605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 760.942.5147 F 760.632.0164

# MEMORANDUM

| | |
|---|---|
| **To:** | ECM Management |
| **From:** | Lisa Valdez, Senior Transportation Planner |
| **Subject:** | Trip Generation and Queuing Analysis for the Main Street Warehouse Project, City of Carson |
| **Date:** | March 9, 2022 |
| **cc:** | Sean Kilkenny, Senior Project Manager, Dudek |
| **Attachment(s):** | Attachment A: ITE Land Use Descriptions<br>Attachment B: Queuing Analysis Worksheets<br>Attachment C: Raw Traffic Count Data |

The purpose of this Transportation Technical Memorandum is to conduct a focused site access analysis for the proposed Main Street Warehouse Project (proposed project or project), in the City of Carson (City). The following Memo describes the proposed project and study area, presents the estimated project trip generation and evaluates the site access.

# 1 Project Description and Study Area

The proposed project is located on a 2.67-acre industrial site at 18001 South Main Street in the City of Carson. Figure 1 provides a map of the transportation study area and Figure 2 presents the proposed project site plan. The project applicant is requesting approval of required entitlements for the construction and operation of an approximately 60,558-square-foot on-spec concrete tilt-up warehouse building and site improvements on an existing industrial site. The project would involve the demolition of an existing vacant manufacturing building (approximately 58,961 square feet) and the site is surrounded by other light and heavy industrial uses. The project site is located within the MH_D (Manufacturing, Heavy – with Site Plan and Design Review Overlay) zone with a General Plan Land Use designation of Heavy Industrial. Access to the site is proposed from two existing driveways on Main Street.

The project site is located on the west side of Main Street, between Victoria Street and Albertoni Street, and the focus of this analysis is on this segment of Main Street. Main Street is a north-south four lane road with a two-way left turn lane (TWLTL). Two raised medians are also provided on Main Street at each end of the study area segment. Main Street, in the study area, is classified as a Major Highway in the City's Transportation and Infrastructure Element[1]. Main Street is also a designated truck route, between Alondra Boulevard to the north and Torrance Boulevard to the south. Sidewalks are provided on both sides of the street, with parking permitted along most of its length. Currently, there are no bus routes along Main Street, near the project site, or bicycle facilities. The speed limit on Main Street is 40 MPH.

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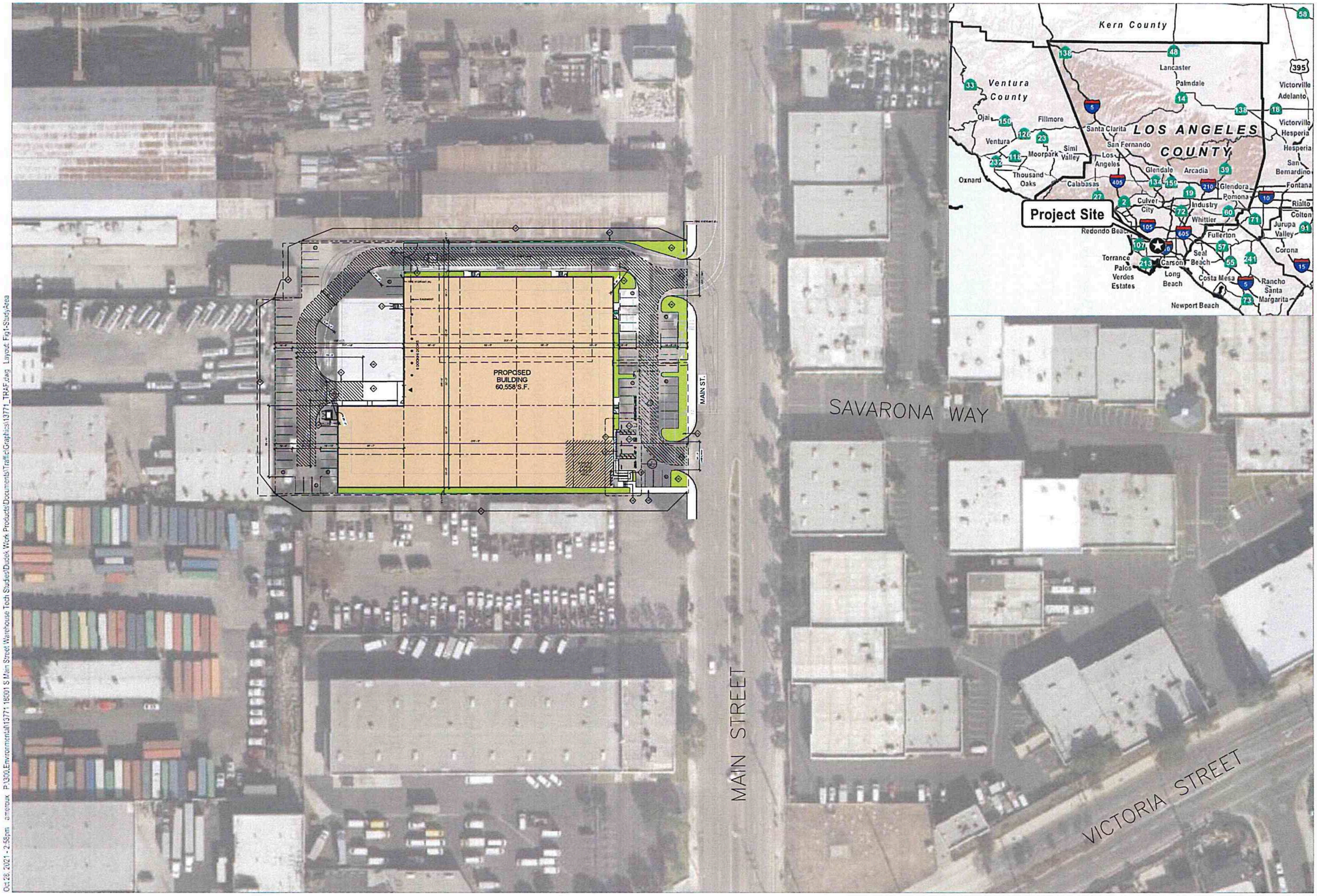
[1] City of Carson. 2004. General Plan Transportation and Infrastructure Element.

**EXHIBIT NO. 2**



Oct 28, 2021 - 2:58pm ameroux P:\300.Environmental\13771 18001 S Main Street Warehouse Tech Studies\Dudek Work Products\Documents\Traffic\Graphics\13771_TRAF.dwg Layout: Fig1-StudyArea

SOURCE: Bing Maps 2021; Herdman Architecture + Design 2021

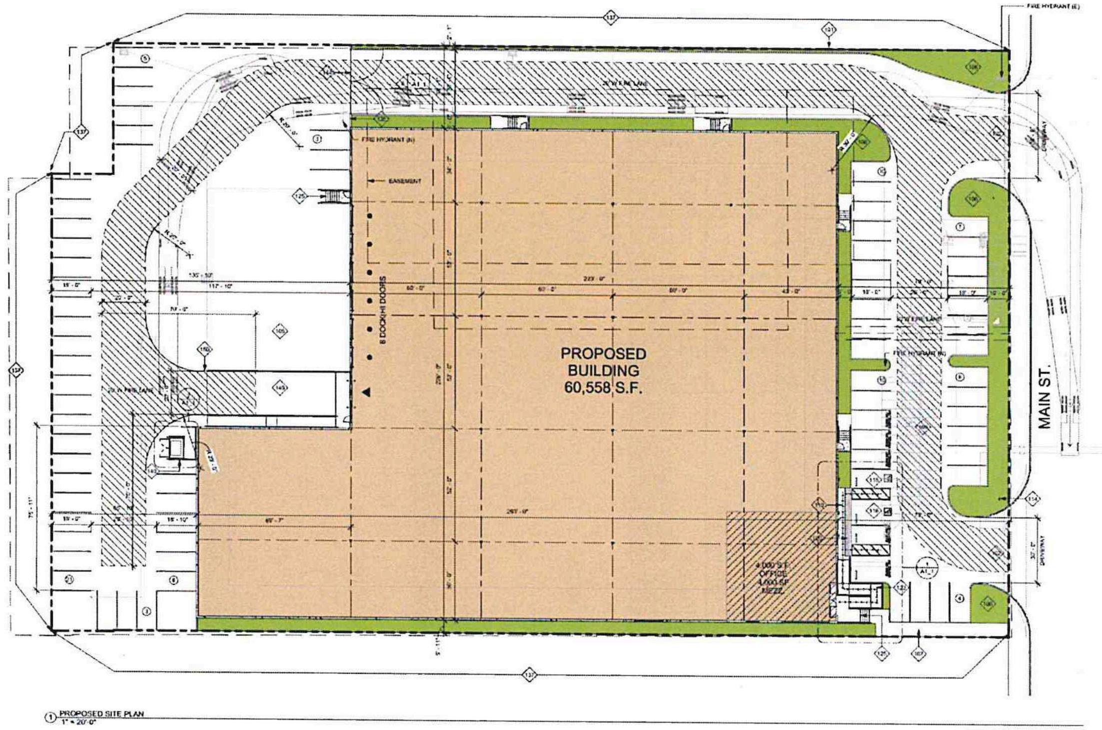
DUDEK

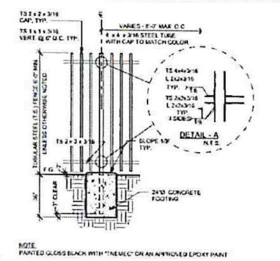
NOT TO SCALE

Figure 1

Main Street Warehouse Transportation Study Area, Carson CA

Main Street Warehouse Project





NOTE:
PAINTED GLOSS BLACK WITH "TNEMEC" OR AN APPROVED EPOXY PAINT

2 TUBULAR STEEL FENCE WITH INTERMEDIATE POST — SCALE: N.T.S.

## DEVELOPER/ OWNER

9th STREET PARTNERS, LLC
403 9TH STREET
MANHATTAN BEACH, CA 90266

CONTACT: TOM ASHCRAFT
PHONE: (310) 620-8590
EMAIL: TOM@9THSTPARTNERS.COM

## APPLICANT'S REPRESENTATIVE/ARCHITECT

HERDMAN ARCHITECTURE & DESIGN, INC.
16201 SCIENTIFIC WAY
IRVINE, CA 92618
CONTACT: BRIDGET HERDMAN
PHONE: 714 389 2500
EMAIL: BRIDGET@HERDMANAD.COM

## SCOPE OF WORK

ONE NEW SPECULATIVE CONCRETE TILT-UP BUILDING FOR WAREHOUSE & OFFICE USE. INCLUDES SITE IMPROVEMENTS AS SHOWN.

## UTILITY PROVIDERS

WATER - CITY OF CARSON

SEWER - CITY OF CARSON

ELECTRIC - SO CAL EDISON

## SHEET INDEX

| | |
|---|---|
| A0 | TITLE SHEET |
| A1 | SITE PLAN |
| A1_1 | SITE DETAILS |
| A1_2 | SITE PHOTOS |
| A2 | BUILDING FLOOR PLAN |
| A4 | BUILDING EXTERIOR ELEVATIONS |
| C1 | CONCEPTUAL GRADING PLAN |
| C2 | CONCEPTUAL GRADING PLAN |
| C3 | CONCEPTUAL STORM DRAIN PLAN |
| L1 | CONCEPTUAL LANDSCAPE PLAN |

## LEGAL DESCRIPTION

THE LAND REFERRED TO HEREINBELOW IS SITUATED IN THE CITY OF CARSON, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

PARCEL 1:

THOSE PORTIONS OF LOTS 10 AND 11 OF THE SOUTH GARDENA TRACT, IN THE CITY OF CARSON, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA AS PER MAP RECORDED IN BOOK 43, PAGE 39 OF MISCELLANEOUS RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE EASTERLY LINE OF LOT 10, DISTANT NORTHERLY THEREON 535.73 FEET FROM THE SOUTHEASTERLY CORNER THEREOF THENCE NORTHERLY ALONG THE EASTERLY LINES OF SAID LOTS 10 AND 11, A DISTANCE OF 270 FEET THENCE WESTERLY AT RIGHT ANGLES TO THE EASTERLY LINE OF SAID LOT 11, A DISTANCE OF 428.8 FEET THENCE SOUTHERLY PARALLEL WITH THE EASTERLY LINE OF SAID LOTS 11 AND 10, A DISTANCE OF 270 FEET TO A LINE DRAWN AT RIGHT ANGLES TO THE EASTERLY LINE OF SAID LOT 10 AND WHICH PASSES THROUGH THE POINT OF BEGINNING, THENCE EASTERLY IN A DIRECT LINE 428.8 FEET TO THE POINT OF BEGINNING.

