue/Private Driveway B, all approaches currently operate acceptably at LOS D or better for both the AM and PM peak hours. For this study intersection, the 95th percentile queues estimates are approximately one vehicle (approximately 25 feet) or less for all approaches in the AM and PM peak hour.

At the minor-leg stop-controlled intersection of Devon Avenue and Edgewood Avenue/Private Driveway C, all approaches currently operate acceptably at LOS D or better for both the AM and PM peak hours. For this study intersection, the 95th percentile queues estimates are approximately one vehicle (approximately 25 feet) or less for all approaches in the AM and PM peak hour.

At the minor-leg stop-controlled intersection of Devon Avenue and Spruce Avenue, all approaches currently operate acceptably at LOS C or better for both the AM and PM peak hours. For this study intersection, the 95th percentile queues estimates are approximately one vehicle (approximately 25 feet) or less for all approaches in the AM and PM peak hour.

The signalized intersection of Busse Road (IL 83) and Devon Avenue currently operates at an overall LOS D during the AM and PM peak hours. The eastbound approach operates at LOS E in both the peak hours. The westbound approach operates at LOS E with the westbound left-turn operating at LOS F in the AM peak hour. The westbound approach operates at LOS F in the PM peak hour. The northbound and southbound approaches operate acceptably at LOS C in the AM and PM peak hours. The northbound left-turn movement operates at LOS E in the AM peak hour and at LOS F in the PM peak hour. The southbound left-turn movement operates at LOS E in both the AM and PM peak hours. The north-south through movements on Busse Road (IL 83) currently operate at LOS C, consistent with IDOT requirements for an SRA route. At this study intersection, the 95th percentile queues are estimated to be contained in the existing storage lanes except for the westbound left-turn lane in the PM peak hour and the northbound right-turn lane in the AM peak hour. The estimated westbound left-turn queue is approximately 360 feet in the PM peak hour, exceeding the existing capacity by 145 feet. The estimated northbound right-turn queue is approximately 360 feet in the AM peak hour, exceeding the existing capacity by 125 feet. Because RTOR movements are not included in the capacity analysis, the 95th percentile queues estimated for this movement is likely conservative, and queues may be better accommodated within the existing storage than the analysis results display.

At the minor-leg stop-controlled intersection of Busse Road and Indian Hill Drive, all approaches currently operate acceptably at LOS C or better in the AM peak hour. In the PM peak hour, the eastbound approach currently operates at LOS D and the northbound left-turn movement currently

operates at LOS E. For this study intersection, the 95th percentile queues estimates are approximately one vehicle (approximately 25 feet) or less for all approaches in the AM and PM peak hour.

3. FUTURE CONDITIONS

This section of the report outlines the proposed site plan, summarizes site-specific traffic characteristics, defines future roadway improvements, and develops future traffic projections for analysis.

3.1. Development Characteristics & Site Access

The proposed redevelopment would provide a total of approximately 1,257,600 square feet of industrial-use space within four buildings, replacing the existing single-family residential neighborhood on the site.

Passenger vehicle trips to each building would be via the following five driveways proportionally to the building areas used by each driveway:

- Access 1
- Access 3
- Access 4
- Access 6
- Access 7

Heavy vehicle trips to each building would be split via the following three driveways proportionally to the building areas used by each driveway:

- Access 2
- Access 5
- Access 7

3.2. Site Trip Generation

In order to calculate site-generated traffic projections for the development, data was referenced from the Institute of Transportation Engineer (ITE) manual titled Trip Generation, Tenth Edition. Trip generation data for the proposed uses, ITE Land Use Code (LUC) 150 - Warehousing, and ITE LUC 130 - Industrial Park, are shown in **Table 3.1**.

The proposed development is anticipated to serve several separate tenants. The future tenant mix will likely include a variety of industrial and warehousing uses and corresponding travel behaviors. In anticipation of the mix of future tenants, the trip generation was calculated considering approximately half of the future development intensity allocated to each LUC 150 – Warehousing, and LUC 130 – Industrial Park.

Copies of the ITE data are provided in the appendix.

Table 3.1. ITE Trip Generation Data

ITE Land Use	Unit	Type	Weekday		
			Daily	AM Peak Hour	PM Peak Hour
Warehousing (LUC 150) [1]	Per 1,000 sq. ft.	Passenger Vehicles	1.11X 50% in/50% out	0.14X 77% in/23% out	0.14X 27% in/73% out
		Heavy Vehicles	0.54X+7.47 50% in/50% out	0.02X 77% in/23% out	0.03X 27% in/73% out
Industrial Park (LUC 130) [2]	Per 1,000 sq. ft.	Passenger Vehicles	3.35X 50% in/50% out	0.36X 81% in/19% out	0.36X 21% in/79% out
		Heavy Vehicles	0.57X 50% in/50% out	0.04X 81% in/19% out	0.04X 21% in/79% out

1 – Data provided in the ITE manual for LUC 150 *Warehousing Vehicle Trip Generation Analysis,* was assumed for total trips (heavy vehicle and passenger vehicles). In the ITE manual, Tables 5-7 of the *Warehousing Vehicle Trip Generation Analysis* outline the daily and peak hour trip generation rates for total trips. The recently published ITE Trip Generation, Tenth Edition Supplement provides guidance to estimate the number of heavy vehicle trips generated, which was considered to identify the split between heavy vehicles and passenger vehicles. A copy of the manual and supplemental data is provided in the appendix. The in/out distribution percentages were obtained from the Trip Generation, Tenth Edition manuals.

2 – Data provided in the ITE manual for LUC 130 *Industrial Park Vehicle Trip Generation Analysis,* was assumed for total trips (heavy vehicle and passenger vehicles). In the ITE manual, Tables 5-7 of the *Industrial Park Vehicle Trip Generation Analysis* outline the daily and peak hour trip generation rates for total trips. The recently published ITE Trip Generation, Tenth Edition Supplement provides guidance to estimate the number of heavy vehicle trips generated, which was considered to identify the split between heavy vehicles and passenger vehicles. A copy of the manual and supplemental data is provided in the appendix. The in/out distribution percentages were obtained from the Trip Generation, Tenth Edition manuals.

The site-generated trips generated during the peak hours were rounded to the nearest multiple of five for the purposes of this analysis, and daily trips were rounded to the nearest multiple of ten. Because the site was operational as a single-family residential neighborhood at the time the traffic counts were performed, the existing site trips entering and exiting the proposed site driveways were subtracted from the projected site-generated trips to calculate a net change in site trips. Projected site traffic volumes are summarized in **Table 3.2** with a comparison to existing site traffic.

Table 3.2. Site-Generated Traffic Projections

Land Use	Size	Type	Weekday						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Warehousing (LUC 150)	628,600 sq. ft.	Passenger Vehicles	690	70	20	90	25	60	85
		Heavy Vehicles	350	10	5	15	5	15	20
Industrial Park (LUC 130)	628,600 sq. ft.	Passenger Vehicles	2,080	185	45	230	50	180	230
		Heavy Vehicles	360	20	5	25	5	20	25
Subtotal			3,480	285	75	360	85	275	360
Less Existing Site Traffic[1]			*N/A*[1]	*-15*	*-40*	*-55*	*-50*	*-30*	*-80*
Total Net Trips			N/A	270	35	305	35	245	280

1 – Only peak hour data was collected at the existing site driveways.

3.3. Directional Distribution

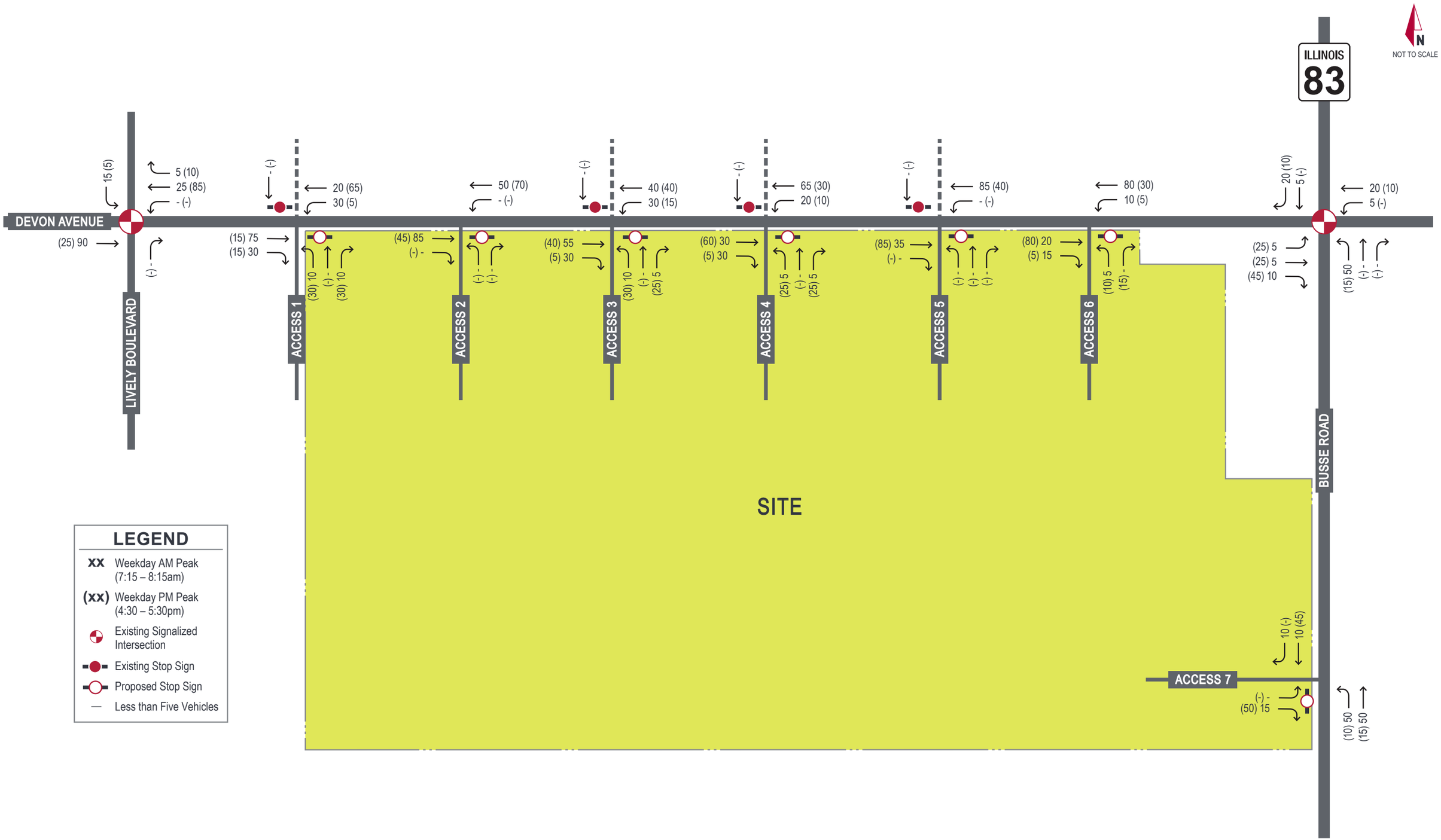
The estimated distribution of site-generated traffic on the surrounding roadway network as it approaches and departs the site is a function of several variables, such as the nature of surrounding land uses, prevailing traffic volumes/patterns, characteristics of the street system, and the ease with which motorists can travel over various sections of that system. The anticipated directional distributions for passenger vehicles and heavy vehicles are outlined in **Table 3.3**. Distributions were separated for trips traveling to the site and from the site on each Lively Boulevard, Devon Avenue, and Busse Road (IL 83). Traffic travels to and from the site northbound and southbound via Lively Boulevard and Busse Road (IL 83) and to and from the east and west via Devon Avenue.

Table 3.3. Estimated Trip Distribution

Traveling to/from:	Percentage of Site Trips	
	Passenger Vehicles	Heavy Vehicles
	To/From Site	To/From Site
North via Lively Road	5%	0%
South via Lively Road	0%	10%
West via Devon Avenue	35%	10%
East via Devon Avenue	10%	40%
North via Busse Road (IL 83)	10%	0%
South via Busse Road (IL 83)	40%	40%
Total	100%	100%

Using the traffic volume projections and estimated trip distributions presented in **Tables 3.2** and **3.3**, the site traffic assignment for passenger vehicles and heavy vehicles were prepared, as shown in

Exhibit 3 and **Exhibit 4**, respectively. The traffic volumes associated with the existing site traffic entering and exiting the proposed site presented in **Table 3.2** were removed from the network as shown in **Exhibit 5**. The total net site traffic assignment is shown in **Exhibit 6**.



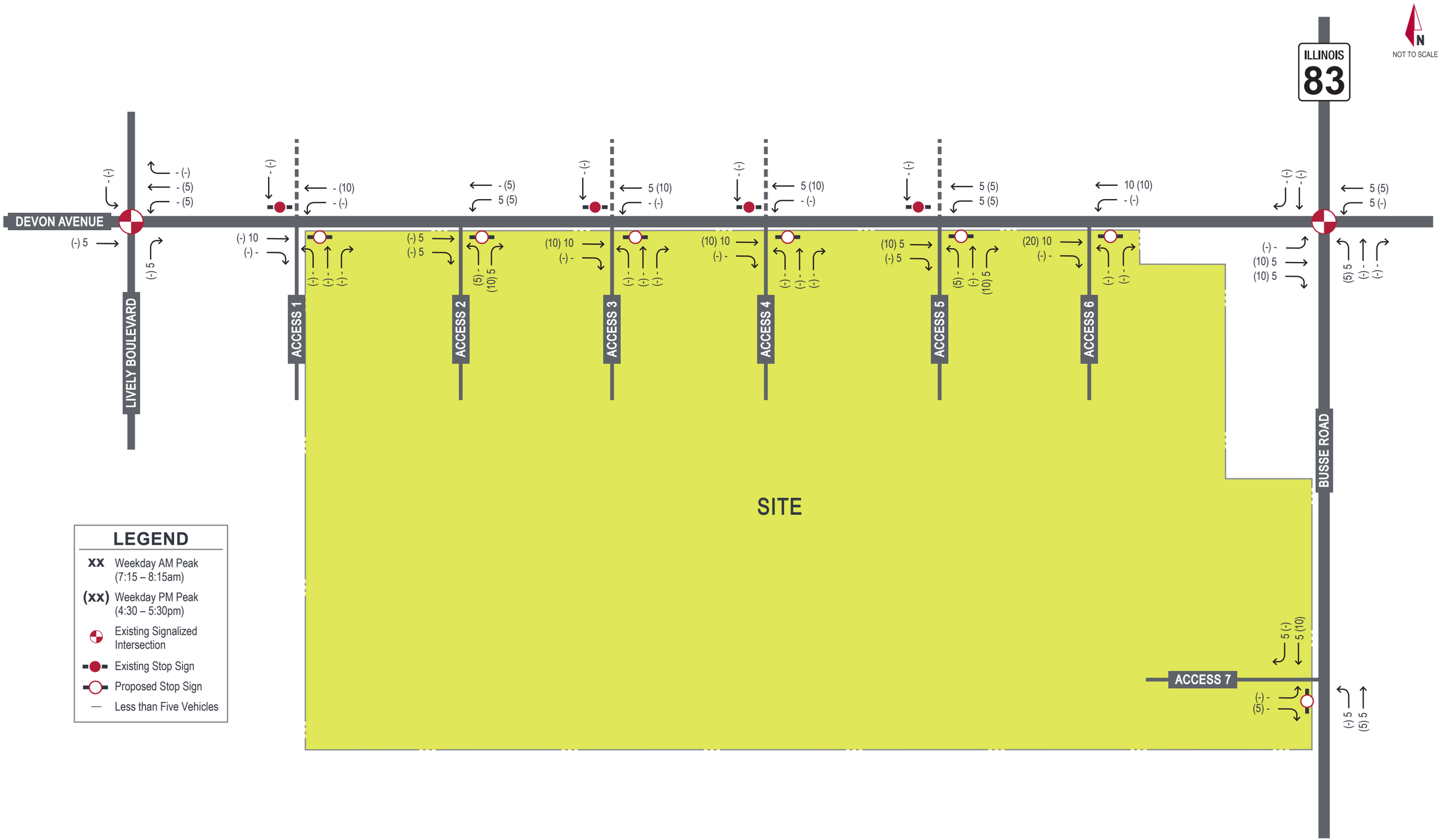
LEGEND

- **XX** Weekday AM Peak (7:15 – 8:15am)
- **(XX)** Weekday PM Peak (4:30 – 5:30pm)
- Existing Signalized Intersection
- Existing Stop Sign
- Proposed Stop Sign
- — Less than Five Vehicles

Kimley»Horn

EXHIBIT 3

SITE GENERATED TRIP ASSIGNMENT - CARS



Kimley»Horn

EXHIBIT 4

SITE GENERATED TRIP ASSIGNMENT - TRUCKS

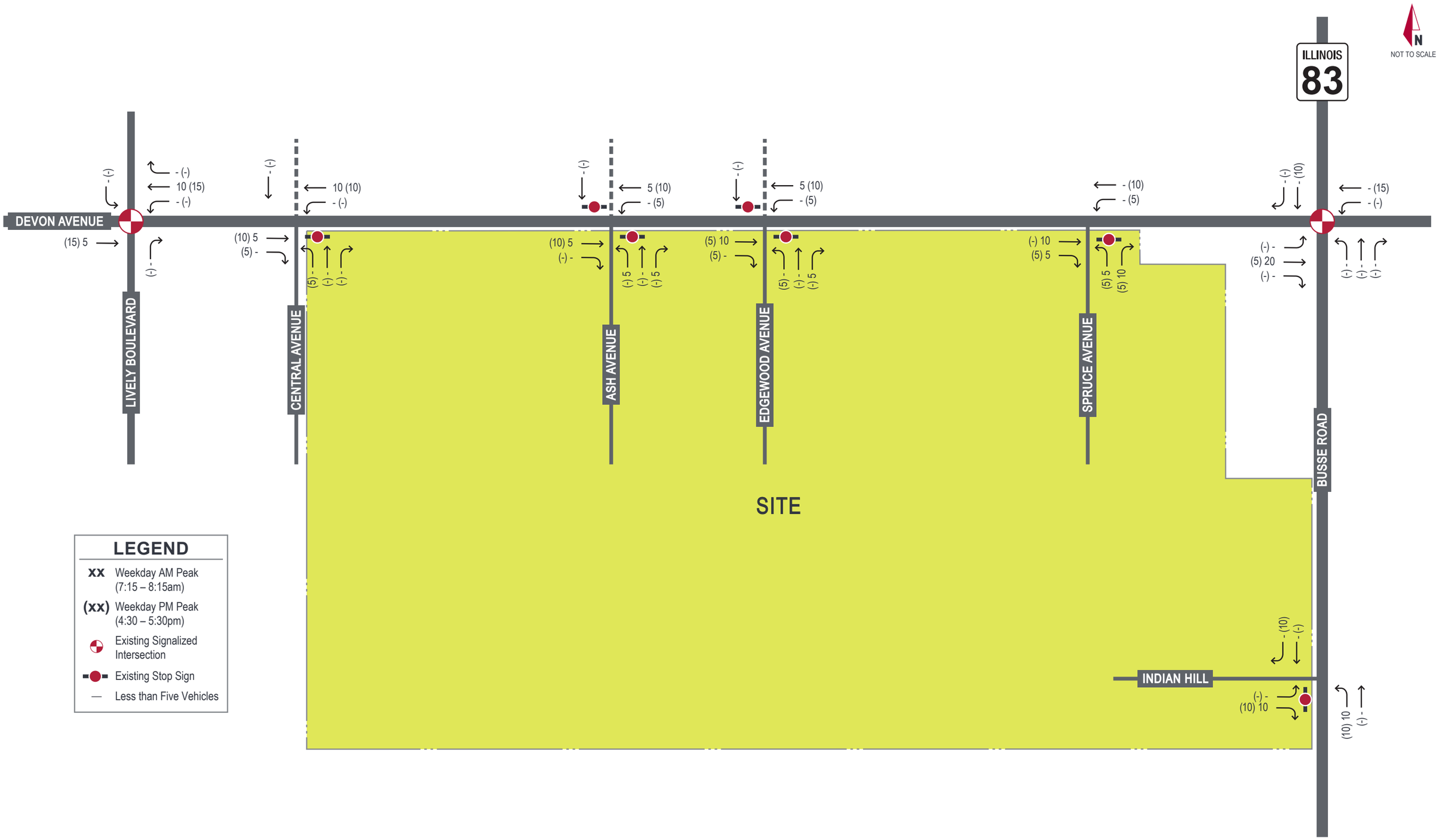


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EXHIBIT 5

TRIP ASSIGNMENT - EXISTING TO BE REMOVED

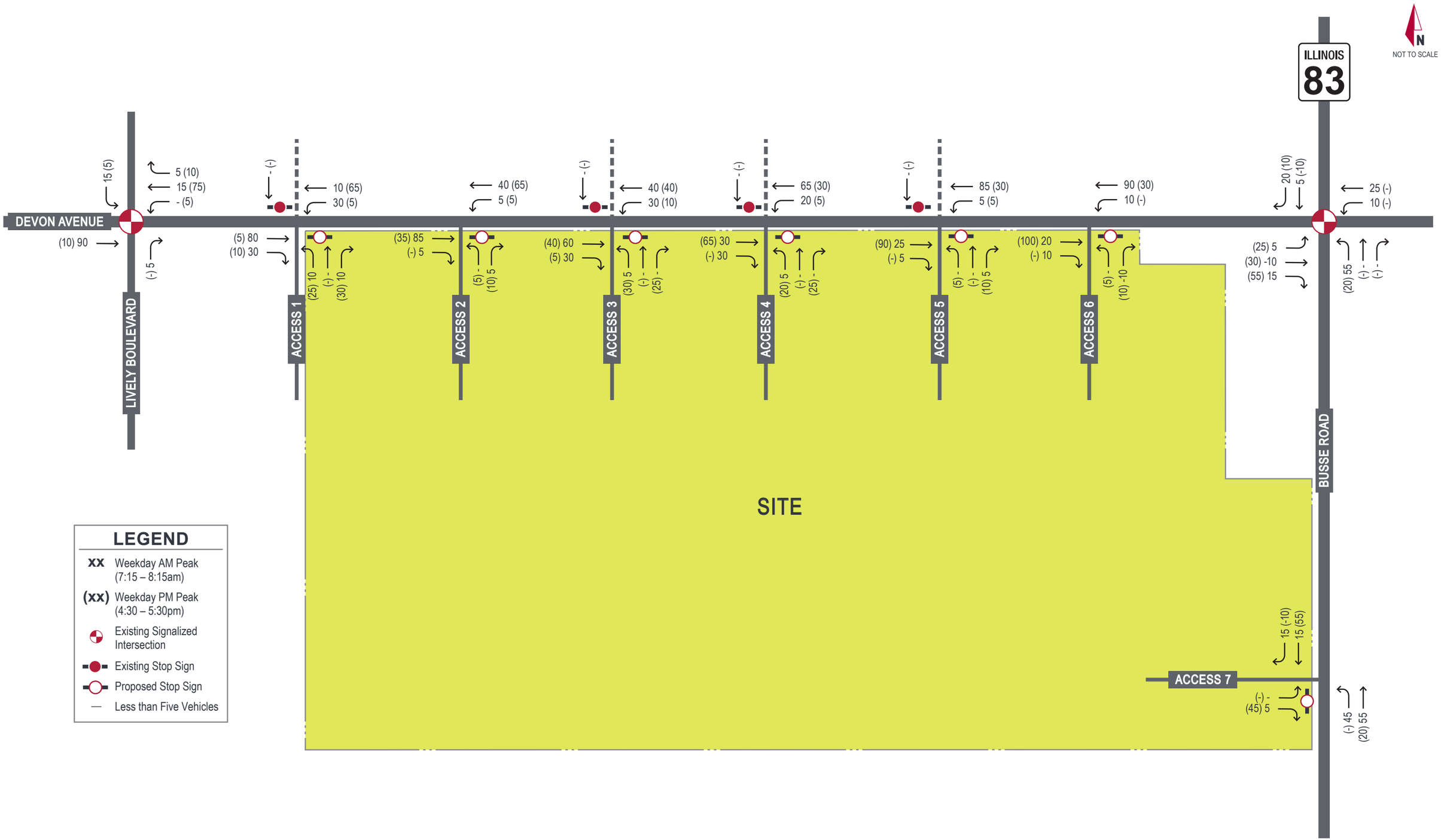

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EXHIBIT 6

SITE GENERATED TRIP ASSIGNMENT - NET

3.4. Future Capacity Analysis

The proposed redevelopment is expected to be constructed by Year 2021; therefore, Kimley-Horn evaluated future traffic conditions for a Year 2026 design horizon (build-plus-five conditions, per typical IDOT requirements).

Background Traffic Projections

Background traffic volumes were estimated using data from the Chicago Metropolitan Agency for Planning (CMAP). An official letter from CMAP documenting the projected Year 2050 traffic volume on the study roadways is included in the appendix. Based on information received from CMAP, annual traffic growth on area roadways is projected to occur at the compounded rates listed below:

- Lively Boulevard north of Devon Avenue 0.45%
- Lively Boulevard north of Devon Avenue 0.43%
- Devon Avenue west of Busse Road (IL 83) 0.18%
- Devon Avenue east of Busse Road (IL 83) -0.51%*
- Busse Road (IL 83) north of Devon Avenue 0.37%
- Busse Road (IL 83) south of Devon Avenue 0.55%

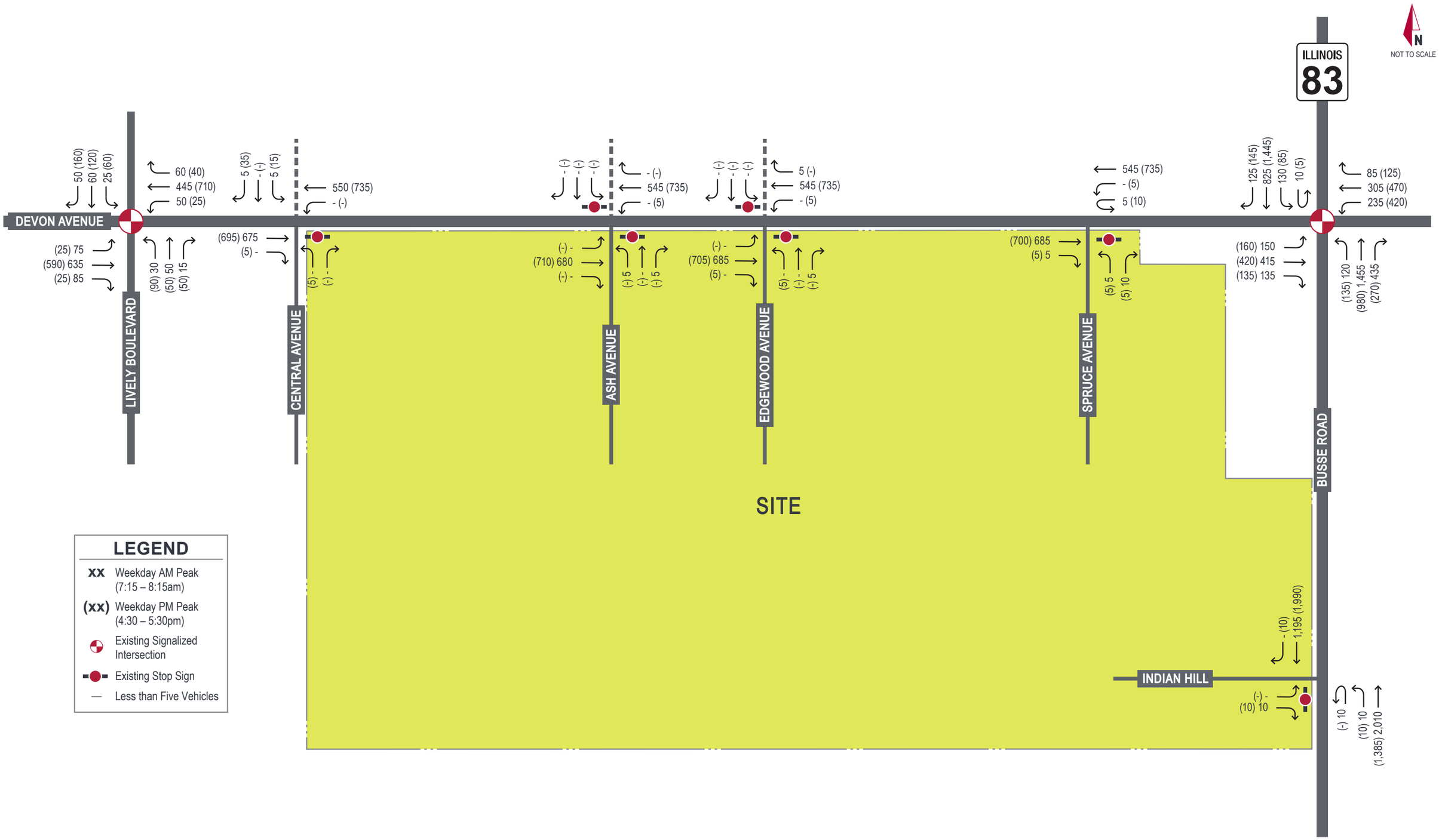
*Note: The CMAP Year 2050 projections result in a negative growth rate for Devon Avenue east of Busse Road (IL 83), however, this analysis assumed a conservative growth rate of 0.0% resulting in static traffic from the Existing 2020 conditions to Future Year 2026 conditions for this roadway link.

These growth rates were applied to existing (Year 2020) traffic volumes (**Exhibit 2**) at the study intersections. Background traffic growth was not applied to turning movements at the existing site access driveways.

The resulting background traffic projections are presented in **Exhibit 7**.

Future Build Traffic Projections

Total traffic projections for Year 2026 were calculated by adding site trips (**Exhibit 6**) to background traffic volumes (**Exhibit 7**). Traffic projections for the Year 2026 future build scenario are illustrated in **Exhibit 8**.



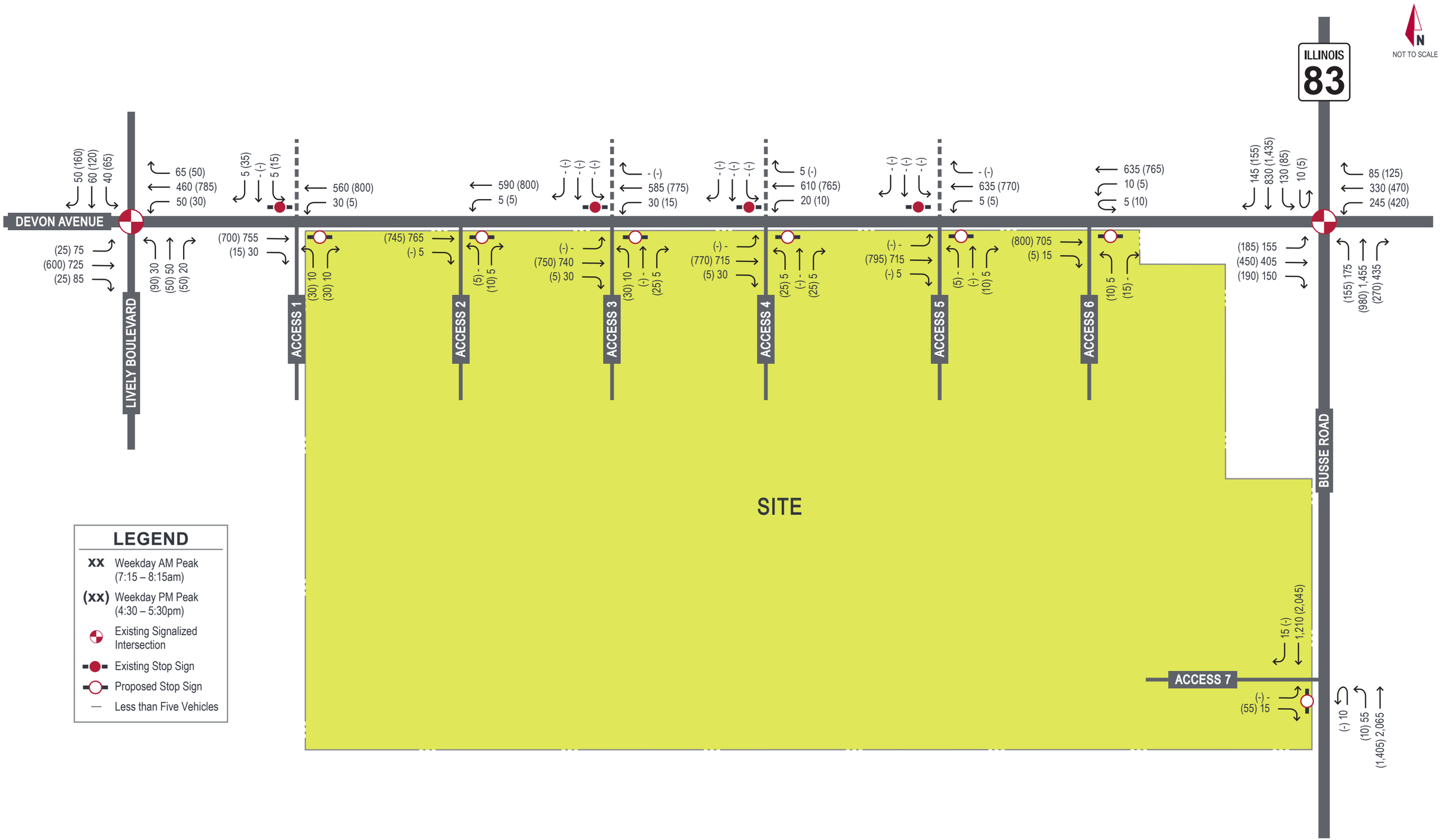
LEGEND

- **xx** Weekday AM Peak (7:15 – 8:15am)
- **(xx)** Weekday PM Peak (4:30 – 5:30pm)
- Existing Signalized Intersection
- Existing Stop Sign
- — Less than Five Vehicles

Kimley»Horn

EXHIBIT 7

FUTURE (2026) NO-BUILD TRAFFIC PROJECTIONS



LEGEND

- **xx** Weekday AM Peak (7:15 – 8:15am)
- **(xx)** Weekday PM Peak (4:30 – 5:30pm)
- Existing Signalized Intersection
- Existing Stop Sign
- Proposed Stop Sign
- — Less than Five Vehicles

Kimley»Horn

EXHIBIT 8

FUTURE (2026) BUILD TRAFFIC PROJECTIONS

Based on the recommended improvements, future capacity results for the build condition are provided in **Table 3.4**. Consistent with the existing conditions analysis, the capacity results are based on Synchro's HCM 6th Edition reports; copies of the reports are provided in the appendix. Note: the study intersection of Busse Road (IL 83) and Devon Avenue was analyzed using HCM 2000 methodology due to phasing conflict limitations in the HCM 6th Edition.

