

Roadway Survey Field Sheet

TS Project # **04-108** Map _____ Grid _____ Start Time **11:15** # Of Days _____

Location: **NE ANDRESEN + 63RD ST**
 City: **VANCOUVER**
 Location ID: **18**

Type Of Survey:
 Volume
 Speed
 Classification

Start Date: **3/16/04** Counters **6**
 S M T W T F S
 End Date: **3/18/04** Tubes **8**
 S M T W T F S

| SITE EVALUATION | | | POSTED SPEED | | DWEELL TIME | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------|---|-------------------------------------|---------------------------------------|---------------------------------|--|--|--|--|--|--|--|--------------|---------------|--|--|--|--|------------|-----|-------|-------|-------|-------|-----|--|----------------|-----|-----|-----|----|----|----------|------------|-----|----|----|----|----|----------|----------|-----|----|----|----|----|----------|
| Vehicles Crossing Tube Perpendicular | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> | ??? | <input type="checkbox"/> None | <input checked="" type="checkbox"/> 40 Mph | <table border="1"> <thead> <tr> <th>LOWEST SPEED</th> <th colspan="5">HIGHEST SPEED</th> <th>(TAD, TBD)</th> </tr> <tr> <th>MPH</th> <th>10-20</th> <th>15-30</th> <th>25-40</th> <th>35-45</th> <th>>45</th> <th></th> </tr> </thead> <tbody> <tr> <td>Standing Queue</td> <td>200</td> <td>130</td> <td>100</td> <td>80</td> <td>40</td> <td>A</td> </tr> <tr> <td>5 - 10 MPH</td> <td>130</td> <td>90</td> <td>70</td> <td>60</td> <td>40</td> <td>B</td> </tr> <tr> <td>> 10 MPH</td> <td>100</td> <td>80</td> <td>60</td> <td>40</td> <td>40</td> <td>M</td> </tr> </tbody> </table> | | | | | | LOWEST SPEED | HIGHEST SPEED | | | | | (TAD, TBD) | MPH | 10-20 | 15-30 | 25-40 | 35-45 | >45 | | Standing Queue | 200 | 130 | 100 | 80 | 40 | A | 5 - 10 MPH | 130 | 90 | 70 | 60 | 40 | B | > 10 MPH | 100 | 80 | 60 | 40 | 40 | M |
| LOWEST SPEED | HIGHEST SPEED | | | | | (TAD, TBD) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MPH | 10-20 | 15-30 | 25-40 | 35-45 | >45 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Standing Queue | 200 | 130 | 100 | 80 | 40 | A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 - 10 MPH | 130 | 90 | 70 | 60 | 40 | B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| > 10 MPH | 100 | 80 | 60 | 40 | 40 | M | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Do You Anticipate Queuing Across Tube | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> 25 Mph | <input type="checkbox"/> 45 Mph | DWEELL (TAD, TBD) D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Speed Greater Than 20 Miles / Hour | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> 30 Mph | <input type="checkbox"/> 50 Mph | Use 2 Counters if Traffic Conditions are different in each direction. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tube Crosses More Than 2 Lanes | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> 35 Mph | <input type="checkbox"/> 55 Mph | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SPEED: High _____ Mph Low _____ Mph | | | <input type="checkbox"/> Other: _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| AXLE STRIKE COUNT | | SYSTEM DELAY LOGIC | | SPEED LOW VOL | | | VEHICLE SPEED / CLASSIFICATION | | | | |
|-------------------|----------|--|----------|---|----------|----------|--|----------|----------|----------|----------|
| G | M | D | A | B | G | M | B | M | B | G | L |
| | | | | | | | | | | | |
| | | <input type="checkbox"/> Tube equal length | | <input type="checkbox"/> Use proper spacing | | | <input type="checkbox"/> One Lane only except Low Volume Speed Surveys ADT 2,000 | | | | |