PARCEL 2:

THE NORTH 210 FEET OF THAT PORTION OF LOT 10 OF THE SOUTH GARDENA TRACT, IN THE CITY OF CARSON, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA AS PER MAP RECORDED IN BOOK 43, PAGE 39 OF MISCELLANEOUS RECORDS, IN THE OFFICE OF THE COUNTY RECORDER.

DESCRIBED AS FOLLOWS:

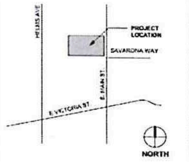
BEGINNING AT THE INTERSECTION OF THE EASTERLY LINE OF BROADWAY 100 FEET WIDE AS DESCRIBED IN DECREE OF CONDEMNATION IN LOS ANGELES COUNTY SUPERIOR COURT CASE THE COUNTY RECORDER WITH A LINE THAT IS PARALLEL WITH AND DISTANT 537.09 FEET SOUTHERLY FROM THE NORTHERLY LINE OF SAID LOT 10 THENCE ALONG SAID PARALLEL LINE NORTH 89 31 42 EAST 400 FEET TO THE TRUE POINT OF BEGINNING. THENCE PARALLEL WITH SAID EASTERLY LINE NORTH 0 28 30 WEST 537.09 FEET TO SAID NORTHERLY LINE THENCE ALONG SAID NORTHERLY LINE NORTH 89 31 49 EAST 28.04 FEET MORE OR LESS, TO A LINE THAT IS PARALLEL WITH AND DISTANT 428.80 FEET WESTERLY MEASURED AT RIGHT ANGLES FROM THE EASTERLY LINE OF SAID LOT 10, THENCE ALONG SAID PARALLEL LINE SOUTH 0 28 30 EAST 537.09 FEET TO A LINE PARALLEL WITH SAID NORTHERLY LINE WHICH PASSES THROUGH THE TRUE POINT OF BEGINNING THENCE ALONG SAID PARALLEL LINE SOUTH 89 31 45 WEST 28.04 FEET.

EXCEPT THE SOUTH 267.08 FEET THEREOF.
FOR CONVEYANCING PURPOSES ONLY APN 7339-003-003 (AFFECTS PARCEL 2) APN 7339-003-004 (AFFECTS PARCEL 1)

## PROJECT INFORMATION

OCCUPANCY S-1/B
CONSTRUCTION TYPE 3B

## VICINITY MAP



## KEYNOTES

| | |
|---|---|
| 101 | PROPERTY LINE. |
| 102 | PROPOSED DRIVEWAY, PER JURISDICTIONAL STANDARDS. |
| 105 | CONCRETE PAVING. |
| 106 | PROPOSED LANDSCAPED AREA. SEE LANDSCAPING PLANS. |
| 107 | (N) SIDEWALK. SEE LANDSCAPING PLANS FOR DECORATIVE TREATMENT WHERE OCCURS. |
| 110 | 12" WIDE MONOLITHIC CONCRETE "STEP OUT" CURBING. |
| 114 | ACCESSIBLE SITE ENTRANCE SIGN. |
| 115 | STANDARD ACCESSIBLE PARKING STALL. |
| 116 | VAN ACCESSIBLE PARKING STALL. |
| 120 | TRUNCATED DOME DETECTABLE WARNING SURFACE. |
| 123 | CURB RAMP: 8.33% MAX SLOPE w/ 2% MAX CROSS SLOPE. |
| 125 | CONCRETE STAIR ON GRADE TYPE "A". |
| 135 | PAINTED CONCRETE TILT-UP SCREEN WALL OR TRASH ENCLOSURE WALL. PAINT BOTH SIDES AND TOP OF WALL. SEE ARCHITECTURAL DRAWINGS FOR COLOR SCHEDULE. |
| 137 | 8'-0" HIGH TUBE STEEL FENCE SEE DETAIL 2/A 1.0. |
| 140 | TRASH ENCLOSURE w/ ROOF COVERING. |
| 144 | PAINTED STEEL SWINGING GATE(S). PROVIDE CONDUIT TO GATE FOR FUTURE MOTOR & OFFICE AREA FOR FUTURE INTERCOM CONTROL. PROVIDE KNOX BOX AS REQUIRED BY FIRE AUTHORITY. |
| 149 | CONCRETE TRUCK RAMP w/ 42" HIGH CONCRETE TILT-UP GUARD ON OPEN SIDE(S). PAINT ALL SIDES OF GUARD WALLS AND HANDRAILS SEE ARCHITECTURAL DRAWINGS FOR COLOR SCHEDULE. |
| 150 | STEEL PIPE BOLLARD PROTECTION POST. |

## SITE LEGEND

| | |
|---|---|
| 🟩 | LANDSCAPE AREA |
| ☐ | CONCRETE PAVING |
| 🟧 | BUILDING AREA |
| | STANDARD PARKING STALL PER CITY REQUIREMENT |
| | TYP. ACCESSIBLE PARKING STALL WITH 5' ACCESS AISLE PER CBC 2019 11B-502.2 |
| | TYP. VAN ACCESSIBLE PARKING STALL WITH 8' ACCESS AISLE PER CBC 2019 11B-502.2 |
| | CLEAN AIR PARKING STALL PAINT, IN THE PAINT USED FOR STALL STRIPING, THE FOLLOWING CHARACTERS SUCH THAT THE LOWER EDGE OF THE LAST WORD ALIGNS WITH THE END OF STALL STRIPING AND IS VISIBLE BENEATH A PARKED VEHICLE<br>CLEAN AIR/ VANPOOL/ EV<br>PER CALGREEN 5.106.5.2.1 |
| | ELECTRIC VEHICLE CHARGING STATION EVCS STALL SHALL PROVIDE SURFACE MARKING STATING<br>"EV CHARGING ONLY"<br>IN LETTER 12" HIGH MINIMUM<br>THE LOWER EDGE OF THE LAST WORD ALIGNS WITH THE END OF STALL STRIPING AND IS VISIBLE BENEATH A PARKED VEHICLE |

PER CBC 2019 11B-812.8
NOTE FUTURE CHARGING SPACES QUALIFY AS DESIGNATED PARKING AS DESCRIBED IN SECTION 5.106.5.2 SHALL PROVIDE SURFACE MARKING STATING "CLEAN AIR/VANPOOL/EV"

| | |
|---|---|
| ● | FIRE HYDRANT |
| → → → | PATH OF TRAVEL |
| — — — | PROPERTY LINE |
| • | DOCK HIGH DOOR |
| ▲ | DRIVE THRU DOOR |

## SITE PLAN GENERAL NOTES

1. SITE PLAN SHALL MEET ALL ENGINEERING & NPDES REQUIREMENTS.
2. GENERAL CONTRACTOR TO REVIEW SOILS REPORT PREPARED BY ____ DATED ____ AND ANY SUBSEQUENT AMENDMENTS. G.C. TO CONFIRM COMPLIANCE.
3. REFER TO CIVIL DRAWINGS FOR ADDITIONAL UTILITY INFORMATION INCLUDING POINTS OF CONNECTION TO OFFSITE UTILITIES AND BUILDING POINTS OF CONNECTION.
4. GENERAL CONTRACTOR TO COORDINATE ALL POINTS OF CONNECTION BETWEEN OFFSITES, CIVIL, M.E.P., & FP DRAWINGS.
5. GRADES SURROUNDING BUILDING TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDING.
6. REFER TO CIVIL DRAWINGS FOR FINISH GRADE ELEVATIONS AND PERCENTAGE SLOPES.
7. GENERAL CONTRACTOR TO CONFIRM AND COMPLY WITH ALL BUILDING, FIRE, AND ENGINEERING DEPARTMENT REGULATIONS DURING CONSTRUCTION INCLUDING ANY TEMPORARY FACILITIES REQUIRED.
8. ALL PAVED AND LANDSCAPED AREAS TO BE BOUND BY 6" MIN. CONCRETE CURB TYPICAL UNLESS SPECIFICALLY NOTED OTHERWISE.
9. ALL ADA PATHS OF TRAVEL NOTED ON PLANS TO MEET THE FOLLOWING MINIMUM REQUIREMENTS: NO ABRUPT CHANGES IN ELEVATION ALLOWABLE ALONG THE PATH OF TRAVEL. THE SLOPE AND CROSS-SLOPE SHALL NOT EXCEED 5% AND 2% RESPECTIVELY UNLESS AN ADA COMPLIANT RAMP OR CURB RAMP IS DESIGNED BY THE CIVIL ENGINEER. IF A WALK CROSSES OR ADJOINS A VEHICLE WAY, AND THE WALKING SURFACES ARE NOT SEPARATED BY CURBS, RAILING OR OTHER ELEMENTS BETWEEN THE PEDESTRIAN AREAS AND VEHICULAR AREAS, THE BOUNDARY BETWEEN THE AREAS SHALL BE DEFINED BY A 4' DEEP DETECTABLE WARNING WHICH IS 36" WIDE COMPLYING WITH CBC SECTION 11B-705.1.2.5.
10. ALL SPECIFICATIONS ON DRAWINGS ARE MINIMUM REQUIREMENTS ONLY. GENERAL CONTRACTOR TO NOTIFY ARCHITECT IN WRITING OF ANY CONFLICTS IN DRAWINGS AND SPECIFICATIONS VIA "RFI".
11. GENERAL CONTRACTOR TO REFER TO ARCHITECTURAL DETAIL SHEETS FOR TYPICAL MINIMUM SITE IMPROVEMENT STANDARDS.
12. CONCRETE MOW STRIP PER ARCHITECTURAL DETAILS TO BE PROVIDED AT ALL GLAZING/STOREFRONT LOCATIONS WHERE ADJACENT TO LANDSCAPING.
13. CONCRETE SPLASH BLOCK PER ARCHITECTURAL DETAILS TO BE PROVIDED AT ALL ROOF DRAIN/DOWN SPOUT TERMINATIONS AT NON CONCRETE AREAS.
14. BRASS LAMB'S TONGUE TO BE PROVIDED AT ALL ROOF DRAIN OVERFLOWS THAT DAYLIGHT AT FACE OF BUILDING WALL.
15. GATES, FENCES, AND WALLS MAY BE SUBJECT TO DEFERRED SUBMITTAL REQUIREMENTS. GENERAL CONTRACTOR TO CONFIRM WITH CITY AND MUST SUBMIT SHOP DRAWINGS TO THE ARCHITECT FOR APPROVAL.

Oct 28, 2021 - 2:52pm amerlux P:\300_Environmental\13771 18001 S Main Street Warehouse Tech Studies\Dudek Work Products\Documents\Traffic\Graphics\13771_TRAF.dwg Layout: Fig2-SitePlan

SOURCE: Herdman Architecture + Design 2021

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**Figure 2**
Site Plan

# 2 Project Trip Generation

The project includes the construction of a 60,558-square-foot warehouse and the demolition of an existing 58,961 square feet manufacturing building. Trip generation estimates for the proposed project are based on daily and AM and PM peak hour trip generation rates obtained from the Institute of Transportation Engineers (ITE) *Trip Generation Handbook, 11th Edition*[2]. As a conservative analysis, Dudek reviewed the trip generation rates for three potential warehouse uses, including General Warehousing (ITE Code 150), High-Cube Fulfillment Center (ITE Code 155), and High Cube Parcel Warehouse (ITE Code 156). No cold storage would be proposed as part of the project, therefore rates for this type of warehouse were not included in the evaluation. A description of each land use code is provided as Attachment A.