Table 3.4. Future (Year 2026) Build Levels of Service

Intersection	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Devon Avenue and Lively Boulevard *				
Eastbound	11	B	12	B
Westbound	10-	A	14	B
Northbound	28	C	27	C
Southbound	25	C	29	C
Intersection	*13*	*B*	*17*	*B*
Devon Avenue and Access 1/Private Driveway A △				
Westbound (Left)	10-	A	9	A
Northbound	22	C	25+	D
Southbound	27	D	22	C
Devon Avenue and Access 2 △				
Westbound (Left)	14	B	14	B
Northbound	15-	B	19	C
Devon Avenue and Access 3/Private Driveway B △				
Eastbound (Left)	9	A	10-	A
Westbound (Left)	10-	A	10-	A
Northbound	26	D	29	D
Southbound	25-	C	30	D
Devon Avenue and Access 4/Private Driveway C △				
Eastbound (Left)	9	A	9	A
Westbound (Left)	10-	A	10-	A
Northbound	22	C	27	D
Southbound	24	C	30	D
Devon Avenue and Access 5/Private Driveway D △				
Eastbound (Left)	9	A	9	A
Westbound (Left)	14	B	10-	A
Northbound	16	C	34	D
Southbound	11	B	11	B
Devon Avenue and Access 6 △				
Westbound (Left)	11	B	13	B
Northbound	22	C	19	C

Intersection	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Busse Road (IL 83) and Devon Avenue ★				
Eastbound	61	E	61	E
Westbound	77	E[1]	83	F
Northbound	33	C[2]	33	C[1]
Southbound	31	C[2]	35	C[2]
Intersection	43	D	49	D
Busse Road (IL 83) and Access 7 △				
Eastbound	21	C	40	E
Northbound (Left)	22	C	43	E

★ – Signalized Intersection
△ – Minor-Leg Stop-Controlled Intersection
1 – Left-turn movement operates at LOS F.
2 – Left-turn movement operates at LOS E.

As shown in **Table 3.4**, the roadway network is projected to perform similarly to existing conditions with minor increases in delay projected for some approaches.

The signalized study intersection of Devon Avenue and Lively Boulevard is anticipated to continue to operate at an overall LOS B during the AM and PM peak hours in the Future Year 2026 Build conditions. All approaches are projected to continue to operate acceptably at LOS C or better. For this study intersection, the 95th percentile queues are estimated to be contained in the existing storage lanes.

The signalized intersection of Busse Road (IL 83) and Devon Avenue is anticipated to continue to operate acceptably at an overall LOS D during the AM and PM peak hours. All approaches are projected to operate at the same LOS as the Existing 2020 conditions. The north-south through movements on Busse Road (IL 83) are anticipated to remain at LOS C, consistent with IDOT requirements for an SRA route. At this study intersection, the 95th percentile queues are estimated to be contained in the existing storage lanes except for the eastbound right-turn lane in the PM peak hour, the northbound right-turn lane in the AM peak hour, and the westbound left-turn lane in both the AM and PM peak hours. The estimated eastbound right-turn queue is approximately 230 feet in the PM peak hour, exceeding the existing capacity by 45 feet. The estimated northbound right-turn queue is approximately 380 in the AM peak hour, exceeding the existing capacity by 145 feet. The estimated westbound left-turn queue is approximately 225 feet in the AM peak hour and 360 feet in the PM peak hour, exceeding the existing capacity by 10 feet and 145 feet, respectively.

At the minor-leg stop-controlled study intersections of Devon Avenue and Access 1-6, all approaches are anticipated to operate at LOS D or better in the AM and PM peak hours for the Future Year 2026 conditions.

At the minor-leg stop-controlled intersection of Busse Road (IL 83) and Access 7, all approaches are anticipated to continue to operate acceptably at LOS C for the AM peak hour. In the PM peak hour, the eastbound approach is projected to increase from LOS D in the Existing 2020 conditions to LOS E in the Future Year 2026 conditions, and the northbound left-turn approach is anticipated to remain operating at LOS D. Low levels-of-service for side-street approaches are not uncommon, as vehicles may experience significant delays turning onto a major roadway.

For all minor-leg stop-controlled study intersections, the 95th percentile queues estimates are approximately one vehicle (approximately 25 feet) or less for all approaches in the AM and PM peak hour.

For the analysis of future traffic conditions, turn lane warrants were evaluated for the study intersections and the proposed site access driveways using guidelines in the IDOT *Bureau of Design and Environment (BDE) Manual*. Based on the IDOT *BDE Manual* volume guidance provided for unsignalized intersections on facilities with a design speed of below 50 MPH (posted speed limits on Busse Road (IL 83) and Devon Avenue are 45 MPH and 40 MPH, respectively), projected future traffic volumes do not meet warrant criteria for an eastbound right-turn lane on Devon Avenue at Access 1-6 or for a southbound right-turn lane on Busse Road (IL 83) at Access 7. Therefore, no right-turn lanes at the site accesses were included in the analysis of future conditions.

For the purposes of this analysis, a single inbound lane and two outbound lanes including a through/left-turn lane and a right-turn lane are recommended for the south legs of the site accesses proposed along Devon Avenue (Access 1-6). A single inbound lane and a shared left-turn/through/right-turn egress lane with minor-leg stop-control is recommended for the west leg of the intersection of Busse Road (IL 83) and Access 7. Minor-leg stop-control is recommended for all outbound traffic at Access 1-7.

RECOMMENDATIONS & CONCLUSIONS

Based on an evaluation of existing and future traffic conditions, the proposed redevelopment is expected to generate approximately 360 trips during the morning peak hour and 360 trips during the evening peak hour. The projected site-generated traffic is not expected to materially impact operations at the study intersections during the peak hours. No improvements were identified for the existing signalized study intersections analyzed at the Future (Year 2026) Build condition. The following improvements are recommended in order to facilitate site access upon construction and occupancy of the subject site:

For each of the proposed intersections of Devon Avenue and Access 1, 3, 4, and 5:

- On site, construct one (1) northbound shared through/left-turn egress lane, one (1) northbound right-turn egress lane, and one (1) ingress lane

For the proposed intersection of Devon Avenue and Access 2 and 6:

- On site, construct one (1) northbound left-turn egress lane, one (1) northbound right-turn egress lane, and one (1) ingress lane

For the proposed intersection of Busse Road (IL 83) and Access 7:

- On site, construct one (1) westbound shared left/right-turn egress lane and one (1) ingress lane

Regardless of the final configuration of the intersection geometrics, several additional items should be taken into consideration when preparing roadway improvement plans for the subject redevelopment. As the design of the site progresses, care should be taken with landscaping, signage, and monumentation at the site access locations to ensure that adequate horizontal sight distance is provided from the new stop bars. If alterations to the site plan or land use should occur, changes to the analysis provided within this traffic impact study may be needed.

APPENDIX

Conceptual Site Plan

CMAP Growth Projections

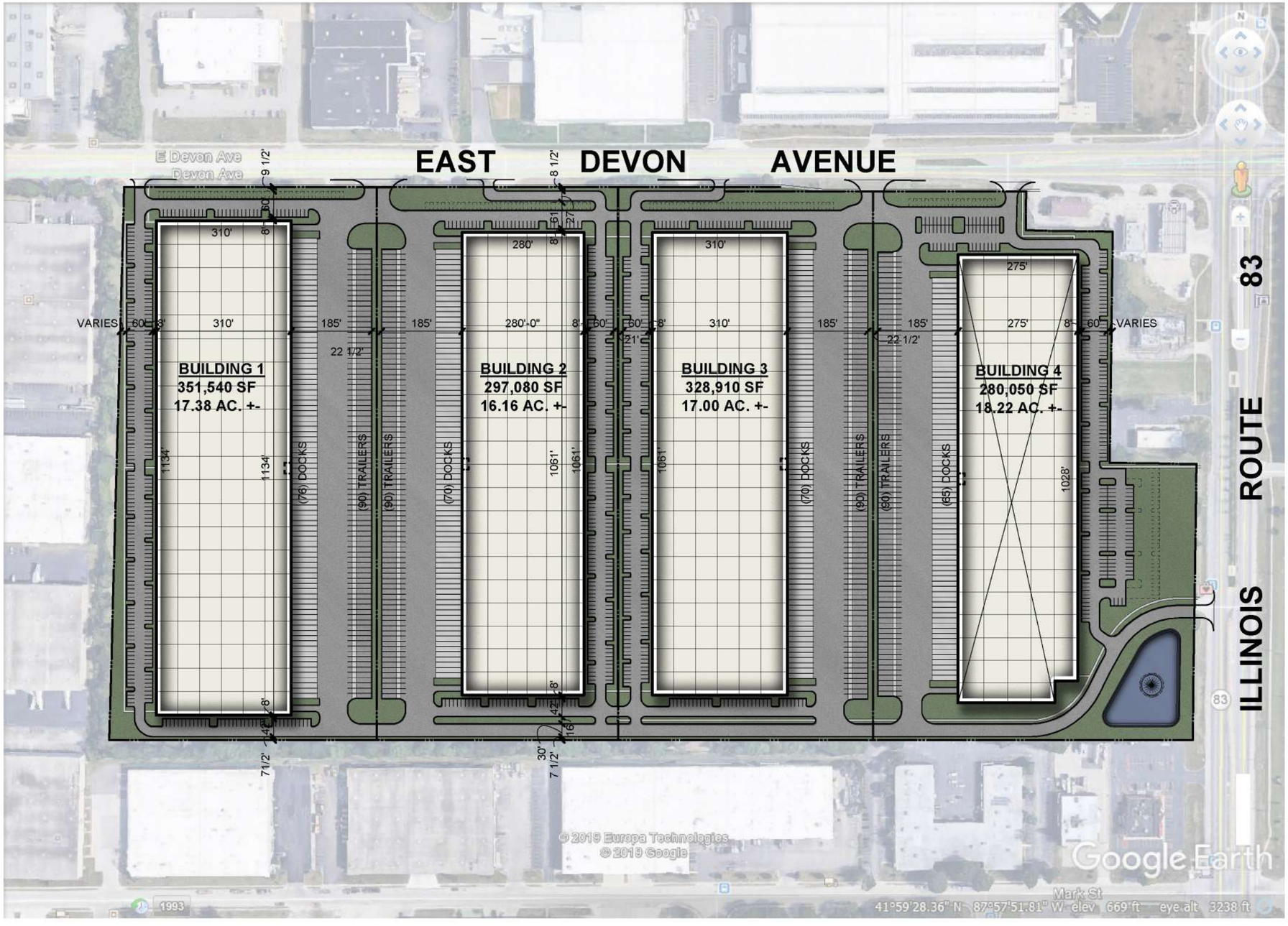
Existing (Year 2020) Capacity Reports

Future (Year 2026) Build Capacity Reports

Data from the ITE Trip Generation, Tenth Edition Manual and Supplement

Traffic Count Data

CONCEPTUAL SITE PLAN



CONCEPTUAL MASTER SITE PLAN FOR:

MOHAWK TERRACE BP

BENSENVILLE, ILLINOIS

SITE AREA (±68.76 AC.)	±2,995,220 SF
DETENTION	TBD

PHASE 1

BUILDING 1

BUILDING AREA	351,540 SF
PARKING	
CAR PARKING PROVIDED	+-286 STALLS
LANDBANKED (ABOVE MAX./IN FRONT YARD)	+-42 STALLS
TRAILER PARKING	85 STALLS
DRIVE IN OVERHEAD DOORS	2 DOORS
TOTAL EXTERIOR DOCKS	76 DOCKS

BUILDING 2

BUILDING AREA	297,080 SF
PARKING	
CAR PARKING PROVIDED	+-257 STALLS
LANDBANKED (ABOVE MAX./IN FRONT YARD)	+-39 STALLS
TRAILER PARKING	85 STALLS
DRIVE IN OVERHEAD DOORS	2 DOORS
TOTAL EXTERIOR DOCKS	70 DOCKS

PHASE 2

BUILDING 3

BUILDING AREA	328,910 SF
PARKING	
CAR PARKING PROVIDED	+-257 STALLS
LANDBANKED (ABOVE MAX./IN FRONT YARD)	+-42 STALLS
TRAILER PARKING	96 STALLS
DRIVE IN OVERHEAD DOORS	2 DOORS
TOTAL EXTERIOR DOCKS	70 DOCKS

BUILDING 4

BUILDING AREA	280,050 SF
PARKING	
CAR PARKING PROVIDED	+-256 STALLS
LANDBANKED (ABOVE MAX./IN FRONT YARD*)	+-77 STALLS
TRAILER PARKING	90 STALLS
DRIVE IN OVERHEAD DOORS	2 DOORS
TOTAL EXTERIOR DOCKS	65 DOCKS

PARKING TOTALS

CAR PARKING PROVIDED	+-1056 STALLS
PARKING REQUIRED BASED ON 10% OFFICE	+-817 STALLS
STALLS OVER 125% MAX. INCL.LANDBANKED	+-235 STALLS

SITE PLAN

220146 11.03.2020

0 25' 125' 250' 500'

HARRIS ARCHITECTS, INC.
WWW.HARRISARCHITECTS.COM 847.303.1155

CMAP GROWTH PROJECTIONS

TRAFFIC FORECAST RECORD

Record Number: du-37-20

Type of Report: Projection

Year Sought: 2050

Analyst: JAR

Organization requesting forecast: Kimley Horn

Contact: Katie Biggs, EIT

Phone number: (630) 487-5757

Sponsor: IDOT

Date request was received: October 1, 2020

Date that response was mailed or faxed: October 6, 2020

Facility Location: Busse Road (IL 83) / Devon Avenue

Municipality: Bensenville

Chicago Metropolitan Agency for Planning

233 South Wacker Drive
Suite 800
Chicago, Illinois 60606

312 454 0400
www.cmap.illinois.gov

October 6, 2020

Katie Biggs, EIT
Transportation Analyst
Kimley-Horn
4201 Winfield Road
Suite 600
Warrenville, IL 60555

Subject: ***Busse Road (IL 83) / Devon Avenue***
IDOT

Dear Ms. Biggs:

In response to a request made on your behalf and dated October 1, 2020, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current Volumes	Year 2050 ADT
Busse Rd (IL 83) north of Devon Ave	36,700	41,100
Busse Rd (IL 83) south of Devon Ave	45,500	53,900
Devon Ave east of Busse Rd	19,100	16,200
Devon Ave west of Busse Rd	18,800	19,900
Lively Rd north of Devon Ave	6,150	7,100
Lively Rd south of Devon Ave	5,800	6,700

Traffic projections are developed using existing ADT data provided in the request letter and the results from the March 2020 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

If you have any questions, please call me at (312) 386-8806.

Sincerely,

Jose Rodriguez, PTP, AICP
Senior Planner, Research & Analysis

cc: Quigley (IDOT)
2020_TrafficForecast\Bensenville\du-37-20\du-37-20.docx

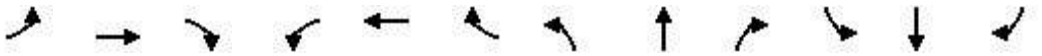
EXISTING (YEAR 2020) CAPACITY REPORTS

Weekday Morning Peak Hour

Weekday Evening Peak Hour

HCM 6th Signalized Intersection Summary
100: Lively Boulevard & Devon Avenue

10/30/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	630	85	50	440	60	30	50	15	25	60	50
Future Volume (veh/h)	75	630	85	50	440	60	30	50	15	25	60	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1781	1781	1678	1663	1663	1637	1485	1485	1530	1501	1618
Adj Flow Rate, veh/h	79	663	89	53	463	63	32	53	16	26	63	53
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	10	8	8	15	16	16	22	28	28	25	32	19
Cap, veh/h	515	1514	203	403	1374	186	267	155	47	254	207	248
Arrive On Green	0.04	0.50	0.50	0.03	0.49	0.49	0.02	0.14	0.14	0.02	0.14	0.14
Sat Flow, veh/h	1668	2999	402	1598	2796	379	1559	1094	330	1457	1501	1372
Grp Volume(v), veh/h	79	374	378	53	261	265	32	0	69	26	63	53
Grp Sat Flow(s),veh/h/ln	1668	1692	1709	1598	1580	1595	1559	0	1424	1457	1501	1372
Q Serve(g_s), s	1.4	8.3	8.3	1.0	5.9	6.0	1.0	0.0	2.6	0.9	2.2	1.9
Cycle Q Clear(g_c), s	1.4	8.3	8.3	1.0	5.9	6.0	1.0	0.0	2.6	0.9	2.2	1.9
Prop In Lane	1.00		0.24	1.00		0.24	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	515	854	863	403	777	784	267	0	201	254	207	248
V/C Ratio(X)	0.15	0.44	0.44	0.13	0.34	0.34	0.12	0.00	0.34	0.10	0.30	0.21
Avail Cap(c_a), veh/h	1011	1872	1890	898	1747	1764	765	0	848	724	894	876
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.0	9.3	9.3	7.5	9.1	9.1	21.3	0.0	22.8	21.4	22.8	20.5
Incr Delay (d2), s/veh	0.1	1.6	1.6	0.1	1.2	1.2	0.2	0.0	2.1	0.2	1.8	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.7	4.8	4.9	0.5	3.2	3.3	0.7	0.0	1.7	0.5	1.5	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.2	10.9	10.9	7.6	10.3	10.3	21.5	0.0	24.9	21.6	24.6	21.4
LnGrp LOS	A	B	B	A	B	B	C	A	C	C	C	C
Approach Vol, veh/h		831			579			101			142	
Approach Delay, s/veh		10.5			10.0			23.8			22.8	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.8	35.7	4.3	14.1	5.5	34.9	4.0	14.3
Change Period (Y+Rc), s	3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0
Max Green Setting (Gmax), s	20.0	65.0	20.0	35.0	20.0	65.0	20.0	35.0
Max Q Clear Time (g_c+I1), s	3.0	10.3	3.0	4.2	3.4	8.0	2.9	4.6
Green Ext Time (p_c), s	0.1	19.4	0.0	1.0	0.1	12.3	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	12.2
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	670	1	1	545	0	1	1	1	5	1	5
Future Vol, veh/h	1	670	1	1	545	0	1	1	1	5	1	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	9	2	2	15	2	2	2	2	67	2	33
Mvmt Flow	1	705	1	1	574	0	1	1	1	5	1	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	574	0	0	706	0	0	999	1284	354	932	1284	288
Stage 1	-	-	-	-	-	-	708	708	-	576	576	-
Stage 2	-	-	-	-	-	-	291	576	-	356	708	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	8.84	6.54	7.56
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	7.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	7.84	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	4.17	4.02	3.63
Pot Cap-1 Maneuver	995	-	-	888	-	0	198	164	642	143	164	624
Stage 1	-	-	-	-	-	0	392	436	-	337	500	-
Stage 2	-	-	-	-	-	0	693	500	-	485	436	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	995	-	-	888	-	-	195	164	641	142	164	623
Mov Cap-2 Maneuver	-	-	-	-	-	-	195	164	-	142	164	-
Stage 1	-	-	-	-	-	-	392	436	-	337	500	-
Stage 2	-	-	-	-	-	-	684	500	-	482	436	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	20.5	22
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	235	995	-	-	888	-	223
HCM Lane V/C Ratio	0.013	0.001	-	-	0.001	-	0.052
HCM Control Delay (s)	20.5	8.6	-	-	9.1	-	22
HCM Lane LOS	C	A	-	-	A	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0	-	0.2

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	675	1	1	540	1	5	1	5	1	1	1
Future Vol, veh/h	1	675	1	1	540	1	5	1	5	1	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	10	100	2	15	2	2	2	2	2	2	2
Mvmt Flow	1	711	1	1	568	1	5	1	5	1	1	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	569	0	0	712	0	0	1002	1285	357	930	1285	286
Stage 1	-	-	-	-	-	-	714	714	-	571	571	-
Stage 2	-	-	-	-	-	-	288	571	-	359	714	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	999	-	-	884	-	-	197	163	639	222	163	711
Stage 1	-	-	-	-	-	-	388	433	-	473	503	-
Stage 2	-	-	-	-	-	-	695	503	-	632	433	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	999	-	-	884	-	-	195	163	638	218	163	710
Mov Cap-2 Maneuver	-	-	-	-	-	-	195	163	-	218	163	-
Stage 1	-	-	-	-	-	-	388	433	-	473	502	-
Stage 2	-	-	-	-	-	-	691	502	-	624	433	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	18.5	19.8
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	278	999	-	-	884	-	-	247
HCM Lane V/C Ratio	0.042	0.001	-	-	0.001	-	-	0.013
HCM Control Delay (s)	18.5	8.6	-	-	9.1	-	-	19.8
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	680	1	1	540	5	1	1	5	1	1	1
Future Vol, veh/h	1	680	1	1	540	5	1	1	5	1	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	9	100	2	16	2	2	2	2	2	2	2
Mvmt Flow	1	716	1	1	568	5	1	1	5	1	1	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	573	0	0	717	0	0	1007	1294	360	935	1292	288
Stage 1	-	-	-	-	-	-	719	719	-	573	573	-
Stage 2	-	-	-	-	-	-	288	575	-	362	719	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	996	-	-	880	-	-	195	161	637	220	162	709
Stage 1	-	-	-	-	-	-	386	431	-	472	502	-
Stage 2	-	-	-	-	-	-	695	501	-	629	431	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	996	-	-	880	-	-	193	161	636	216	162	708
Mov Cap-2 Maneuver	-	-	-	-	-	-	193	161	-	216	162	-
Stage 1	-	-	-	-	-	-	386	431	-	472	501	-
Stage 2	-	-	-	-	-	-	691	500	-	621	431	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	15.1	19.8
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	364	996	-	-	880	-	-	246
HCM Lane V/C Ratio	0.02	0.001	-	-	0.001	-	-	0.013
HCM Control Delay (s)	15.1	8.6	-	-	9.1	-	-	19.8
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

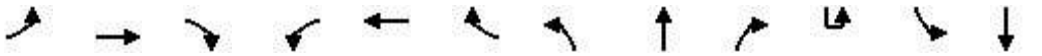
Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Vol, veh/h	680	5	5	1	540	5	10
Future Vol, veh/h	680	5	5	1	540	5	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	-	None	-	None
Storage Length	-	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	-	0	0	-
Grade, %	0	-	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95	95
Heavy Vehicles, %	9	2	2	2	15	2	10
Mvmt Flow	716	5	5	1	568	5	11

Major/Minor	Major1		Major2			Minor1	
Conflicting Flow All	0	0	721	721	0	1015	361
Stage 1	-	-	-	-	-	719	-
Stage 2	-	-	-	-	-	296	-
Critical Hdwy	-	-	6.44	4.14	-	6.84	7.1
Critical Hdwy Stg 1	-	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.52	2.22	-	3.52	3.4
Pot Cap-1 Maneuver	-	-	501	877	-	234	613
Stage 1	-	-	-	-	-	444	-
Stage 2	-	-	-	-	-	729	-
Platoon blocked, %	-	-			-		
Mov Cap-1 Maneuver	-	-	532	532	-	231	613
Mov Cap-2 Maneuver	-	-	-	-	-	231	-
Stage 1	-	-	-	-	-	444	-
Stage 2	-	-	-	-	-	721	-

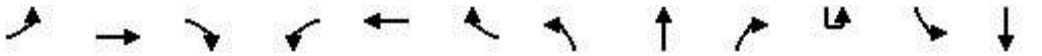
Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	14.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	395	-	-	532	-
HCM Lane V/C Ratio	0.04	-	-	0.012	-
HCM Control Delay (s)	14.5	-	-	11.9	-
HCM Lane LOS	B	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	150	410	135	235	300	85	115	1410	420	10	125	805
Future Volume (vph)	150	410	135	235	300	85	115	1410	420	10	125	805
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	1900	2000
Storage Length (ft)	185		185	215		165	190		235		220	
Storage Lanes	2		1	2		1	2		1		2	
Taper Length (ft)	205			200			225				225	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.91	0.97	0.91
Ped Bike Factor	1.00		0.99									
Frt			0.850			0.850			0.850			
Flt Protected	0.950			0.950			0.950				0.950	
Satd. Flow (prot)	3099	3551	1455	2736	3304	1324	2968	4667	1417	0	3256	4368
Flt Permitted	0.950			0.950			0.950				0.950	
Satd. Flow (perm)	3097	3551	1436	2736	3304	1324	2968	4667	1417	0	3256	4368
Right Turn on Red			No			No			No			
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			45				45
Link Distance (ft)		546			1578			1049				625
Travel Time (s)		9.3			26.9			15.9				9.5
Confl. Peds. (#/hr)	1		1									
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	13%	7%	11%	28%	15%	22%	18%	17%	14%	2%	8%	25%
Adj. Flow (vph)	158	432	142	247	316	89	121	1484	442	11	132	847
Shared Lane Traffic (%)												
Lane Group Flow (vph)	158	432	142	247	316	89	121	1484	442	0	143	847
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		30			30			30				30
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	1.00	0.94
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors	1	2	1	1	2	1	1	2	1	1	1	2
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Left	Thru
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	20	100
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	120
Future Volume (vph)	120
Ideal Flow (vphpl)	1900
Storage Length (ft)	200
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1392
Flt Permitted	
Satd. Flow (perm)	1392
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	0.95
Heavy Vehicles (%)	16%
Adj. Flow (vph)	126
Shared Lane Traffic (%)	
Lane Group Flow (vph)	126
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	20
Trailing Detector (ft)	0
Detector 1 Position(ft)	0
Detector 1 Size(ft)	20
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pt+ov	Prot	Prot	NA
Protected Phases	3	8	5	7	4	1!	5	2	2 7	1!	1	6
Permitted Phases			8			4						
Detector Phase	3	8	5	7	4	1	5	2	2 7	1	1	6
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0		3.0	3.0	15.0
Minimum Split (s)	7.5	61.5	7.5	7.5	63.5	7.5	7.5	53.5		7.5	7.5	53.5
Total Split (s)	19.0	38.0	19.0	19.0	38.0	19.0	19.0	74.0		19.0	19.0	74.0
Total Split (%)	12.7%	25.3%	12.7%	12.7%	25.3%	12.7%	12.7%	49.3%		12.7%	12.7%	49.3%
Maximum Green (s)	14.5	31.5	14.5	14.5	31.5	14.5	14.5	67.5		14.5	14.5	67.5
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5		3.5	3.5	4.5
All-Red Time (s)	1.0	2.0	1.0	1.0	2.0	1.0	1.0	2.0		1.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	4.5	6.5	4.5	4.5	6.5	4.5	4.5	6.5			4.5	6.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0	3.0	3.0	7.0		3.0	3.0	7.0
Recall Mode	None	None	None	None	None	None	None	C-Min		None	None	C-Min
Walk Time (s)		7.0			7.0			7.0				7.0
Flash Dont Walk (s)		48.0			50.0			40.0				40.0
Pedestrian Calls (#/hr)		0			0			0				0
Act Effct Green (s)	12.5	28.2	41.6	14.5	30.2	48.4	11.4	73.6	92.6		11.7	73.9
Actuated g/C Ratio	0.08	0.19	0.28	0.10	0.20	0.32	0.08	0.49	0.62		0.08	0.49
v/c Ratio	0.61	0.65	0.36	0.94	0.48	0.21	0.54	0.65	0.51		0.56	0.39
Control Delay	76.6	60.9	41.6	107.4	55.4	37.4	75.3	31.0	19.5		75.0	25.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	76.6	60.9	41.6	107.4	55.4	37.4	75.3	31.0	19.5		75.0	25.4
LOS	E	E	D	F	E	D	E	C	B		E	C
Approach Delay		60.5			72.6			31.1				30.4
Approach LOS		E			E			C				C
Queue Length 50th (ft)	78	207	106	125	145	63	59	393	233		70	189
Queue Length 95th (ft)	117	261	160	#213	194	107	93	480	359		106	243
Internal Link Dist (ft)		466			1498			969				545
Turn Bay Length (ft)	185		185	215		165	190		235		220	
Base Capacity (vph)	299	745	429	264	693	451	286	2289	874		314	2153
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Reduced v/c Ratio	0.53	0.58	0.33	0.94	0.46	0.20	0.42	0.65	0.51		0.46	0.39

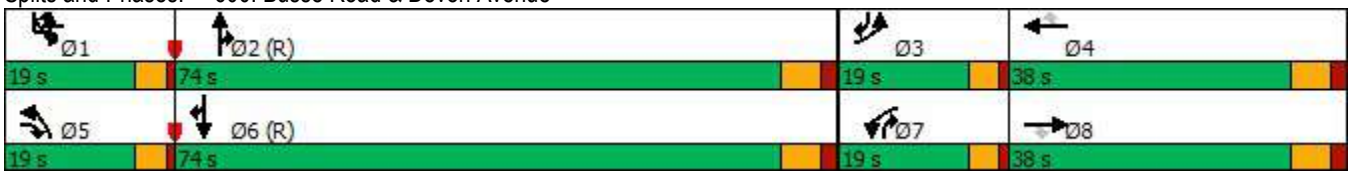
Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 75 (50%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 41.6	Intersection LOS: D

Lane Group	SBR
Turn Type	pt+ov
Protected Phases	6 3
Permitted Phases	
Detector Phase	6 3
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	90.9
Actuated g/C Ratio	0.61
v/c Ratio	0.15
Control Delay	14.0
Queue Delay	0.0
Total Delay	14.0
LOS	B
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	51
Queue Length 95th (ft)	90
Internal Link Dist (ft)	
Turn Bay Length (ft)	200
Base Capacity (vph)	862
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.15

Intersection Summary

Intersection Capacity Utilization 68.4% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
! Phase conflict between lane groups.

Splits and Phases: 600: Busse Road & Devon Avenue



Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	1	10	10	10	1945	1175	1
Future Vol, veh/h	1	10	10	10	1945	1175	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	-	-	115	-	-	-
Veh in Median Storage, #	0	-	-	-	0	0	-
Grade, %	0	-	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95	95
Heavy Vehicles, %	2	17	2	10	15	23	50
Mvmt Flow	1	11	11	11	2047	1237	1

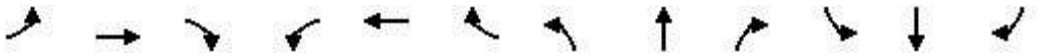
Major/Minor	Minor2		Major1			Major2	
Conflicting Flow All	2101	619	904	1238	0	-	0
Stage 1	1238	-	-	-	-	-	-
Stage 2	863	-	-	-	-	-	-
Critical Hdwy	5.74	7.44	5.64	5.5	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.07	2.32	3.2	-	-	-
Pot Cap-1 Maneuver	83	342	497	280	-	-	-
Stage 1	173	-	-	-	-	-	-
Stage 2	338	-	-	-	-	-	-
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	78	342	354	354	-	-	-
Mov Cap-2 Maneuver	78	-	-	-	-	-	-
Stage 1	163	-	-	-	-	-	-
Stage 2	338	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19.4	0.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	354	-	262	-	-
HCM Lane V/C Ratio	0.059	-	0.044	-	-
HCM Control Delay (s)	15.8	-	19.4	-	-
HCM Lane LOS	C	-	C	-	-
HCM 95th %tile Q(veh)	0.2	-	0.1	-	-

HCM 6th Signalized Intersection Summary
100: Lively Boulevard & Devon Avenue

10/30/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	580	25	25	700	40	90	50	50	60	115	155
Future Volume (veh/h)	25	580	25	25	700	40	90	50	50	60	115	155
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1844	1530	1811	1906	1914	1426	1501	1707	1750	1811
Adj Flow Rate, veh/h	26	611	26	26	737	42	95	53	53	63	121	163
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	10	10	10	25	6	6	4	32	32	13	16	6
Cap, veh/h	351	1560	66	366	1587	90	343	123	123	317	299	289
Arrive On Green	0.02	0.48	0.48	0.02	0.48	0.48	0.06	0.19	0.19	0.04	0.17	0.17
Sat Flow, veh/h	1668	3253	138	1457	3309	189	1823	653	653	1626	1750	1535
Grp Volume(v), veh/h	26	312	325	26	383	396	95	0	106	63	121	163
Grp Sat Flow(s),veh/h/ln	1668	1664	1727	1457	1721	1777	1823	0	1306	1626	1750	1535
Q Serve(g_s), s	0.5	8.0	8.0	0.6	9.9	9.9	2.8	0.0	4.8	2.1	4.1	6.4
Cycle Q Clear(g_c), s	0.5	8.0	8.0	0.6	9.9	9.9	2.8	0.0	4.8	2.1	4.1	6.4
Prop In Lane	1.00		0.08	1.00		0.11	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	351	798	828	366	825	852	343	0	247	317	299	289
V/C Ratio(X)	0.07	0.39	0.39	0.07	0.46	0.46	0.28	0.00	0.43	0.20	0.40	0.56
Avail Cap(c_a), veh/h	824	1626	1687	778	1681	1736	779	0	687	735	921	834
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.3	11.1	11.1	9.1	11.6	11.6	20.6	0.0	23.8	21.5	24.6	24.5
Incr Delay (d2), s/veh	0.1	1.4	1.4	0.1	1.9	1.8	0.4	0.0	2.5	0.3	1.9	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.3	4.9	5.1	0.3	6.3	6.5	2.1	0.0	2.8	1.4	3.2	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.4	12.5	12.5	9.2	13.5	13.4	21.1	0.0	26.3	21.8	26.5	28.2
LnGrp LOS	A	B	B	A	B	B	C	A	C	C	C	C
Approach Vol, veh/h		663			805			201			347	
Approach Delay, s/veh		12.4			13.3			23.8			26.4	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.1	37.9	7.1	17.4	4.1	37.9	5.9	18.6
Change Period (Y+Rc), s	3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0
Max Green Setting (Gmax), s	20.0	65.0	20.0	35.0	20.0	65.0	20.0	35.0
Max Q Clear Time (g_c+I1), s	2.6	10.0	4.8	8.4	2.5	11.9	4.1	6.8
Green Ext Time (p_c), s	0.0	15.5	0.2	2.6	0.0	20.0	0.1	1.1

Intersection Summary	
HCM 6th Ctrl Delay	16.3
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	685	5	1	725	0	5	0	1	15	1	35
Future Vol, veh/h	0	685	5	1	725	0	5	0	1	15	1	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	8	2	2	8	2	2	2	2	8	2	2
Mvmt Flow	0	721	5	1	763	0	5	0	1	16	1	37

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	763	0	0	726	0	0	1109	1489	364	1127	1491	383
Stage 1	-	-	-	-	-	-	724	724	-	765	765	-
Stage 2	-	-	-	-	-	-	385	765	-	362	726	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.66	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.66	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.66	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.58	4.02	3.32
Pot Cap-1 Maneuver	845	-	-	873	-	0	164	123	633	152	123	615
Stage 1	-	-	-	-	-	0	383	429	-	349	410	-
Stage 2	-	-	-	-	-	0	610	410	-	613	428	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	845	-	-	873	-	-	153	123	632	152	123	614
Mov Cap-2 Maneuver	-	-	-	-	-	-	153	123	-	152	123	-
Stage 1	-	-	-	-	-	-	383	429	-	349	410	-
Stage 2	-	-	-	-	-	-	571	410	-	611	428	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	26.3	19
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	175	845	-	-	873	-	311
HCM Lane V/C Ratio	0.036	-	-	-	0.001	-	0.173
HCM Control Delay (s)	26.3	0	-	-	9.1	-	19
HCM Lane LOS	D	A	-	-	A	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	0.6