The potential project trip generation is presented in Table 1. Based on ITE rates, the project could generate approximately 104 to 280 daily trips, 9 to 42 AM peak hour trips, and 10 to 39 PM peak hour trips. This equates to 155 to 420 daily passenger car equivalents (PCEs), 14 to 64 AM peak hour PCEs, and 15 to 59 PM peak hour PCEs.

## Table 1. Project Trip Generation

| Land Use | ITE Code | Size/ Units | Daily | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | In | Out | Total | In | Out | Total |
| **TRIP RATES[1]** | | | | | | | | | |
| A. Warehousing | 150 | 60.558 | 1.71 | 0.13 | 0.04 | 0.17 | 0.05 | 0.13 | 0.18 |
| B. High-Cube Fulfillment | 155 | 60.558 | 1.81 | 0.12 | 0.03 | 0.15 | 0.06 | 0.10 | 0.16 |
| C. High-Cube Parcel | 156 | 60.558 | 4.63 | 0.35 | 0.35 | 0.70 | 0.44 | 0.20 | 0.64 |
| **TRIP GENERATION- WAREHOUSE (150)** | | | | | | | | | |
| **Vehicle Mix[3]** | | **Percent[3]** | | | | | | | |
| Passenger Vehicles | | 69.0% | 71 | 5 | 2 | 7 | 2 | 5 | 8 |
| 2-Axle Trucks | | 6.8% | 7 | 1 | 0 | 1 | 0 | 1 | 1 |
| 3-Axle Trucks | | 5.5% | 6 | 0 | 0 | 1 | 0 | 0 | 1 |
| 4+-Axle Trucks | | 18.7% | 19 | 1 | 0 | 2 | 1 | 2 | 2 |
| **Project Trip Generation Non-PCE** | | | **104** | **8** | **2** | **10** | **3** | **8** | **11** |
| **Vehicle Mix[3]** | | **PCE Factor[4]** | | | | | | | |
| Passenger Vehicles | | 1.0 | 71 | 5 | 2 | 7 | 2 | 5 | 8 |
| 2-Axle Trucks | | 2.0 | 14 | 1 | 0 | 1 | 0 | 1 | 1 |
| 3-Axle Trucks | | 2.0 | 11 | 1 | 0 | 1 | 0 | 1 | 1 |
| 4+-Axle Trucks | | 3.0 | 58 | 4 | 1 | 6 | 2 | 4 | 6 |
| **Project Trip Generation W/PCE** | | | **155** | **12** | **4** | **16** | **5** | **11** | **16** |
| **TRIP GENERATION- HIGH-CUBE FULFILLMENT (155)** | | | | | | | | | |
| **Vehicle Mix[3]** | | **Percent[3]** | | | | | | | |
| Passenger Vehicles | | 69.0% | 76 | 5 | 1 | 6 | 3 | 4 | 7 |
| 2-Axle Trucks | | 6.8% | 7 | 1 | 0 | 1 | 0 | 0 | 1 |
| 3-Axle Trucks | | 5.5% | 6 | 0 | 0 | 0 | 0 | 0 | 1 |
| 4+-Axle Trucks | | 18.7% | 20 | 1 | 0 | 2 | 1 | 1 | 2 |

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[2] Institute of Transportation Engineers. 2021. *Trip Generation Handbook, 11th Edition*

## Table 1. Project Trip Generation

| Land Use | ITE Code | Size/ Units | Daily | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | In | Out | Total | In | Out | Total |
| **Project Trip Generation Non-PCE** | | | **110** | **7** | **2** | **9** | **4** | **6** | **10** |
| **Vehicle Mix[3]** | | **PCE Factor[4]** | | | | | | | |
| Passenger Vehicles | | 1.0 | 76 | 5 | 1 | 6 | 3 | 4 | 7 |
| 2-Axle Trucks | | 2.0 | 15 | 1 | 0 | 1 | 1 | 1 | 1 |
| 3-Axle Trucks | | 2.0 | 12 | 1 | 0 | 1 | 0 | 1 | 1 |
| 4+-Axle Trucks | | 3.0 | 61 | 4 | 1 | 5 | 2 | 3 | 5 |
| **Project Trip Generation W/PCE** | | | **164** | **11** | **3** | **14** | **6** | **9** | **15** |
| **TRIP GENERATION- HIGH-CUBE FPARCEL (156)** | | | | | | | | | |
| **Vehicle Mix[3]** | | **Percent[3]** | | | | | | | |
| Passenger Vehicles | | 69.0% | 193 | 15 | 15 | 29 | 18 | 9 | 27 |
| 2-Axle Trucks | | 6.8% | 19 | 1 | 1 | 3 | 2 | 1 | 3 |
| 3-Axle Trucks | | 5.5% | 15 | 1 | 1 | 2 | 1 | 1 | 2 |
| 4+-Axle Trucks | | 18.7% | 52 | 4 | 4 | 8 | 5 | 2 | 7 |
| **Project Trip Generation Non-PCE** | | | **280** | **21** | **21** | **42** | **26** | **12** | **39** |
| **Vehicle Mix[3]** | | **PCE Factor[4]** | | | | | | | |
| Passenger Vehicles | | 1.0 | 193 | 15 | 15 | 29 | 18 | 9 | 27 |
| 2-Axle Trucks | | 2.0 | 38 | 3 | 3 | 6 | 4 | 2 | 5 |
| 3-Axle Trucks | | 2.0 | 31 | 2 | 2 | 5 | 3 | 1 | 4 |
| 4+-Axle Trucks | | 3.0 | 157 | 12 | 12 | 24 | 15 | 7 | 22 |
| **Project Trip Generation W/PCE** | | | **420** | **32** | **32** | **64** | **39** | **19** | **59** |

**Notes:** TSF = Thousand Square Feet; Rounding errors may occur

[1]Trip rates from the Institute of Transportation Engineers (ITE), *Trip Generation, 11th Edition, 2021.*

[2] Trip Generation (without trip credit applied) is shown for site queuing analysis only.

[3] Vehicle Mix and Percent from SCAQMD, Warehouse Truck Trip Study Data Results and Usage, July 2014.

[4] Passenger Car Equivalent (PCE) factors are assumed to be 1.0 for passenger vehicles, 2.0 for medium trucks, and 3.0 for heavy trucks.

Table 2 presents the project trip generation based on applying a trip credit for the existing manufacturing building to be demolished. The trip generation rates for all three rates evaluated for the proposed use are presented. In most instances, the proposed project generates fewer trips than the existing manufacturing use. As shown in Table 2, using the highest, most conservative rate for the proposed use (ITE Code 156), the project would generate no new daily trips, a net increase in 2 AM peak hour trips, and a net decrease in 5 PM peak hour trips.

**Table 2. Project Trip Generation with Trip Credit**

| Land Use | ITE Code | Size/Units | Daily | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | In | Out | Total | In | Out | Total |
| **TRIP GENERATION - WAREHOUSE (150)** | | | | | | | | | |
| Proposed | 150 | 60.558 | 104 | 8 | 2 | 10 | 3 | 8 | 11 |
| Existing | 140 | 58.961 | 280 | 30 | 10 | 40 | 14 | 30 | 44 |
| ***Net Change*** | | **1.597** | **-176** | **-22** | **-8** | **-30** | **-11** | **-22** | **-33** |
| **TRIP GENERATION- HIGH-CUBE FULFILLMENT (155)** | | | | | | | | | |
| Proposed | 155 | 60.558 | 110 | 7 | 2 | 9 | 4 | 6 | 10 |
| Existing | 140 | 58.961 | 280 | 30 | 10 | 40 | 14 | 30 | 44 |
| ***Net Change*** | | **1.597** | **-170** | **-23** | **-8** | **-31** | **-10** | **-24** | **-34** |
| **TRIP GENERATION- HIGH-CUBE PARCEL (156)** | | | | | | | | | |
| Proposed | 156 | 60.558 | 280 | 21 | 21 | 42 | 26 | 12 | 39 |
| Existing | 140 | 58.961 | 280 | 30 | 10 | 40 | 14 | 30 | 44 |
| ***Net Change*** | | **1.597** | **0** | **-9** | **12** | **2** | **13** | **-18** | **-5** |

**Notes:** TSF = Thousand Square Feet; Rounding errors may occur

[1] Trip rates from the Institute of Transportation Engineers (ITE), *Trip Generation, 11th Edition, 2021.*

[2] Trip rates for the existing use are based on ITE Code 140 (Manufacturing) which has a daily rate of 4.75, an AM peak hour rate of 0.68 (0.52 in and 0.16 out), and a PM peak hour rate of 0.74 (0.23 in and 0.51 out).

# 3 Site Access

Vehicular access to the Project site is proposed from two existing driveways on Main Street, with minor improvements proposed. The existing driveways will be removed and reconstructed per the City's engineering design standards. The northern driveway is proposed to be approximately 39 feet wide with full access provided. The southern driveway is proposed to be 30 feet wide and restricted to right turn in and right turn out movements only, due to the existing raised median on Main Street, near the driveway. The median is approximately 281-feet-in length. A two-way left turn lane is provided on Main Street along the remainder of the project frontage.

## 3.1 Queuing Analysis

A queuing analysis was prepared for the project driveways to assess the adequacy of any off-site storage lanes into the project site, as well as the adequacy of driveway throat lengths and space on-site for vehicles to queue without effecting the internal circulation on the project site. Queuing was analyzed utilizing the SimTraffic software, which calculates the 95th percentile (design) queue. All queuing analysis data and SimTraffic queuing worksheets are provided in Attachment B. As a conservative analysis, the queuing analysis was conducted for all three ITE rates evaluated for the project.

AM and PM peak hour turning movement counts were collected on October 14, 2021 at the unsignalized intersection of Main Street and Savarona Drive, across from the project site and were used to calculate the Existing plus Project queues. The raw traffic counts worksheets are provided in Attachment C.

As shown in Table 3, none of the calculated 95th percentile (design) queues exceed storage capacities along Main Street. None of the queues would conflict with turning movements into or out of the project site, within the internal access drive aisles, or along Main Street with the addition of Project traffic during the Existing plus Project conditions. The longest 95th percentile queue is shown for the westbound left-through-right turning movement at the south project driveway, reaching 61 feet in the PM peak hour under Existing plus Project conditions.

## Table 3. Peak-Hour Queuing Summary for Existing Plus Project Conditions

| No. | Intersection | Movement[1] | Pocket Length[1] | Existing plus Project |  |  |  |
|---|---|---|---|---|---|---|---|
|  |  |  |  | AM Peak Hour |  | PM Peak Hour |  |
|  |  |  |  | 95th Percentile Queue[2] | Exceeds Turn Pocket Length? | 95th Percentile Queue[2] | Exceeds Turn Pocket Length? |
| **QUEUING ANALYSIS- WAREHOUSE (150)** |  |  |  |  |  |  |  |
| 1 | Main Street/North Project Driveway | EBLR | 500 | 21 | No | 34 | No |
|  |  | NBL | 150 | 16 | No | 9 | No |
| 2 | Main Street/South Project Driveway | EBR | 500 | 10 | No | 22 | No |
|  |  | WBLTR | 125 | 40 | No | 61 | No |
|  |  | SBLT | 150[3] | 42 | No | 23 | No |
| **QUEUING ANALYSIS- HIGH-CUBE FULFILLMENT (155)** |  |  |  |  |  |  |  |
| 1 | Main Street/North Project Driveway | EBLR | 500 | 15 | No | 28 | No |
|  |  | NBL | 150 | 15 | No | 13 | No |
| 2 | Main Street/South Project Driveway | EBR | 500 | 8 | No | 21 | No |
|  |  | WBLTR | 125 | 40 | No | 61 | No |
|  |  | SBLT | 150[3] | 43 | No | 23 | No |
| **QUEUING ANALYSIS- HIGH-CUBE PARCEL (156)** |  |  |  |  |  |  |  |
| 1 | Main Street/North Project Driveway | EBLR | 500 | 45 | No | 36 | No |
|  |  | NBL | 150 | 26 | No | 33 | No |
| 2 | Main Street/South Project Driveway | EBR | 500 | 30 | No | 30 | No |
|  |  | WBLTR | 125 | 40 | No | 61 | No |
|  |  | SBLT | 150[3] | 43 | No | 23 | No |

**Source:** Attachment B
**Notes:** EBLR = eastbound left-right; NBL = northbound left; EBR = eastbound right; WBLTR = westbound left-through-right; SBLT = southbound left-through

[1] Measured in feet.

[2] Based on 95th percentile (design) queue length in SimTraffic 10

[3] Length measured from nearest intersection.

## 3.2 Pedestrian and Bicycle Access

The site is in an existing industrial area with limited pedestrian and bicycle activity. Sidewalks are located on both sides of Main Street and there are currently no bike facilities. The City of Carson Master Plan of Bikeways[3] was adopted by the City Council in August 2013 and proposes an extensive network of streets designed to be safe and comfortable for bicyclists, with the goal of enhancing the practical use of bicycles as a transportation choice. Between Alondra Street to the north and Victoria Street to the south, the plan proposes to add six-foot bike lanes to sections of Main Street with a raised median and six-foot bike lanes with a two-foot buffer to sections without a median.

Bicyclist and pedestrian safety would be maintained at existing levels in the area since the project is not changing the existing land use and would result in a negligible increase in project related trips. The project is proposing to reconstruct the existing driveways on Main Street to meet the City's design standards and would be improved over existing conditions. The project would not include any other site improvements that would extend into the public right-of-way or alter the existing roadway network. Therefore, the project would also not interfere with City's ability to construct any planned bicycle or pedestrian facilities in the future.

# 4 Summary

The key findings of the project trip generation, site access, and LOS analysis presented in this Memo are summarized below:

- The proposed project could generate approximately 104 to 280 daily trips, 9 to 42 AM peak hour trips, and 10 to 39 PM peak hour trips (Table 1), depending on the type of warehouse constructed. This equates to 155 to 420 daily PCEs, 14 to 64 AM peak hour PCEs, and 15 to 59 PM peak hour PCEs. By applying a trip credit for the existing manufacturing building to be demolished, in most instances, the project generates fewer trips than the existing manufacturing use. Using the highest, most conservative rate for the proposed use (ITE Code 156), the project would generate no new daily trips, a net increase in 12 AM peak hour trips, and a net decrease in 5 PM peak hour trips (Table 2).
- The proposed Project would not result in unacceptable queueing conditions into or out of the Project site (Table 3). No impacts would occur.
- Bicyclist and pedestrian safety would be maintained at existing levels in the area since the project is not changing the existing land use and would result in a negligible increase in project related trips.

---

[3] City of Carson. 2013. Carson Master Plan of Bikeways.

# Attachment A: ITE Land Use Codes

ITE Land Use: 150, Warehousing
Average Sample Size: 292,000 SF
Number of Studies: 31 studies

# 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

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

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, 1050

ITE Land Use: 155, High Cube Fulfillment Center
Average Sample Size: 886,000 SF
Number of Studies: 10 studies

# Land Use: 155
## High-Cube Fulfillment Center Warehouse

---

### Description

A high-cube warehouse (HCW) is a building that typically has at least 200,000 gross square feet of floor area, has a ceiling height of 24 feet or more, and is used primarily for the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials) prior to their distribution to retail locations or other warehouses. A typical HCW has a high level of on-site automation and logistics management. The automation and logistics enable highly-efficient processing of goods through the HCW. A high-cube warehouse can be free-standing or located in an industrial park.

Warehousing (Land Use 150), high-cube transload and short-term storage warehouse (Land Use 154), high-cube parcel hub warehouse (Land Use 156), and high-cube cold storage warehouse (Land Use 157) are related land uses.

### Land Use Subcategory

Each fulfillment center in the ITE database has been categorized as either a sort or non-sort facility. A sort facility is a fulfillment center that ships out smaller items, requiring extensive sorting, typically by manual means. A non-sort facility is a fulfillment center that ships large box items that are processed primarily with automation rather than through manual means. Separate sets of data plots are presented for the sort and non-sort fulfillment centers. Some limited assembly and repackaging may occur within the facility.

### Additional Data

A high-cube warehouse may contain a mezzanine. In a HCW setting, a mezzanine is a free-standing, semi-permanent structure that is commonly supported by structural steel columns and that is lined with racks or shelves. The gross floor area (GFA) values for the study sites in the database for this land use do NOT include the floor area of the mezzanine. The GFA values represent only the permanent ground-floor square footage.

The amount of office/employee welfare space that is provided within a HCW can be highly variable but is typically an insignificant portion of the overall building square footage. Within the trip generation database, common values are between 3,000 and 5,000 square feet for a Cold Storage HCW and between 5,000 and 10,000 square feet for Transload, Fulfillment Center, and Parcel Hub HCW (all of which are less than one percent of total GFA for a site). Therefore, for the trip generation data plots, any office space that is part of the normal operation of the warehouse is included in the total GFA.

The High-Cube Warehouse/Distribution Center-related land uses underwent specialized consideration through a commissioned study titled "High-Cube Warehouse Vehicle Trip Generation Analysis," published in October 2016. The results of this study are posted on the ITE website at http://library.ite.org/pub/a3e6679a-e3a8-bf38-7f29-2961becdd498.

ITE Land Use: 156, High Cube Parcel Hub Warehouse
Average Sample Size: 543,000 SF
Number of Studies: 8 studies

# Land Use: 156

# High-Cube Parcel Hub Warehouse

## Description

A high-cube warehouse (HCW) is a building that typically has at least 200,000 gross square feet of floor area, has a ceiling height of 24 feet or more, and is used primarily for the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials) prior to their distribution to retail locations or other warehouses. A typical HCW has a high level of on-site automation and logistics management. The automation and logistics enable highly-efficient processing of goods through the HCW. A high-cube warehouse can be free-standing or located in an industrial park.

A high-cube parcel hub warehouses typically serves as a regional and local freight-forwarder facility for time sensitive shipments via airfreight and ground carriers. A site can also include truck maintenance, wash, or fueling facilities. Some limited assembly and repackaging may occur within the facility.

A high-cube warehouse may contain a mezzanine. In a HCW setting, a mezzanine is a free-standing, semi-permanent structure that is commonly supported by structural steel columns and that is lined with racks or shelves. The gross floor area (GFA) values for the study sites in the database for this land use do NOT include the floor area of the mezzanine. The GFA values represent only the permanent ground-floor square footage.

The amount of office/employee welfare space that is provided within a HCW can be highly variable but is typically an insignificant portion of the overall building square footage. Within the trip generation database, common values are between 3,000 and 5,000 square feet for a Cold Storage HCW and between 5,000 and 10,000 square feet for Transload, Fulfillment Center, and Parcel Hub HCW (all of which are less than one percent of total GFA for a site). Therefore, for the trip generation data plots, any office space that is part of the normal operation of the warehouse is included in the total GFA.

Warehousing (Land Use 150), high-cube transload and short-term storage warehouse (Land Use 154), high-cube fulfillment center warehouse (Land Use 155), and high-cube cold storage warehouse (Land Use 157) are related land uses.

## Additional Data

The High-Cube Warehouse/Distribution Center-related land uses underwent specialized consideration through a commissioned study titled "High-Cube Warehouse Vehicle Trip Generation Analysis," published in October 2016. The results of this study are posted on the ITE website at http://library.ite.org/pub/a3e6679a-e3a8-bf38-7f29-2961becdd498.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip

# Attachment B: Queuing Analysis Worksheets

## Intersection: 1: Main St & North Project Dwy

| Movement | EB | NB |
|---|---|---|
| Directions Served | LR | L |
| Maximum Queue (ft) | 31 | 31 |
| Average Queue (ft) | 4 | 2 |
| 95th Queue (ft) | 21 | 16 |
| Link Distance (ft) | 357 | |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | 75 |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

## Intersection: 2: Main St & South Project Dwy/Savarona Wy

| Movement | EB | WB | SB |
|---|---|---|---|
| Directions Served | R | LTR | LT |
| Maximum Queue (ft) | 31 | 36 | 53 |
| Average Queue (ft) | 1 | 15 | 12 |
| 95th Queue (ft) | 10 | 40 | 42 |
| Link Distance (ft) | 248 | 232 | 123 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Network Summary

Network wide Queuing Penalty: 0

## Intersection: 1: Main St & North Project Dwy

| Movement | EB | NB |
|---|---|---|
| Directions Served | LR | L |
| Maximum Queue (ft) | 31 | 24 |
| Average Queue (ft) | 10 | 1 |
| 95th Queue (ft) | 34 | 9 |
| Link Distance (ft) | 357 | |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | 75 |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

## Intersection: 2: Main St & South Project Dwy/Savarona Wy

| Movement | EB | WB | SB |
|---|---|---|---|
| Directions Served | R | LTR | LT |
| Maximum Queue (ft) | 31 | 74 | 40 |
| Average Queue (ft) | 4 | 32 | 4 |
| 95th Queue (ft) | 22 | 61 | 23 |
| Link Distance (ft) | 248 | 232 | 123 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Network Summary

Network wide Queuing Penalty: 0

## Intersection: 1: Main St & North Project Dwy

| Movement | EB | NB |
|---|---|---|
| Directions Served | LR | L |
| Maximum Queue (ft) | 30 | 24 |
| Average Queue (ft) | 2 | 2 |
| 95th Queue (ft) | 15 | 15 |
| Link Distance (ft) | 357 | |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | 75 |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

## Intersection: 2: Main St & South Project Dwy/Savarona Wy

| Movement | EB | WB | SB |
|---|---|---|---|
| Directions Served | R | LTR | LT |
| Maximum Queue (ft) | 12 | 31 | 61 |
| Average Queue (ft) | 1 | 15 | 13 |
| 95th Queue (ft) | 8 | 40 | 43 |
| Link Distance (ft) | 248 | 232 | 123 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Network Summary

Network wide Queuing Penalty: 0

## Intersection: 1: Main St & North Project Dwy

| Movement | EB | NB |
|---|---|---|
| Directions Served | LR | L |
| Maximum Queue (ft) | 31 | 30 |
| Average Queue (ft) | 7 | 2 |
| 95th Queue (ft) | 28 | 13 |
| Link Distance (ft) | 357 | |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | 75 |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

## Intersection: 2: Main St & South Project Dwy/Savarona Wy

| Movement | EB | WB | SB |
|---|---|---|---|
| Directions Served | R | LTR | LT |
| Maximum Queue (ft) | 31 | 74 | 40 |
| Average Queue (ft) | 4 | 32 | 4 |
| 95th Queue (ft) | 21 | 61 | 23 |
| Link Distance (ft) | 248 | 232 | 123 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Network Summary

Network wide Queuing Penalty: 0

## Intersection: 1: Main St & North Project Dwy

| Movement | EB | NB | SB |
|---|---|---|---|
| Directions Served | LR | L | TR |
| Maximum Queue (ft) | 48 | 36 | 4 |
| Average Queue (ft) | 19 | 6 | 0 |
| 95th Queue (ft) | 45 | 26 | 3 |
| Link Distance (ft) | 357 |  | 370 |
| Upstream Blk Time (%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |
| Storage Bay Dist (ft) |  | 75 |  |
| Storage Blk Time (%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |

## Intersection: 2: Main St & South Project Dwy/Savarona Wy

| Movement | EB | WB | SB |
|---|---|---|---|
| Directions Served | R | LTR | LT |
| Maximum Queue (ft) | 31 | 41 | 57 |
| Average Queue (ft) | 8 | 14 | 13 |
| 95th Queue (ft) | 30 | 40 | 43 |
| Link Distance (ft) | 248 | 232 | 123 |
| Upstream Blk Time (%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |
| Storage Bay Dist (ft) |  |  |  |
| Storage Blk Time (%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |