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	700	1	5	725	1	1	1	1	1	1	1
Future Vol, veh/h	1	700	1	5	725	1	1	1	1	1	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	8	2	2	8	2	2	2	2	2	2	2
Mvmt Flow	1	737	1	5	763	1	1	1	1	1	1	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	764	0	0	738	0	0	1133	1514	370	1146	1514	383
Stage 1	-	-	-	-	-	-	740	740	-	774	774	-
Stage 2	-	-	-	-	-	-	393	774	-	372	740	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	845	-	-	864	-	-	158	119	627	154	119	615
Stage 1	-	-	-	-	-	-	375	421	-	357	406	-
Stage 2	-	-	-	-	-	-	603	406	-	621	421	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	845	-	-	864	-	-	156	118	626	152	118	614
Mov Cap-2 Maneuver	-	-	-	-	-	-	156	118	-	152	118	-
Stage 1	-	-	-	-	-	-	375	421	-	357	404	-
Stage 2	-	-	-	-	-	-	596	404	-	617	421	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.1	25.1	25.4
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	182	845	-	-	864	-	-	180
HCM Lane V/C Ratio	0.017	0.001	-	-	0.006	-	-	0.018
HCM Control Delay (s)	25.1	9.3	-	-	9.2	-	-	25.4
HCM Lane LOS	D	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	695	5	5	725	1	5	1	1	1	1	1
Future Vol, veh/h	1	695	5	5	725	1	5	1	1	1	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	10	2	2	8	2	2	2	2	2	2	2
Mvmt Flow	1	732	5	5	763	1	5	1	1	1	1	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	764	0	0	737	0	0	1130	1511	370	1144	1513	383
Stage 1	-	-	-	-	-	-	737	737	-	774	774	-
Stage 2	-	-	-	-	-	-	393	774	-	370	739	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	845	-	-	865	-	-	158	119	627	155	119	615
Stage 1	-	-	-	-	-	-	376	423	-	357	406	-
Stage 2	-	-	-	-	-	-	603	406	-	622	422	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	845	-	-	865	-	-	156	118	626	153	118	614
Mov Cap-2 Maneuver	-	-	-	-	-	-	156	118	-	153	118	-
Stage 1	-	-	-	-	-	-	376	423	-	357	404	-
Stage 2	-	-	-	-	-	-	596	404	-	618	422	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.1	27.7	25.4
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	166	845	-	-	865	-	-	180
HCM Lane V/C Ratio	0.044	0.001	-	-	0.006	-	-	0.018
HCM Control Delay (s)	27.7	9.3	-	-	9.2	-	-	25.4
HCM Lane LOS	D	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

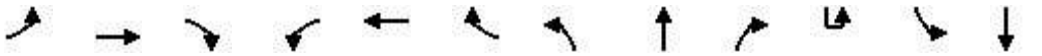
Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Vol, veh/h	690	5	10	5	725	5	5
Future Vol, veh/h	690	5	10	5	725	5	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	-	None	-	None
Storage Length	-	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	-	0	0	-
Grade, %	0	-	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95	95
Heavy Vehicles, %	9	2	2	2	8	2	2
Mvmt Flow	726	5	11	5	763	5	5

Major/Minor	Major1		Major2			Minor1	
Conflicting Flow All	0	0	732	731	0	1143	366
Stage 1	-	-	-	-	-	729	-
Stage 2	-	-	-	-	-	414	-
Critical Hdwy	-	-	6.44	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.52	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	493	869	-	194	631
Stage 1	-	-	-	-	-	438	-
Stage 2	-	-	-	-	-	635	-
Platoon blocked, %	-	-			-		
Mov Cap-1 Maneuver	-	-	572	572	-	189	631
Mov Cap-2 Maneuver	-	-	-	-	-	189	-
Stage 1	-	-	-	-	-	438	-
Stage 2	-	-	-	-	-	617	-

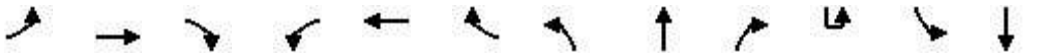
Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	17.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	291	-	-	572	-
HCM Lane V/C Ratio	0.036	-	-	0.028	-
HCM Control Delay (s)	17.8	-	-	11.5	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	160	410	135	420	450	125	130	950	260	5	85	1405
Future Volume (vph)	160	410	135	420	450	125	130	950	260	5	85	1405
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	1900	2000
Storage Length (ft)	185		185	215		165	190		235		220	
Storage Lanes	2		1	2		1	2		1		2	
Taper Length (ft)	205			200			225				225	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.91	0.97	0.91
Ped Bike Factor	1.00		0.99									
Frt			0.850			0.850			0.850			
Flt Protected	0.950			0.950			0.950				0.950	
Satd. Flow (prot)	3155	3455	1509	3155	3585	1495	3019	4627	1392	0	2808	5103
Flt Permitted	0.950			0.950			0.950				0.950	
Satd. Flow (perm)	3153	3455	1490	3155	3585	1495	3019	4627	1392	0	2808	5103
Right Turn on Red			No			No			No			
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			45				45
Link Distance (ft)		546			1578			1049				625
Travel Time (s)		9.3			26.9			15.9				9.5
Confl. Peds. (#/hr)	1		1									
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	11%	10%	7%	11%	6%	8%	16%	18%	16%	2%	26%	7%
Adj. Flow (vph)	168	432	142	442	474	132	137	1000	274	5	89	1479
Shared Lane Traffic (%)												
Lane Group Flow (vph)	168	432	142	442	474	132	137	1000	274	0	94	1479
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		24			24			24				24
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	1.00	0.94
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors	1	2	1	1	2	1	1	2	1	1	1	2
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Left	Thru
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	20	100
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	140
Future Volume (vph)	140
Ideal Flow (vphpl)	1900
Storage Length (ft)	200
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1482
Flt Permitted	
Satd. Flow (perm)	1482
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	0.95
Heavy Vehicles (%)	9%
Adj. Flow (vph)	147
Shared Lane Traffic (%)	
Lane Group Flow (vph)	147
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	20
Trailing Detector (ft)	0
Detector 1 Position(ft)	0
Detector 1 Size(ft)	20
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pt+ov	Prot	Prot	NA
Protected Phases	3	8	5	7	4	1!	5	2	2 7	1!	1	6
Permitted Phases			8			4						
Detector Phase	3	8	5	7	4	1	5	2	2 7	1	1	6
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0		3.0	3.0	15.0
Minimum Split (s)	7.5	61.5	7.5	7.5	63.5	7.5	7.5	53.5		7.5	7.5	53.5
Total Split (s)	29.0	38.0	16.0	24.0	33.0	15.0	16.0	73.0		15.0	15.0	72.0
Total Split (%)	19.3%	25.3%	10.7%	16.0%	22.0%	10.0%	10.7%	48.7%		10.0%	10.0%	48.0%
Maximum Green (s)	24.5	31.5	11.5	19.5	26.5	10.5	11.5	66.5		10.5	10.5	65.5
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5		3.5	3.5	4.5
All-Red Time (s)	1.0	2.0	1.0	1.0	2.0	1.0	1.0	2.0		1.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	4.5	6.5	4.5	4.5	6.5	4.5	4.5	6.5			4.5	6.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0	3.0	3.0	7.0		3.0	3.0	7.0
Recall Mode	None	None	None	None	None	None	None	C-Min		None	None	C-Min
Walk Time (s)		7.0			7.0			7.0				7.0
Flash Dont Walk (s)		48.0			50.0			40.0				40.0
Pedestrian Calls (#/hr)		0			0			0				0
Act Effct Green (s)	13.3	28.4	41.3	19.5	34.6	50.6	10.9	70.6	94.6		9.5	69.2
Actuated g/C Ratio	0.09	0.19	0.28	0.13	0.23	0.34	0.07	0.47	0.63		0.06	0.46
v/c Ratio	0.60	0.66	0.35	1.08	0.57	0.26	0.63	0.46	0.31		0.53	0.63
Control Delay	74.5	61.3	41.8	126.4	54.3	37.4	80.6	28.3	14.6		78.8	32.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	74.5	61.3	41.8	126.4	54.3	37.4	80.6	28.3	14.6		78.8	32.7
LOS	E	E	D	F	D	D	F	C	B		E	C
Approach Delay		60.6			82.6			30.7				33.7
Approach LOS		E			F			C				C
Queue Length 50th (ft)	82	207	105	~247	216	92	67	243	121		46	406
Queue Length 95th (ft)	120	262	164	#360	280	152	106	294	185		78	469
Internal Link Dist (ft)		466			1498			969				545
Turn Bay Length (ft)	185		185	215		165	190		235		220	
Base Capacity (vph)	515	725	418	410	826	514	233	2176	877		196	2355
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Reduced v/c Ratio	0.33	0.60	0.34	1.08	0.57	0.26	0.59	0.46	0.31		0.48	0.63

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 86 (57%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 47.3	Intersection LOS: D

Lane Group	SBR
Turn Type	pt+ov
Protected Phases	6 3
Permitted Phases	
Detector Phase	6 3
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	87.1
Actuated g/C Ratio	0.58
v/c Ratio	0.17
Control Delay	15.6
Queue Delay	0.0
Total Delay	15.6
LOS	B
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	67
Queue Length 95th (ft)	103
Internal Link Dist (ft)	
Turn Bay Length (ft)	200
Base Capacity (vph)	970
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.15

Intersection Summary

Intersection Capacity Utilization 73.4% ICU Level of Service D
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
! Phase conflict between lane groups.

Splits and Phases: 600: Busse Road & Devon Avenue

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	1	10	1	10	1340	1950	10
Future Vol, veh/h	1	10	1	10	1340	1950	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	-	-	115	-	-	-
Veh in Median Storage, #	0	-	-	-	0	0	-
Grade, %	0	-	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	16	7	2
Mvmt Flow	1	11	1	11	1411	2053	11

Major/Minor	Minor2		Major1			Major2	
Conflicting Flow All	2647	1032	1506	2064	0	-	0
Stage 1	2059	-	-	-	-	-	-
Stage 2	588	-	-	-	-	-	-
Critical Hdwy	5.74	7.14	5.64	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	2.32	3.12	-	-	-
Pot Cap-1 Maneuver	41	197	229	116	-	-	-
Stage 1	52	-	-	-	-	-	-
Stage 2	472	-	-	-	-	-	-
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	37	197	121	121	-	-	-
Mov Cap-2 Maneuver	37	-	-	-	-	-	-
Stage 1	47	-	-	-	-	-	-
Stage 2	472	-	-	-	-	-	-

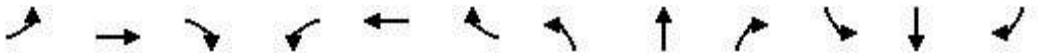
Approach	EB	NB	SB
HCM Control Delay, s	32.8	0.3	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	121	-	141	-	-
HCM Lane V/C Ratio	0.096	-	0.082	-	-
HCM Control Delay (s)	37.8	-	32.8	-	-
HCM Lane LOS	E	-	D	-	-
HCM 95th %tile Q(veh)	0.3	-	0.3	-	-

FUTURE (YEAR 2026) BUILD CAPACITY REPORTS

Weekday Morning Peak Hour

Weekday Evening Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	725	85	50	460	65	30	50	20	40	60	50
Future Volume (veh/h)	75	725	85	50	460	65	30	50	20	40	60	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1781	1781	1678	1678	1678	1637	1485	1485	1663	1501	1618
Adj Flow Rate, veh/h	79	763	89	53	484	68	32	53	21	42	63	53
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	10	8	8	15	15	15	22	28	28	16	32	19
Cap, veh/h	520	1637	191	379	1471	206	253	129	51	250	202	242
Arrive On Green	0.04	0.54	0.54	0.03	0.52	0.52	0.02	0.13	0.13	0.03	0.13	0.13
Sat Flow, veh/h	1668	3054	356	1598	2808	393	1559	1010	400	1584	1501	1372
Grp Volume(v), veh/h	79	423	429	53	274	278	32	0	74	42	63	53
Grp Sat Flow(s),veh/h/ln	1668	1692	1717	1598	1594	1607	1559	0	1411	1584	1501	1372
Q Serve(g_s), s	1.4	10.0	10.0	1.0	6.4	6.4	1.2	0.0	3.1	1.5	2.5	2.1
Cycle Q Clear(g_c), s	1.4	10.0	10.0	1.0	6.4	6.4	1.2	0.0	3.1	1.5	2.5	2.1
Prop In Lane	1.00		0.21	1.00		0.24	1.00		0.28	1.00		1.00
Lane Grp Cap(c), veh/h	520	907	921	379	835	842	253	0	180	250	202	242
V/C Ratio(X)	0.15	0.47	0.47	0.14	0.33	0.33	0.13	0.00	0.41	0.17	0.31	0.22
Avail Cap(c_a), veh/h	967	1701	1726	827	1602	1615	702	0	764	694	812	799
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.8	9.3	9.3	7.4	8.9	8.9	23.9	0.0	26.0	23.7	25.3	22.8
Incr Delay (d2), s/veh	0.1	1.7	1.7	0.2	1.0	1.1	0.2	0.0	3.2	0.3	1.8	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.7	5.8	5.9	0.5	3.5	3.6	0.8	0.0	2.1	1.0	1.7	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.9	11.0	11.0	7.6	9.9	9.9	24.2	0.0	29.2	24.0	27.1	23.8
LnGrp LOS	A	B	B	A	A	A	C	A	C	C	C	C
Approach Vol, veh/h		931			605			106			158	
Approach Delay, s/veh		10.6			9.7			27.7			25.2	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.9	40.7	4.4	14.7	5.7	39.9	4.9	14.2
Change Period (Y+Rc), s	3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0
Max Green Setting (Gmax), s	20.0	65.0	20.0	35.0	20.0	65.0	20.0	35.0
Max Q Clear Time (g_c+I1), s	3.0	12.0	3.2	4.5	3.4	8.4	3.5	5.1
Green Ext Time (p_c), s	0.1	22.7	0.0	1.0	0.1	13.1	0.1	0.7

Intersection Summary	
HCM 6th Ctrl Delay	12.6
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	755	30	30	560	0	10	0	10	5	1	5
Future Vol, veh/h	0	755	30	30	560	0	10	0	10	5	1	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	100	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	9	2	2	15	2	2	2	2	67	2	33
Mvmt Flow	0	795	32	32	589	0	11	0	11	5	1	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	589	0	0	827	0	0	1171	1464	415	1052	1480	296
Stage 1	-	-	-	-	-	-	811	811	-	653	653	-
Stage 2	-	-	-	-	-	-	360	653	-	399	827	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	8.84	6.54	7.56
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	7.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	7.84	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	4.17	4.02	3.63
Pot Cap-1 Maneuver	982	-	-	800	-	0	148	127	586	113	124	616
Stage 1	-	-	-	-	-	0	339	391	-	297	462	-
Stage 2	-	-	-	-	-	0	631	462	-	452	384	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	982	-	-	800	-	-	141	122	585	107	119	615
Mov Cap-2 Maneuver	-	-	-	-	-	-	141	122	-	107	119	-
Stage 1	-	-	-	-	-	-	339	391	-	297	444	-
Stage 2	-	-	-	-	-	-	599	444	-	443	384	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.5	22	27.2
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	141	585	982	-	-	800	-	174
HCM Lane V/C Ratio	0.075	0.018	-	-	-	0.039	-	0.067
HCM Control Delay (s)	32.6	11.3	0	-	-	9.7	-	27.2
HCM Lane LOS	D	B	A	-	-	A	-	D
HCM 95th %tile Q(veh)	0.2	0.1	0	-	-	0.1	-	0.2

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	765	5	5	590	1	5
Future Vol, veh/h	765	5	5	590	1	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	100	100	2	2	100
Mvmt Flow	805	5	5	621	1	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	810	0	1129	405
Stage 1	-	-	-	-	808	-
Stage 2	-	-	-	-	321	-
Critical Hdwy	-	-	6.1	-	6.84	8.9
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	3.2	-	3.52	4.3
Pot Cap-1 Maneuver	-	-	400	-	198	388
Stage 1	-	-	-	-	399	-
Stage 2	-	-	-	-	708	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	400	-	196	388
Mov Cap-2 Maneuver	-	-	-	-	311	-
Stage 1	-	-	-	-	399	-
Stage 2	-	-	-	-	700	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	14.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	311	388	-	-	400	-
HCM Lane V/C Ratio	0.003	0.014	-	-	0.013	-
HCM Control Delay (s)	16.6	14.4	-	-	14.1	-
HCM Lane LOS	C	B	-	-	B	-
HCM 95th %tile Q(veh)	0	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	740	30	30	585	1	10	1	5	1	1	1
Future Vol, veh/h	1	740	30	30	585	1	10	1	5	1	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	100	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	11	2	2	15	2	2	2	2	2	2	2
Mvmt Flow	1	779	32	32	616	1	11	1	5	1	1	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	617	0	0	811	0	0	1171	1478	407	1074	1494	310
Stage 1	-	-	-	-	-	-	797	797	-	681	681	-
Stage 2	-	-	-	-	-	-	374	681	-	393	813	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	959	-	-	811	-	-	148	125	593	174	122	686
Stage 1	-	-	-	-	-	-	346	397	-	407	448	-
Stage 2	-	-	-	-	-	-	619	448	-	603	390	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	959	-	-	811	-	-	142	120	592	166	117	685
Mov Cap-2 Maneuver	-	-	-	-	-	-	142	120	-	166	117	-
Stage 1	-	-	-	-	-	-	346	397	-	407	431	-
Stage 2	-	-	-	-	-	-	592	431	-	595	390	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.5	26.2	24.6
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	140	592	959	-	-	811	-	-	187
HCM Lane V/C Ratio	0.083	0.009	0.001	-	-	0.039	-	-	0.017
HCM Control Delay (s)	33	11.1	8.8	-	-	9.6	-	-	24.6
HCM Lane LOS	D	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.3	0	0	-	-	0.1	-	-	0.1

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	715	30	20	610	5	5	1	5	1	1	1
Future Vol, veh/h	1	715	30	20	610	5	5	1	5	1	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	100	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	10	2	2	15	2	2	2	2	2	2	2
Mvmt Flow	1	753	32	21	642	5	5	1	5	1	1	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	647	0	0	785	0	0	1136	1460	394	1067	1474	325
Stage 1	-	-	-	-	-	-	771	771	-	687	687	-
Stage 2	-	-	-	-	-	-	365	689	-	380	787	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	934	-	-	829	-	-	157	128	605	176	125	671
Stage 1	-	-	-	-	-	-	359	408	-	403	446	-
Stage 2	-	-	-	-	-	-	627	445	-	614	401	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	934	-	-	829	-	-	152	125	604	170	122	670
Mov Cap-2 Maneuver	-	-	-	-	-	-	152	125	-	170	122	-
Stage 1	-	-	-	-	-	-	359	408	-	403	435	-
Stage 2	-	-	-	-	-	-	608	434	-	606	401	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	21.7	24
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	147	604	934	-	-	829	-	-	193
HCM Lane V/C Ratio	0.043	0.009	0.001	-	-	0.025	-	-	0.016
HCM Control Delay (s)	30.6	11	8.9	-	-	9.5	-	-	24
HCM Lane LOS	D	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0	0	-	-	0.1	-	-	0.1

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	715	5	5	645	1	1	0	5	0	0	1
Future Vol, veh/h	1	715	5	5	645	1	1	0	5	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	100	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	100	100	2	2	2	2	100	2	2	2
Mvmt Flow	1	753	5	5	679	1	1	0	5	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	680	0	0	758	0	0	1108	1448	379	1069	1450	340
Stage 1	-	-	-	-	-	-	758	758	-	690	690	-
Stage 2	-	-	-	-	-	-	350	690	-	379	760	-
Critical Hdwy	4.14	-	-	6.1	-	-	7.54	6.54	8.9	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	3.2	-	-	3.52	4.02	4.3	3.52	4.02	3.32
Pot Cap-1 Maneuver	908	-	-	428	-	-	164	130	408	176	130	656
Stage 1	-	-	-	-	-	-	365	413	-	401	444	-
Stage 2	-	-	-	-	-	-	639	444	-	615	413	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	908	-	-	428	-	-	162	128	408	172	128	656
Mov Cap-2 Maneuver	-	-	-	-	-	-	162	128	-	172	128	-
Stage 1	-	-	-	-	-	-	365	413	-	401	439	-
Stage 2	-	-	-	-	-	-	631	439	-	606	413	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.1	16.2	10.5
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	162	408	908	-	-	428	-	-	656
HCM Lane V/C Ratio	0.006	0.013	0.001	-	-	0.012	-	-	0.002
HCM Control Delay (s)	27.4	13.9	9	-	-	13.5	-	-	10.5
HCM Lane LOS	D	B	A	-	-	B	-	-	B
HCM 95th %tile Q(veh)	0	0	0	-	-	0	-	-	0

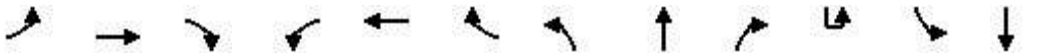
Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Vol, veh/h	705	15	5	10	635	5	1
Future Vol, veh/h	705	15	5	10	635	5	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	-	None	-	None
Storage Length	-	-	-	50	-	0	100
Veh in Median Storage, #	0	-	-	-	0	0	-
Grade, %	0	-	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95	95
Heavy Vehicles, %	10	2	2	2	14	2	2
Mvmt Flow	742	16	5	11	668	5	1

Major/Minor	Major1		Major2			Minor1	
Conflicting Flow All	0	0	758	758	0	1116	379
Stage 1	-	-	-	-	-	750	-
Stage 2	-	-	-	-	-	366	-
Critical Hdwy	-	-	6.44	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.52	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	474	849	-	202	619
Stage 1	-	-	-	-	-	427	-
Stage 2	-	-	-	-	-	672	-
Platoon blocked, %	-	-			-		
Mov Cap-1 Maneuver	-	-	671	671	-	197	619
Mov Cap-2 Maneuver	-	-	-	-	-	197	-
Stage 1	-	-	-	-	-	427	-
Stage 2	-	-	-	-	-	656	-

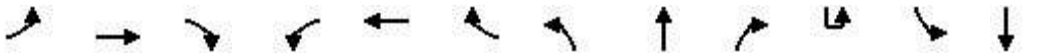
Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	21.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	197	619	-	-	671	-
HCM Lane V/C Ratio	0.027	0.002	-	-	0.024	-
HCM Control Delay (s)	23.8	10.8	-	-	10.5	-
HCM Lane LOS	C	B	-	-	B	-
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	155	405	150	245	330	85	175	1455	435	10	130	830
Future Volume (vph)	155	405	150	245	330	85	175	1455	435	10	130	830
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	1900	2000
Storage Length (ft)	185		185	215		165	190		235		220	
Storage Lanes	2		1	2		1	2		1		2	
Taper Length (ft)	205			200			225				225	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.91	0.97	0.91
Ped Bike Factor	1.00		0.99									
Frt			0.850			0.850			0.850			
Flt Protected	0.950			0.950			0.950				0.950	
Satd. Flow (prot)	3099	3519	1429	2714	3304	1324	3045	4667	1417	0	3256	4368
Flt Permitted	0.950			0.950			0.950				0.950	
Satd. Flow (perm)	3097	3519	1411	2714	3304	1324	3045	4667	1417	0	3256	4368
Right Turn on Red			No			No			No			
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			45				45
Link Distance (ft)		546			1578			1049				625
Travel Time (s)		9.3			26.9			15.9				9.5
Confl. Peds. (#/hr)	1		1									
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	13%	8%	13%	29%	15%	22%	15%	17%	14%	2%	8%	25%
Adj. Flow (vph)	163	426	158	258	347	89	184	1532	458	11	137	874
Shared Lane Traffic (%)												
Lane Group Flow (vph)	163	426	158	258	347	89	184	1532	458	0	148	874
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		30			30			30				30
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	1.00	0.94
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors	1	2	1	1	2	1	1	2	1	1	1	2
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Left	Thru
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	20	100
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	145
Future Volume (vph)	145
Ideal Flow (vphpl)	1900
Storage Length (ft)	200
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1417
Flt Permitted	
Satd. Flow (perm)	1417
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	0.95
Heavy Vehicles (%)	14%
Adj. Flow (vph)	153
Shared Lane Traffic (%)	
Lane Group Flow (vph)	153
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	20
Trailing Detector (ft)	0
Detector 1 Position(ft)	0
Detector 1 Size(ft)	20
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pt+ov	Prot	Prot	NA
Protected Phases	3	8	5	7	4	1!	5	2	2 7	1!	1	6
Permitted Phases			8			4						
Detector Phase	3	8	5	7	4	1	5	2	2 7	1	1	6
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0		3.0	3.0	15.0
Minimum Split (s)	7.5	61.5	7.5	7.5	63.5	7.5	7.5	53.5		7.5	7.5	53.5
Total Split (s)	19.0	38.0	19.0	19.0	38.0	19.0	19.0	74.0		19.0	19.0	74.0
Total Split (%)	12.7%	25.3%	12.7%	12.7%	25.3%	12.7%	12.7%	49.3%		12.7%	12.7%	49.3%
Maximum Green (s)	14.5	31.5	14.5	14.5	31.5	14.5	14.5	67.5		14.5	14.5	67.5
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5		3.5	3.5	4.5
All-Red Time (s)	1.0	2.0	1.0	1.0	2.0	1.0	1.0	2.0		1.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	4.5	6.5	4.5	4.5	6.5	4.5	4.5	6.5			4.5	6.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0	3.0	3.0	7.0		3.0	3.0	7.0
Recall Mode	None	None	None	None	None	None	None	C-Min		None	None	C-Min
Walk Time (s)		7.0			7.0			7.0				7.0
Flash Dont Walk (s)		48.0			50.0			40.0				40.0
Pedestrian Calls (#/hr)		0			0			0				0
Act Effct Green (s)	12.6	27.9	43.2	14.5	29.8	48.2	13.2	73.7	92.7		11.9	72.3
Actuated g/C Ratio	0.08	0.19	0.29	0.10	0.20	0.32	0.09	0.49	0.62		0.08	0.48
v/c Ratio	0.62	0.65	0.39	0.98	0.53	0.21	0.69	0.67	0.52		0.57	0.42
Control Delay	77.0	61.2	41.5	118.2	56.9	37.5	79.8	31.5	19.9		75.3	26.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	77.0	61.2	41.5	118.2	56.9	37.5	79.8	31.5	19.9		75.3	26.6
LOS	E	E	D	F	E	D	E	C	B		E	C
Approach Delay		60.5			77.2			33.2				31.2
Approach LOS		E			E			C				C
Queue Length 50th (ft)	80	204	117	132	161	63	90	413	245		73	204
Queue Length 95th (ft)	120	258	177	#226	212	107	134	502	378		109	252
Internal Link Dist (ft)		466			1498			969				545
Turn Bay Length (ft)	185		185	215		165	190		235		220	
Base Capacity (vph)	299	738	419	262	693	448	294	2291	875		314	2106
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Reduced v/c Ratio	0.55	0.58	0.38	0.98	0.50	0.20	0.63	0.67	0.52		0.47	0.42

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 75 (50%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.98	
Intersection Signal Delay: 43.3	Intersection LOS: D

Lane Group	SBR
Turn Type	pt+ov
Protected Phases	6 3
Permitted Phases	
Detector Phase	6 3
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	89.5
Actuated g/C Ratio	0.60
v/c Ratio	0.18
Control Delay	14.9
Queue Delay	0.0
Total Delay	14.9
LOS	B
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	66
Queue Length 95th (ft)	109
Internal Link Dist (ft)	
Turn Bay Length (ft)	200
Base Capacity (vph)	862
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.18

Intersection Summary

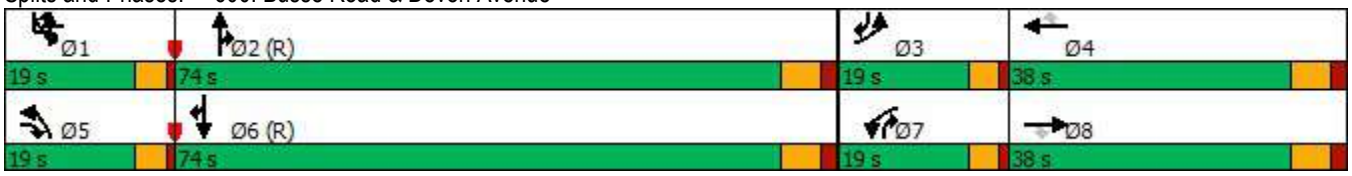
Intersection Capacity Utilization 69.6% ICU Level of Service C

Analysis Period (min) 15

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

! Phase conflict between lane groups.

Splits and Phases: 600: Busse Road & Devon Avenue



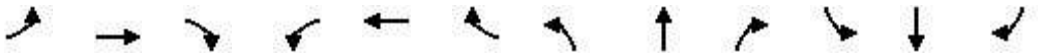
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	1	15	10	55	2065	1210	15
Future Vol, veh/h	1	15	10	55	2065	1210	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	-	-	115	-	-	-
Veh in Median Storage, #	0	-	-	-	0	0	-
Grade, %	0	-	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95	95
Heavy Vehicles, %	2	11	11	11	15	23	33
Mvmt Flow	1	16	11	58	2174	1274	16

Major/Minor	Minor2		Major1			Major2	
Conflicting Flow All	2290	645	941	1290	0	-	0
Stage 1	1282	-	-	-	-	-	-
Stage 2	1008	-	-	-	-	-	-
Critical Hdwy	5.74	7.32	5.82	5.52	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.01	2.41	3.21	-	-	-
Pot Cap-1 Maneuver	65	339	440	261	-	-	-
Stage 1	162	-	-	-	-	-	-
Stage 2	283	-	-	-	-	-	-
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	49	339	277	277	-	-	-
Mov Cap-2 Maneuver	49	-	-	-	-	-	-
Stage 1	122	-	-	-	-	-	-
Stage 2	283	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20.6	0.7	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	277	-	247	-	-
HCM Lane V/C Ratio	0.247	-	0.068	-	-
HCM Control Delay (s)	22.2	-	20.6	-	-
HCM Lane LOS	C	-	C	-	-
HCM 95th %tile Q(veh)	0.9	-	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	600	25	30	785	50	90	50	50	65	120	160
Future Volume (veh/h)	25	600	25	30	785	50	90	50	50	65	120	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1337	1811	1811	1914	1426	1426	1722	1750	1811
Adj Flow Rate, veh/h	26	632	26	32	826	53	95	53	53	68	126	168
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	10	10	10	38	6	6	4	32	32	12	16	6
Cap, veh/h	328	1645	68	337	1666	107	326	120	120	307	295	285
Arrive On Green	0.02	0.50	0.50	0.02	0.51	0.51	0.06	0.18	0.18	0.05	0.17	0.17
Sat Flow, veh/h	1668	3258	134	1273	3283	211	1823	653	653	1640	1750	1535
Grp Volume(v), veh/h	26	323	335	32	433	446	95	0	106	68	126	168
Grp Sat Flow(s),veh/h/ln	1668	1664	1728	1273	1721	1773	1823	0	1306	1640	1750	1535
Q Serve(g_s), s	0.6	8.7	8.8	0.9	12.1	12.1	3.1	0.0	5.3	2.5	4.7	7.3
Cycle Q Clear(g_c), s	0.6	8.7	8.8	0.9	12.1	12.1	3.1	0.0	5.3	2.5	4.7	7.3
Prop In Lane	1.00		0.08	1.00		0.12	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	328	840	872	337	873	900	326	0	239	307	295	285
V/C Ratio(X)	0.08	0.38	0.38	0.09	0.50	0.50	0.29	0.00	0.44	0.22	0.43	0.59
Avail Cap(c_a), veh/h	755	1474	1530	659	1524	1571	711	0	623	677	835	758
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.5	11.2	11.2	9.1	11.9	11.9	23.0	0.0	26.6	23.7	27.3	27.3
Incr Delay (d2), s/veh	0.1	1.3	1.3	0.1	2.0	1.9	0.5	0.0	2.7	0.4	2.1	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.3	5.4	5.6	0.4	7.8	8.0	2.4	0.0	3.2	1.7	3.7	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.6	12.5	12.4	9.2	13.9	13.8	23.5	0.0	29.4	24.0	29.4	31.4
LnGrp LOS	A	B	B	A	B	B	C	A	C	C	C	C
Approach Vol, veh/h		684			911			201			362	
Approach Delay, s/veh		12.4			13.7			26.6			29.3	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.4	43.0	7.5	18.4	4.2	43.2	6.5	19.4
Change Period (Y+Rc), s	3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0
Max Green Setting (Gmax), s	20.0	65.0	20.0	35.0	20.0	65.0	20.0	35.0
Max Q Clear Time (g_c+I1), s	2.9	10.8	5.1	9.3	2.6	14.1	4.5	7.3
Green Ext Time (p_c), s	0.0	16.1	0.2	2.7	0.0	23.1	0.1	1.1

Intersection Summary	
HCM 6th Ctrl Delay	17.1
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	700	15	5	800	0	30	0	30	15	1	35
Future Vol, veh/h	0	700	15	5	800	0	30	0	30	15	1	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	100	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	8	2	2	9	2	2	2	2	8	2	2
Mvmt Flow	0	737	16	5	842	0	32	0	32	16	1	37

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	842	0	0	753	0	0	1178	1597	378	1222	1605	422
Stage 1	-	-	-	-	-	-	745	745	-	852	852	-
Stage 2	-	-	-	-	-	-	433	852	-	370	753	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.66	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.66	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.66	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.58	4.02	3.32
Pot Cap-1 Maneuver	789	-	-	853	-	0	146	105	620	129	104	580
Stage 1	-	-	-	-	-	0	372	419	-	308	374	-
Stage 2	-	-	-	-	-	0	571	374	-	606	416	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	789	-	-	853	-	-	135	104	619	122	103	579
Mov Cap-2 Maneuver	-	-	-	-	-	-	135	104	-	122	103	-
Stage 1	-	-	-	-	-	-	372	419	-	308	372	-
Stage 2	-	-	-	-	-	-	530	372	-	575	416	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.1	25.4	22.1
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	135	619	789	-	-	853	-	264
HCM Lane V/C Ratio	0.234	0.051	-	-	-	0.006	-	0.203
HCM Control Delay (s)	39.6	11.1	0	-	-	9.2	-	22.1
HCM Lane LOS	E	B	A	-	-	A	-	C
HCM 95th %tile Q(veh)	0.9	0.2	0	-	-	0	-	0.7

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	745	1	5	800	5	10
Future Vol, veh/h	745	1	5	800	5	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	100	2	100	100
Mvmt Flow	784	1	5	842	5	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	785	0	1216	393
Stage 1	-	-	-	-	785	-
Stage 2	-	-	-	-	431	-
Critical Hdwy	-	-	6.1	-	8.8	8.9
Critical Hdwy Stg 1	-	-	-	-	7.8	-
Critical Hdwy Stg 2	-	-	-	-	7.8	-
Follow-up Hdwy	-	-	3.2	-	4.5	4.3
Pot Cap-1 Maneuver	-	-	413	-	80	397
Stage 1	-	-	-	-	229	-
Stage 2	-	-	-	-	407	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	413	-	79	397
Mov Cap-2 Maneuver	-	-	-	-	166	-
Stage 1	-	-	-	-	229	-
Stage 2	-	-	-	-	402	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	18.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	166	397	-	-	413	-
HCM Lane V/C Ratio	0.032	0.027	-	-	0.013	-
HCM Control Delay (s)	27.4	14.3	-	-	13.8	-
HCM Lane LOS	D	B	-	-	B	-
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	750	5	15	775	1	30	1	25	1	1	1
Future Vol, veh/h	1	750	5	15	775	1	30	1	25	1	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	100	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	9	2	2	9	2	2	2	2	2	2	2
Mvmt Flow	1	789	5	16	816	1	32	1	26	1	1	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	817	0	0	794	0	0	1236	1643	398	1247	1645	410
Stage 1	-	-	-	-	-	-	794	794	-	849	849	-
Stage 2	-	-	-	-	-	-	442	849	-	398	796	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	807	-	-	823	-	-	132	99	601	130	99	591
Stage 1	-	-	-	-	-	-	348	398	-	322	375	-
Stage 2	-	-	-	-	-	-	564	375	-	599	397	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	807	-	-	823	-	-	129	97	600	121	97	590
Mov Cap-2 Maneuver	-	-	-	-	-	-	129	97	-	121	97	-
Stage 1	-	-	-	-	-	-	348	398	-	322	368	-
Stage 2	-	-	-	-	-	-	550	368	-	570	397	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.2	28.6	29.9
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	128	600	807	-	-	823	-	-	148
HCM Lane V/C Ratio	0.255	0.044	0.001	-	-	0.019	-	-	0.021
HCM Control Delay (s)	42.5	11.3	9.5	-	-	9.5	-	-	29.9
HCM Lane LOS	E	B	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	1	0.1	0	-	-	0.1	-	-	0.1