## Network Summary

Network wide Queuing Penalty: 0

## Intersection: 1: Main St & North Project Dwy

| Movement | EB | NB |
|---|---|---|
| Directions Served | LR | L |
| Maximum Queue (ft) | 42 | 38 |
| Average Queue (ft) | 11 | 9 |
| 95th Queue (ft) | 36 | 33 |
| Link Distance (ft) | 357 | |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | 75 |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

## Intersection: 2: Main St & South Project Dwy/Savarona Wy

| Movement | EB | WB | SB |
|---|---|---|---|
| Directions Served | R | LTR | LT |
| Maximum Queue (ft) | 31 | 77 | 40 |
| Average Queue (ft) | 8 | 33 | 4 |
| 95th Queue (ft) | 30 | 61 | 23 |
| Link Distance (ft) | 248 | 232 | 123 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Network Summary

Network wide Queuing Penalty: 0

# Attachment C: Raw Traffic Count Data

# INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

| DATE: | LOCATION: | Carson | PROJECT #: | SC3127 |
|---|---|---|---|---|
| Wed, Oct 13, 21 | NORTH & SOUTH: | Main | LOCATION #: | 1 |
| | EAST & WEST: | Savarona | CONTROL: | STOP W |

NOTES:

AM
PM
MD
OTHER
OTHER

▲ N
◄ W  E ►
S ▼

☐ Add U-Turns to Left Turns

| | | NORTHBOUND<br>Main | | | SOUTHBOUND<br>Main | | | EASTBOUND<br>Savarona | | | WESTBOUND<br>Savarona | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| | LANES: | X | 2 | 0 | 0 | 2 | X | X | X | X | 0 | X | 0 | |
| AM | 7:00 AM | 0 | 63 | 4 | 6 | 76 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 151 |
| | 7:15 AM | 0 | 78 | 6 | 10 | 81 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 178 |
| | 7:30 AM | 0 | 70 | 3 | 7 | 85 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 167 |
| | 7:45 AM | 0 | 121 | 19 | 9 | 139 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 290 |
| | 8:00 AM | 0 | 103 | 4 | 8 | 119 | 0 | 0 | 0 | 0 | 1 | 0 | 4 | 239 |
| | 8:15 AM | 0 | 106 | 4 | 11 | 91 | 0 | 0 | 0 | 0 | 1 | 0 | 5 | 218 |
| | 8:30 AM | 0 | 93 | 6 | 10 | 85 | 0 | 0 | 0 | 0 | 3 | 0 | 1 | 198 |
| | 8:45 AM | 0 | 85 | 9 | 13 | 84 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 194 |
| | VOLUMES | 0 | 719 | 55 | 74 | 760 | 0 | 0 | 0 | 0 | 9 | 0 | 18 | 1,637 |
| | APPROACH % | 0% | 93% | 7% | 9% | 91% | 0% | 0% | 0% | 0% | 33% | 0% | 67% | |
| | APP/DEPART | 776 | / | 737 | 834 | / | 771 | 0 | / | 129 | 27 | / | 0 | 0 |
| | BEGIN PEAK HR | | 7:45 AM | | | | | | | | | | | |
| | VOLUMES | 0 | 423 | 33 | 38 | 434 | 0 | 0 | 0 | 0 | 5 | 0 | 12 | 947 |
| | APPROACH % | 0% | 92% | 7% | 8% | 92% | 0% | 0% | 0% | 0% | 29% | 0% | 71% | |
| | PEAK HR FACTOR | | 0.806 | | | 0.797 | | | 0.000 | | | 0.708 | | 0.811 |
| | APP/DEPART | 458 | / | 435 | 472 | / | 441 | 0 | / | 71 | 17 | / | 0 | 0 |
| PM | 4:00 PM | 0 | 94 | 3 | 0 | 150 | 0 | 0 | 0 | 0 | 7 | 0 | 9 | 263 |
| | 4:15 PM | 0 | 114 | 3 | 3 | 141 | 0 | 0 | 0 | 0 | 4 | 0 | 7 | 272 |
| | 4:30 PM | 0 | 113 | 1 | 4 | 152 | 0 | 0 | 0 | 0 | 5 | 0 | 13 | 288 |
| | 4:45 PM | 0 | 123 | 3 | 0 | 123 | 0 | 0 | 0 | 0 | 7 | 0 | 10 | 266 |
| | 5:00 PM | 0 | 121 | 0 | 3 | 157 | 0 | 0 | 0 | 0 | 9 | 0 | 10 | 300 |
| | 5:15 PM | 0 | 112 | 3 | 2 | 140 | 0 | 0 | 0 | 0 | 4 | 0 | 6 | 267 |
| | 5:30 PM | 0 | 91 | 1 | 3 | 141 | 0 | 0 | 0 | 0 | 6 | 0 | 7 | 249 |
| | 5:45 PM | 0 | 93 | 1 | 0 | 103 | 0 | 0 | 0 | 0 | 5 | 0 | 4 | 206 |
| | VOLUMES | 0 | 861 | 15 | 15 | 1,107 | 0 | 0 | 0 | 0 | 47 | 0 | 66 | 2,118 |
| | APPROACH % | 0% | 98% | 2% | 1% | 98% | 0% | 0% | 0% | 0% | 42% | 0% | 58% | |
| | APP/DEPART | 881 | / | 929 | 1,124 | / | 1,159 | 0 | / | 30 | 113 | / | 0 | 0 |
| | BEGIN PEAK HR | | 4:15 PM | | | | | | | | | | | |
| | VOLUMES | 0 | 471 | 7 | 10 | 573 | 0 | 0 | 0 | 0 | 25 | 0 | 40 | 1,133 |
| | APPROACH % | 0% | 98% | 1% | 2% | 98% | 0% | 0% | 0% | 0% | 38% | 0% | 62% | |
| | PEAK HR FACTOR | | 0.951 | | | 0.914 | | | 0.000 | | | 0.855 | | 0.938 |
| | APP/DEPART | 483 | / | 513 | 585 | / | 603 | 0 | / | 17 | 65 | / | 0 | 0 |

| U-TURNS | | | | |
|---|---|---|---|---|
| NB | SB | EB | WB | TTL |
| 0 | 0 | 0 | 0 | |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 2 | 0 | 0 | 0 | 2 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 2 | 0 | 0 | 0 | 2 |
| 0 | 0 | 0 | 0 | 0 |
| 2 | 0 | 0 | 0 | 2 |
| 0 | 1 | 0 | 0 | 1 |
| 1 | 1 | 0 | 0 | 2 |
| 2 | 0 | 0 | 0 | 2 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 5 | 2 | 0 | 0 | 7 |

**Main**

NORTH SIDE

**Savarona** WEST SIDE

EAST SIDE **Savarona**

SOUTH SIDE

**Main**

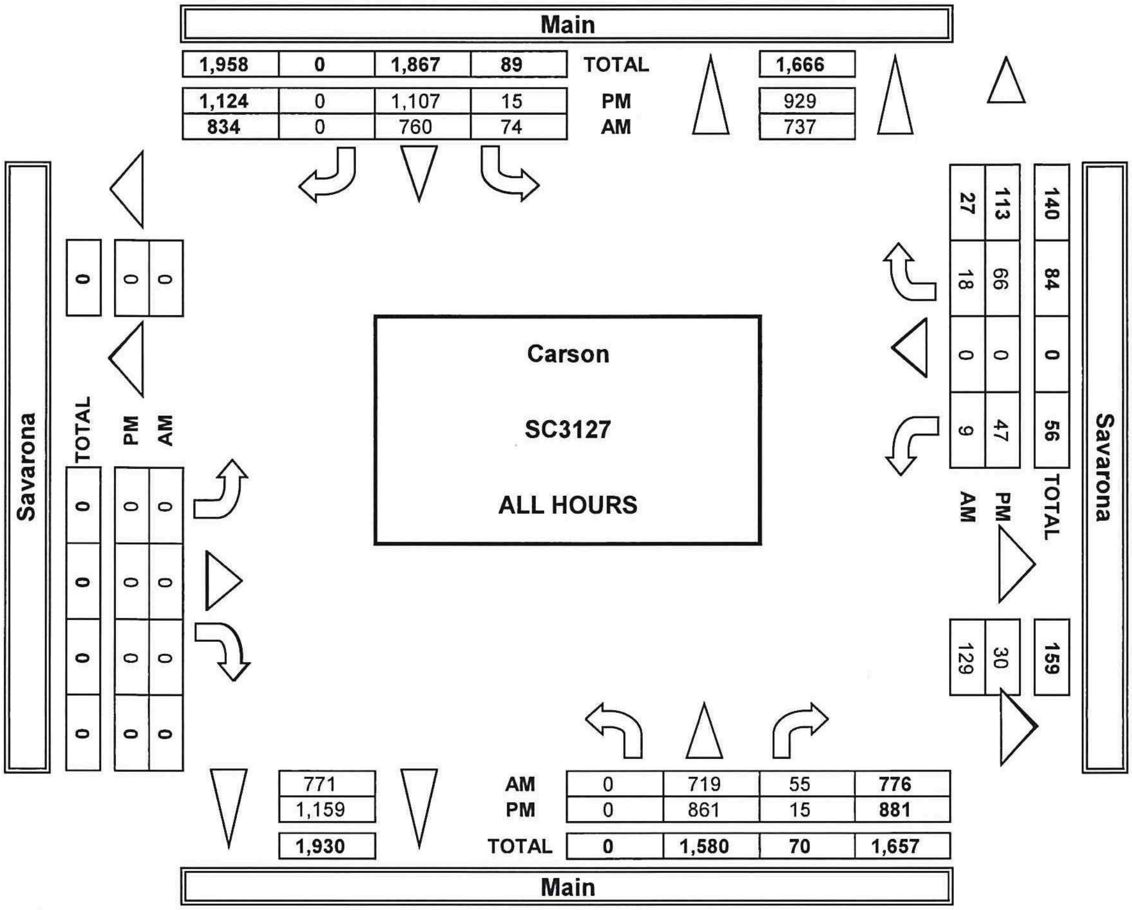
| | | ALL PED AND BIKE | | | | |
|---|---|---|---|---|---|---|
| | | N SIDE | S SIDE | E SIDE | W SIDE | TOTAL |
| AM | 7:00 AM | 0 | 0 | 1 | 0 | 1 |
| | 7:15 AM | 0 | 0 | 0 | 0 | 0 |
| | 7:30 AM | 0 | 0 | 2 | 0 | 2 |
| | 7:45 AM | 0 | 0 | 0 | 0 | 0 |
| | 8:00 AM | 0 | 0 | 0 | 0 | 0 |
| | 8:15 AM | 0 | 0 | 1 | 0 | 1 |
| | 8:30 AM | 0 | 0 | 0 | 0 | 0 |
| | 8:45 AM | 0 | 0 | 1 | 0 | 1 |
| | TOTAL | 0 | 0 | 5 | 0 | 5 |
| PM | 4:00 PM | 0 | 0 | 0 | 0 | 0 |
| | 4:15 PM | 0 | 0 | 0 | 1 | 1 |
| | 4:30 PM | 0 | 0 | 0 | 1 | 1 |
| | 4:45 PM | 0 | 0 | 0 | 0 | 0 |
| | 5:00 PM | 0 | 0 | 0 | 0 | 0 |
| | 5:15 PM | 0 | 0 | 0 | 0 | 0 |
| | 5:30 PM | 0 | 0 | 0 | 0 | 0 |
| | 5:45 PM | 0 | 0 | 0 | 0 | 0 |
| | TOTAL | 0 | 0 | 0 | 2 | 2 |

| | | PEDESTRIAN CROSSINGS | | | | |
|---|---|---|---|---|---|---|
| | | N SIDE | S SIDE | E SIDE | W SIDE | TOTAL |
| AM | 7:00 AM | 0 | 0 | 1 | 0 | 1 |
| | 7:15 AM | 0 | 0 | 0 | 0 | 0 |
| | 7:30 AM | 0 | 0 | 2 | 0 | 2 |
| | 7:45 AM | 0 | 0 | 0 | 0 | 0 |
| | 8:00 AM | 0 | 0 | 0 | 0 | 0 |
| | 8:15 AM | 0 | 0 | 1 | 0 | 1 |
| | 8:30 AM | 0 | 0 | 0 | 0 | 0 |
| | 8:45 AM | 0 | 0 | 1 | 0 | 1 |
| | TOTAL | 0 | 0 | 5 | 0 | 5 |
| PM | 4:00 PM | 0 | 0 | 0 | 0 | 0 |
| | 4:15 PM | 0 | 0 | 0 | 0 | 0 |
| | 4:30 PM | 0 | 0 | 0 | 0 | 0 |
| | 4:45 PM | 0 | 0 | 0 | 0 | 0 |
| | 5:00 PM | 0 | 0 | 0 | 0 | 0 |
| | 5:15 PM | 0 | 0 | 0 | 0 | 0 |
| | 5:30 PM | 0 | 0 | 0 | 0 | 0 |
| | 5:45 PM | 0 | 0 | 0 | 0 | 0 |
| | TOTAL | 0 | 0 | 0 | 0 | 0 |

| | | BICYCLE CROSSINGS | | | | |
|---|---|---|---|---|---|---|
| | | NS | SS | ES | WS | TOTAL |
| AM | 7:00 AM | 0 | 0 | 0 | 0 | 0 |
| | 7:15 AM | 0 | 0 | 0 | 0 | 0 |
| | 7:30 AM | 0 | 0 | 0 | 0 | 0 |
| | 7:45 AM | 0 | 0 | 0 | 0 | 0 |
| | 8:00 AM | 0 | 0 | 0 | 0 | 0 |
| | 8:15 AM | 0 | 0 | 0 | 0 | 0 |
| | 8:30 AM | 0 | 0 | 0 | 0 | 0 |
| | 8:45 AM | 0 | 0 | 0 | 0 | 0 |
| | TOTAL | 0 | 0 | 0 | 0 | 0 |
| PM | 4:00 PM | 0 | 0 | 0 | 0 | 0 |
| | 4:15 PM | 0 | 0 | 0 | 1 | 1 |
| | 4:30 PM | 0 | 0 | 0 | 1 | 1 |
| | 4:45 PM | 0 | 0 | 0 | 0 | 0 |
| | 5:00 PM | 0 | 0 | 0 | 0 | 0 |
| | 5:15 PM | 0 | 0 | 0 | 0 | 0 |
| | 5:30 PM | 0 | 0 | 0 | 0 | 0 |
| | 5:45 PM | 0 | 0 | 0 | 0 | 0 |
| | TOTAL | 0 | 0 | 0 | 2 | 2 |

## AimTD LLC

TURNING MOVEMENT COUNTS



**Main**

| | | | | | |
|---|---|---|---|---|---|
| 1,958 | 0 | 1,867 | 89 | TOTAL | 1,666 |
| 1,124 | 0 | 1,107 | 15 | PM | 929 |
| 834 | 0 | 760 | 74 | AM | 737 |

**Savarona**

| TOTAL | PM | AM |
|---|---|---|
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |

Carson

SC3127

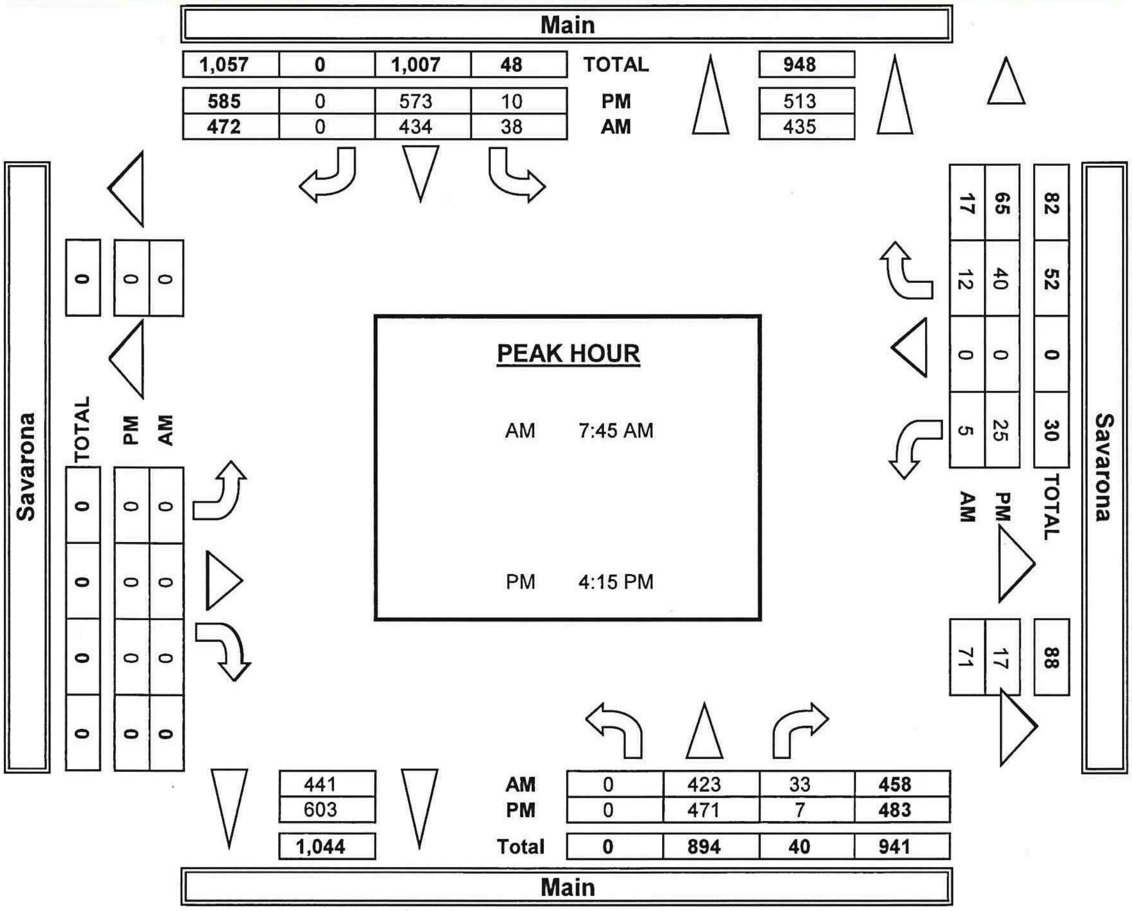
ALL HOURS

**Savarona**

| AM | PM | TOTAL |
|---|---|---|
| 27 | 113 | 140 |
| 18 | 66 | 84 |
| 0 | 0 | 0 |
| 9 | 47 | 56 |
| 129 | 30 | 159 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 771 | AM | 0 | 719 | 55 | 776 |
| 1,159 | PM | 0 | 861 | 15 | 881 |
| 1,930 | TOTAL | 0 | 1,580 | 70 | 1,657 |

**Main**



**Main**

| | | | | | |
|---|---|---|---|---|---|
| 1,057 | 0 | 1,007 | 48 | TOTAL | 948 |
| 585 | 0 | 573 | 10 | PM | 513 |
| 472 | 0 | 434 | 38 | AM | 435 |

**Savarona**

| TOTAL | PM | AM |
|---|---|---|
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |
| 0 | 0 | 0 |

**PEAK HOUR**

AM 7:45 AM

PM 4:15 PM

**Savarona**

| AM | PM | TOTAL |
|---|---|---|
| 17 | 65 | 82 |
| 12 | 40 | 52 |
| 0 | 0 | 0 |
| 5 | 25 | 30 |
| 71 | 17 | 88 |

| | | | | | |
|---|---|---|---|---|---|
| 441 | AM | 0 | 423 | 33 | 458 |
| 603 | PM | 0 | 471 | 7 | 483 |
| 1,044 | Total | 0 | 894 | 40 | 941 |

**Main**

# INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

| | | | | | |
|---|---|---|---|---|---|
| DATE:<br>10/13/21<br>WEDNESDAY | LOCATION: | Carson | | PROJECT #: | SC3127 |
| | NORTH & SOUTH: | Main | | LOCATION #: | 1 |
| | EAST & WEST: | Savarona | | CONTROL: | STOP W |

| | NOTES: | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PCE<br>Adjusted | Class | 1 | 2 | 3 | 4 | 5 | 6 | | AM<br>PM<br>MD<br>OTHER<br>OTHER | ◄ W | ▲<br>N |
| | Factor | 1 | 1.5 | 2 | 3 | 2 | 2 | | | | E ► |
| | | | | | | | | | | | S<br>▼ |

| | | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | | U-TURNS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Main | | | Main | | | Savarona | | | Savarona | | | | | | | | |
| | | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL | NB | SB | EB | WB | TTL |
| | LANES: | X | 2 | 0 | 0 | 2 | X | X | X | X | 0 | X | 0 | | | | | | |
| AM | 7:00 AM | 0 | 71 | 4 | 7 | 91 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 176 | | | | | 0 |
| | 7:15 AM | 0 | 87 | 6 | 11 | 88 | 0 | 0 | 0 | 0 | 2 | 0 | 3 | 196 | | | | | 0 |
| | 7:30 AM | 0 | 75 | 3 | 7 | 100 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 187 | | | | | 0 |
| | 7:45 AM | 0 | 133 | 20 | 10 | 151 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 314 | | | | | 0 |
| | 8:00 AM | 0 | 112 | 4 | 8 | 135 | 0 | 0 | 0 | 0 | 2 | 0 | 4 | 264 | | | | | 0 |
| | 8:15 AM | 0 | 114 | 4 | 11 | 108 | 0 | 0 | 0 | 0 | 1 | 0 | 6 | 243 | | | | | 0 |
| | 8:30 AM | 0 | 103 | 6 | 10 | 103 | 0 | 0 | 0 | 0 | 4 | 0 | 1 | 226 | | | | | 0 |
| | 8:45 AM | 0 | 100 | 9 | 14 | 106 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 231 | | | | | 0 |
| | VOLUMES | 0 | 794 | 56 | 77 | 879 | 0 | 0 | 0 | 0 | 11 | 0 | 20 | 1,836 | 0 | 0 | 0 | 0 | 0 |
| | APPROACH % | 0% | 93% | 7% | 8% | 92% | 0% | 0% | 0% | 0% | 36% | 0% | 64% | | | | | | |
| | APP/DEPART | 849 | / | 813 | 956 | / | 890 | 0 | / | 133 | 31 | / | 0 | 0 | | | | | |
| | BEGIN PEAK HR | | 7:45 AM | | | | | | | | | | | | | | | | |
| | VOLUMES | 0 | 461 | 34 | 39 | 495 | 0 | 0 | 0 | 0 | 6 | 0 | 13 | 1,047 | | | | | |
| | APPROACH % | 0% | 93% | 7% | 7% | 93% | 0% | 0% | 0% | 0% | 32% | 0% | 68% | | | | | | |
| | PEAK HR FACTOR | | 0.813 | | | 0.834 | | | 0.000 | | | 0.712 | | 0.833 | | | | | |
| | APP/DEPART | 495 | / | 474 | 534 | / | 501 | 0 | / | 72 | 19 | / | 0 | 0 | | | | | |
| PM | 4:00 PM | 0 | 104 | 3 | 0 | 163 | 0 | 0 | 0 | 0 | 7 | 0 | 9 | 285 | | | | | 0 |
| | 4:15 PM | 0 | 131 | 3 | 4 | 161 | 0 | 0 | 0 | 0 | 4 | 0 | 7 | 309 | | | | | 0 |
| | 4:30 PM | 0 | 127 | 1 | 5 | 168 | 0 | 0 | 0 | 0 | 6 | 0 | 13 | 318 | | | | | 0 |
| | 4:45 PM | 0 | 139 | 3 | 0 | 140 | 0 | 0 | 0 | 0 | 8 | 0 | 10 | 299 | | | | | 0 |
| | 5:00 PM | 0 | 131 | 0 | 3 | 175 | 0 | 0 | 0 | 0 | 9 | 0 | 10 | 327 | | | | | 0 |
| | 5:15 PM | 0 | 116 | 3 | 2 | 153 | 0 | 0 | 0 | 0 | 4 | 0 | 6 | 283 | | | | | 0 |
| | 5:30 PM | 0 | 102 | 1 | 3 | 156 | 0 | 0 | 0 | 0 | 6 | 0 | 7 | 275 | | | | | 0 |
| | 5:45 PM | 0 | 101 | 1 | 0 | 109 | 0 | 0 | 0 | 0 | 5 | 0 | 4 | 219 | | | | | 0 |
| | VOLUMES | 0 | 948 | 15 | 16 | 1,222 | 0 | 0 | 0 | 0 | 48 | 0 | 66 | 2,315 | 0 | 0 | 0 | 0 | 0 |
| | APPROACH % | 0% | 98% | 2% | 1% | 99% | 0% | 0% | 0% | 0% | 42% | 0% | 58% | | | | | | |
| | APP/DEPART | 963 | / | 1,014 | 1,238 | / | 1,270 | 0 | / | 31 | 114 | / | 0 | 0 | | | | | |
| | BEGIN PEAK HR | | 4:15 PM | | | | | | | | | | | | | | | | |
| | VOLUMES | 0 | 527 | 7 | 11 | 642 | 0 | 0 | 0 | 0 | 26 | 0 | 40 | 1,253 | | | | | |
| | APPROACH % | 0% | 99% | 1% | 2% | 98% | 0% | 0% | 0% | 0% | 39% | 0% | 61% | | | | | | |
| | PEAK HR FACTOR | | 0.940 | | | 0.920 | | | 0.000 | | | 0.868 | | 0.958 | | | | | |
| | APP/DEPART | 534 | / | 567 | 653 | / | 668 | 0 | / | 18 | 66 | / | 0 | 0 | | | | | |