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	770	5	10	765	1	25	1	25	1	1	1
Future Vol, veh/h	1	770	5	10	765	1	25	1	25	1	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	100	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	10	2	2	9	2	2	2	2	2	2	2
Mvmt Flow	1	811	5	11	805	1	26	1	26	1	1	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	806	0	0	816	0	0	1242	1644	409	1237	1646	404
Stage 1	-	-	-	-	-	-	816	816	-	828	828	-
Stage 2	-	-	-	-	-	-	426	828	-	409	818	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	814	-	-	807	-	-	131	99	592	132	98	596
Stage 1	-	-	-	-	-	-	337	389	-	332	384	-
Stage 2	-	-	-	-	-	-	577	384	-	590	388	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	814	-	-	807	-	-	128	98	591	124	97	595
Mov Cap-2 Maneuver	-	-	-	-	-	-	128	98	-	124	97	-
Stage 1	-	-	-	-	-	-	337	389	-	332	379	-
Stage 2	-	-	-	-	-	-	566	379	-	561	388	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.1	26.5	29.5
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	127	591	814	-	-	807	-	-	150
HCM Lane V/C Ratio	0.215	0.045	0.001	-	-	0.013	-	-	0.021
HCM Control Delay (s)	41	11.4	9.4	-	-	9.5	-	-	29.5
HCM Lane LOS	E	B	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	0.8	0.1	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	795	1	5	770	1	5	0	10	0	0	1
Future Vol, veh/h	1	795	1	5	770	1	5	0	10	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	100	2	100	2	2	2
Mvmt Flow	1	837	1	5	811	1	5	0	11	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	812	0	0	838	0	0	1256	1662	419	1243	1662	406
Stage 1	-	-	-	-	-	-	840	840	-	822	822	-
Stage 2	-	-	-	-	-	-	416	822	-	421	840	-
Critical Hdwy	4.14	-	-	4.14	-	-	9.5	6.54	8.9	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	8.5	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	8.5	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	4.5	4.02	4.3	3.52	4.02	3.32
Pot Cap-1 Maneuver	810	-	-	792	-	-	58	96	378	131	96	594
Stage 1	-	-	-	-	-	-	178	379	-	334	386	-
Stage 2	-	-	-	-	-	-	384	386	-	581	379	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	810	-	-	792	-	-	58	95	378	127	95	594
Mov Cap-2 Maneuver	-	-	-	-	-	-	58	95	-	127	95	-
Stage 1	-	-	-	-	-	-	178	379	-	334	384	-
Stage 2	-	-	-	-	-	-	381	384	-	564	379	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.1	34.3	11.1
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	58	378	810	-	-	792	-	-	594
HCM Lane V/C Ratio	0.091	0.028	0.001	-	-	0.007	-	-	0.002
HCM Control Delay (s)	73.2	14.8	9.4	-	-	9.6	-	-	11.1
HCM Lane LOS	F	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.3	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Vol, veh/h	800	5	10	5	765	10	15
Future Vol, veh/h	800	5	10	5	765	10	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	-	None	-	None
Storage Length	-	-	-	50	-	0	100
Veh in Median Storage, #	0	-	-	-	0	0	-
Grade, %	0	-	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95	95
Heavy Vehicles, %	10	2	2	2	9	2	2
Mvmt Flow	842	5	11	5	805	11	16

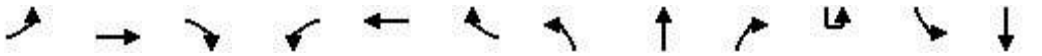
Major/Minor	Major1		Major2			Minor1	
Conflicting Flow All	0	0	847	847	0	1280	424
Stage 1	-	-	-	-	-	845	-
Stage 2	-	-	-	-	-	435	-
Critical Hdwy	-	-	6.44	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.52	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	416	786	-	158	579
Stage 1	-	-	-	-	-	382	-
Stage 2	-	-	-	-	-	620	-
Platoon blocked, %	-	-			-		
Mov Cap-1 Maneuver	-	-	483	483	-	153	579
Mov Cap-2 Maneuver	-	-	-	-	-	153	-
Stage 1	-	-	-	-	-	382	-
Stage 2	-	-	-	-	-	600	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	19
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	153	579	-	-	483	-
HCM Lane V/C Ratio	0.069	0.027	-	-	0.033	-
HCM Control Delay (s)	30.3	11.4	-	-	12.7	-
HCM Lane LOS	D	B	-	-	B	-
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0.1	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	185	450	190	420	470	125	155	980	270	5	85	1435
Future Volume (vph)	185	450	190	420	470	125	155	980	270	5	85	1435
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	1900	2000
Storage Length (ft)	185		185	215		165	190		235		220	
Storage Lanes	2		1	2		1	2		1		2	
Taper Length (ft)	205			200			225				225	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.91	0.97	0.91
Ped Bike Factor	1.00		0.99									
Frt			0.850			0.850			0.850			
Flt Protected	0.950			0.950			0.950				0.950	
Satd. Flow (prot)	3183	3393	1468	3155	3551	1495	2993	4627	1392	0	2808	5103
Flt Permitted	0.950			0.950			0.950				0.950	
Satd. Flow (perm)	3182	3393	1449	3155	3551	1495	2993	4627	1392	0	2808	5103
Right Turn on Red			No			No			No			
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			45				45
Link Distance (ft)		546			1578			1049				625
Travel Time (s)		9.3			26.9			15.9				9.5
Confl. Peds. (#/hr)	1		1									
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	10%	12%	10%	11%	7%	8%	17%	18%	16%	2%	26%	7%
Adj. Flow (vph)	195	474	200	442	495	132	163	1032	284	5	89	1511
Shared Lane Traffic (%)												
Lane Group Flow (vph)	195	474	200	442	495	132	163	1032	284	0	94	1511
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left
Median Width(ft)		30			30			30				30
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	1.00	0.94
Turning Speed (mph)	15		9	15		9	15		9	9	15	
Number of Detectors	1	2	1	1	2	1	1	2	1	1	1	2
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Left	Thru
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	20	100
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	155
Future Volume (vph)	155
Ideal Flow (vphpl)	1900
Storage Length (ft)	200
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1495
Flt Permitted	
Satd. Flow (perm)	1495
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	0.95
Heavy Vehicles (%)	8%
Adj. Flow (vph)	163
Shared Lane Traffic (%)	
Lane Group Flow (vph)	163
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	20
Trailing Detector (ft)	0
Detector 1 Position(ft)	0
Detector 1 Size(ft)	20
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pt+ov	Prot	Prot	NA
Protected Phases	3	8	5	7	4	1!	5	2	2 7	1!	1	6
Permitted Phases			8			4						
Detector Phase	3	8	5	7	4	1	5	2	2 7	1	1	6
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0		3.0	3.0	15.0
Minimum Split (s)	7.5	61.5	7.5	7.5	63.5	7.5	7.5	53.5		7.5	7.5	53.5
Total Split (s)	29.0	38.0	16.0	24.0	33.0	15.0	16.0	73.0		15.0	15.0	72.0
Total Split (%)	19.3%	25.3%	10.7%	16.0%	22.0%	10.0%	10.7%	48.7%		10.0%	10.0%	48.0%
Maximum Green (s)	24.5	31.5	11.5	19.5	26.5	10.5	11.5	66.5		10.5	10.5	65.5
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5		3.5	3.5	4.5
All-Red Time (s)	1.0	2.0	1.0	1.0	2.0	1.0	1.0	2.0		1.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	4.5	6.5	4.5	4.5	6.5	4.5	4.5	6.5			4.5	6.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0	3.0	3.0	7.0		3.0	3.0	7.0
Recall Mode	None	None	None	None	None	None	None	C-Min		None	None	C-Min
Walk Time (s)		7.0			7.0			7.0				7.0
Flash Dont Walk (s)		48.0			50.0			40.0				40.0
Pedestrian Calls (#/hr)		0			0			0				0
Act Effct Green (s)	14.5	29.6	42.8	19.5	34.6	50.6	11.2	69.4	93.4		9.5	67.7
Actuated g/C Ratio	0.10	0.20	0.29	0.13	0.23	0.34	0.07	0.46	0.62		0.06	0.45
v/c Ratio	0.64	0.71	0.48	1.08	0.60	0.26	0.73	0.48	0.33		0.53	0.66
Control Delay	74.4	62.3	44.8	126.4	55.3	37.7	86.6	29.3	15.3		78.8	34.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	74.4	62.3	44.8	126.4	55.3	37.7	86.6	29.3	15.3		78.8	34.2
LOS	E	E	D	F	E	D	F	C	B		E	C
Approach Delay		61.0			82.6			32.9				34.9
Approach LOS		E			F			C				C
Queue Length 50th (ft)	96	226	152	~247	225	91	81	261	132		46	428
Queue Length 95th (ft)	136	290	230	#360	298	154	#129	306	193		78	483
Internal Link Dist (ft)		466			1498			969				545
Turn Bay Length (ft)	185		185	215		165	190		235		220	
Base Capacity (vph)	519	712	418	410	819	514	231	2139	866		196	2301
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Reduced v/c Ratio	0.38	0.67	0.48	1.08	0.60	0.26	0.71	0.48	0.33		0.48	0.66

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 86 (57%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 48.5	Intersection LOS: D

Lane Group	SBR
Turn Type	pt+ov
Protected Phases	6 3
Permitted Phases	
Detector Phase	6 3
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Maximum Green (s)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	
Recall Mode	
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	86.7
Actuated g/C Ratio	0.58
v/c Ratio	0.19
Control Delay	15.7
Queue Delay	0.0
Total Delay	15.7
LOS	B
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	76
Queue Length 95th (ft)	109
Internal Link Dist (ft)	
Turn Bay Length (ft)	200
Base Capacity (vph)	963
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.17

Intersection Summary

Intersection Capacity Utilization 74.7%	ICU Level of Service D

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

! Phase conflict between lane groups.

Splits and Phases: 600: Busse Road & Devon Avenue

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	1	55	1	10	1405	2045	1
Future Vol, veh/h	1	55	1	10	1405	2045	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	-	-	115	-	-	-
Veh in Median Storage, #	0	-	-	-	0	0	-
Grade, %	0	-	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95	95
Heavy Vehicles, %	2	9	2	2	16	7	2
Mvmt Flow	1	58	1	11	1479	2153	1

Major/Minor	Minor2		Major1			Major2	
Conflicting Flow All	2770	1077	1572	2154	0	-	0
Stage 1	2154	-	-	-	-	-	-
Stage 2	616	-	-	-	-	-	-
Critical Hdwy	5.74	7.28	5.64	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-	-
Follow-up Hdwy	3.82	3.99	2.32	3.12	-	-	-
Pot Cap-1 Maneuver	35	175	210	104	-	-	-
Stage 1	45	-	-	-	-	-	-
Stage 2	457	-	-	-	-	-	-
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	31	175	107	107	-	-	-
Mov Cap-2 Maneuver	31	-	-	-	-	-	-
Stage 1	40	-	-	-	-	-	-
Stage 2	457	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	39.4	0.3	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	107	-	162	-	-
HCM Lane V/C Ratio	0.108	-	0.364	-	-
HCM Control Delay (s)	42.8	-	39.4	-	-
HCM Lane LOS	E	-	E	-	-
HCM 95th %tile Q(veh)	0.4	-	1.5	-	-

DATA FROM THE ITE MANUAL TRIP GENERATION, TENTH EDITION

Land Use: 130
Industrial Park

Description

An industrial park contains a number of industrial or related facilities. It is characterized by a mix of manufacturing, service, and warehouse facilities with a wide variation in the proportion of each type of use from one location to another. Many industrial parks contain highly diversified facilities—some with a large number of small businesses and others with one or two dominant industries. General light industrial (Land Use 110) and manufacturing (Land Use 140) are related uses.

Additional Data

The sites were surveyed in the 1980s, the 2000s, and the 2010s in California, Georgia, New Jersey, New York, Ontario (CAN), and Pennsylvania.

Source Numbers

106, 162, 184, 251, 277, 422, 706, 747, 753, 937

Industrial Park
(130)

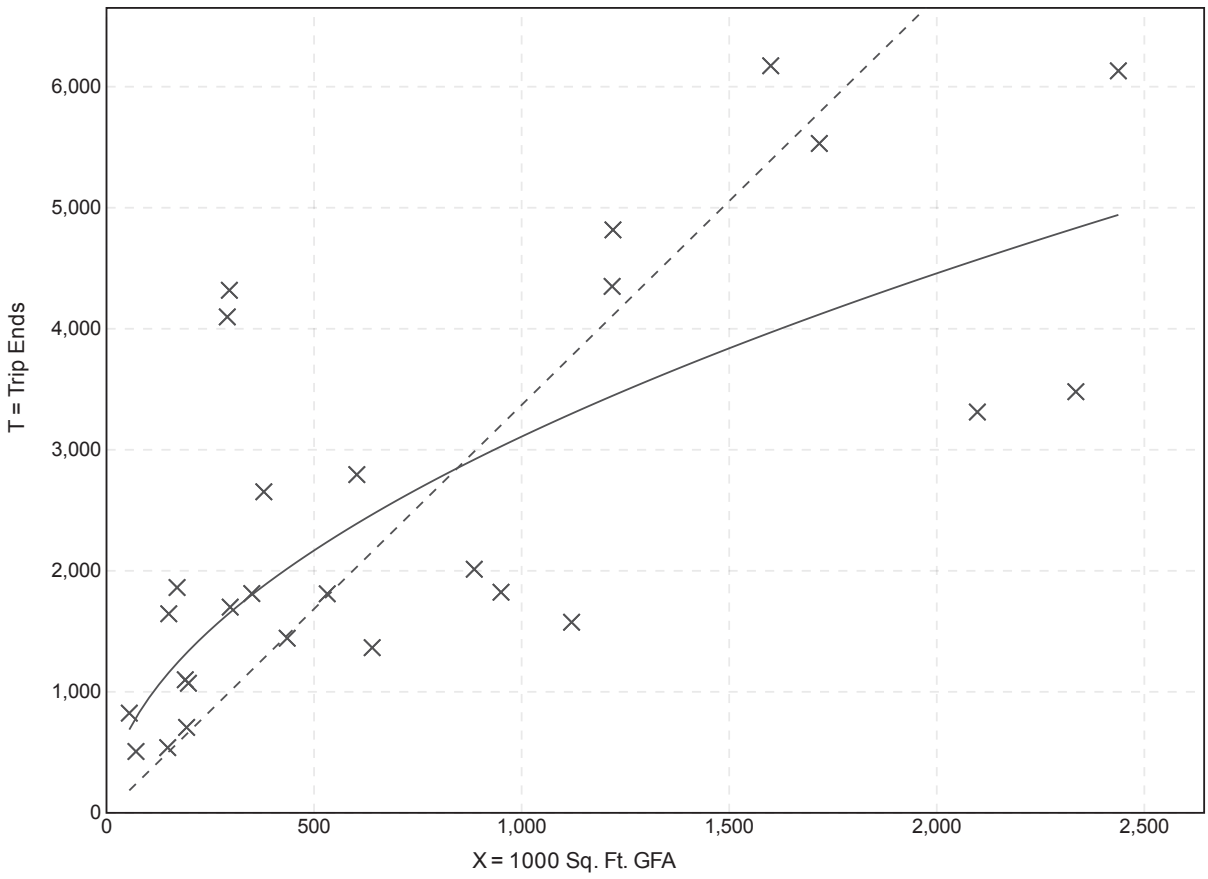
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 27
1000 Sq. Ft. GFA: 762
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
3.37	1.41 - 14.98	2.60

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.52 Ln(X) + 4.45

R^2= 0.58

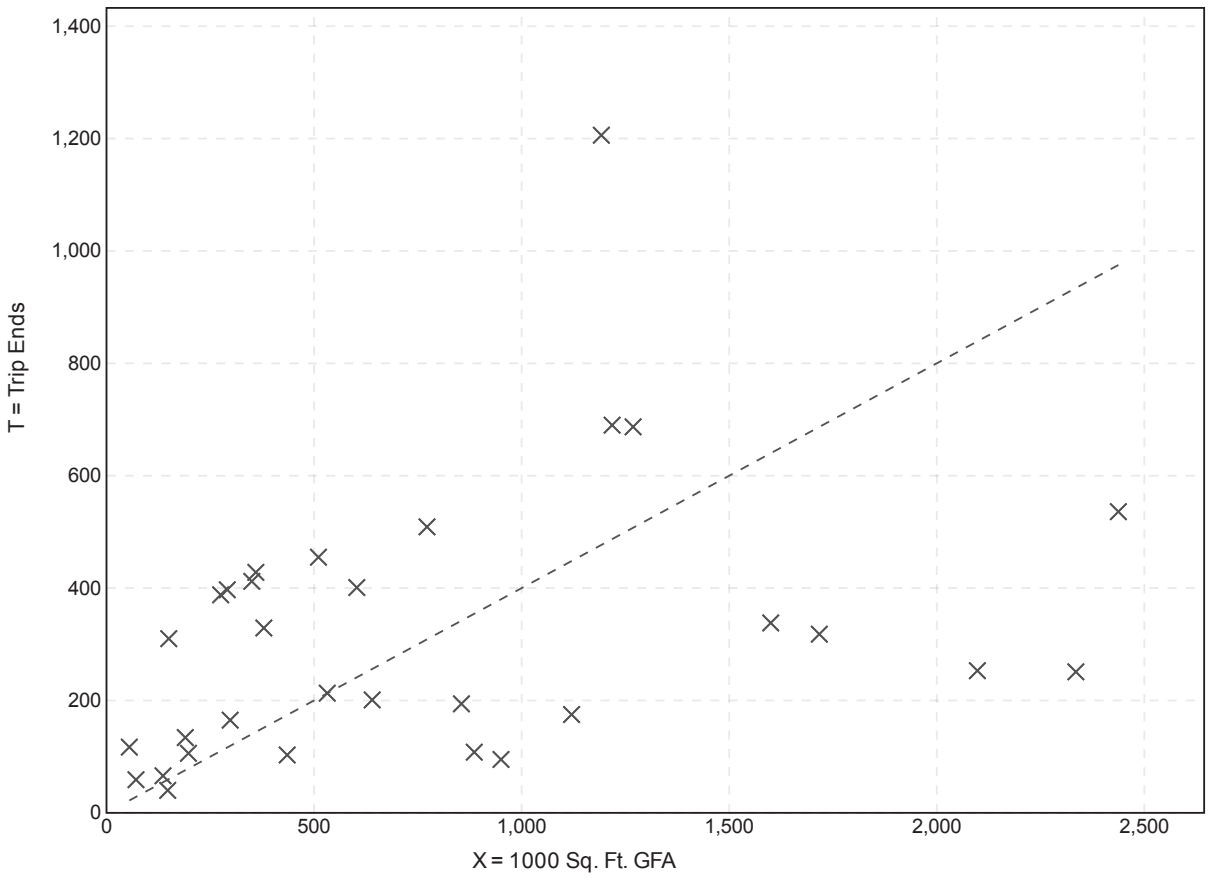
Industrial Park
(130)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
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:	31
1000 Sq. Ft. GFA:	776
Directional Distribution:	81% entering, 19% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.40	0.10 - 2.13	0.37

Data Plot and Equation



Fitted Curve Equation: Not Given

R^2= ****

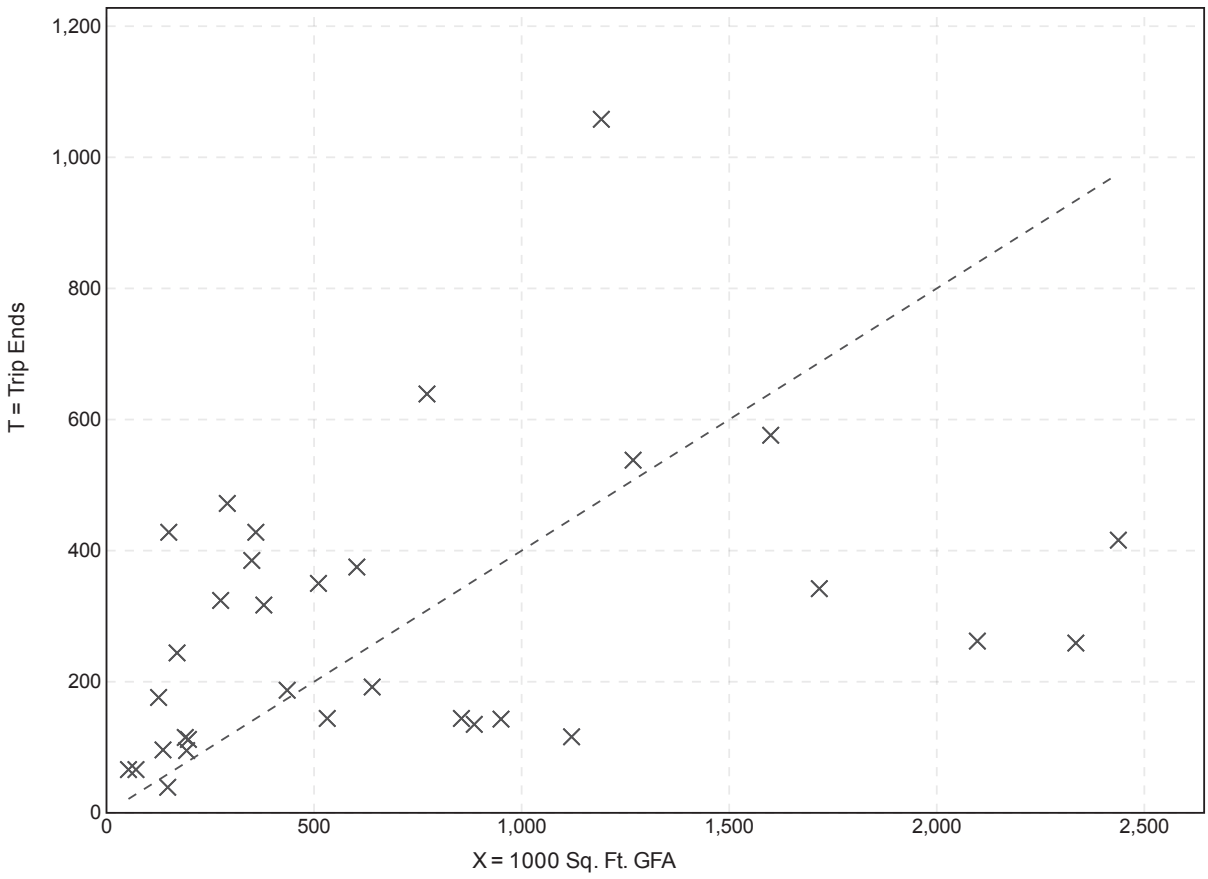
Industrial Park
(130)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
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:	32
1000 Sq. Ft. GFA:	720
Directional Distribution:	21% entering, 79% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.40	0.10 - 2.85	0.41

Data Plot and Equation



Fitted Curve Equation: Not Given

R^2= ****

Industrial Park
(130)

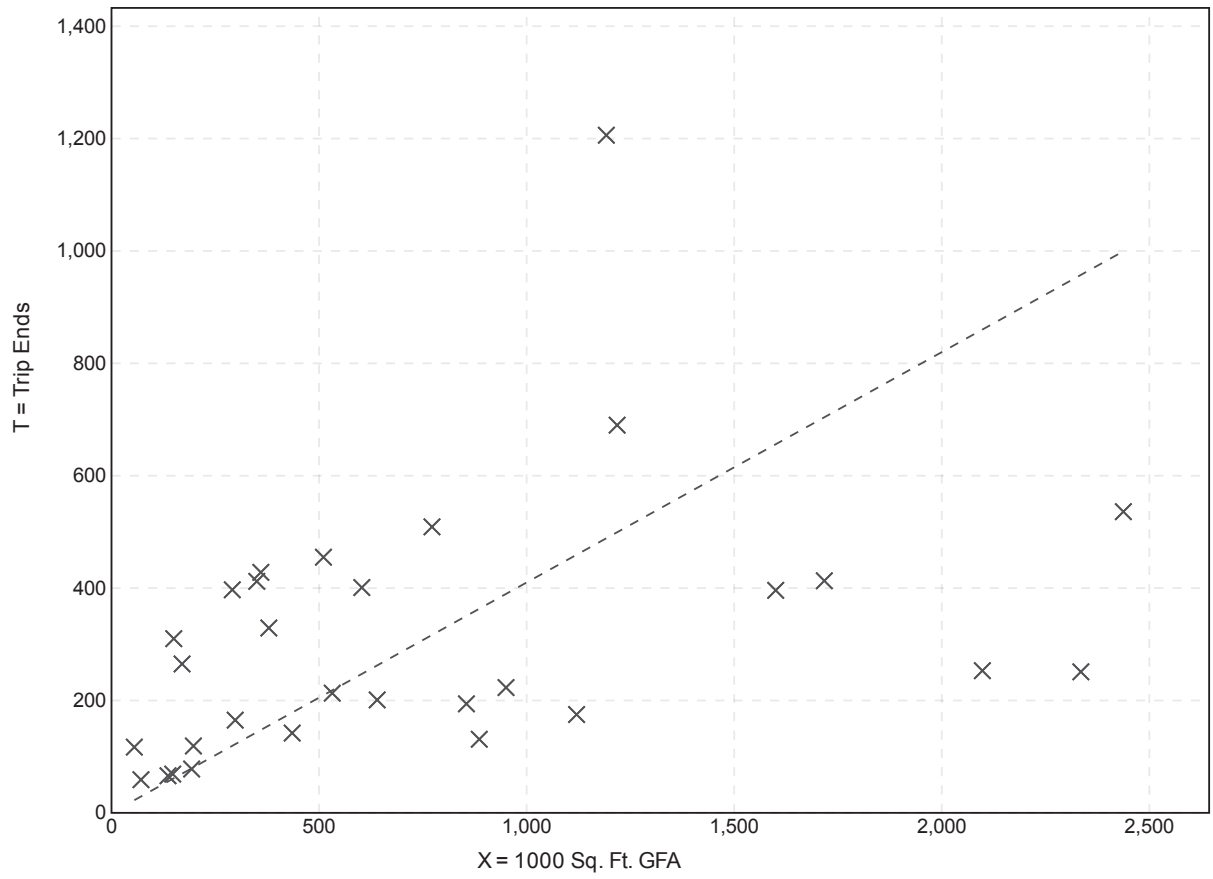
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
AM Peak Hour of Generator

Setting/Location: **General Urban/Suburban**
Number of Studies: 30
1000 Sq. Ft. GFA: 757
Directional Distribution: 87% entering, 13% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.41	0.11 - 2.13	0.37

Data Plot and Equation



Fitted Curve Equation: Not Given

R^2= **

Industrial Park
(130)

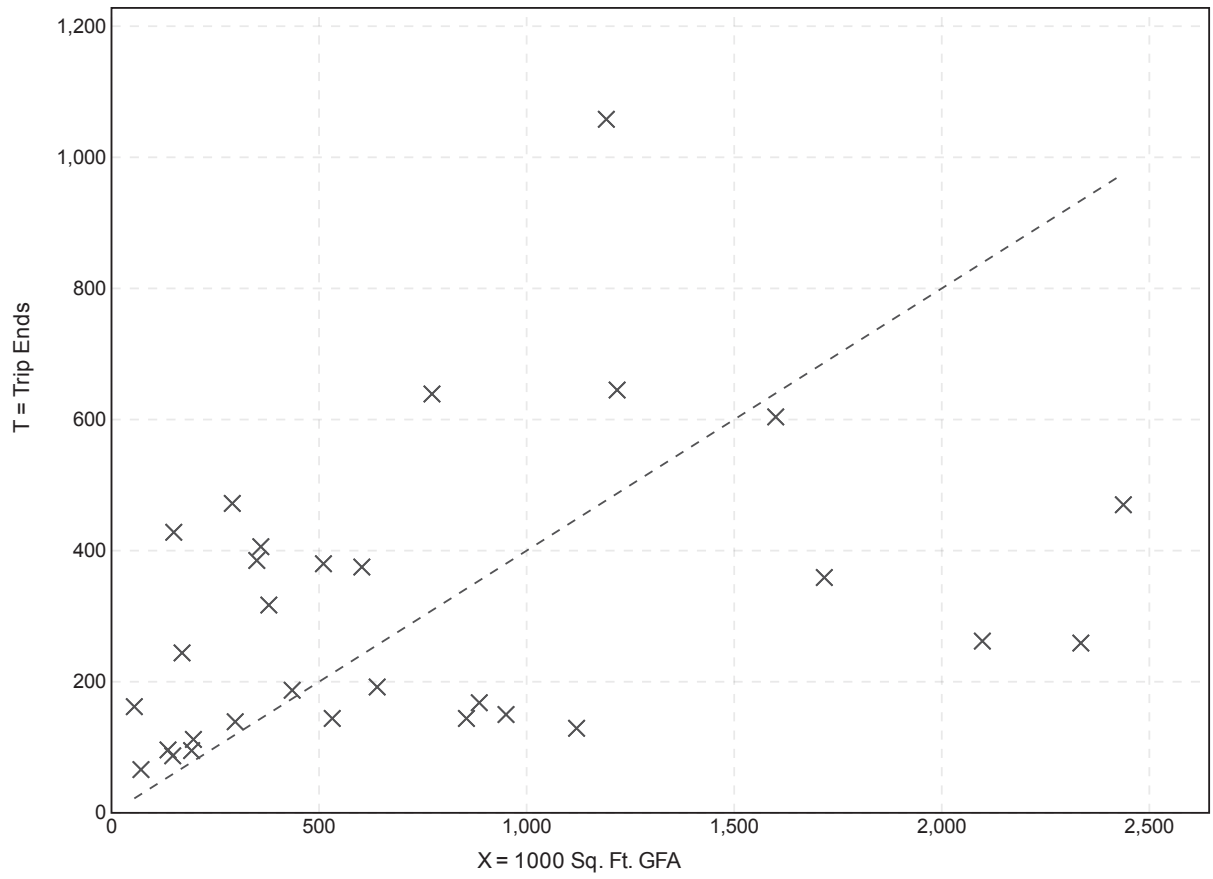
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
PM Peak Hour of Generator

Setting/Location: **General Urban/Suburban**
Number of Studies: 30
1000 Sq. Ft. GFA: 757
Directional Distribution: 21% entering, 79% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.40	0.11 - 2.95	0.41

Data Plot and Equation



Fitted Curve Equation: Not Given

R^2= ****

Industrial Park
(130)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Saturday**

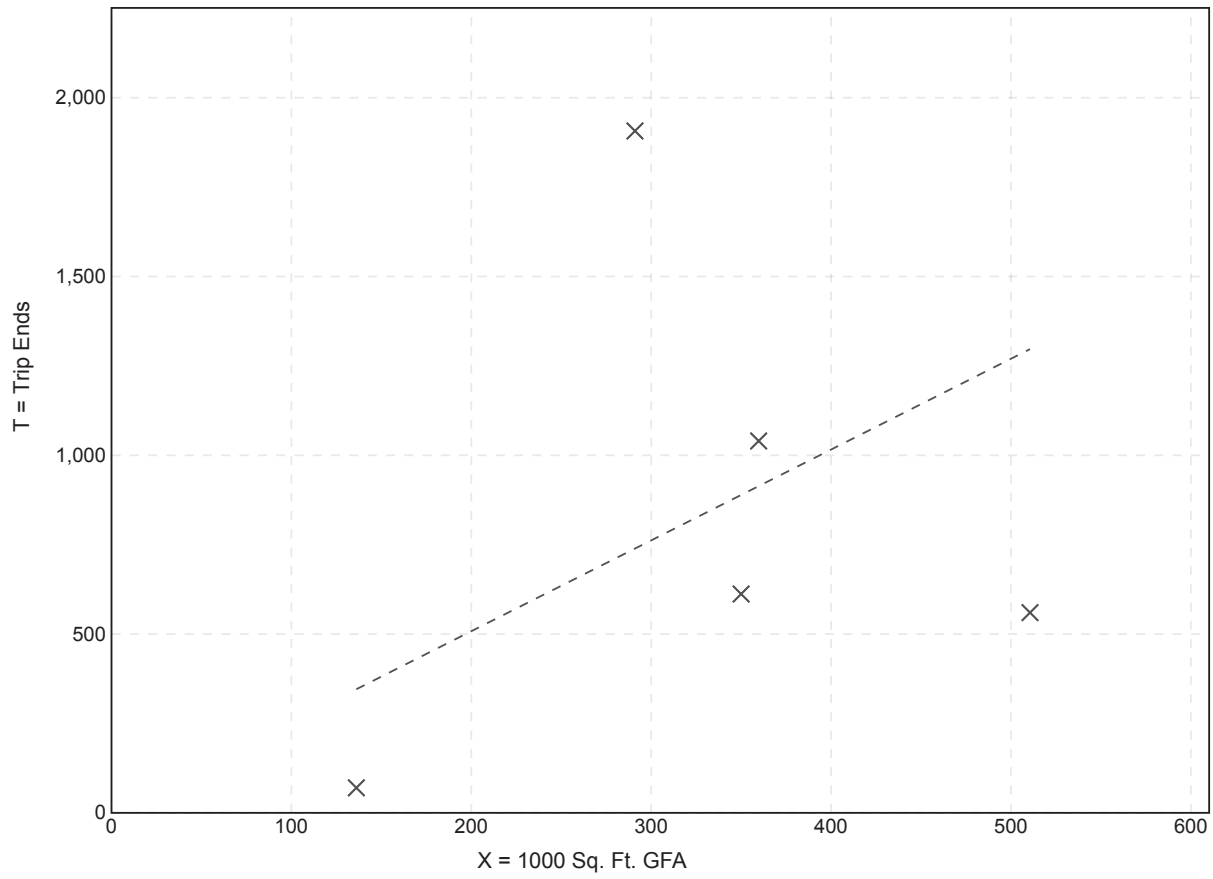
Setting/Location: **General Urban/Suburban**
Number of Studies: 5
1000 Sq. Ft. GFA: 329
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.54	0.51 - 6.55	2.23

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= **

Industrial Park
(130)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Saturday, Peak Hour of Generator**

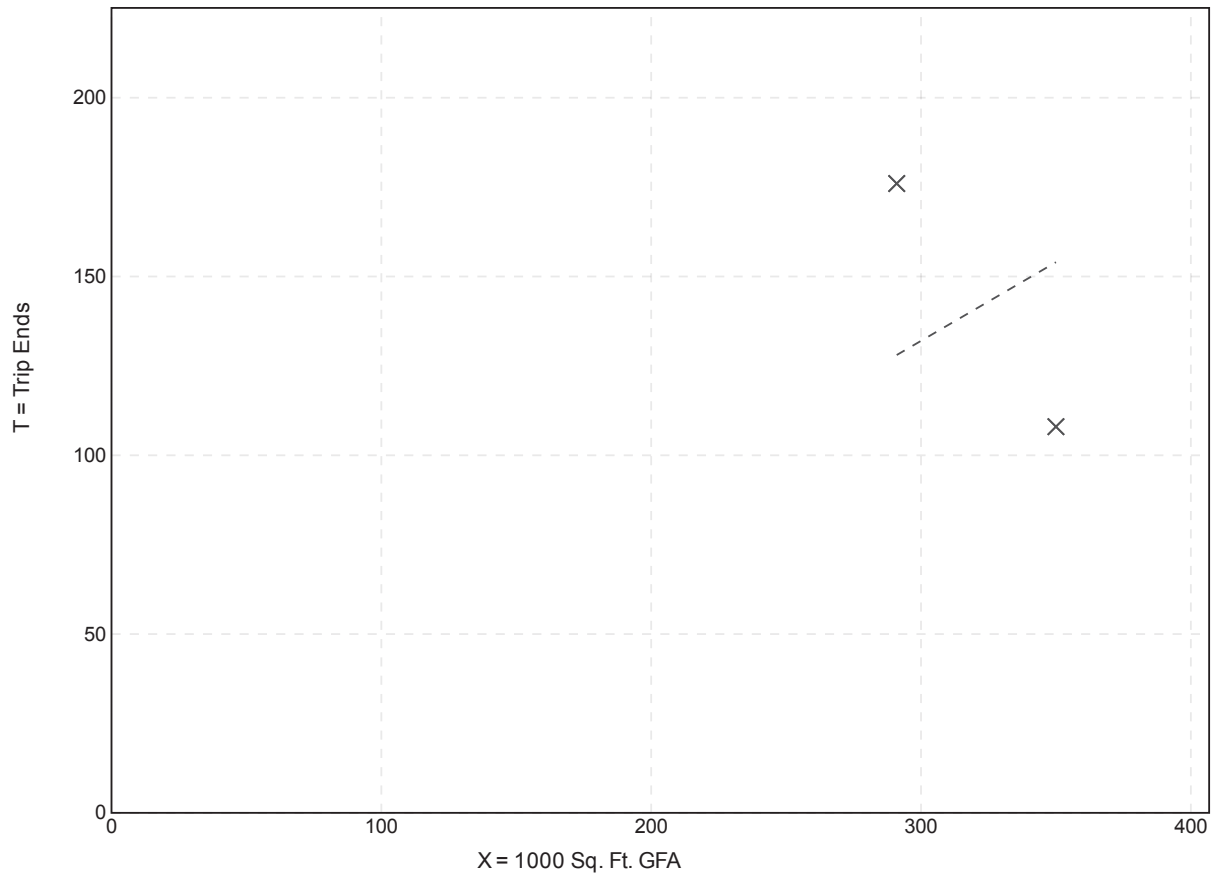
Setting/Location: **General Urban/Suburban**
Number of Studies: 2
1000 Sq. Ft. GFA: 321
Directional Distribution: 32% entering, 68% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.44	0.31 - 0.60	*

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= **

Industrial Park
(130)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Sunday**

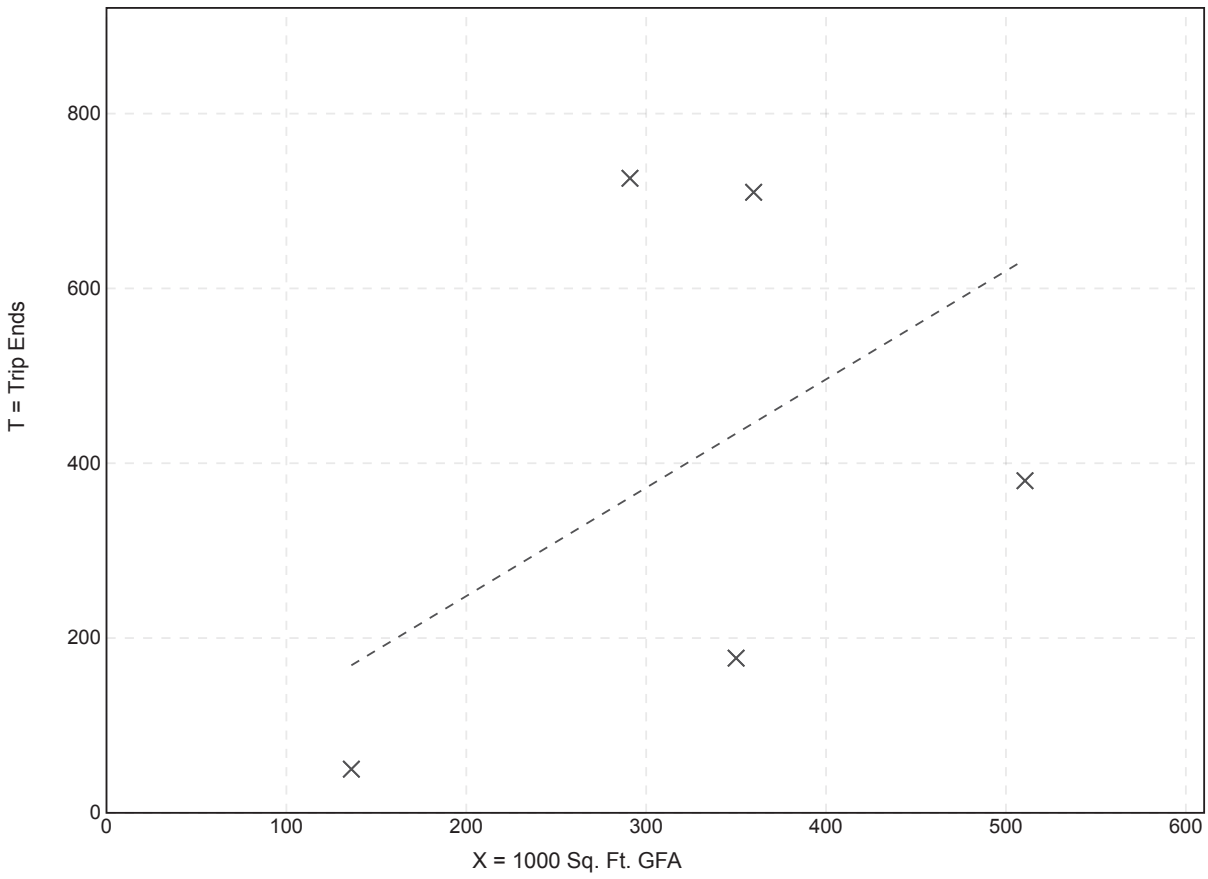
Setting/Location: **General Urban/Suburban**
Number of Studies: 5
1000 Sq. Ft. GFA: 329
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.24	0.37 - 2.49	0.90

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= **

Industrial Park
(130)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Sunday, Peak Hour of Generator**

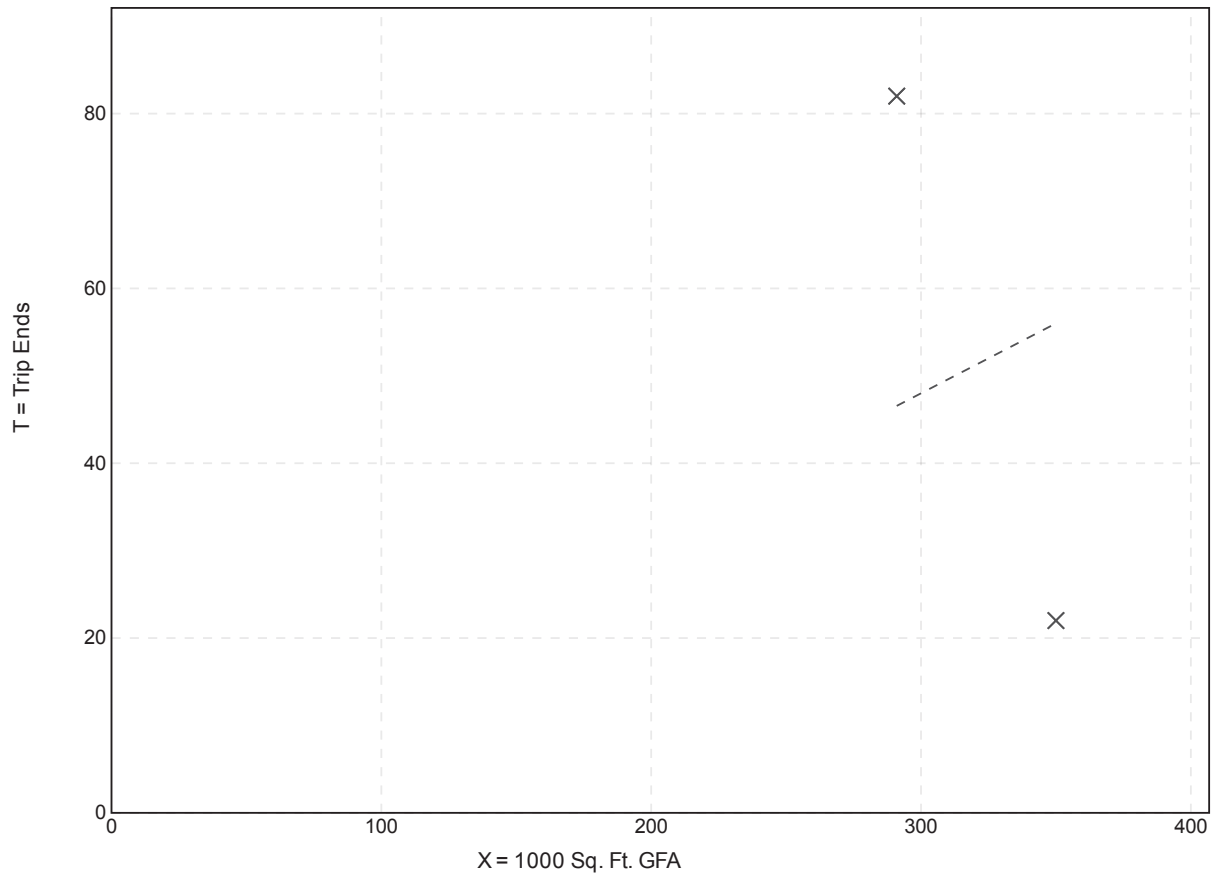
Setting/Location: **General Urban/Suburban**
Number of Studies: 2
1000 Sq. Ft. GFA: 321
Directional Distribution: 46% entering, 54% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.16	0.06 - 0.28	*

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= **

Industrial Park
(130)

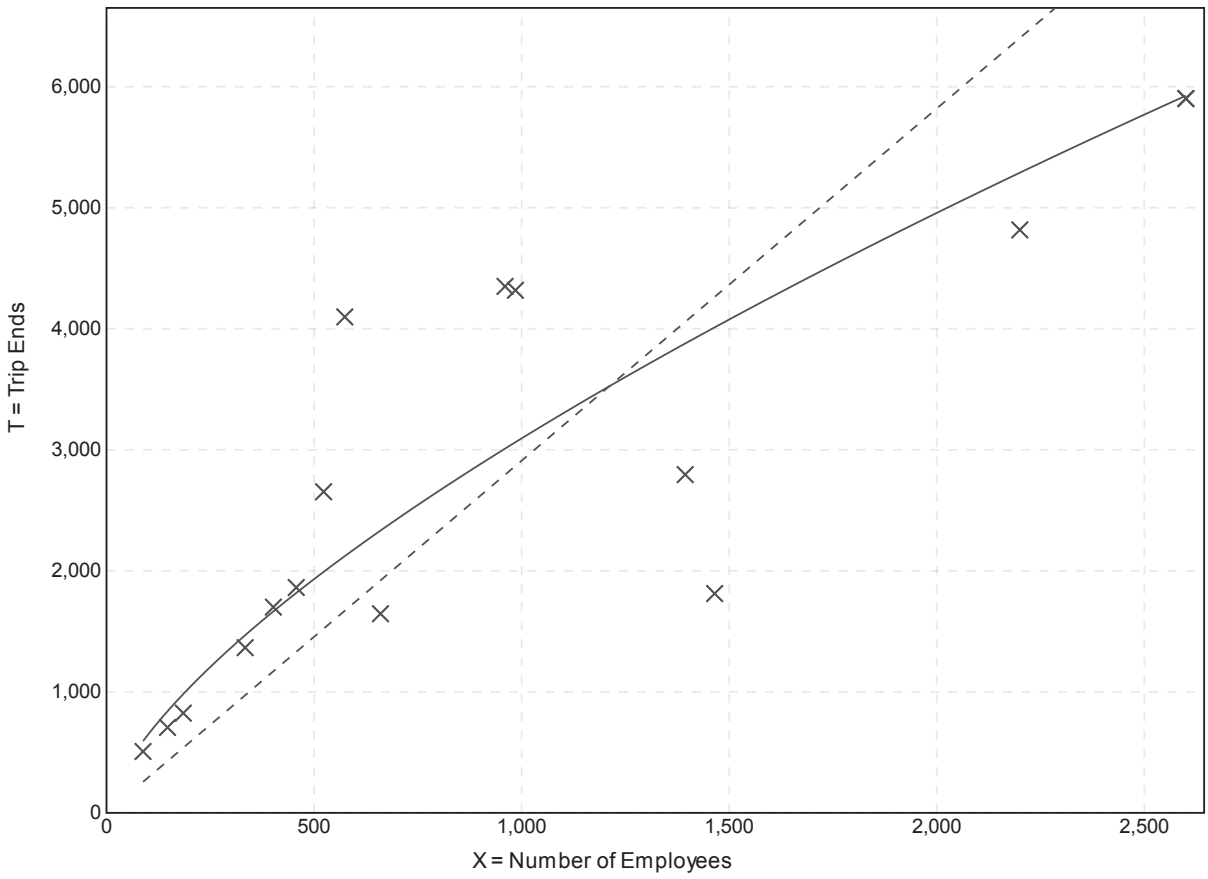
Vehicle Trip Ends vs: **Employees**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 16
Avg. Num. of Employees: 973
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
2.91	1.24 - 7.14	1.42

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.68 Ln(X) + 3.34

R^2= 0.81

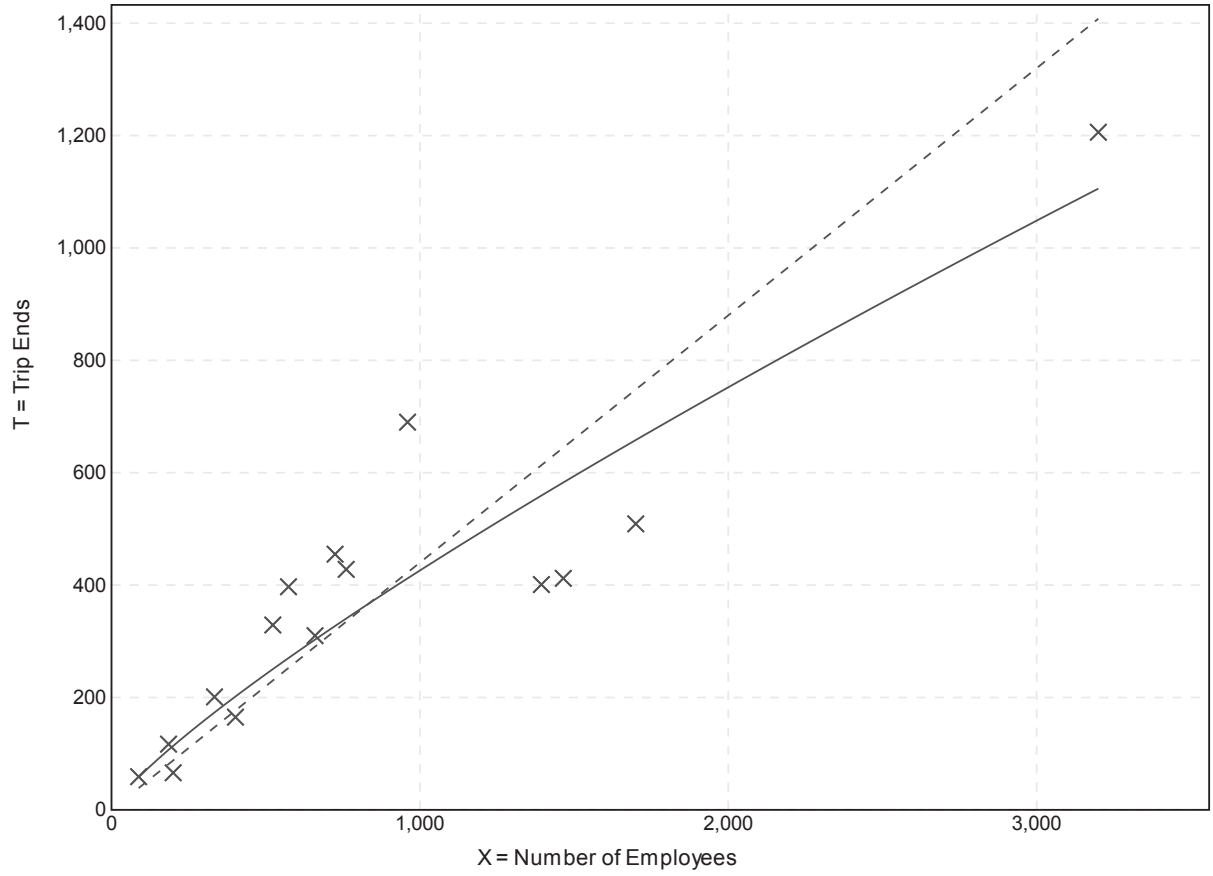
Industrial Park
(130)

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:	15
Avg. Num. of Employees:	878
Directional Distribution:	86% entering, 14% exiting

Vehicle Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.44	0.28 - 0.72	0.16

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.82 Ln(X) + 0.39

R^2= 0.87

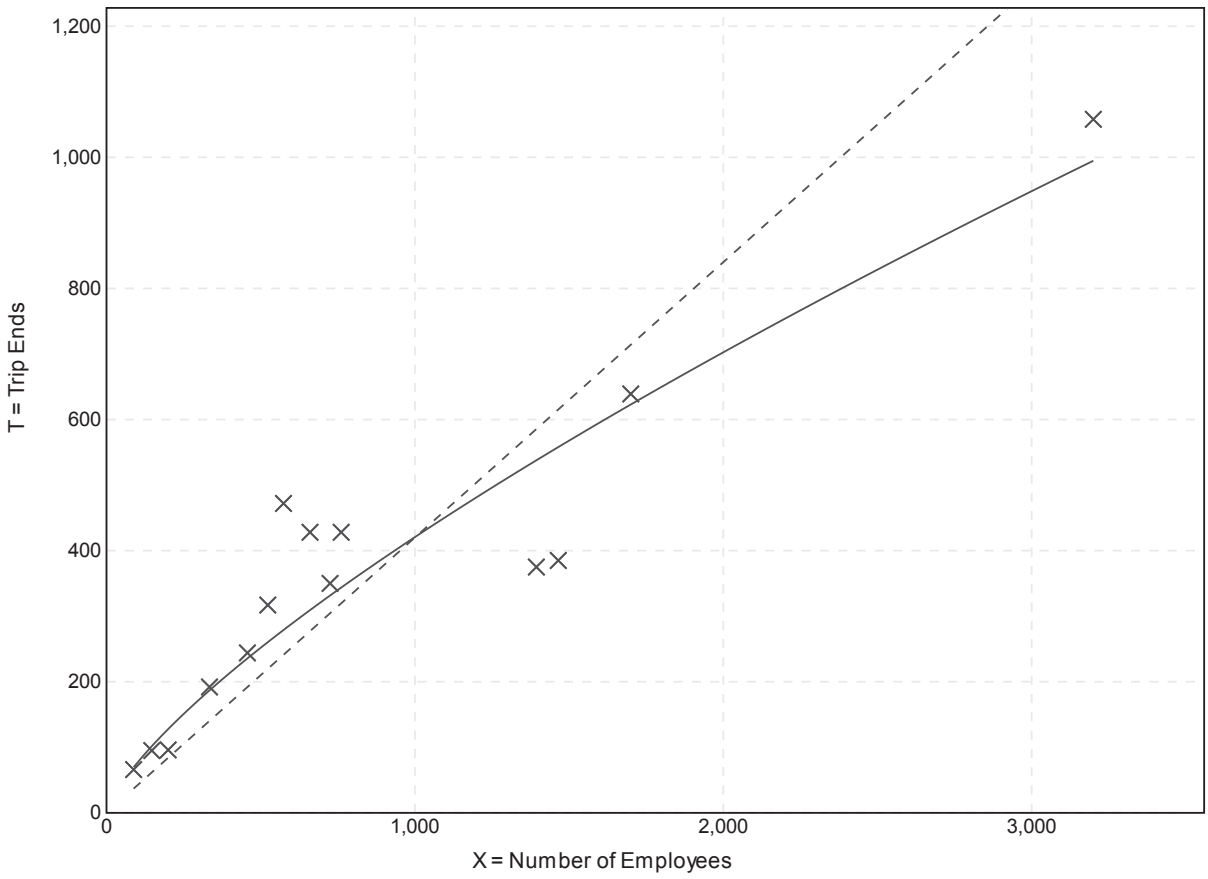
Industrial Park
(130)

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:	14
Avg. Num. of Employees:	873
Directional Distribution:	20% entering, 80% exiting

Vehicle Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.42	0.26 - 0.82	0.16

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.74 Ln(X) + 0.93

R^2= 0.90

Industrial Park
(130)

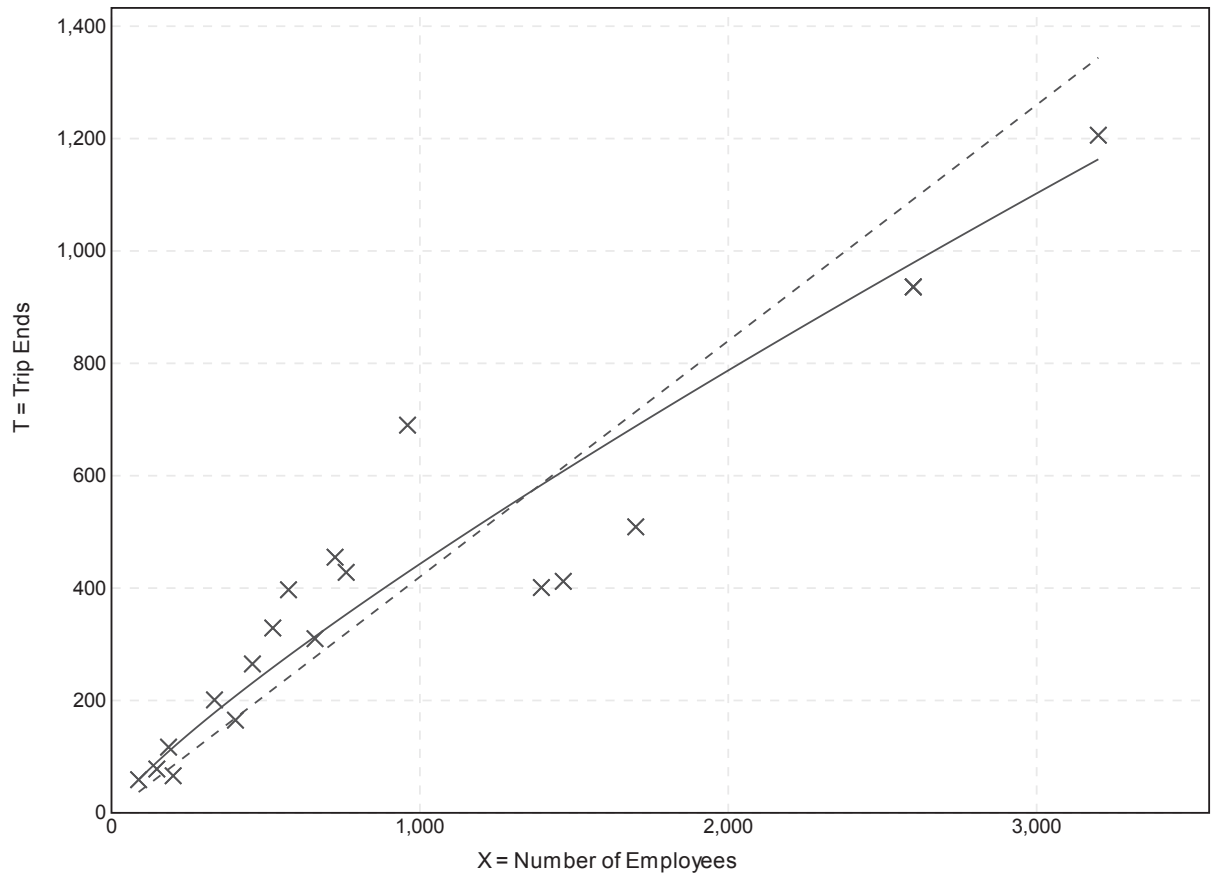
Vehicle Trip Ends vs: **Employees**
On a: **Weekday,**
AM Peak Hour of Generator

Setting/Location: **General Urban/Suburban**
Number of Studies: 19
Avg. Num. of Employees: 999
Directional Distribution: 87% entering, 13% exiting

Vehicle Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.42	0.28 - 0.72	0.14

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.83 Ln(X) + 0.36

R^2= 0.90

Industrial Park
(130)

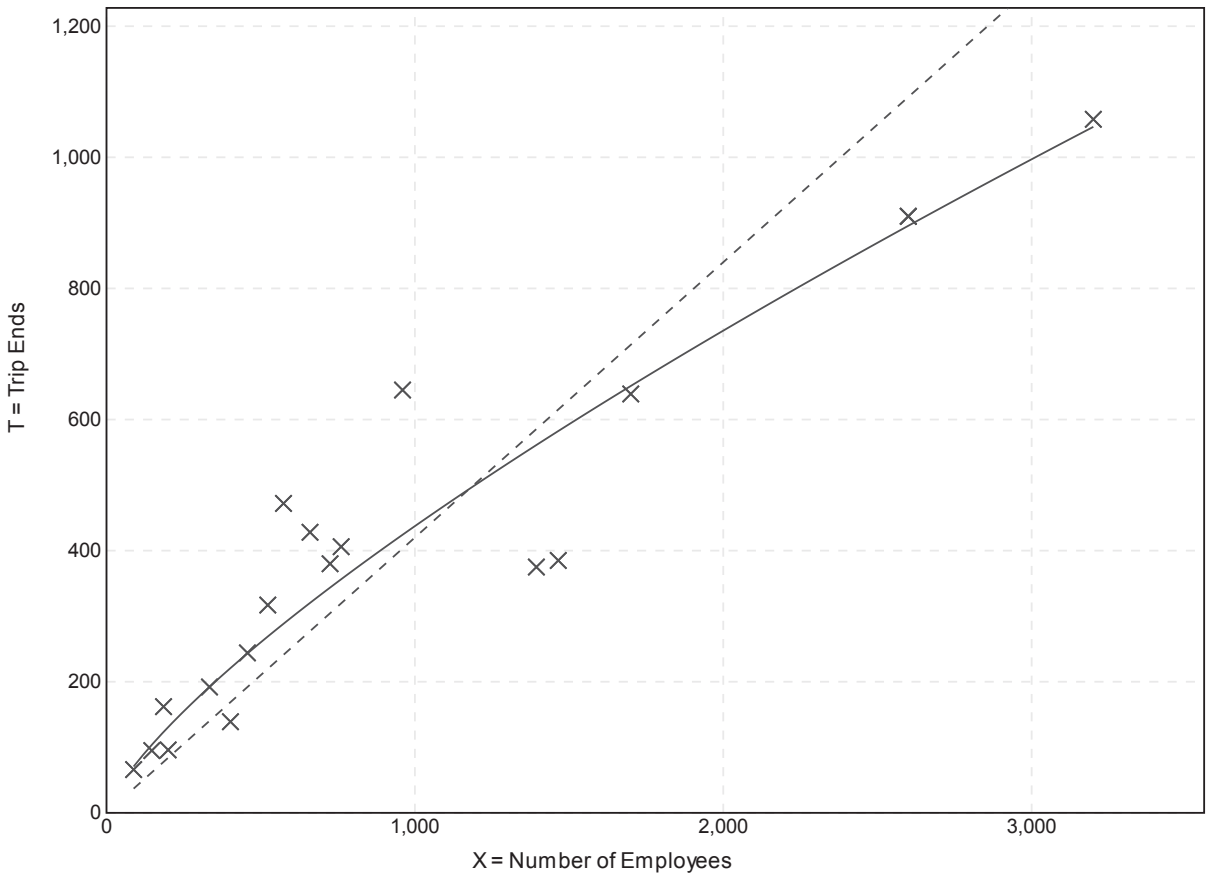
Vehicle Trip Ends vs: **Employees**
On a: **Weekday,**
PM Peak Hour of Generator

Setting/Location: **General Urban/Suburban**
Number of Studies: 19
Avg. Num. of Employees: 999
Directional Distribution: 21% entering, 79% exiting

Vehicle Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.42	0.26 - 0.88	0.15

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.75 Ln(X) + 0.90

R^2= 0.89

Industrial Park
(130)

Vehicle Trip Ends vs: **Employees**
On a: **Saturday**

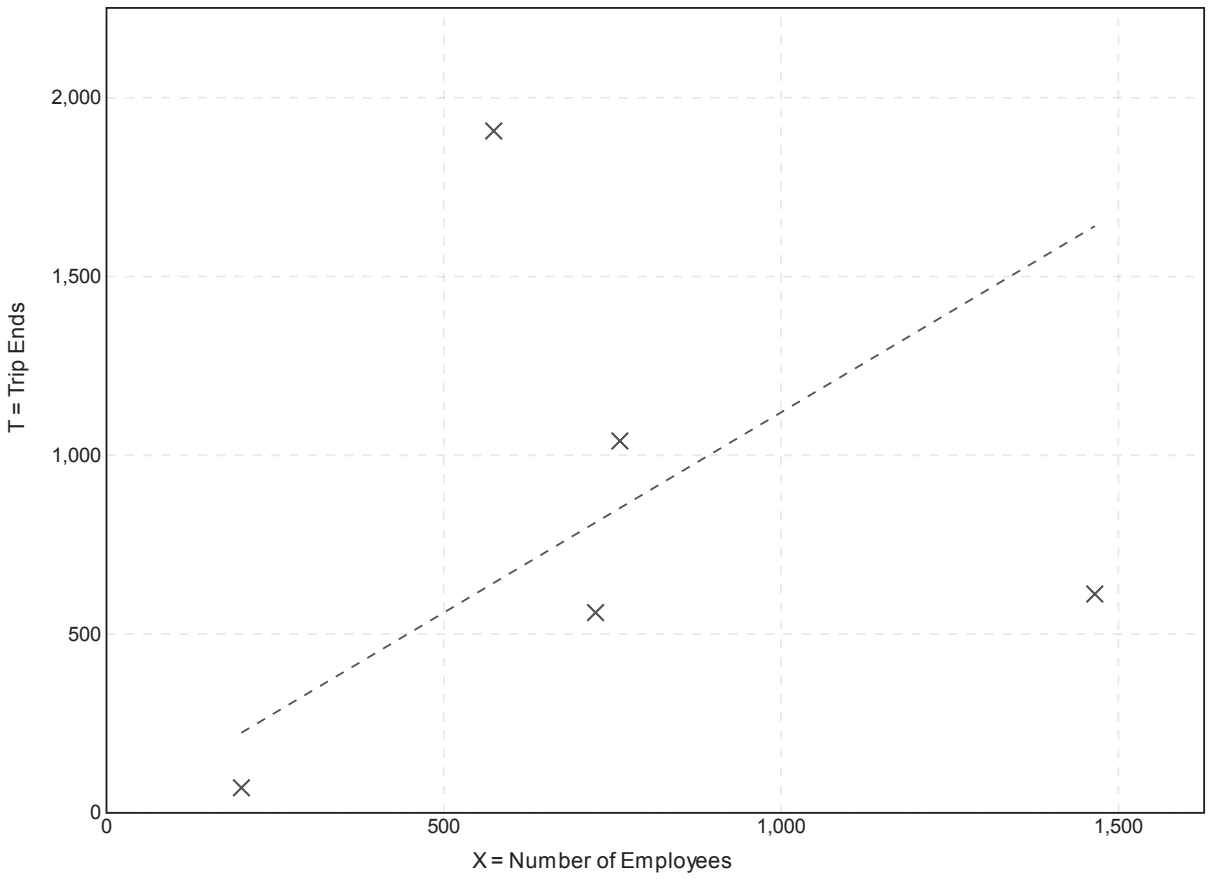
Setting/Location: **General Urban/Suburban**
Number of Studies: 5
Avg. Num. of Employees: 745
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
1.12	0.35 - 3.32	1.12

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= ****

Industrial Park
(130)

Vehicle Trip Ends vs: **Employees**
On a: **Saturday, Peak Hour of Generator**

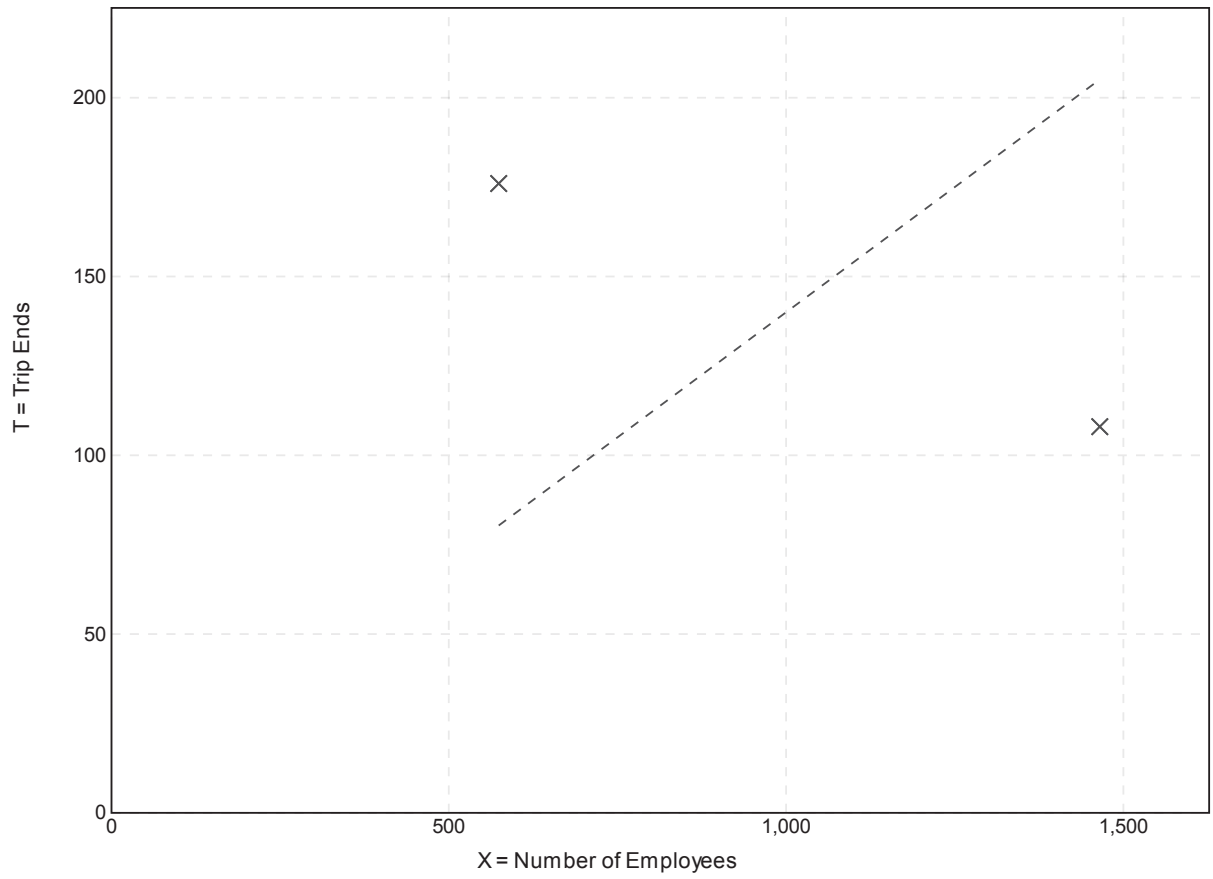
Setting/Location: **General Urban/Suburban**
Number of Studies: 2
Avg. Num. of Employees: 1020
Directional Distribution: 32% entering, 68% exiting

Vehicle Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.14	0.07 - 0.31	*

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= **

Industrial Park
(130)