**Main**

NORTH SIDE

**Savarona** WEST SIDE EAST SIDE **Savarona**

SOUTH SIDE

**Main**

# INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

| DATE: | LOCATION: | Carson | PROJECT #: | SC3127 |
|---|---|---|---|---|
| 10/13/21 | NORTH & SOUTH: | Main | LOCATION #: | 1 |
| WEDNESDAY | EAST & WEST: | Savarona | CONTROL: | STOP W |

**CLASS 1:** PASSENGER VEHICLES

**NOTES:**

AM
PM
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OTHER

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| | | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | | U-TURNS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Main | | | Main | | | Savarona | | | Savarona | | | | | | | | |
| | | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL | NB | SB | EB | WB | TTL |
| | LANES: | X | 2 | 0 | 0 | 2 | X | X | X | X | 0 | X | 0 | | | | | | |
| AM | 7:00 AM | 0 | 53 | 4 | 4 | 57 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 118 | 0 | 0 | 0 | 0 | 0 |
| | 7:15 AM | 0 | 64 | 6 | 9 | 71 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 151 | 0 | 0 | 0 | 0 | 0 |
| | 7:30 AM | 0 | 65 | 3 | 7 | 72 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 149 | 0 | 0 | 0 | 0 | 0 |
| | 7:45 AM | 0 | 107 | 18 | 8 | 122 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 257 | 2 | 0 | 0 | 0 | 2 |
| | 8:00 AM | 0 | 93 | 4 | 8 | 103 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 212 | 0 | 0 | 0 | 0 | 0 |
| | 8:15 AM | 0 | 96 | 4 | 11 | 76 | 0 | 0 | 0 | 0 | 1 | 0 | 4 | 192 | 0 | 0 | 0 | 0 | 0 |
| | 8:30 AM | 0 | 81 | 6 | 10 | 68 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 168 | 0 | 0 | 0 | 0 | 0 |
| | 8:45 AM | 0 | 68 | 9 | 12 | 65 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 157 | 0 | 0 | 0 | 0 | 0 |
| | VOLUMES | 0 | 627 | 54 | 69 | 634 | 0 | 0 | 0 | 0 | 5 | 0 | 15 | 1,406 | 2 | 0 | 0 | 0 | 2 |
| | APPROACH % | 0% | 92% | 8% | 10% | 90% | 0% | 0% | 0% | 0% | 25% | 0% | 75% | | | | | | |
| | APP/DEPART | 683 | / | 642 | 703 | / | 641 | 0 | / | 123 | 20 | / | 0 | 0 | | | | | |
| | BEGIN PEAK HR | | 7:45 AM | | | | | | | | | | | | | | | | |
| | VOLUMES | 0 | 377 | 32 | 37 | 369 | 0 | 0 | 0 | 0 | 3 | 0 | 11 | 831 | | | | | |
| | APPROACH % | 0% | 92% | 8% | 9% | 91% | 0% | 0% | 0% | 0% | 21% | 0% | 79% | | | | | | |
| | PEAK HR FACTOR | | 0.809 | | | 0.781 | | | 0.000 | | | 0.700 | | 0.802 | | | | | |
| | APP/DEPART | 411 | / | 388 | 406 | / | 374 | 0 | / | 69 | 14 | / | 0 | 0 | | | | | |
| PM | 4:00 PM | 0 | 83 | 3 | 0 | 136 | 0 | 0 | 0 | 0 | 7 | 0 | 9 | 238 | 0 | 0 | 0 | 0 | 0 |
| | 4:15 PM | 0 | 91 | 3 | 2 | 119 | 0 | 0 | 0 | 0 | 4 | 0 | 7 | 226 | 2 | 0 | 0 | 0 | 2 |
| | 4:30 PM | 0 | 96 | 1 | 3 | 131 | 0 | 0 | 0 | 0 | 4 | 0 | 13 | 248 | 0 | 1 | 0 | 0 | 1 |
| | 4:45 PM | 0 | 101 | 3 | 0 | 108 | 0 | 0 | 0 | 0 | 6 | 0 | 10 | 228 | 1 | 1 | 0 | 0 | 2 |
| | 5:00 PM | 0 | 107 | 0 | 3 | 135 | 0 | 0 | 0 | 0 | 9 | 0 | 10 | 264 | 2 | 0 | 0 | 0 | 2 |
| | 5:15 PM | 0 | 106 | 3 | 2 | 122 | 0 | 0 | 0 | 0 | 4 | 0 | 6 | 243 | 0 | 0 | 0 | 0 | 0 |
| | 5:30 PM | 0 | 77 | 1 | 3 | 127 | 0 | 0 | 0 | 0 | 6 | 0 | 7 | 221 | 0 | 0 | 0 | 0 | 0 |
| | 5:45 PM | 0 | 85 | 1 | 0 | 98 | 0 | 0 | 0 | 0 | 5 | 0 | 4 | 193 | 0 | 0 | 0 | 0 | 0 |
| | VOLUMES | 0 | 746 | 15 | 13 | 976 | 0 | 0 | 0 | 0 | 45 | 0 | 66 | 1,868 | 5 | 2 | 0 | 0 | 7 |
| | APPROACH % | 0% | 97% | 2% | 1% | 98% | 0% | 0% | 0% | 0% | 41% | 0% | 59% | | | | | | |
| | APP/DEPART | 766 | / | 814 | 991 | / | 1,026 | 0 | / | 28 | 111 | / | 0 | 0 | | | | | |
| | BEGIN PEAK HR | | 4:15 PM | | | | | | | | | | | | | | | | |
| | VOLUMES | 0 | 395 | 7 | 8 | 493 | 0 | 0 | 0 | 0 | 23 | 0 | 40 | 973 | | | | | |
| | APPROACH % | 0% | 97% | 2% | 2% | 98% | 0% | 0% | 0% | 0% | 37% | 0% | 63% | | | | | | |
| | PEAK HR FACTOR | | 0.933 | | | 0.911 | | | 0.000 | | | 0.829 | | 0.914 | | | | | |
| | APP/DEPART | 407 | / | 437 | 503 | / | 521 | 0 | / | 15 | 63 | / | 0 | 0 | | | | | |

**Main**

NORTH SIDE

**Savarona** WEST SIDE

EAST SIDE **Savarona**

SOUTH SIDE

**Main**

# INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

| DATE: | | | | |
|---|---|---|---|---|
| 10/13/21 | LOCATION: | Carson | PROJECT #: | SC3127 |
| WEDNESDAY | NORTH & SOUTH: | Main | LOCATION #: | 1 |
| | EAST & WEST: | Savarona | CONTROL: | STOP W |

**CLASS 2:**
2-AXLE
WORK
VEHICLES/
TRUCKS

**NOTES:**

AM
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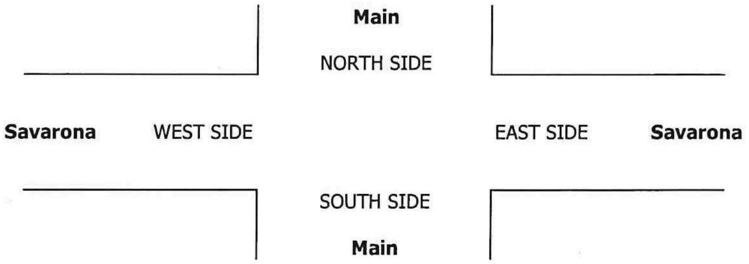
| | | NORTHBOUND<br>Main | | | SOUTHBOUND<br>Main | | | EASTBOUND<br>Savarona | | | WESTBOUND<br>Savarona | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| | LANES: | X | 2 | 0 | 0 | 2 | X | X | X | X | 0 | X | 0 | |
| AM | 7:00 AM | 0 | 6 | 0 | 2 | 13 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 23 |
| | 7:15 AM | 0 | 10 | 0 | 1 | 8 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 21 |
| | 7:30 AM | 0 | 2 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| | 7:45 AM | 0 | 9 | 1 | 1 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| | 8:00 AM | 0 | 7 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 19 |
| | 8:15 AM | 0 | 8 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 16 |
| | 8:30 AM | 0 | 8 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 18 |
| | 8:45 AM | 0 | 11 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
| | VOLUMES | 0 | 61 | 1 | 4 | 78 | 0 | 0 | 0 | 0 | 4 | 0 | 3 | 151 |
| | APPROACH % | 0% | 98% | 2% | 5% | 95% | 0% | 0% | 0% | 0% | 57% | 0% | 43% | |
| | APP/DEPART | 62 | / | 64 | 82 | / | 82 | 0 | / | 5 | 7 | / | 0 | 0 |
| | BEGIN PEAK HR | | 7:45 AM | | | | | | | | | | | |
| | VOLUMES | 0 | 32 | 1 | 1 | 40 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 77 |
| | APPROACH % | 0% | 97% | 3% | 2% | 98% | 0% | 0% | 0% | 0% | 67% | 0% | 33% | |
| | PEAK HR FACTOR | | 0.825 | | | 0.732 | | | 0.000 | | | 0.750 | | 0.802 |
| | APP/DEPART | 33 | / | 33 | 41 | / | 42 | 0 | / | 2 | 3 | / | 0 | 0 |
| PM | 4:00 PM | 0 | 7 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| | 4:15 PM | 0 | 16 | 0 | 1 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 |
| | 4:30 PM | 0 | 9 | 0 | 1 | 17 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 28 |
| | 4:45 PM | 0 | 14 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 24 |
| | 5:00 PM | 0 | 11 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| | 5:15 PM | 0 | 5 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| | 5:30 PM | 0 | 11 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| | 5:45 PM | 0 | 5 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| | VOLUMES | 0 | 78 | 0 | 2 | 89 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 171 |
| | APPROACH % | 0% | 100% | 0% | 2% | 98% | 0% | 0% | 0% | 0% | 100% | 0% | 0% | |
| | APP/DEPART | 78 | / | 78 | 91 | / | 91 | 0 | / | 2 | 2 | / | 0 | 0 |
| | BEGIN PEAK HR | | 4:15 PM | | | | | | | | | | | |
| | VOLUMES | 0 | 50 | 0 | 2 | 54 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 108 |
| | APPROACH % | 0% | 100% | 0% | 4% | 96% | 0% | 0% | 0% | 0% | 100% | 0% | 0% | |
| | PEAK HR FACTOR | | 0.781 | | | 0.778 | | | 0.000 | | | 0.500 | | 0.844 |
| | APP/DEPART | 50 | / | 50 | 56 | / | 56 | 0 | / | 2 | 2 | / | 0 | 0 |

| U-TURNS | | | | |
|---|---|---|---|---|
| NB | SB | EB | WB | TTL |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |

| | | | | |
|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |



# INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

| DATE: | LOCATION: | Carson | PROJECT #: | SC3127 |
|---|---|---|---|---|
| 10/13/21 | NORTH & SOUTH: | Main | LOCATION #: | 1 |
| WEDNESDAY | EAST & WEST: | Savarona | CONTROL: | STOP W |