Vehicle Trip Ends vs: **Employees**
On a: **Sunday**

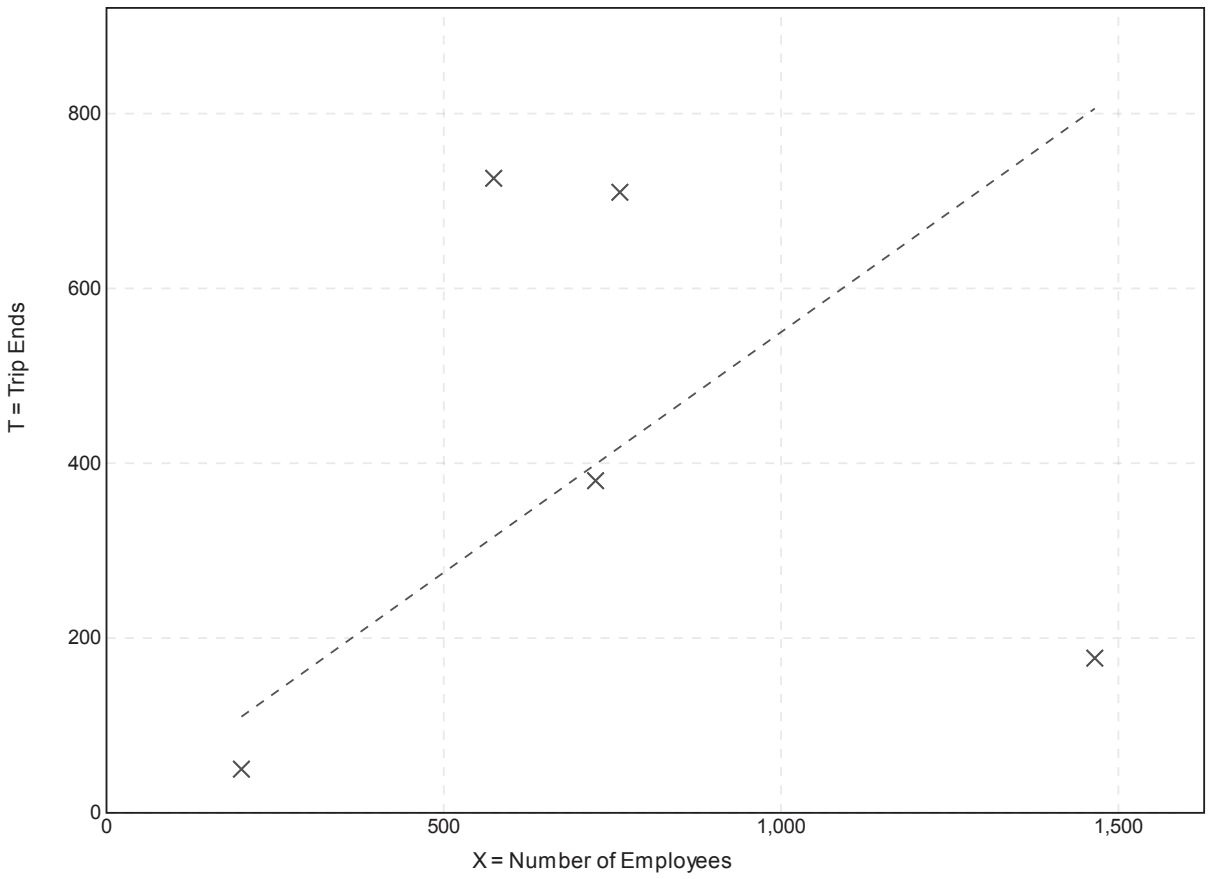
Setting/Location: **General Urban/Suburban**
Number of Studies: 5
Avg. Num. of Employees: 745
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.55	0.12 - 1.26	0.48

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= ****

Industrial Park
(130)

Vehicle Trip Ends vs: **Employees**
On a: **Sunday, Peak Hour of Generator**

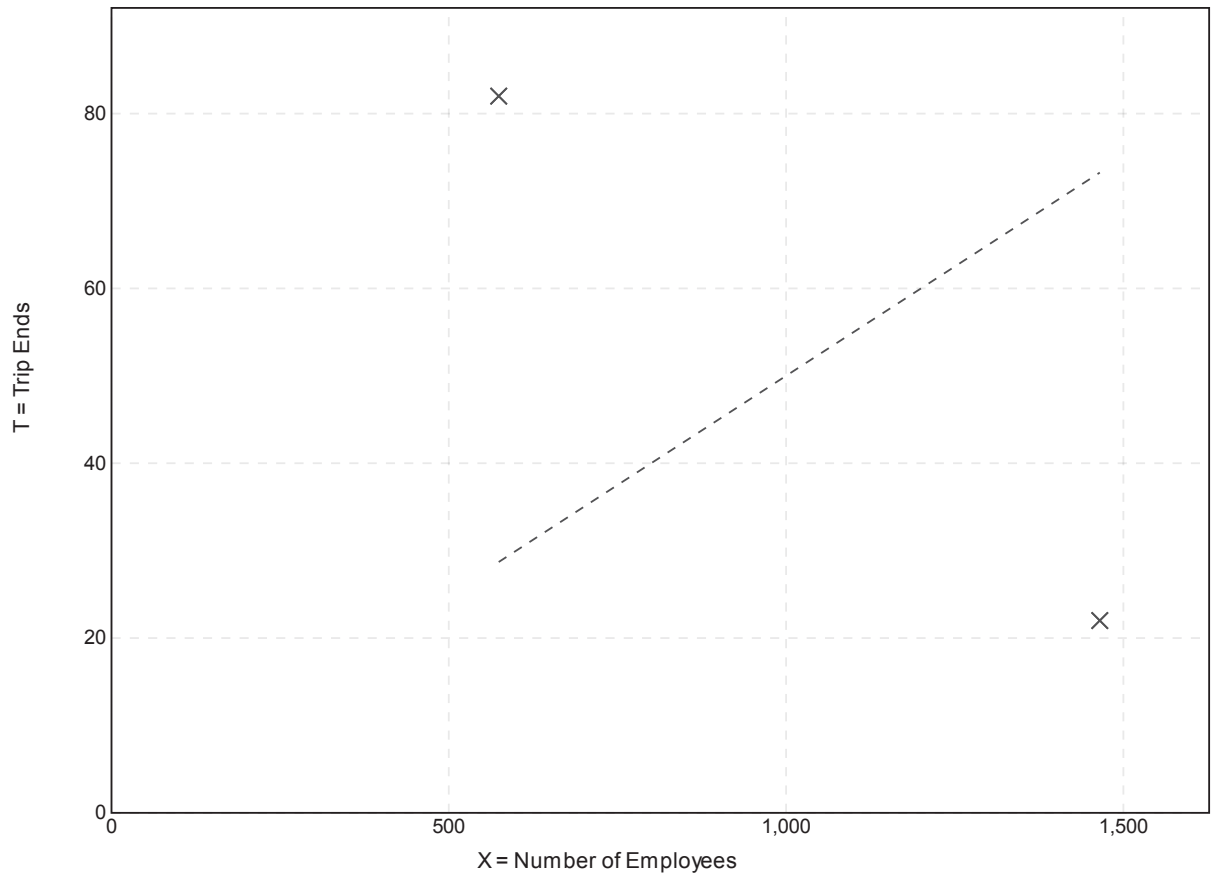
Setting/Location: **General Urban/Suburban**
Number of Studies: 2
Avg. Num. of Employees: 1020
Directional Distribution: 46% entering, 54% exiting

Vehicle Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.05	0.02 - 0.14	*

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= **

Industrial Park
(130)

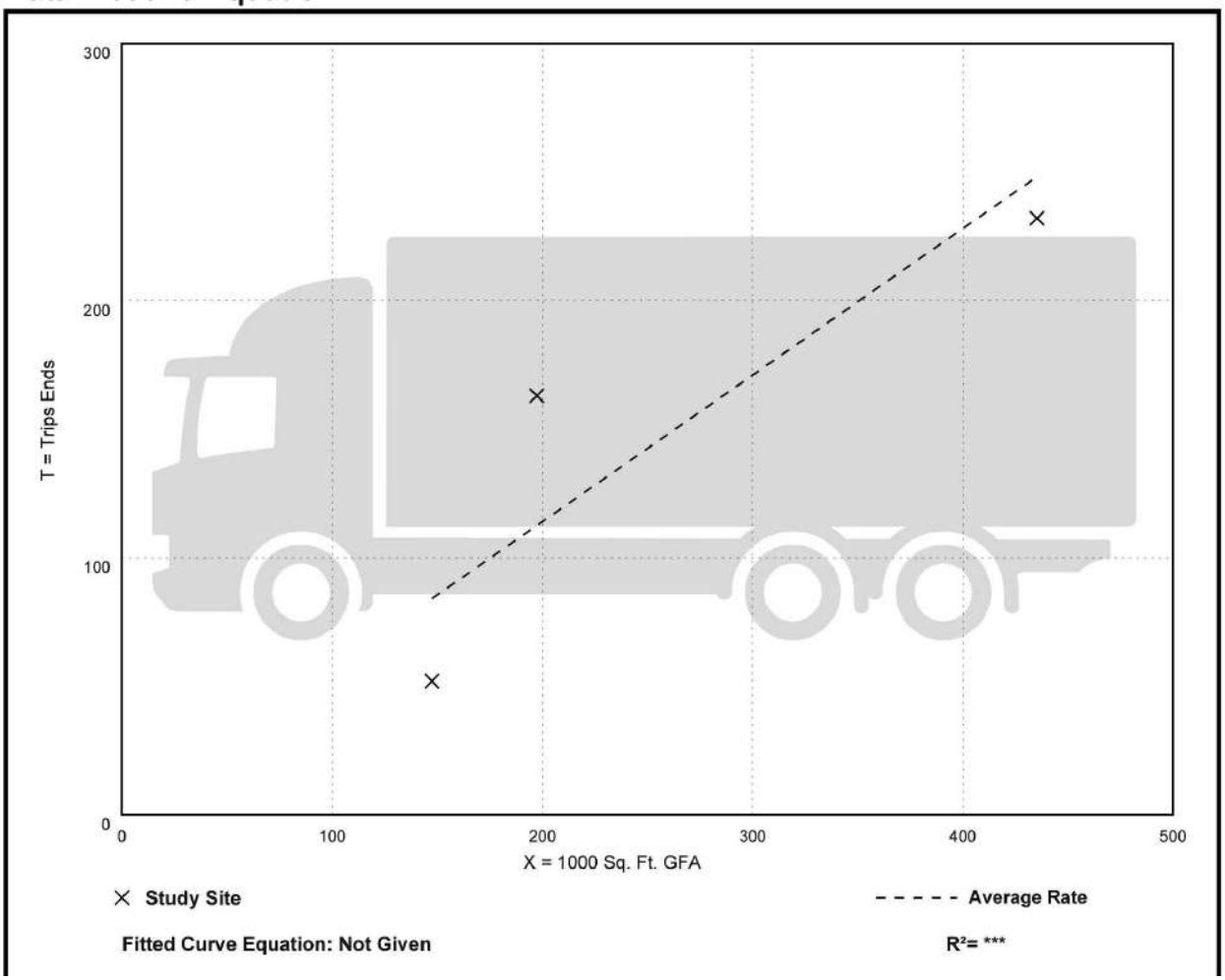
Truck Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 3
Avg. 1000 Sq. Ft. GFA: 260
Directional Distribution: 50% entering, 50% exiting

Truck Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.57	0.35 - 0.83	0.20

Data Plot and Equation



Fitted Curve Equation: Not Given

R^2= ***

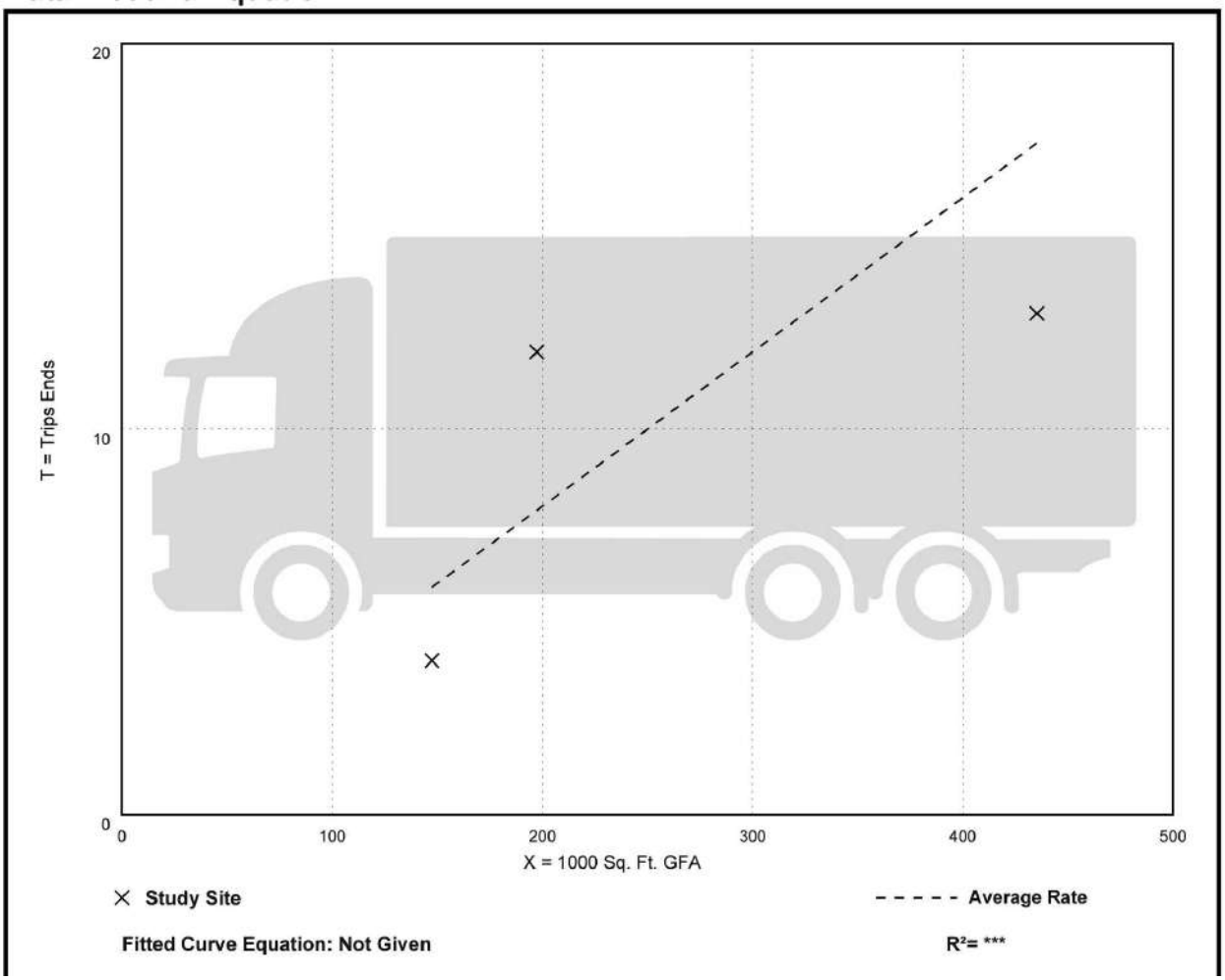
Industrial Park
(130)

Truck Trip Ends vs: 1000 Sq. Ft. GFA
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: 3
Avg. 1000 Sq. Ft. GFA: 260
Directional Distribution: 45% entering, 55% exiting

Truck Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.04	0.03 - 0.06	0.02

Data Plot and Equation



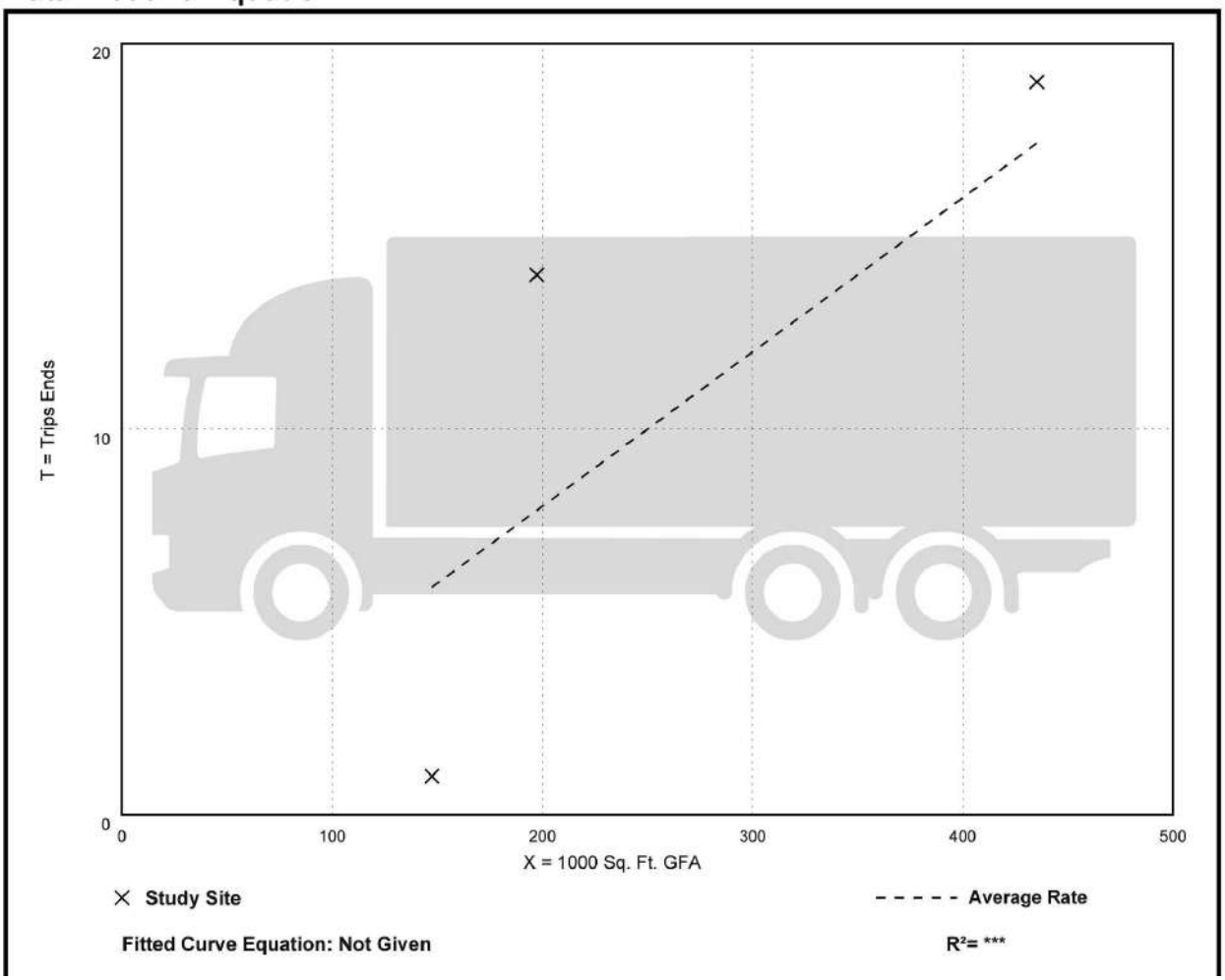
Industrial Park
(130)

Truck Trip Ends vs: 1000 Sq. Ft. GFA
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. 1000 Sq. Ft. GFA: 260
Directional Distribution: 38% entering, 62% exiting

Truck Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.04	0.01 - 0.07	0.03

Data Plot and Equation



Fitted Curve Equation: Not Given

R^2= ***

Industrial Park
(130)

Truck Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
AM Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 3
Avg. 1000 Sq. Ft. GFA: 260
Directional Distribution: 67% entering, 33% exiting

Truck Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.03	0.02 - 0.05	0.01

Data Plot and Equation

Industrial Park
(130)

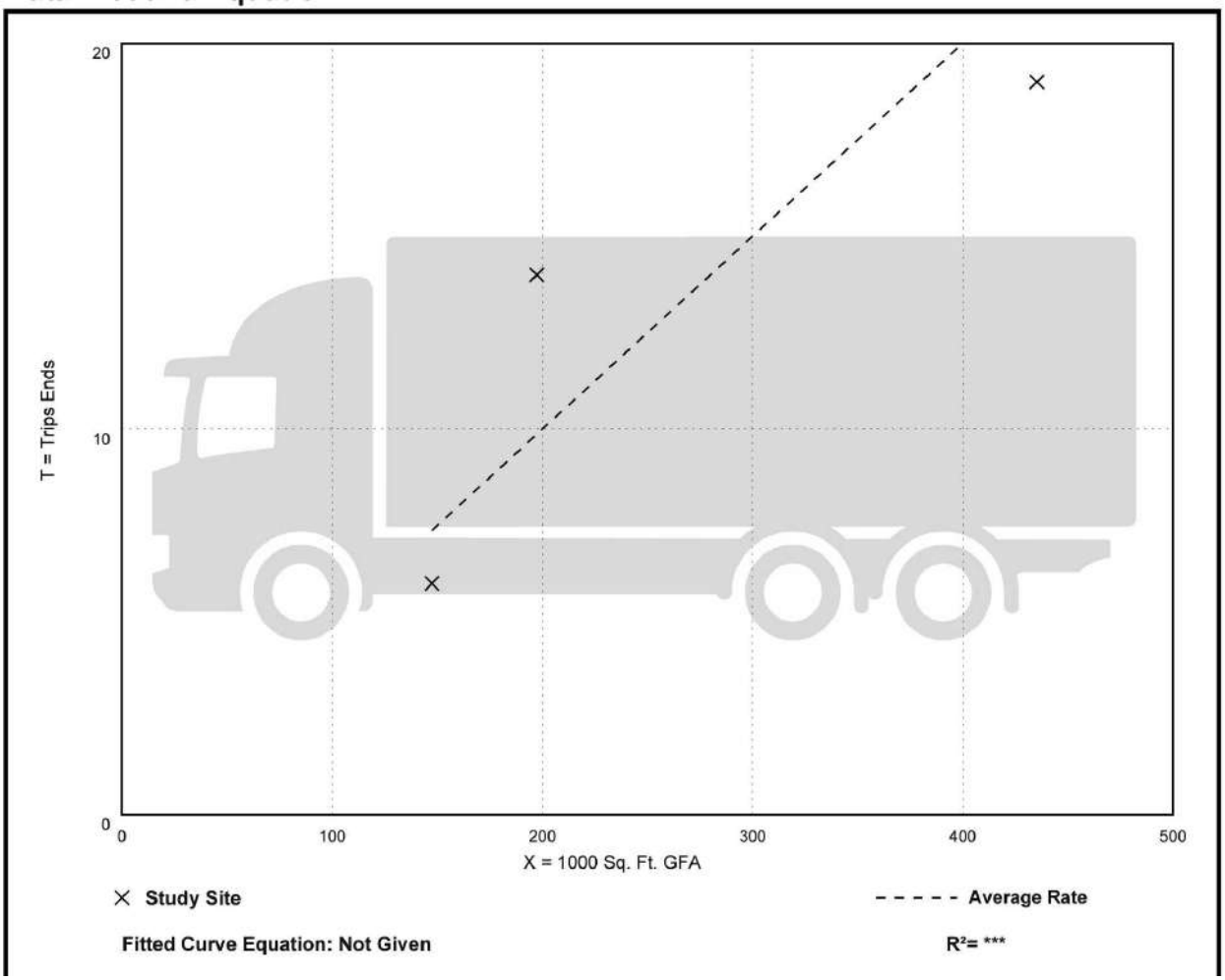
Truck Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
PM Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 3
Avg. 1000 Sq. Ft. GFA: 260
Directional Distribution: 38% entering, 62% exiting

Truck Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.05	0.04 - 0.07	0.01

Data Plot and Equation



Land Use: 150
Warehousing

Description

A warehouse is primarily devoted to the storage of materials, but it may also include office and maintenance areas. High-cube transload and short-term storage warehouse (Land Use 154), high-cube fulfillment center warehouse (Land Use 155), high-cube parcel hub warehouse (Land Use 156), and high-cube cold storage warehouse (Land Use 157) are related uses.

Additional Data

Time-of-day distribution data for this land use are presented in Appendix A. For the 13 general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 11:30 a.m. and 12:30 p.m. and 3:00 and 4:00 p.m., respectively.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in California, Connecticut, Minnesota, New Jersey, New York, Ohio, Oregon, Pennsylvania, and Texas.

Source Numbers

184, 331, 406, 411, 443, 579, 583, 596, 598, 611, 619, 642, 752, 869, 875, 876, 914, 940

Warehousing
(150)

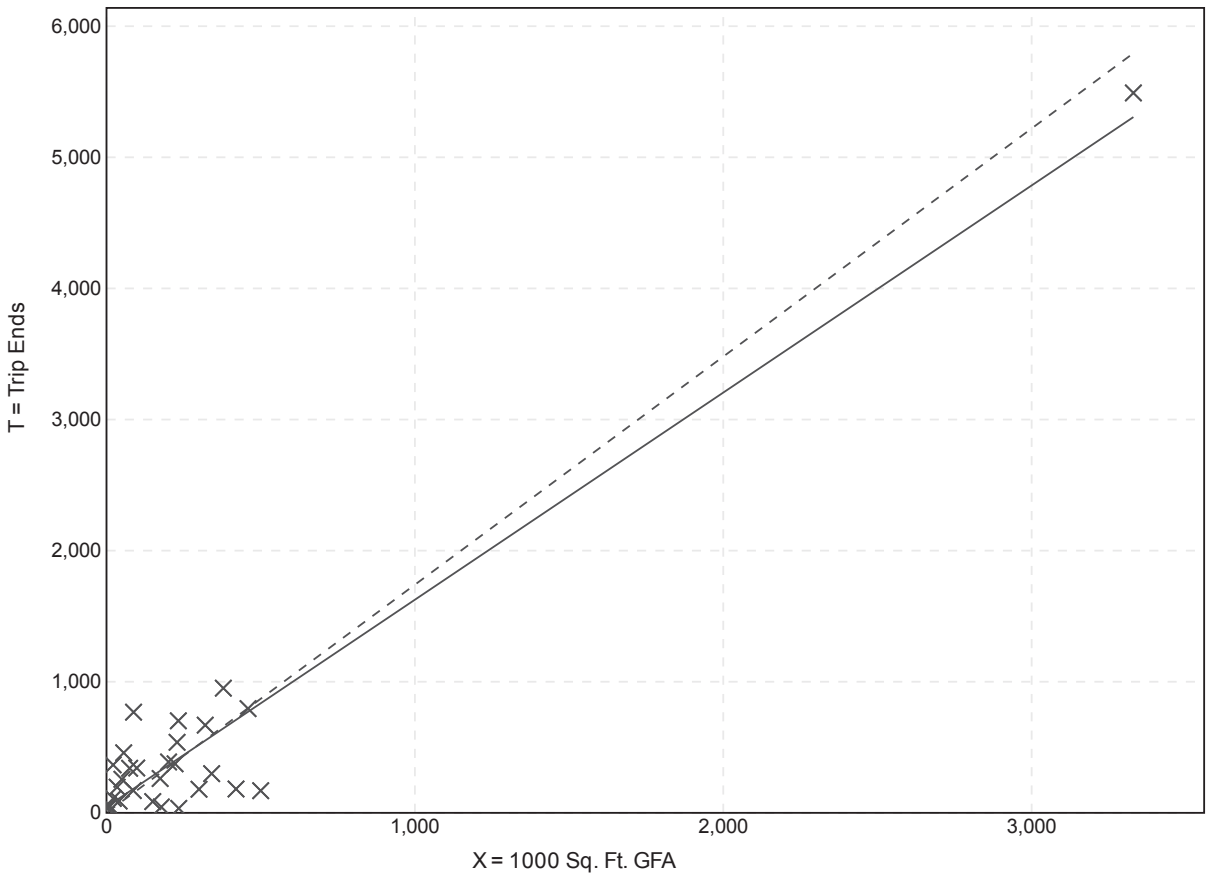
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 29
1000 Sq. Ft. GFA: 285
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.74	0.15 - 16.93	1.55

Data Plot and Equation



Fitted Curve Equation: T = 1.58(X) + 45.54

R^2= 0.93

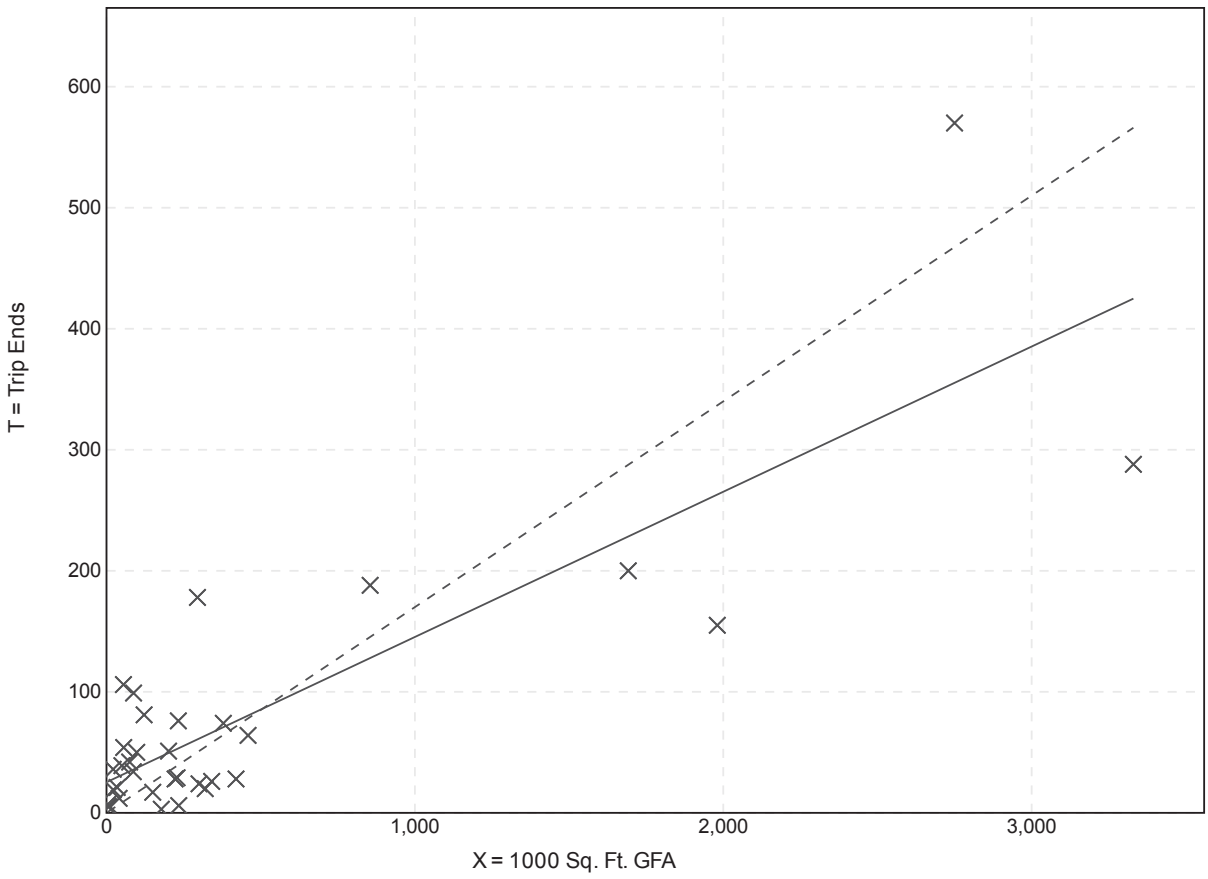
Warehousing
(150)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
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:	34
1000 Sq. Ft. GFA:	451
Directional Distribution:	77% entering, 23% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.17	0.02 - 1.93	0.20

Data Plot and Equation



Fitted Curve Equation: T = 0.12(X) + 25.32

R^2= 0.69

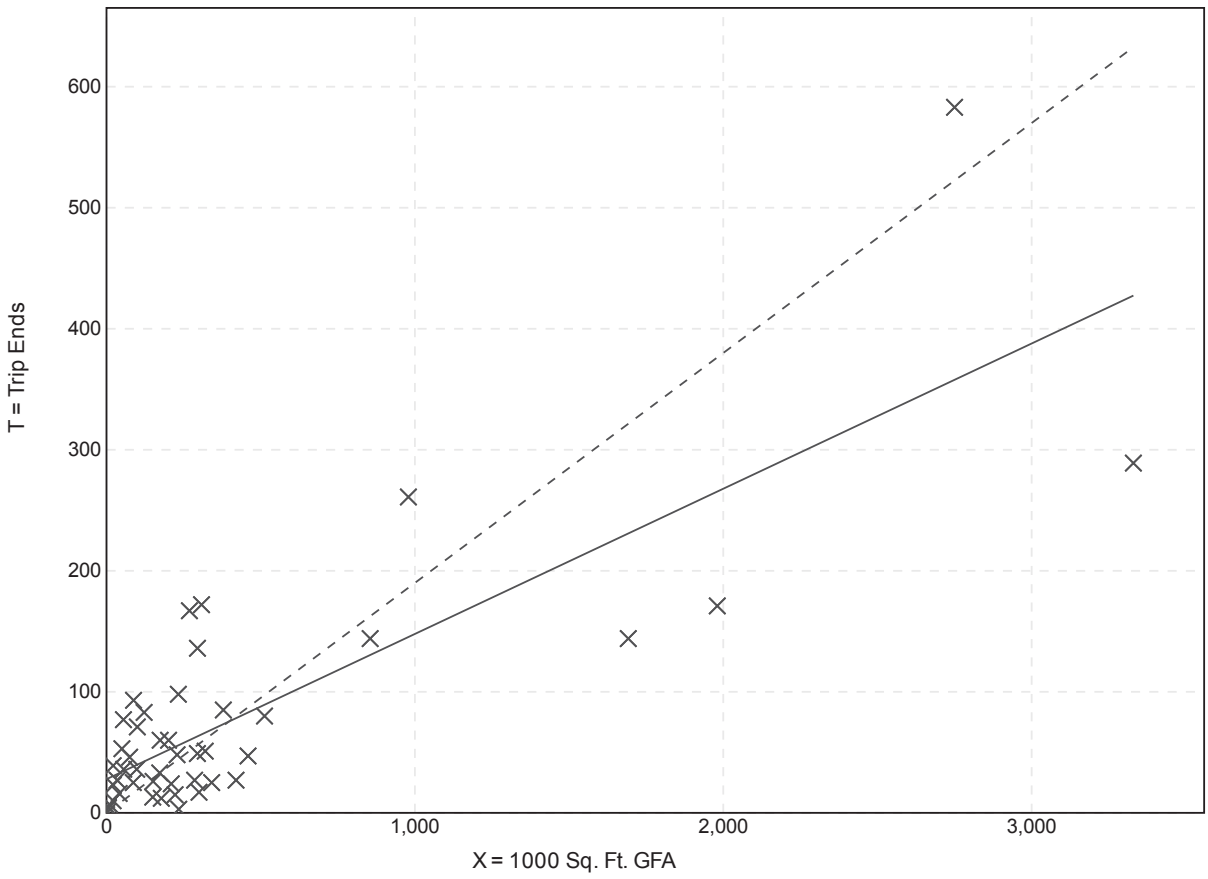
Warehousing
(150)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
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:	47
1000 Sq. Ft. GFA:	400
Directional Distribution:	27% entering, 73% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.19	0.01 - 1.80	0.18

Data Plot and Equation



Fitted Curve Equation: T = 0.12(X) + 27.82

R^2= 0.65

Warehousing
(150)

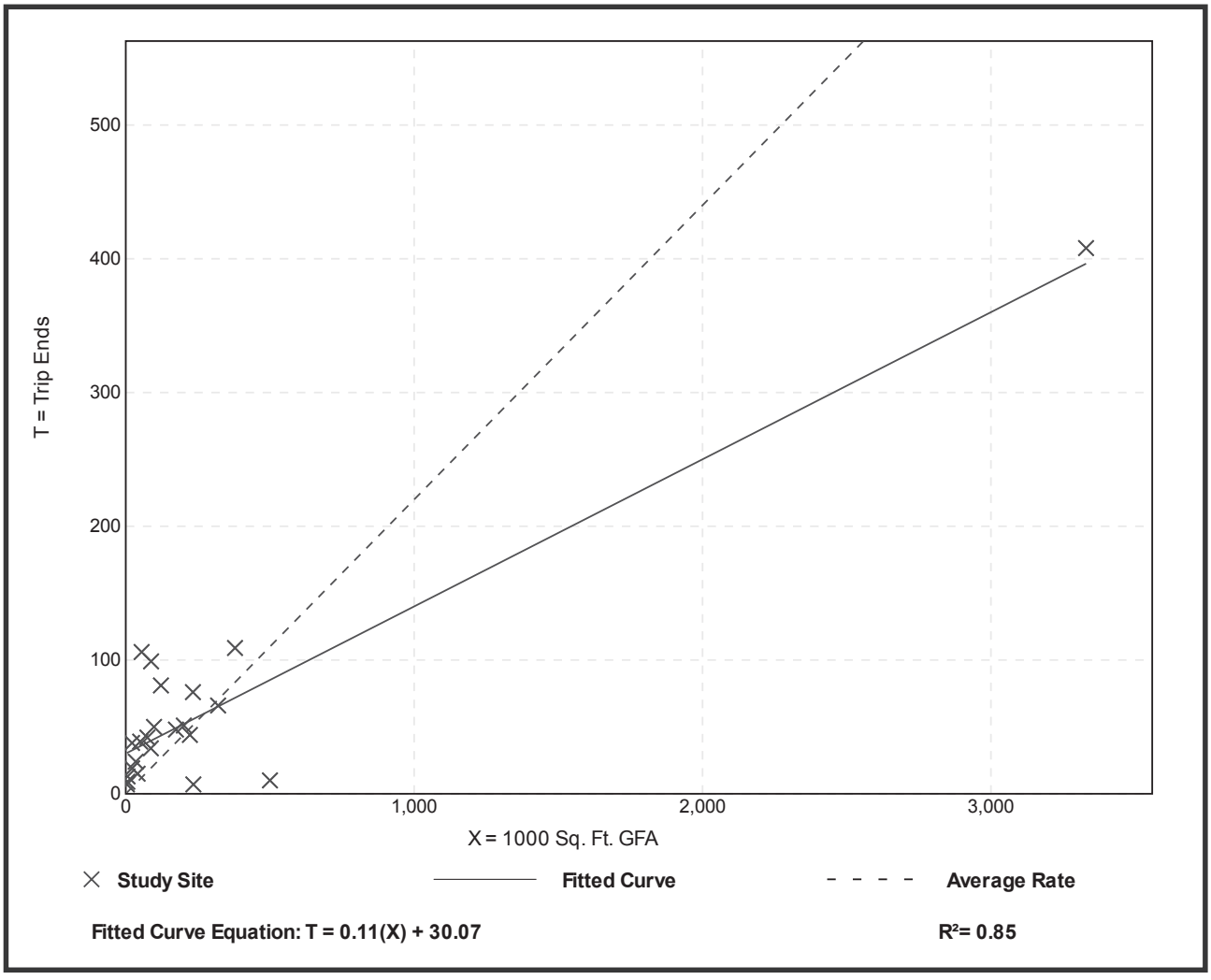
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
AM Peak Hour of Generator

Setting/Location: **General Urban/Suburban**
Number of Studies: 23
1000 Sq. Ft. GFA: 274
Directional Distribution: 65% entering, 35% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.22	0.02 - 2.08	0.28

Data Plot and Equation



Warehousing
(150)

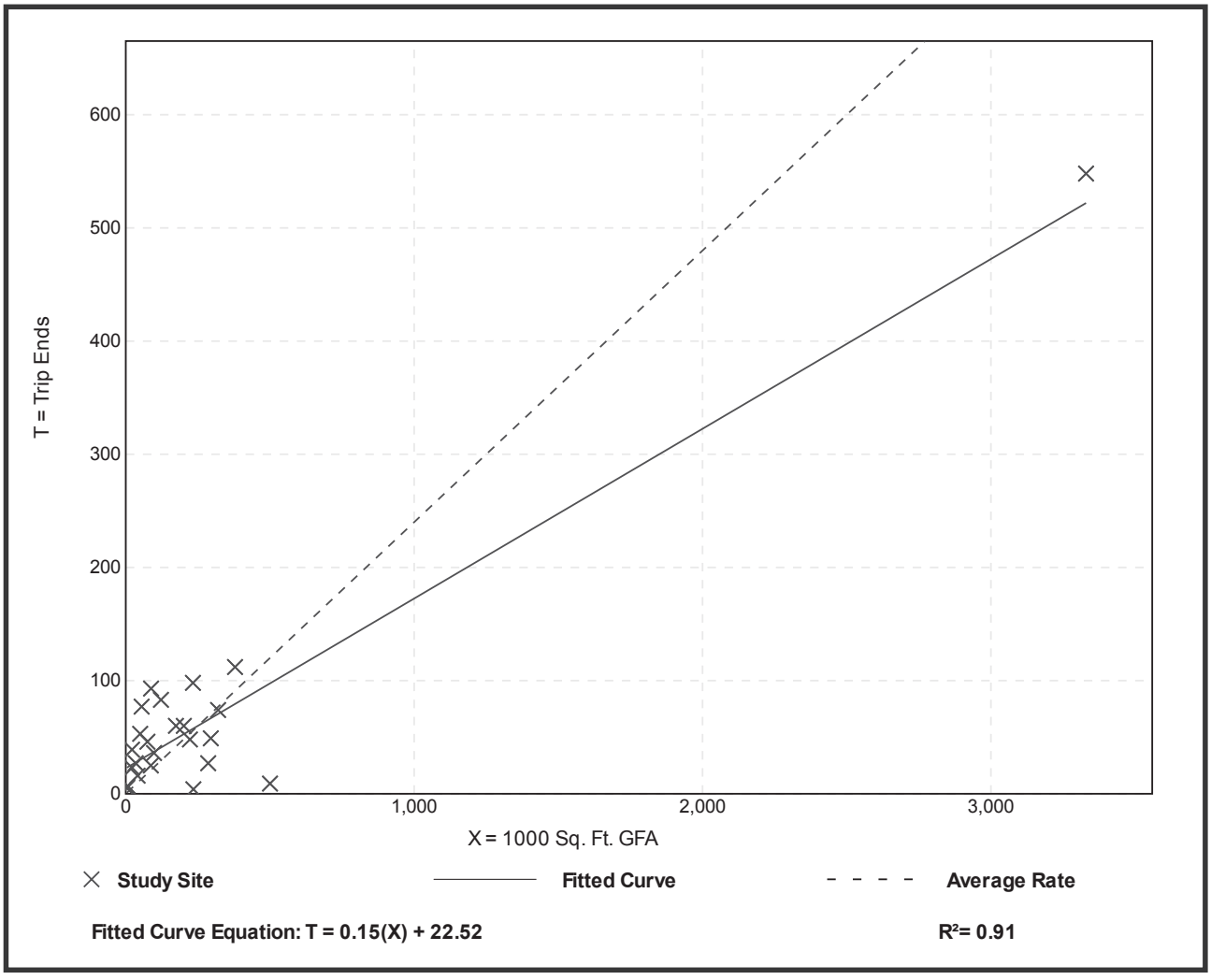
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
PM Peak Hour of Generator

Setting/Location: **General Urban/Suburban**
Number of Studies: 25
1000 Sq. Ft. GFA: 275
Directional Distribution: 24% entering, 76% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.24	0.02 - 1.80	0.24

Data Plot and Equation



Warehousing
(150)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Saturday**

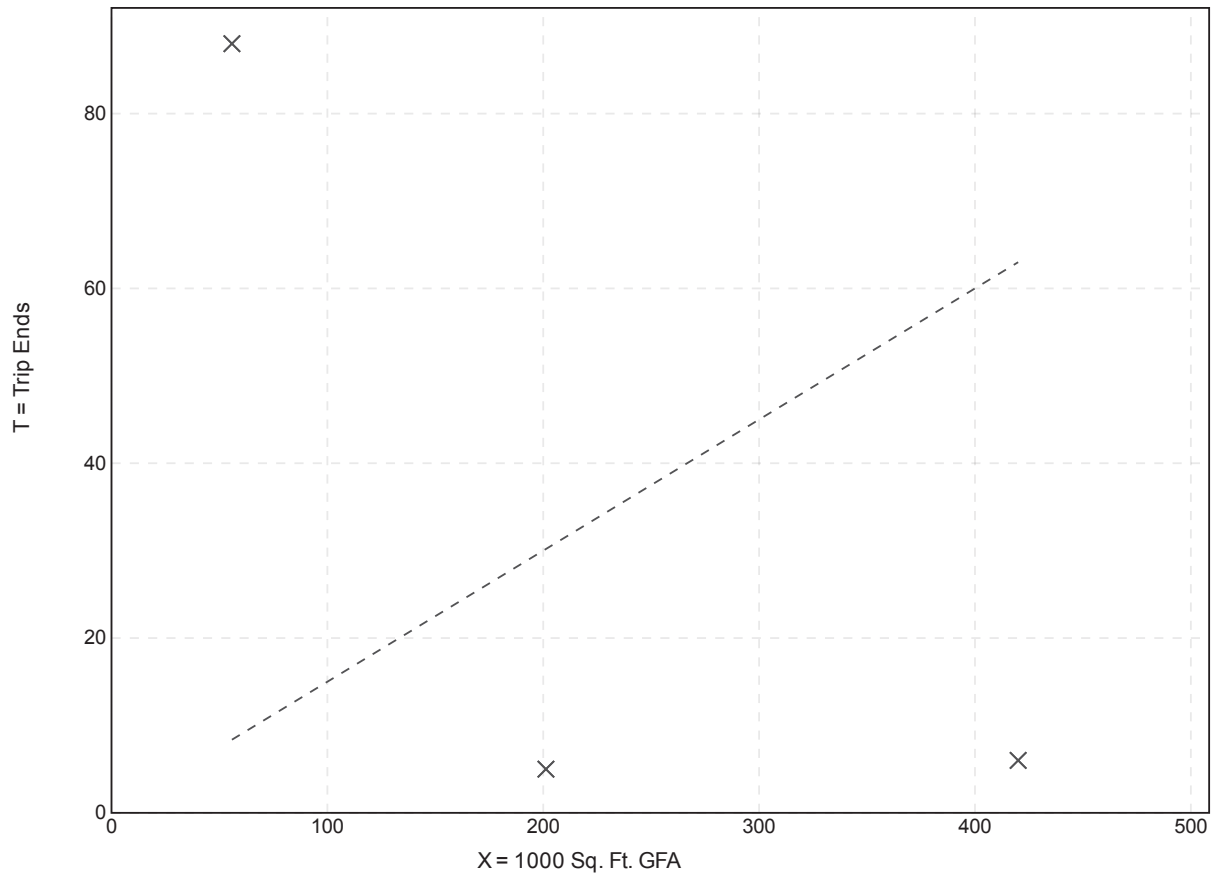
Setting/Location: **General Urban/Suburban**
Number of Studies: 3
1000 Sq. Ft. GFA: 226
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.15	0.01 - 1.58	1.12

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= ****

Warehousing
(150)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Saturday, Peak Hour of Generator**

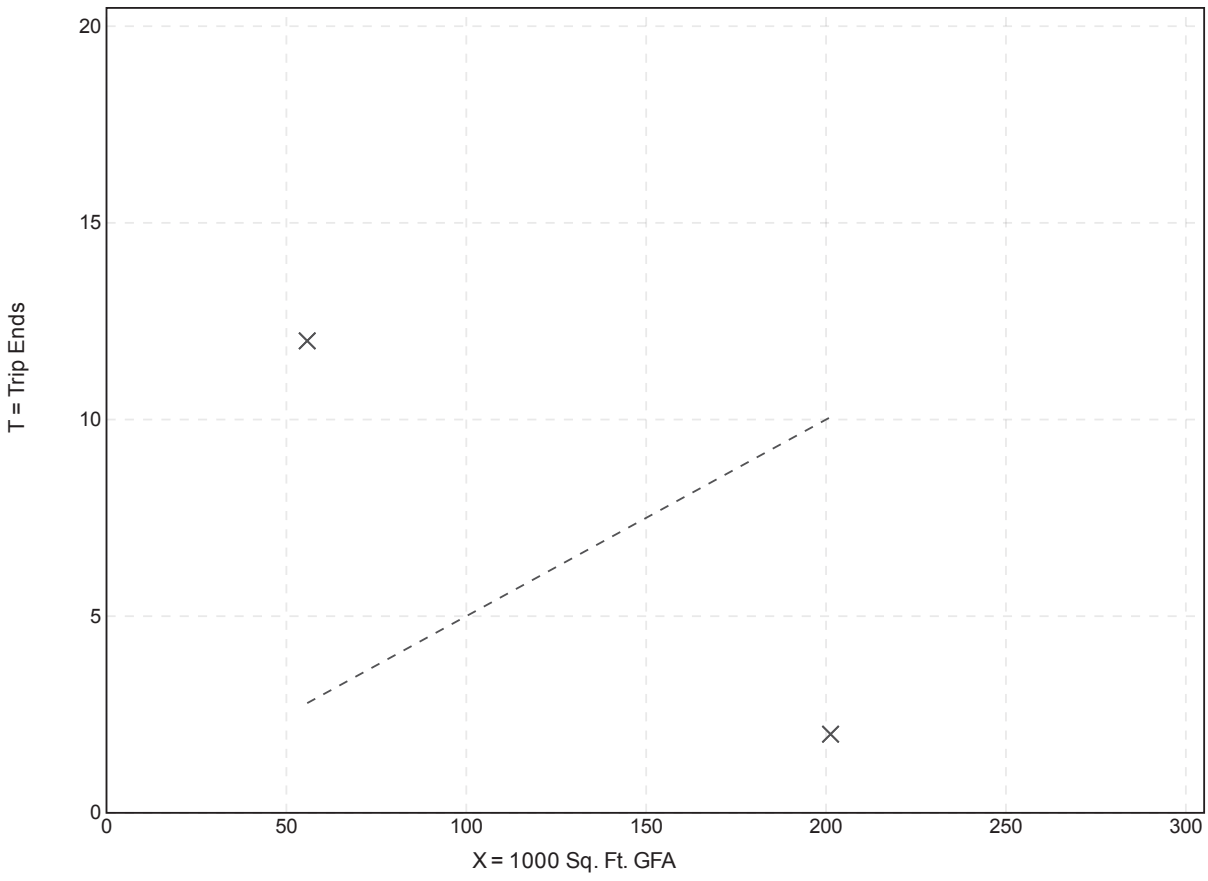
Setting/Location: **General Urban/Suburban**
Number of Studies: 2
1000 Sq. Ft. GFA: 129
Directional Distribution: 64% entering, 36% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.05	0.01 - 0.22	*

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= **

Warehousing
(150)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Sunday**

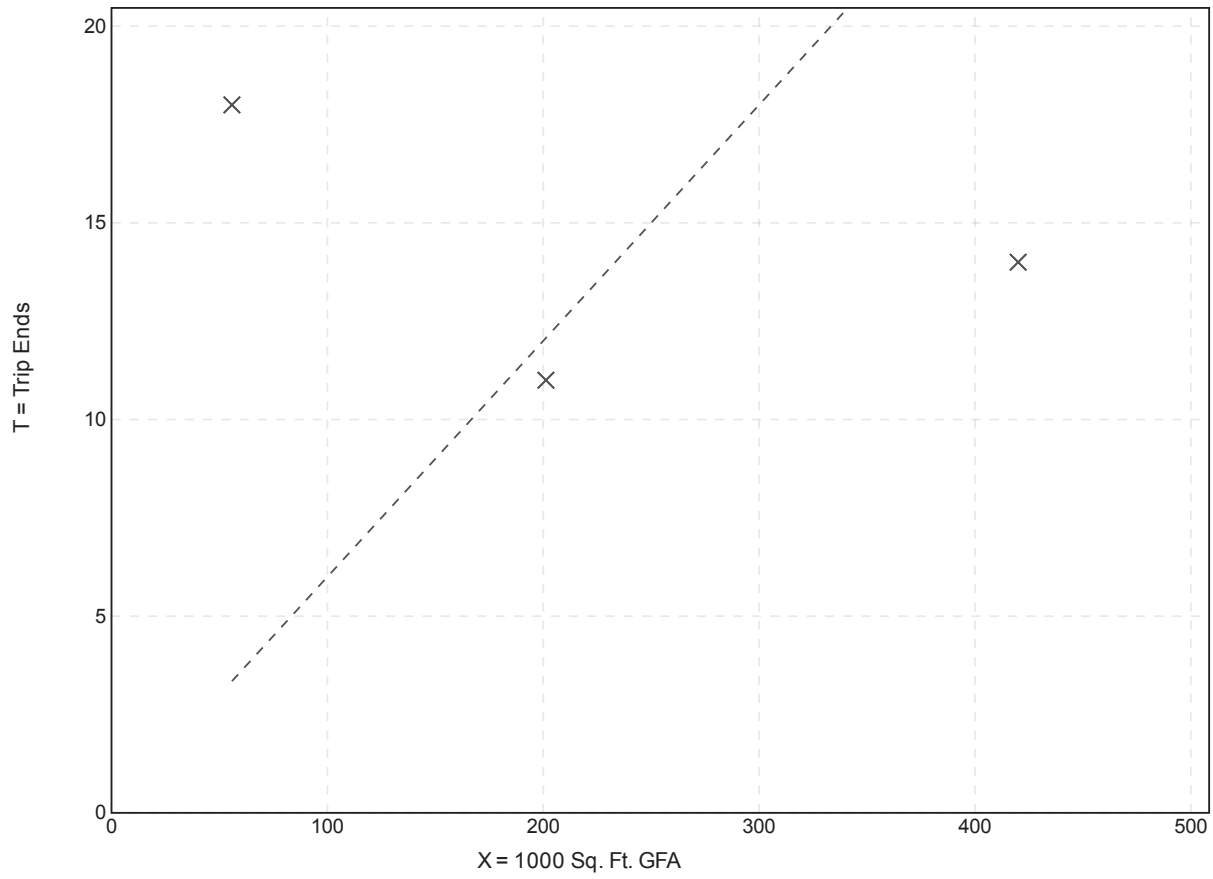
Setting/Location: **General Urban/Suburban**
Number of Studies: 3
1000 Sq. Ft. GFA: 226
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.06	0.03 - 0.32	0.23

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= ****

Warehousing
(150)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Sunday, Peak Hour of Generator**

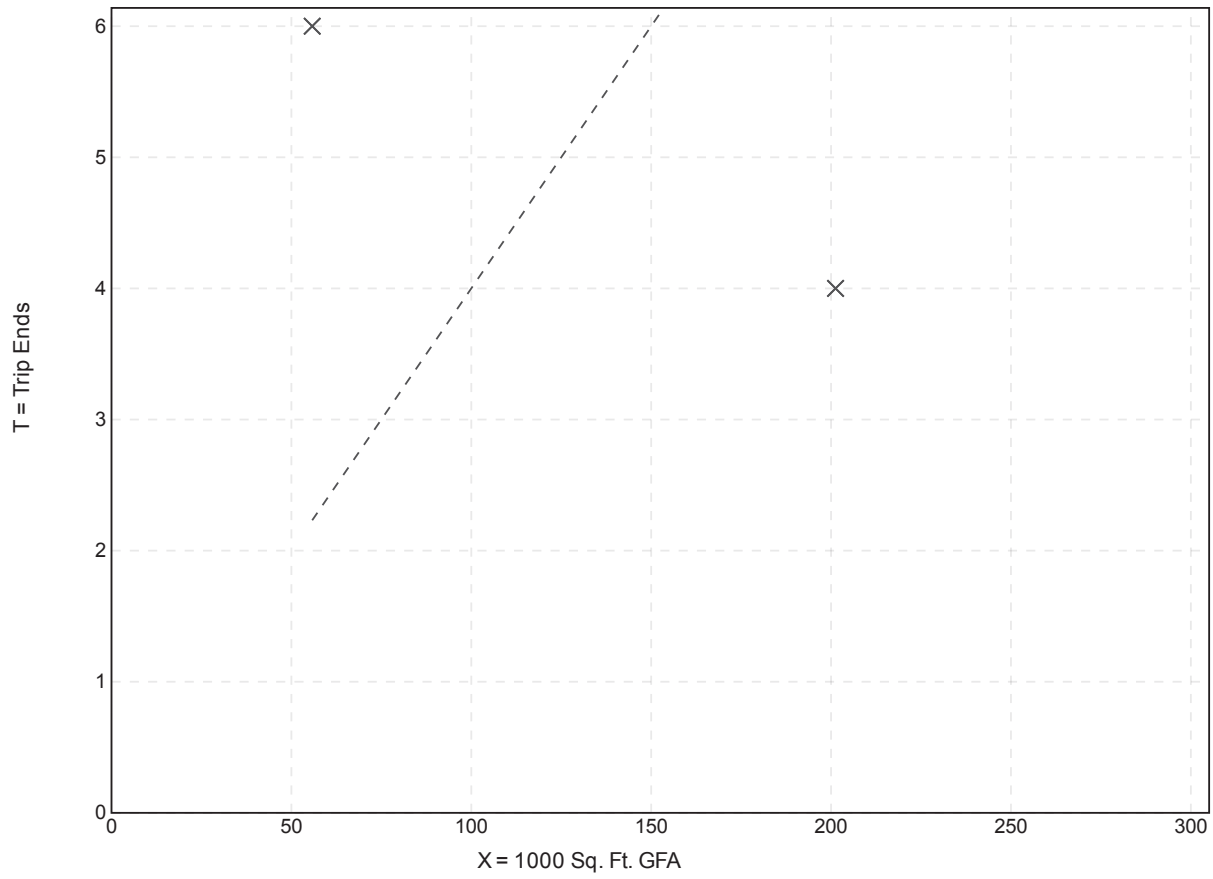
Setting/Location: **General Urban/Suburban**
Number of Studies: 2
1000 Sq. Ft. GFA: 129
Directional Distribution: 52% entering, 48% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.04	0.02 - 0.11	*

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= **

Warehousing
(150)

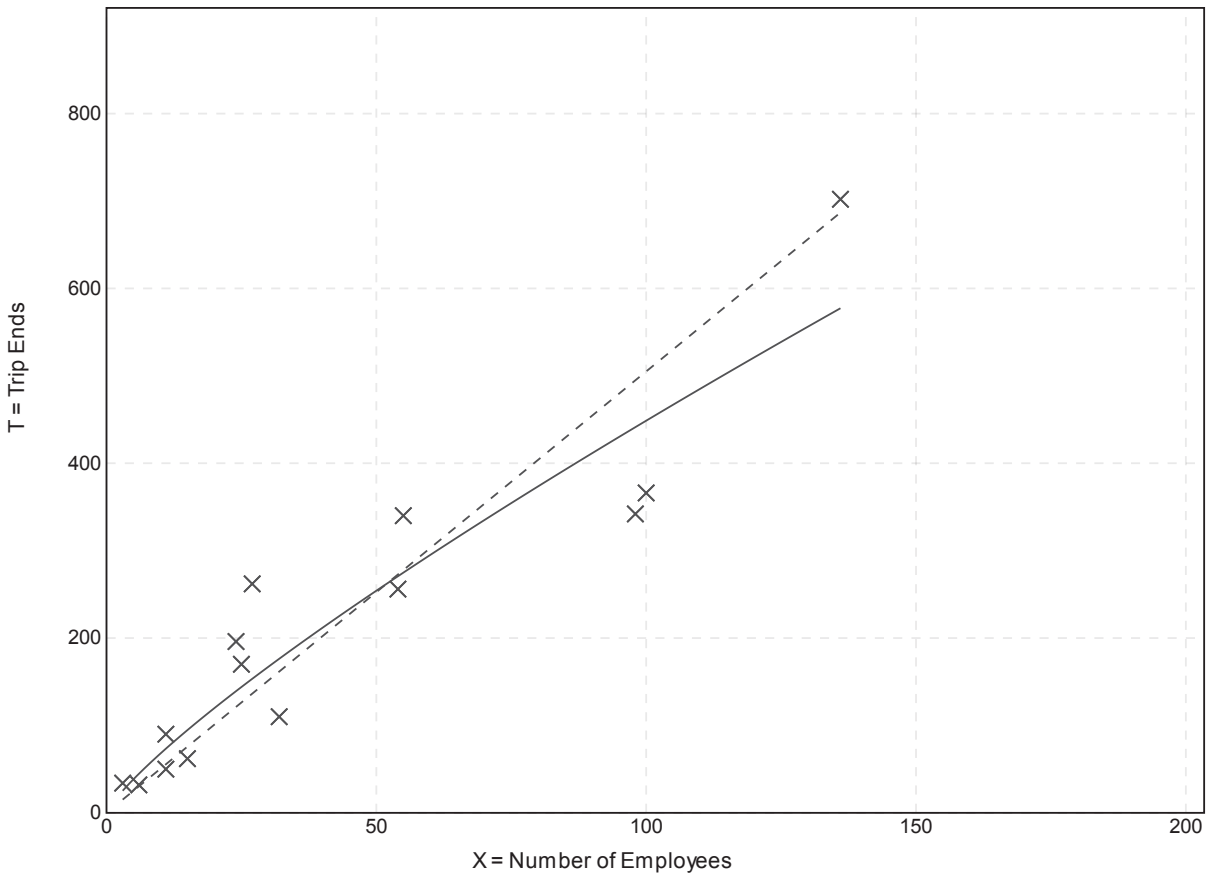
Vehicle Trip Ends vs: **Employees**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 14
Avg. Num. of Employees: 43
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
5.05	3.44 - 11.33	1.77

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.82 Ln(X) + 2.33

R^2= 0.88

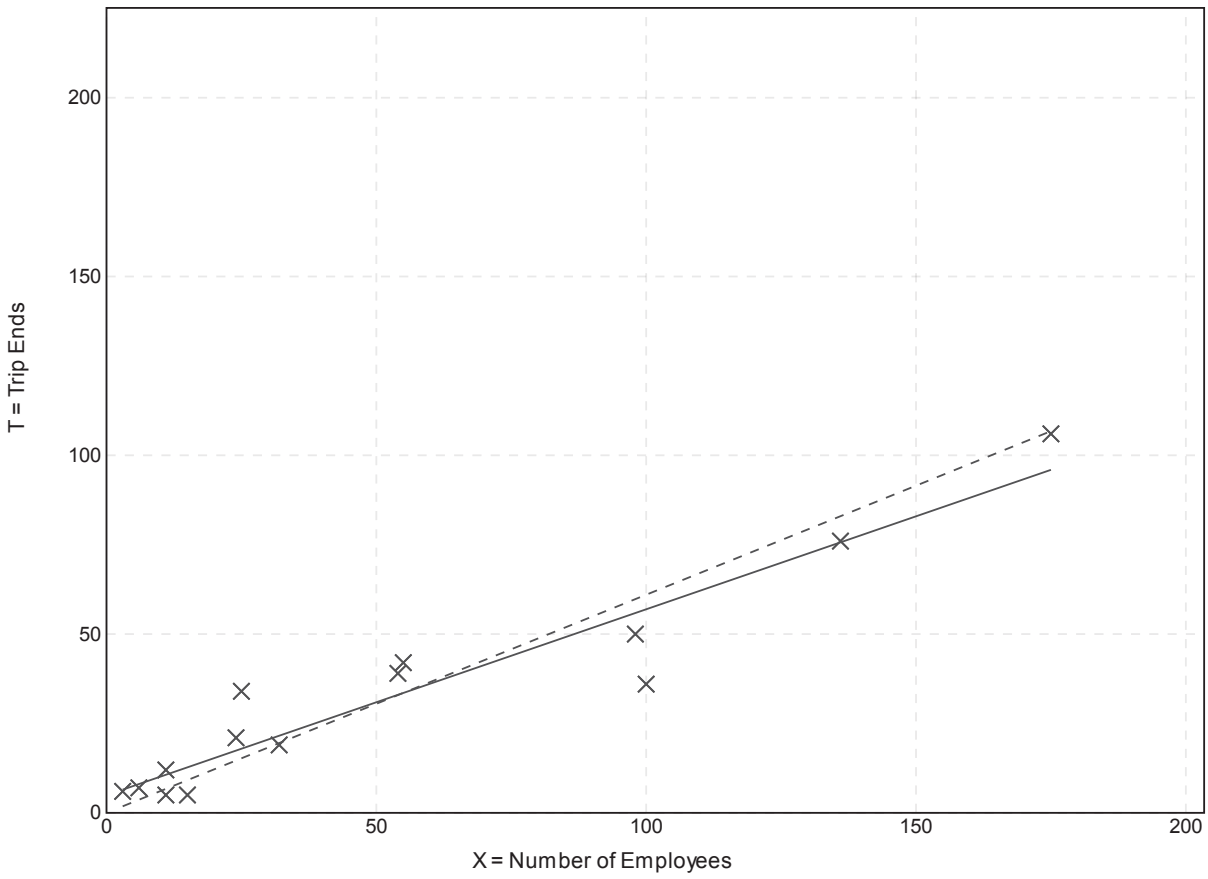
Warehousing
(150)

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:	14
Avg. Num. of Employees:	53
Directional Distribution:	72% entering, 28% exiting

Vehicle Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.61	0.33 - 2.00	0.23

Data Plot and Equation



Fitted Curve Equation: T = 0.52(X) + 4.93

R^2= 0.91

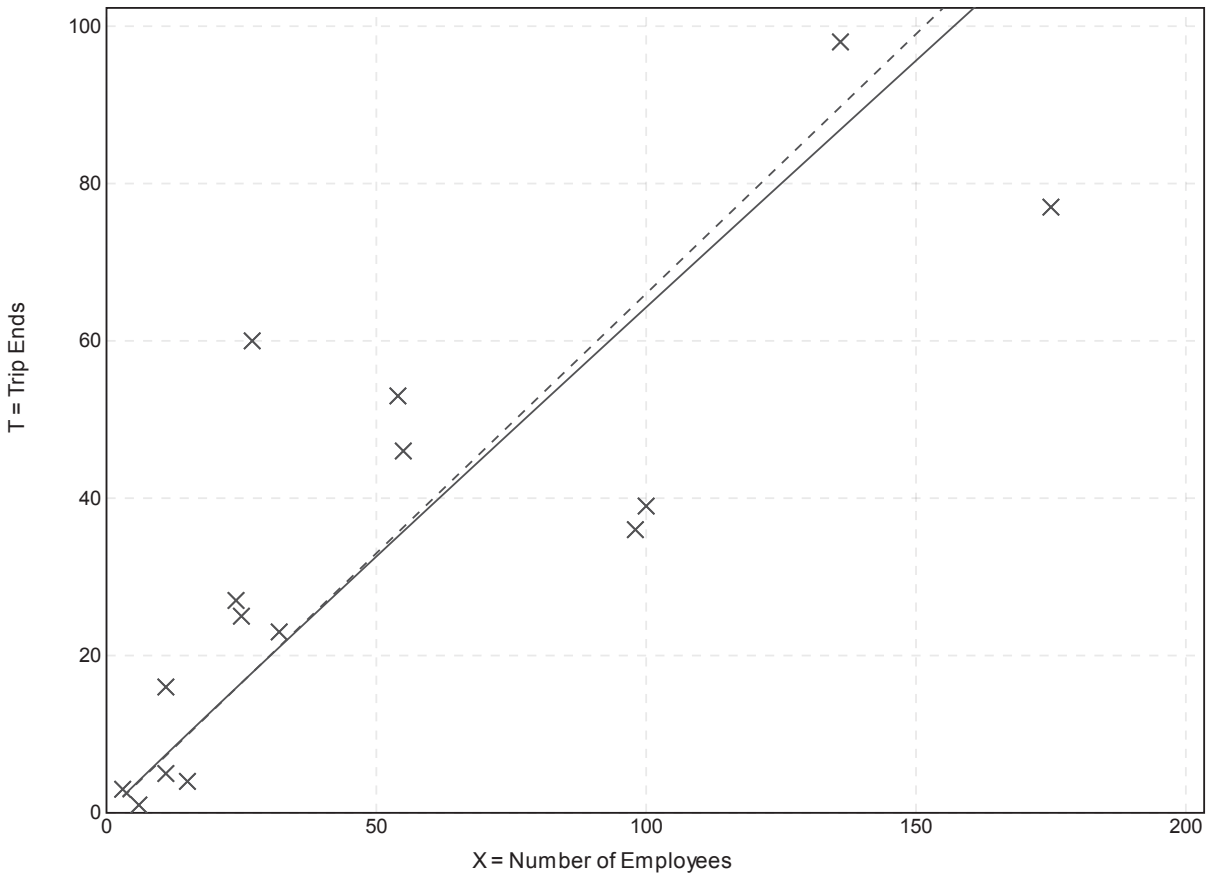
Warehousing
(150)

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:	15
Avg. Num. of Employees:	51
Directional Distribution:	36% entering, 65% exiting

Vehicle Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.66	0.17 - 2.22	0.40

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.98 Ln(X) - 0.35

R^2= 0.74

Warehousing
(150)

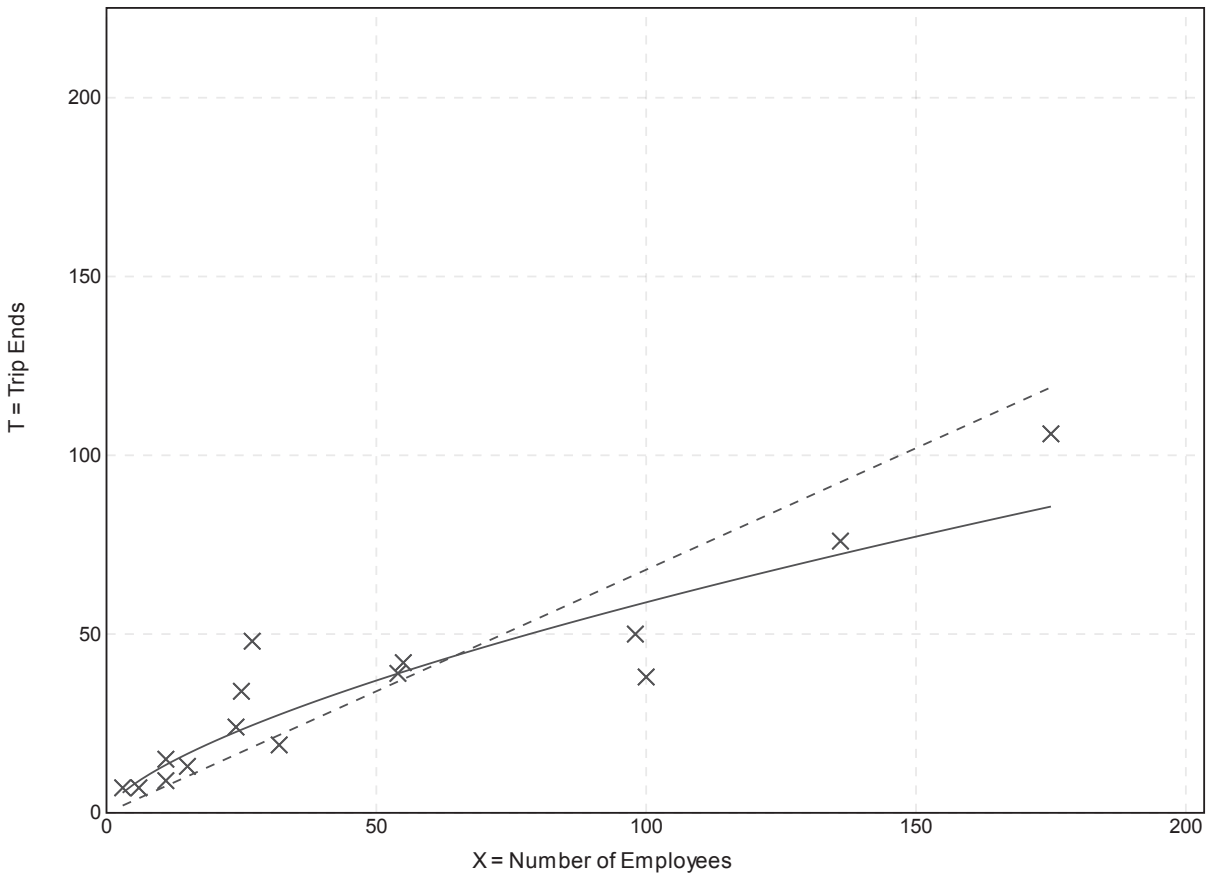
Vehicle Trip Ends vs: **Employees**
On a: **Weekday,**
AM Peak Hour of Generator