**CLASS 3:**
3-AXLE
TRUCKS

**NOTES:**

AM
PM
MD
OTHER
OTHER

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| | | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Main | | | Main | | | Savarona | | | Savarona | | |
| | | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| | LANES: | X | 2 | 0 | 0 | 2 | X | X | X | X | 0 | X | 0 | |
| AM | 7:00 AM | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| | 7:15 AM | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| | 7:30 AM | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| | 7:45 AM | 0 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| | 8:00 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 8:15 AM | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| | 8:30 AM | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| | 8:45 AM | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| | VOLUMES | 0 | 10 | 0 | 1 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 |
| | APPROACH % | 0% | 100% | 0% | 6% | 94% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | APP/DEPART | 10 | / | 10 | 16 | / | 15 | 0 | / | 1 | 0 | / | 0 | 0 |
| | BEGIN PEAK HR | | 7:45 AM | | | | | | | | | | | |
| | VOLUMES | 0 | 4 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| | APPROACH % | 0% | 100% | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | PEAK HR FACTOR | | 0.500 | | | 0.750 | | | 0.000 | | | 0.000 | | 0.650 |
| | APP/DEPART | 4 | / | 4 | 9 | / | 9 | 0 | / | 0 | 0 | / | 0 | 0 |
| PM | 4:00 PM | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| | 4:15 PM | 0 | 4 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| | 4:30 PM | 0 | 7 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| | 4:45 PM | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| | 5:00 PM | 0 | 1 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| | 5:15 PM | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| | 5:30 PM | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| | 5:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | VOLUMES | 0 | 20 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 |
| | APPROACH % | 0% | 100% | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | APP/DEPART | 20 | / | 20 | 14 | / | 14 | 0 | / | 0 | 0 | / | 0 | 0 |
| | BEGIN PEAK HR | | 4:15 PM | | | | | | | | | | | |
| | VOLUMES | 0 | 17 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 |
| | APPROACH % | 0% | 100% | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | PEAK HR FACTOR | | 0.607 | | | 0.357 | | | 0.000 | | | 0.000 | | 0.844 |
| | APP/DEPART | 17 | / | 17 | 10 | / | 10 | 0 | / | 0 | 0 | / | 0 | 0 |

| U-TURNS | | | | |
|---|---|---|---|---|
| NB | SB | EB | WB | TTL |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |

**Main**

NORTH SIDE

**Savarona** WEST SIDE

EAST SIDE **Savarona**

SOUTH SIDE

**Main**

# INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

| DATE: | | | | |
|---|---|---|---|---|
| 10/13/21 | LOCATION: | Carson | PROJECT #: | SC3127 |
| WEDNESDAY | NORTH & SOUTH: | Main | LOCATION #: | 1 |
| | EAST & WEST: | Savarona | CONTROL: | STOP W |

**CLASS 4:** 4 OR MORE AXLE TRUCKS

**NOTES:**

AM
PM
MD
OTHER
OTHER

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E ►
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| | | NORTHBOUND Main | | | SOUTHBOUND Main | | | EASTBOUND Savarona | | | WESTBOUND Savarona | | | | U-TURNS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL | NB | SB | EB | WB | TTL |
| | LANES: | X | 2 | 0 | 0 | 2 | X | X | X | X | 0 | X | 0 | | | | | | |
| AM | 7:00 AM | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| | 7:15 AM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| | 7:30 AM | 0 | 1 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 |
| | 7:45 AM | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| | 8:00 AM | 0 | 2 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 |
| | 8:15 AM | 0 | 2 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 |
| | 8:30 AM | 0 | 2 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 |
| | 8:45 AM | 0 | 3 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 |
| | VOLUMES | 0 | 13 | 0 | 0 | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 0 | 0 | 0 | 0 | 0 |
| | APPROACH % | 0% | 100% | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | | | | | | |
| | APP/DEPART | 13 | / | 13 | 32 | / | 32 | 0 | / | 0 | 0 | / | 0 | 0 | | | | | |
| | BEGIN PEAK HR | | 7:45 AM | | | | | | | | | | | | | | | | |
| | VOLUMES | 0 | 8 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | | | | | |
| | APPROACH % | 0% | 100% | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | | | | | | |
| | PEAK HR FACTOR | | 1.000 | | | 0.800 | | | 0.000 | | | 0.000 | | 0.857 | | | | | |
| | APP/DEPART | 8 | / | 8 | 16 | / | 16 | 0 | / | 0 | 0 | / | 0 | 0 | | | | | |
| PM | 4:00 PM | 0 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 |
| | 4:15 PM | 0 | 2 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 |
| | 4:30 PM | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 |
| | 4:45 PM | 0 | 1 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 |
| | 5:00 PM | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| | 5:15 PM | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| | 5:30 PM | 0 | 2 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 |
| | 5:45 PM | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 |
| | VOLUMES | 0 | 11 | 0 | 0 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 39 | 0 | 0 | 0 | 0 | 0 |
| | APPROACH % | 0% | 100% | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | | | | | | |
| | APP/DEPART | 11 | / | 11 | 28 | / | 28 | 0 | / | 0 | 0 | / | 0 | 0 | | | | | |
| | BEGIN PEAK HR | | 4:15 PM | | | | | | | | | | | | | | | | |
| | VOLUMES | 0 | 5 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | | | | | |
| | APPROACH % | 0% | 100% | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | | | | | | |
| | PEAK HR FACTOR | | 0.625 | | | 0.667 | | | 0.000 | | | 0.000 | | 0.750 | | | | | |
| | APP/DEPART | 5 | / | 5 | 16 | / | 16 | 0 | / | 0 | 0 | / | 0 | 0 | | | | | |

**Main**

NORTH SIDE

**Savarona** WEST SIDE

EAST SIDE **Savarona**

SOUTH SIDE

**Main**

# INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

| DATE: | LOCATION: | Carson | PROJECT #: | SC3127 |
|---|---|---|---|---|
| 10/13/21 | NORTH & SOUTH: | Main | LOCATION #: | 1 |
| WEDNESDAY | EAST & WEST: | Savarona | CONTROL: | STOP W |

| CLASS 5: | NOTES: |
|---|---|
| RV | |

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PM
MD
OTHER
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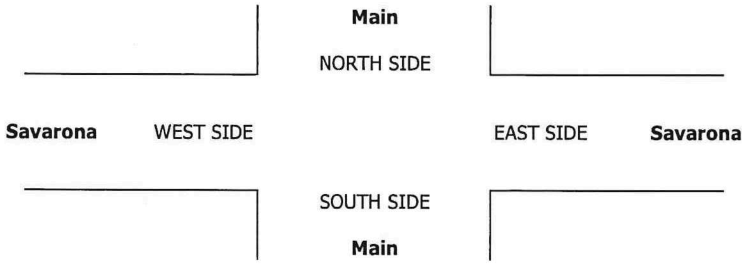
| | | NORTHBOUND<br>Main | | | SOUTHBOUND<br>Main | | | EASTBOUND<br>Savarona | | | WESTBOUND<br>Savarona | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| | LANES: | X | 2 | 0 | 0 | 2 | X | X | X | X | 0 | X | 0 | |
| AM | 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | VOLUMES | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | APPROACH % | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | APP/DEPART | 0 | / | 0 | 0 | / | 0 | 0 | / | 0 | 0 | / | 0 | 0 |
| | BEGIN PEAK HR | | 7:45 AM | | | | | | | | | | | |
| | VOLUMES | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | APPROACH % | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | PEAK HR FACTOR | | 0.000 | | | 0.000 | | | 0.000 | | | 0.000 | | 0.000 |
| | APP/DEPART | 0 | / | 0 | 0 | / | 0 | 0 | / | 0 | 0 | / | 0 | 0 |
| PM | 4:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | VOLUMES | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | APPROACH % | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | APP/DEPART | 0 | / | 0 | 0 | / | 0 | 0 | / | 0 | 0 | / | 0 | 0 |
| | BEGIN PEAK HR | | 4:15 PM | | | | | | | | | | | |
| | VOLUMES | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | APPROACH % | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | PEAK HR FACTOR | | 0.000 | | | 0.000 | | | 0.000 | | | 0.000 | | 0.000 |
| | APP/DEPART | 0 | / | 0 | 0 | / | 0 | 0 | / | 0 | 0 | / | 0 | 0 |

**U-TURNS**

| NB | SB | EB | WB | TTL |
|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |

| NB | SB | EB | WB | TTL |
|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |



# INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

| | | | | | |
|---|---|---|---|---|---|
| DATE:<br>10/13/21<br>WEDNESDAY | LOCATION: | Carson | | PROJECT #: | SC3127 |
| | NORTH & SOUTH: | Main | | LOCATION #: | 1 |
| | EAST & WEST: | Savarona | | CONTROL: | STOP W |

| | | | |
|---|---|---|---|
| **CLASS 6:** | **NOTES:** | AM<br>PM<br>MD<br>OTHER<br>OTHER | ▲ N<br>◀ W  E ▶<br>S ▼ |
| BUSES | | | |

| | | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Main | | | Main | | | Savarona | | | Savarona | | |
| | | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| | LANES: | X | 2 | 0 | 0 | 2 | X | X | X | X | 0 | X | 0 | |
| AM | 7:00 AM | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| | 7:15 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 7:30 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 7:45 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 8:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8:30 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 8:45 AM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| | VOLUMES | 0 | 8 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| | APPROACH % | 0% | 100% | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | APP/DEPART | 8 | / | 8 | 1 | / | 1 | 0 | / | 0 | 0 | / | 0 | 0 |
| | BEGIN PEAK HR | | 7:45 AM | | | | | | | | | | | |
| | VOLUMES | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| | APPROACH % | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | PEAK HR FACTOR | | 0.500 | | | 0.000 | | | 0.000 | | | 0.000 | | 0.500 |
| | APP/DEPART | 2 | / | 2 | 0 | / | 0 | 0 | / | 0 | 0 | / | 0 | 0 |
| PM | 4:00 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 4:15 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 4:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4:45 PM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| | 5:00 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 5:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5:45 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | VOLUMES | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| | APPROACH % | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | APP/DEPART | 6 | / | 6 | 0 | / | 0 | 0 | / | 0 | 0 | / | 0 | 0 |
| | BEGIN PEAK HR | | 4:15 PM | | | | | | | | | | | |
| | VOLUMES | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| | APPROACH % | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | PEAK HR FACTOR | | 0.500 | | | 0.000 | | | 0.000 | | | 0.000 | | 0.500 |
| | APP/DEPART | 4 | / | 4 | 0 | / | 0 | 0 | / | 0 | 0 | / | 0 | 0 |

| U-TURNS | | | | |
|---|---|---|---|---|
| NB | SB | EB | WB | TTL |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |

**Main**

NORTH SIDE

**Savarona** WEST SIDE

EAST SIDE **Savarona**

SOUTH SIDE

**Main**