Setting/Location: **General Urban/Suburban**
Number of Studies: 15
Avg. Num. of Employees: 51
Directional Distribution: 53% entering, 47% exiting

Vehicle Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.68	0.38 - 2.33	0.33

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.67 Ln(X) + 0.99

R^2= 0.87

Warehousing
(150)

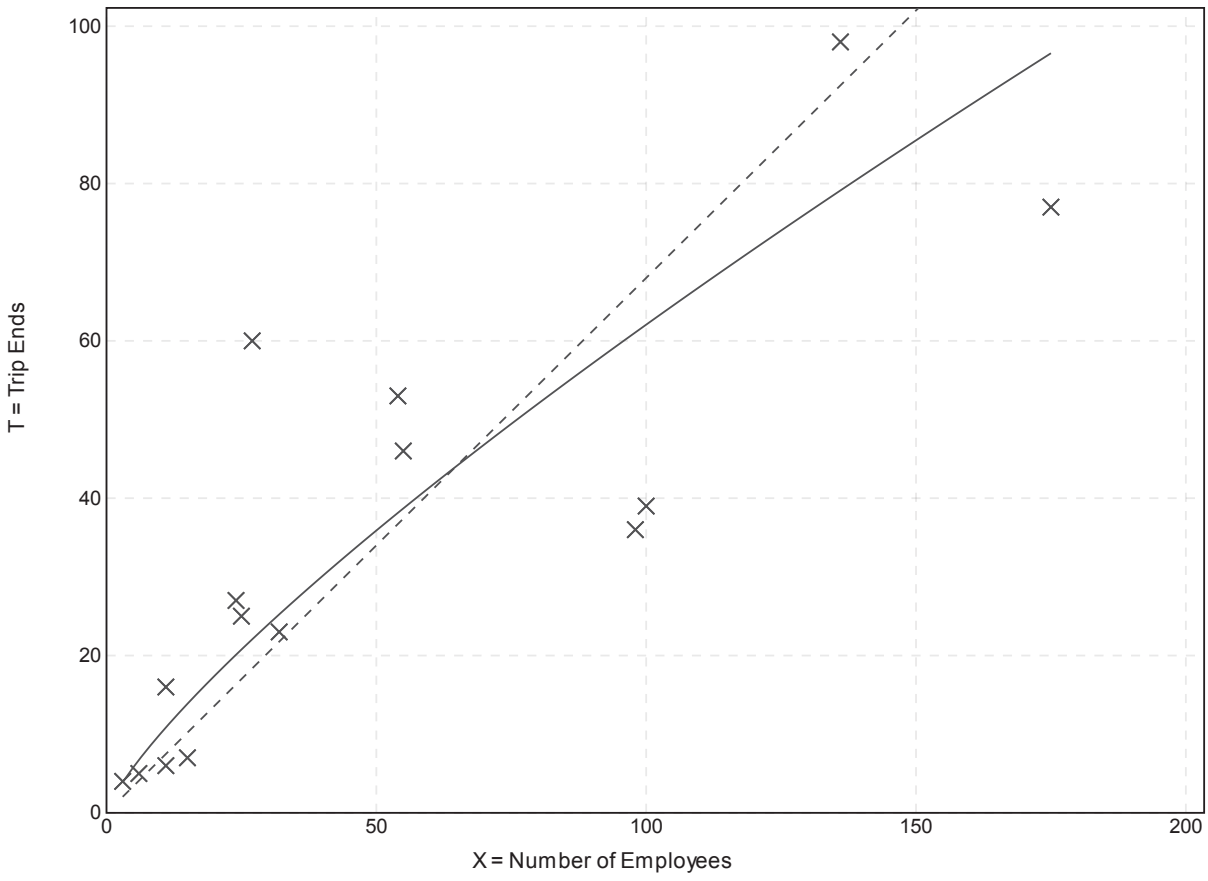
Vehicle Trip Ends vs: **Employees**
On a: **Weekday,**
PM Peak Hour of Generator

Setting/Location: **General Urban/Suburban**
Number of Studies: 15
Avg. Num. of Employees: 51
Directional Distribution: 28% entering, 72% exiting

Vehicle Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.68	0.37 - 2.22	0.40

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.79 Ln(X) + 0.49

R^2= 0.80

10 Truck Trip Generation Data Plots

The table below lists the 50 land uses for which truck trip generation data are available. Data plots are presented on the following pages for a single independent variable across all available time periods and settings. Data plots for additional independent variables are available in the ITETripGen web app for some land uses.

A land use denoted in the table with a "*" symbol indicates that trip generation data plots are available only in the ITETripGen web app. They are not reproduced in the hard-copy or electronic versions of the ITE *Trip Generation Manual*, 10th Edition Supplement.

The truck trip generation data plots and statistics for the AM and PM Peak Hour of Generator refer to the peak hour for total vehicle trips generated by the site. This time period may or may not coincide with the peak hour of truck trips generated by the site. Refer to Appendix D for truck trip time of day distributions by land use.

CODE	LAND USE
Industrial (Land Uses 100–199)	
110	General Light Industrial
130	Industrial Park
140	Manufacturing
150	Warehousing
151	Mini-Warehouse
154	High-Cube Transload and Short-Term Storage Warehouse
155	High-Cube Fulfillment Center Warehouse
156	High-Cube Parcel Hub Warehouse
157	High-Cube Cold Storage Warehouse
170	Utility
180	Specialty Trade Contractor

CODE	LAND USE
Residential (Land Uses 200–299)	
254	Assisted Living
Lodging (Land Uses 300–399)	
312	Business Hotel
320	Motel
Institutional (Land Uses 500–599)	
565	Day Care Center
580	Museum
Medical (Land Uses 600–699)	
610	Hospital
620	Nursing Home
630	Clinic
640	Animal Hospital/Veterinary Clinic

CODE	LAND USE
Office (Land Uses 700–799)	
710	General Office Building
712	Small Office Building
720	Medical-Dental Office Building
730	Government Office Building
Retail (Land Uses 800–899)	
812	Building Materials and Lumber Store
813	Free-Standing Discount Superstore
814	Variety Store
816	Hardware/Paint Store
820	Shopping Center
840	Automobile Sales (New)
841	Automobile Sales (Used)
842	Recreational Vehicle Sales
843	Automobile Parts Sales
848	Tire Store
850	Supermarket
853	Convenience Market with Gasoline Pumps
862	Home Improvement Superstore
881	Pharmacy/Drugstore with Drive-Through Window
890	Furniture Store

CODE	LAND USE
Services (Land Uses 900–999)	
912	Drive-in Bank
931	Quality Restaurant*
932	High-Turnover (Sit-Down) Restaurant
933	Fast-Food Restaurant without Drive-Through Window
934	Fast-Food Restaurant with Drive-Through Window
935	Fast-Food Restaurant with Drive-Through Window and No Indoor Seating
941	Quick Lubrication Vehicle Shop
943	Automobile Parts and Service Center
945	Gasoline/Service Station with Convenience Market
950	Truck Stop
960	Super Convenience Market/Gas Station

Warehousing
(150)

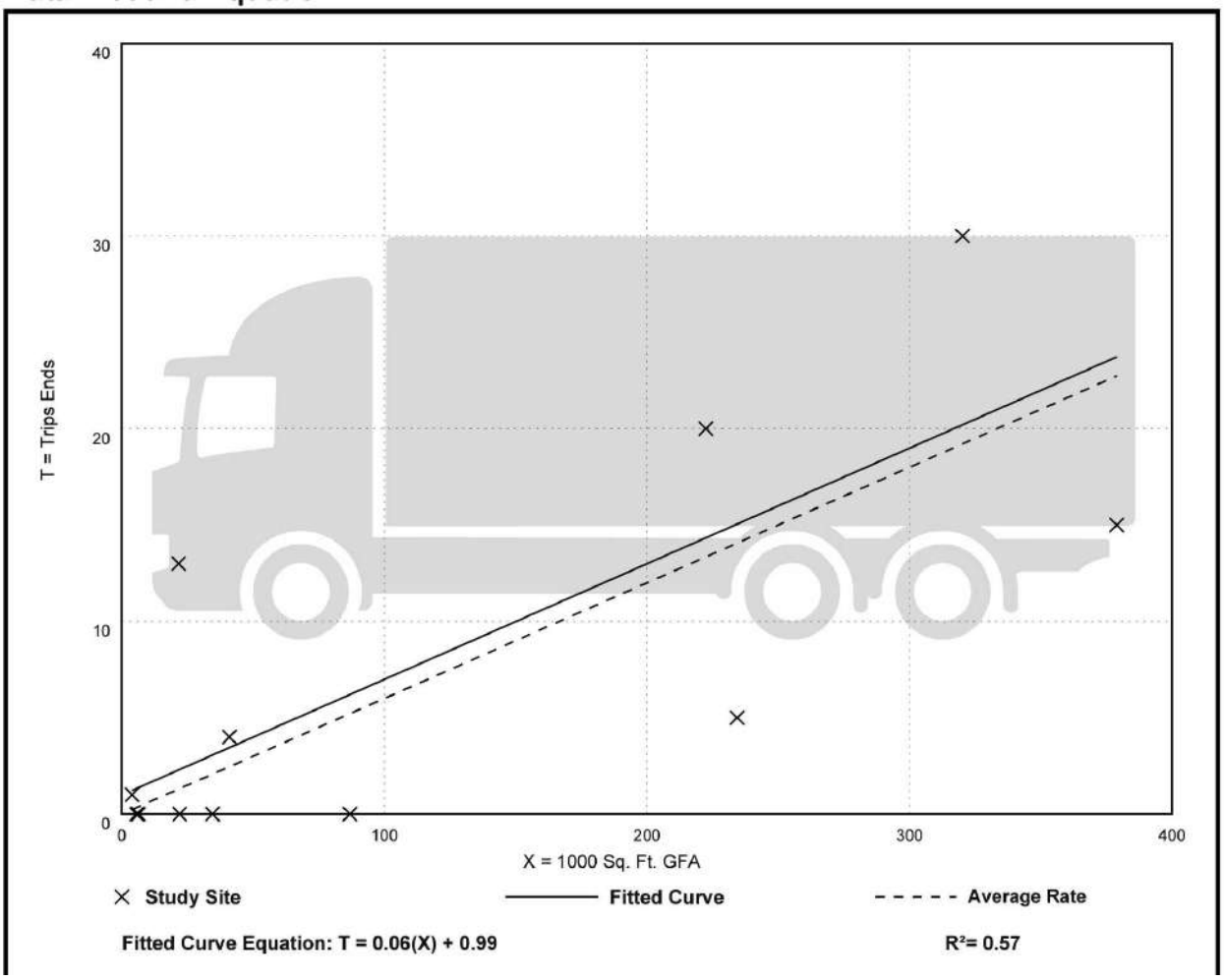
Truck Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
AM Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 12
Avg. 1000 Sq. Ft. GFA: 115
Directional Distribution: 35% entering, 65% exiting

Truck Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.06	0.00 - 0.60	0.08

Data Plot and Equation



Warehousing
(150)

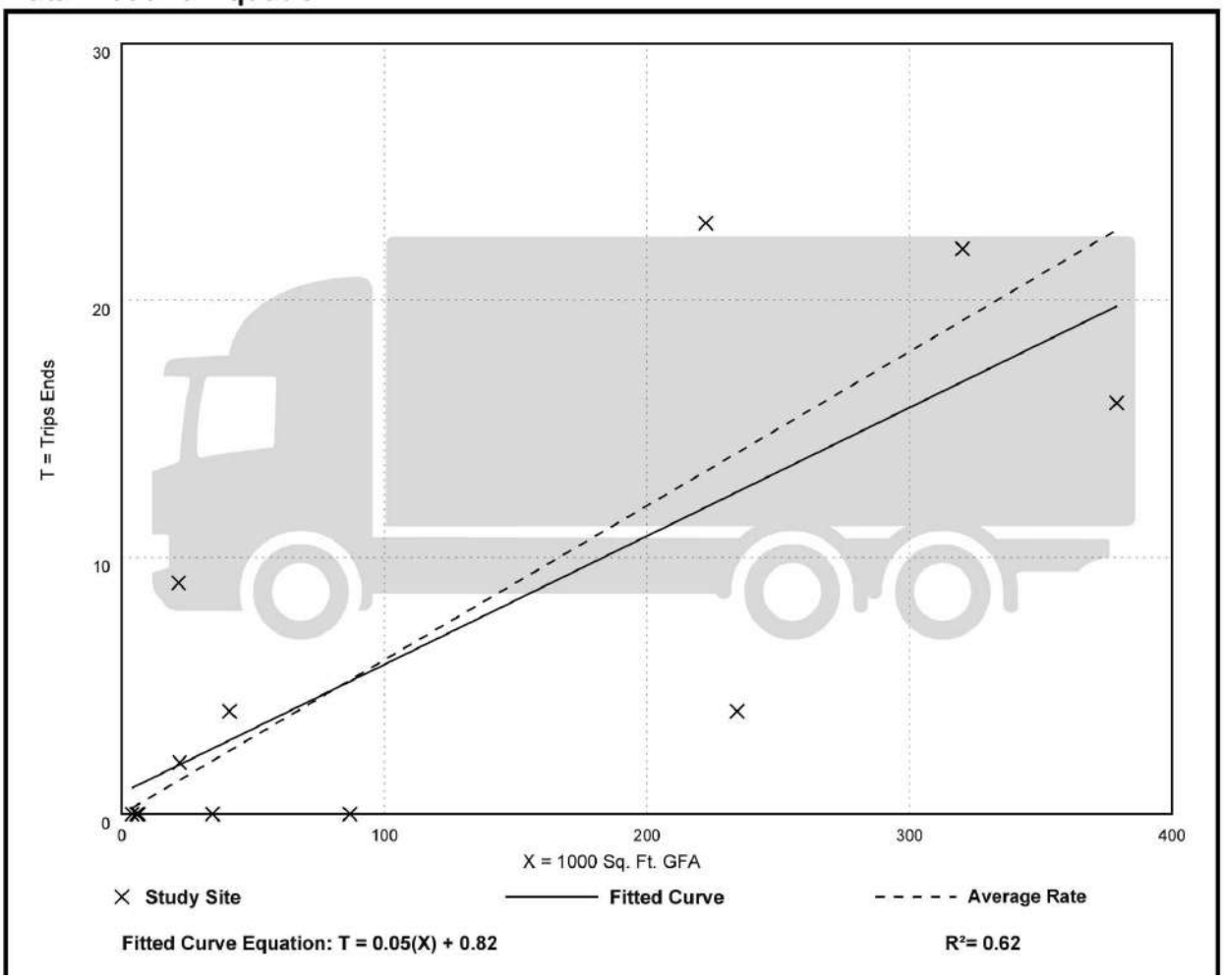
Truck Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
PM Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 12
Avg. 1000 Sq. Ft. GFA: 115
Directional Distribution: 53% entering, 47% exiting

Truck Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.06	0.00 - 0.42	0.06

Data Plot and Equation



Fitted Curve Equation: T = 0.05(X) + 0.82

R^2= 0.62

TRAFFIC COUNT DATA

Study Name Devon Avenue & Lively Avenue
Date Wednesday, September 23, 2020

Report Summary

		Eastbound						Westbound						Northbound						Southbound								Crosswalk		
Time Period	Class.	U	L	T	R	I	O	U	L	T	R	I	O	U	L	T	R	I	O	U	L	T	R	I	O	Total		s on Cr	edestria	Total
AM Peak Period	Lights	0	60	523	69	652	381	0	40	322	43	405	553	0	21	33	15	69	148	1	15	39	38	93	137	1219	W	0	0	0
Specified Period																														
7:15 AM - 8:15 AM	Mediums	0	4	23	4	31	43	0	5	33	6	44	29	0	6	7	2	15	21	0	4	12	4	20	17	110	E	0	0	0
One Hour Peak																														
7:15 AM - 8:15 AM	ticulated Truc	0	3	21	4	28	33	0	2	28	6	36	22	0	0	6	0	6	12	0	1	6	5	12	15	82	S	0	2	2
	Total	**0**	**67**	**567**	**77**	**711**	**457**	**0**	**47**	**383**	**55**	**485**	**604**	**0**	**27**	**46**	**17**	**90**	**181**	**1**	**20**	**57**	**47**	**125**	**169**	**1411**	N	0	0	0
	PHF	0	0.76	0.82	0.71	0.8	0.82	0	0.69	0.8	0.76	0.84	0.83	0	0.96	0.82	0.61	0.87	0.77	0.25	0.71	0.59	0.78	0.73	0.83	0.83				
	HV %	0%	10%	8%	10%	8%	17%	0%	15%	16%	22%	16%	8%	0%	22%	28%	12%	23%	18%	0%	25%	32%	19%	26%	19%	14%		**0**	**2**	**2**
PM Peak Period	Lights	0	18	462	12	492	810	0	15	603	29	647	547	0	78	32	38	148	111	0	47	84	129	260	79	1547	W	0	0	0
Specified Period																														
4:30 PM - 5:30 PM	Mediums	0	1	24	1	26	25	0	2	18	4	24	31	0	1	8	2	11	9	0	5	6	6	17	13	78	E	2	0	2
One Hour Peak																														
4:30 PM - 5:30 PM	ticulated Truc	0	1	25	6	32	23	0	3	19	4	26	30	0	2	7	3	12	19	0	2	10	2	14	12	84	S	0	0	0
	Total	**0**	**20**	**511**	**19**	**550**	**858**	**0**	**20**	**640**	**37**	**697**	**608**	**0**	**81**	**47**	**43**	**171**	**139**	**0**	**54**	**100**	**137**	**291**	**104**	**1709**	N	1	0	1
	PHF	0	0.5	0.88	0.59	0.84	0.88	0	0.83	0.97	0.77	0.96	0.84	0	0.63	0.65	0.6	0.7	0.76	0	0.61	0.76	0.67	0.74	0.65	0.85				
	HV %	0%	10%	10%	37%	11%	6%	0%	25%	6%	22%	7%	10%	0%	4%	32%	12%	13%	20%	0%	13%	16%	6%	11%	24%	9%		**3**	**0**	**3**

Study Name Devon Avenue & Central Avenue / Private Driveway
Date Wednesday, September 23, 2020

Report Summary

		Eastbound						Westbound						Northbound						Southbound								Crosswalk		
Time Period	Class.	U	L	T	R	I	O	U	L	T	R	I	O	U	L	T	R	I	O	U	L	T	R	I	O	Total		s on Cr	edestria	Total
AM Peak Period	Lights	0	0	547	0	547	422	0	0	419	0	419	548	0	1	0	0	1	0	0	1	0	2	3	0	970	W	0	0	0
Specified Period																														
7:15 AM - 8:15 AM	Mediums	0	0	33	0	33	39	0	0	38	0	38	35	0	0	0	0	0	0	0	2	0	1	3	0	74	E	0	0	0
One Hour Peak																														
7:15 AM - 8:15 AM	ticulated Truc	0	0	24	0	24	37	0	0	37	0	37	24	0	0	0	0	0	0	0	0	0	0	0	0	61	S	0	0	0
	Total	**0**	**0**	**604**	**0**	**604**	**498**	**0**	**0**	**494**	**0**	**494**	**607**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**3**	**0**	**3**	**6**	**0**	**1105**	N	0	1	1
	PHF	0	0	0.84	0	0.84	0.86	0	0	0.86	0	0.86	0.84	0	0.25	0	0	0.25	0	0	0.38	0	0.38	0.38	0	0.85				
	HV %	0%	0%	9%	0%	9%	15%	0%	0%	15%	0%	15%	10%	0%	0%	0%	0%	0%	0%	0%	67%	0%	33%	50%	0%	12%		**0**	**1**	**1**
PM Peak Period	Lights	0	1	573	4	578	651	0	1	618	0	619	586	0	4	0	1	5	6	0	12	1	29	42	1	1244	W	0	0	0
Specified Period																														
4:30 PM - 5:30 PM	Mediums	0	0	25	0	25	26	0	0	26	0	26	26	0	0	0	0	0	0	0	1	0	0	1	0	52	E	0	0	0
One Hour Peak																														
4:30 PM - 5:30 PM	ticulated Truc	0	0	28	0	28	26	0	0	26	0	26	28	0	0	0	0	0	0	0	0	0	0	0	0	54	S	0	1	1
	Total	**0**	**1**	**626**	**4**	**631**	**703**	**0**	**1**	**670**	**0**	**671**	**640**	**0**	**4**	**0**	**1**	**5**	**6**	**0**	**13**	**1**	**29**	**43**	**1**	**1350**	N	1	1	2
	PHF	0	0.25	0.85	0.33	0.86	0.92	0	0.25	0.92	0	0.91	0.86	0	1	0	0.25	0.62	0.38	0	0.46	0.25	0.81	0.63	0.25	0.92				
	HV %	0%	0%	8%	0%	8%	7%	0%	0%	8%	0%	8%	8%	0%	0%	0%	0%	0%	0%	0%	8%	0%	0%	2%	0%	8%		**1**	**2**	**3**

Study Name Devon Avenue & Ash Street / Private Driveway
Date Wednesday, September 23, 2020

Report Summary

		Eastbound						Westbound						Northbound						Southbound								Crosswalk		
Time Period	Class.	U	L	T	R	I	O	U	L	T	R	I	O	U	L	T	R	I	O	U	L	T	R	I	O	Total		s on Cr	edestria	Total
AM Peak Period	Lights	0	0	527	0	527	430	0	1	426	0	427	530	0	4	0	3	7	1	0	0	0	0	0	0	961	W	0	0	0
Specified Period																														
7:15 AM - 8:15 AM	Mediums	0	0	35	2	37	41	0	0	41	0	41	35	0	0	0	0	0	2	0	0	0	0	0	0	78	E	0	0	0
One Hour Peak																														
7:15 AM - 8:15 AM	ticulated Truc	0	0	26	0	26	37	0	0	37	0	37	26	0	0	0	0	0	0	0	0	0	0	0	0	63	S	0	0	0
	Total	**0**	**0**	**588**	**2**	**590**	**508**	**0**	**1**	**504**	**0**	**505**	**591**	**0**	**4**	**0**	**3**	**7**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**1102**	N	0	1	1
	PHF	0	0	0.85	0.5	0.86	0.85	0	0.25	0.85	0	0.85	0.86	0	0.5	0	0.75	0.58	0.38	0	0	0	0	0	0	0.86				
	HV %	0%	0%	10%	100%	11%	15%	0%	0%	15%	0%	15%	10%	0%	0%	0%	0%	0%	67%	0%	0%	0%	0%	0%	0%	13%		**0**	**1**	**1**
PM Peak Period	Lights	0	0	571	2	573	634	0	3	634	0	637	571	0	0	0	0	0	5	0	0	0	0	0	0	1210	W	0	0	0
Specified Period																														
4:30 PM - 5:30 PM	Mediums	0	0	22	0	22	28	0	0	28	0	28	22	0	0	0	0	0	0	0	0	0	0	0	0	50	E	0	0	0
One Hour Peak																														
4:30 PM - 5:30 PM	ticulated Truc	0	0	31	0	31	28	0	0	28	0	28	31	0	0	0	0	0	0	0	0	0	0	0	0	59	S	0	0	0
	Total	**0**	**0**	**624**	**2**	**626**	**690**	**0**	**3**	**690**	**0**	**693**	**624**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**1319**	N	1	0	1
	PHF	0	0	0.85	0.5	0.85	0.95	0	0.38	0.95	0	0.95	0.85	0	0	0	0	0	0.62	0	0	0	0	0	0	0.93				
	HV %	0%	0%	8%	0%	8%	8%	0%	0%	8%	0%	8%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%		**1**	**0**	**1**

Study Name Devon Avenue & Edgewood Avenue / Private Driveway
Date Wednesday, September 23, 2020

Report Summary

		Eastbound						Westbound						Northbound						Southbound								Crosswalk	
Time Period	Class.	U	L	T	R	I	O	U	L	T	R	I	O	U	L	T	R	I	O	U	L	T	R	I	O	Total		s on Cr	edestria Total
AM Peak Period	Lights	0	0	535	0	535	418	0	0	417	5	422	539	0	1	0	4	5	0	0	0	0	0	0	5	962	W	0	0	0
Specified Period																													
7:15 AM - 8:15 AM	Mediums	0	0	28	1	29	37	0	0	37	0	37	28	0	0	0	0	0	1	0	0	0	0	0	0	66	E	0	0	0
One Hour Peak																													
7:15 AM - 8:15 AM	ticulated Truc	0	0	25	0	25	41	0	0	41	0	41	25	0	0	0	0	0	0	0	0	0	0	0	0	66	S	0	0	0
	Total	**0**	**0**	**588**	**1**	**589**	**496**	**0**	**0**	**495**	**5**	**500**	**592**	**0**	**1**	**0**	**4**	**5**	**1**	**0**	**0**	**0**	**0**	**0**	**5**	**1094**	N	0	1	1
	PHF	0	0	0.82	0.25	0.82	0.79	0	0	0.79	0.42	0.8	0.82	0	0.25	0	0.5	0.62	0.25	0	0	0	0	0	0.42	0.81				
	HV %	0%	0%	9%	100%	9%	16%	0%	0%	16%	0%	16%	9%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	12%		**0**	**1**	**1**
PM Peak Period	Lights	0	0	548	4	552	639	0	3	635	2	640	549	1	3	0	0	4	8	0	1	0	1	2	2	1198	W	1	0	1
Specified Period																													
4:30 PM - 5:30 PM	Mediums	0	0	28	0	28	26	0	0	26	0	26	28	0	0	0	0	0	0	0	0	0	0	0	0	54	E	0	0	0
One Hour Peak																													
4:30 PM - 5:30 PM	ticulated Truc	0	0	30	0	30	26	0	0	26	0	26	30	0	0	0	0	0	0	0	0	0	0	0	0	56	S	0	1	1
	Total	**0**	**0**	**606**	**4**	**610**	**691**	**0**	**3**	**687**	**2**	**692**	**607**	**1**	**3**	**0**	**0**	**4**	**8**	**0**	**1**	**0**	**1**	**2**	**2**	**1308**	N	1	0	1
	PHF	0	0	0.92	0.33	0.93	0.87	0	0.38	0.88	0.25	0.88	0.93	0.25	0.25	0	0	0.33	0.4	0	0.25	0	0.25	0.5	0.25	0.93				
	HV %	0%	0%	10%	0%	10%	8%	0%	0%	8%	0%	8%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%		**2**	**1**	**3**

Study Name Devon Avenue & Edgewood Avenue / Private Driveway
Date Wednesday, September 23, 2020

Report Summary

		Eastbound						Westbound						Northbound						Southbound								Crosswalk	
Time Period	Class.	U	L	T	R	I	O	U	L	T	R	I	O	U	L	T	R	I	O	U	L	T	R	I	O	Total		s on Cr	edestria Total
AM Peak Period	Lights	0	0	535	0	535	418	0	0	417	5	422	539	0	1	0	4	5	0	0	0	0	0	0	5	962	W	0	0	0
Specified Period																													
7:15 AM - 8:15 AM	Mediums	0	0	28	1	29	37	0	0	37	0	37	28	0	0	0	0	0	1	0	0	0	0	0	0	66	E	0	0	0
One Hour Peak																													
7:15 AM - 8:15 AM	ticulated Truc	0	0	25	0	25	41	0	0	41	0	41	25	0	0	0	0	0	0	0	0	0	0	0	0	66	S	0	0	0
	Total	**0**	**0**	**588**	**1**	**589**	**496**	**0**	**0**	**495**	**5**	**500**	**592**	**0**	**1**	**0**	**4**	**5**	**1**	**0**	**0**	**0**	**0**	**0**	**5**	**1094**	N	0	1	1
	PHF	0	0	0.82	0.25	0.82	0.79	0	0	0.79	0.42	0.8	0.82	0	0.25	0	0.5	0.62	0.25	0	0	0	0	0	0.42	0.81				
	HV %	0%	0%	9%	100%	9%	16%	0%	0%	16%	0%	16%	9%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	12%		**0**	**1**	**1**
PM Peak Period	Lights	0	0	548	4	552	639	0	3	635	2	640	549	1	3	0	0	4	8	0	1	0	1	2	2	1198	W	1	0	1
Specified Period																													
4:30 PM - 5:30 PM	Mediums	0	0	28	0	28	26	0	0	26	0	26	28	0	0	0	0	0	0	0	0	0	0	0	0	54	E	0	0	0
One Hour Peak																													
4:30 PM - 5:30 PM	ticulated Truc	0	0	30	0	30	26	0	0	26	0	26	30	0	0	0	0	0	0	0	0	0	0	0	0	56	S	0	1	1
	Total	**0**	**0**	**606**	**4**	**610**	**691**	**0**	**3**	**687**	**2**	**692**	**607**	**1**	**3**	**0**	**0**	**4**	**8**	**0**	**1**	**0**	**1**	**2**	**2**	**1308**	N	1	0	1
	PHF	0	0	0.92	0.33	0.93	0.87	0	0.38	0.88	0.25	0.88	0.93	0.25	0.25	0	0	0.33	0.4	0	0.25	0	0.25	0.5	0.25	0.93				
	HV %	0%	0%	10%	0%	10%	8%	0%	0%	8%	0%	8%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%		**2**	**1**	**3**

Study Name Devon Avenue & Busse Road
Date Wednesday, September 23, 2020

Report Summary

		Eastbound						Westbound						Northbound						Southbound							Crosswalk		
Time Period	Class.	U	L	T	R	I	O	U	L	T	R	I	O	U	L	T	R	I	O	U	L	T	R	I	O	Total		s on Cr	edestria	Total
AM Peak Period	Lights	0	112	327	102	541	396	0	146	231	57	434	725	0	78	958	298	1334	760	9	100	512	87	708	1136	3017	W	0	1	1
Specified Period																														
7:15 AM - 8:15 AM	Mediums	0	8	13	7	28	36	0	36	21	10	67	40	0	5	79	20	104	118	0	7	75	10	92	97	291	E	0	0	0
One Hour Peak																														
7:15 AM - 8:15 AM	ticulated Truc	0	8	13	6	27	39	0	20	20	6	46	44	0	12	116	29	157	119	0	2	93	7	102	130	332	S	0	0	0
	Total	**0**	**128**	**353**	**115**	**596**	**471**	**0**	**202**	**272**	**73**	**547**	**809**	**0**	**95**	**1153**	**347**	**1595**	**997**	**9**	**109**	**680**	**104**	**902**	**1363**	**3640**	N	0	0	0
	PHF	0	0.76	0.94	0.85	0.9	0.87	0	0.84	0.86	0.65	0.82	0.9	0	0.85	0.85	0.84	0.85	0.97	0.56	0.78	0.97	0.9	0.93	0.83	0.88				
	HV %	0%	13%	7%	11%	9%	16%	0%	28%	15%	22%	21%	10%	0%	18%	17%	14%	16%	24%	0%	8%	25%	16%	22%	17%	17%		**0**	**1**	**1**
PM Peak Period	Lights	1	124	321	112	558	558	0	312	360	101	773	563	0	93	667	185	945	1502	5	57	1078	104	1244	897	3520	W	0	0	0
Specified Period																														
4:30 PM - 5:30 PM	Mediums	0	8	17	5	30	26	0	15	12	3	30	37	0	10	60	14	84	49	0	6	29	4	39	71	183	E	0	0	0
One Hour Peak																														
4:30 PM - 5:30 PM	ticulated Truc	0	7	19	3	29	23	0	22	9	6	37	55	0	8	84	22	114	78	0	14	53	6	73	97	253	S	0	0	0
	Total	**1**	**139**	**357**	**120**	**617**	**607**	**0**	**349**	**381**	**110**	**840**	**655**	**0**	**111**	**811**	**221**	**1143**	**1629**	**5**	**77**	**1160**	**114**	**1356**	**1065**	**3956**	N	0	0	0
	PHF	0.25	0.81	0.95	0.71	0.91	0.98	0	0.9	0.92	0.89	0.91	0.89	0	0.87	0.85	0.77	0.84	0.83	0.62	0.77	0.76	0.84	0.78	0.86	0.87				
	HV %	0%	11%	10%	7%	10%	8%	0%	11%	6%	8%	8%	14%	0%	16%	18%	16%	17%	8%	0%	26%	7%	9%	8%	16%	11%		**0**	**0**	**0**

Study Name Busse Road & Indian Hill
Date Wednesday, September 23, 2020

Report Summary

		Eastbound					Northbound					Southbound						Crosswalk		
Time Period	Class.	U	L	R	I	O	U	L	T	I	O	U	T	R	I	O	Total		s on Cr	edestria	Total
AM Peak Period	Lights	0	0	10	10	10	8	9	1553	1570	865	0	847	1	848	1553	2428	W	0	0	0
Specified Period																					
7:15 AM - 8:15 AM	Mediums	0	0	2	2	2	0	1	116	117	120	1	118	1	120	117	239	S	0	0	0
One Hour Peak																					
7:15 AM - 8:15 AM	ticulated Truc	0	0	0	0	0	0	0	156	156	134	0	134	0	134	156	290	N	0	0	0
	Total	**0**	**0**	**12**	**12**	**12**	**8**	**10**	**1825**	**1843**	**1119**	**1**	**1099**	**2**	**1102**	**1826**	**2957**		**0**	**0**	**0**
	PHF	0	0	0.6	0.6	0.75	0.67	0.83	0.85	0.85	0.97	0.25	0.97	0.5	0.97	0.85	0.91				
	HV %	0%	0%	17%	17%	17%	0%	10%	15%	15%	23%	100%	23%	50%	23%	15%	18%				
PM Peak Period	Lights	0	1	10	11	20	1	12	1027	1040	1751	0	1740	8	1748	1028	2799	W	0	0	0
Specified Period																					
4:30 PM - 5:30 PM	Mediums	0	0	0	0	0	0	0	78	78	60	0	60	0	60	78	138	S	0	0	0
One Hour Peak																					
4:30 PM - 5:30 PM	ticulated Truc	0	0	0	0	0	0	0	117	117	72	0	72	0	72	117	189	N	0	0	0
	Total	**0**	**1**	**10**	**11**	**20**	**1**	**12**	**1222**	**1235**	**1883**	**0**	**1872**	**8**	**1880**	**1223**	**3126**		**0**	**0**	**0**
	PHF	0	0.25	0.62	0.69	0.71	0.25	0.75	0.89	0.89	0.88	0	0.87	0.67	0.88	0.89	0.88				
	HV %	0%	0%	0%	0%	0%	0%	0%	16%	16%	7%	0%	7%	0%	7%	16%	10%				

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