COUNTER / SET DOWN

Type: **M.C. / MAX**

No. **25** **A2** **A7**

Box **x90** **33** **35**

Tube Length **40**

Hammer Test

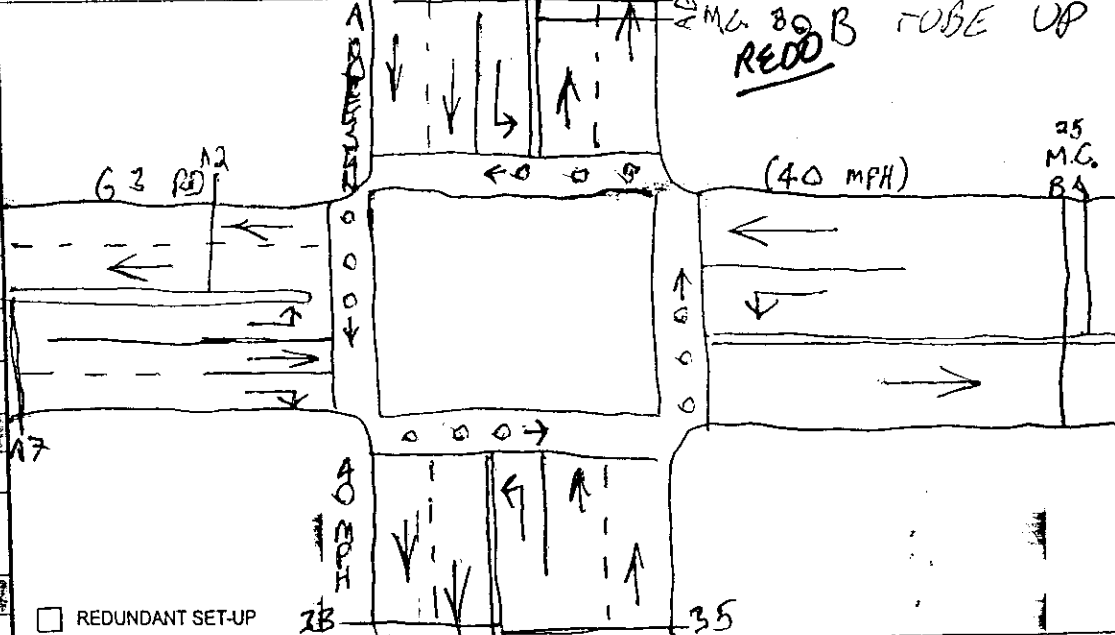
| CHECK | DATE | TIME |
|-------|------|------|
| P F | | |
| P F | | |
| P F | | |
| P F | | |
| P F | | |

DIRECTION: East Bound West Bound North Bound South Bound Approach

COMBINED: East / West North / South DRWY: Combined In-Bound Out-Bound

ROAD: Dry Wet Asphalt Concrete Broken Rutted Curved

NORTH
NORTH IS UP



PICK-UP

Hammer Test

Date: **3/18/04** Time: **9:40**

FILE NAMES

17AND535
11 11 33
1863DWA7
11 A2
1863DE25
18AND80

Remarks: **#80 REDD - BAD TUBE**

WEATHER: Sunny Overcast Rain Snow

Surveyed By: **M.P.**

TRAFFIC SMITHY
 1225 NW Murray Blvd. Suite 111
 Portland, OR 97229
 Phone: 503/641-6333 - Fax: 503/643-8866

TRAFFIC SMITHY, INC

1225 NW MURRAY BLVD

PORTLAND, OR 97209

Phone: 503-641-6333 Fax: 503-643-8866

Roadway: NE ANDRESEN

Location: SOUTH OF 63RD STREET

Date: 03/17/04

Day of Week: Wednesday

NB Traffic

| TIME | :00 | :05 | :10 | :15 | :20 | :25 | :30 | :35 | :40 | :45 | :50 | :55 | Total |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| 00:00 | 6 | 8 | 5 | 5 | 2 | 4 | 10 | 3 | 4 | 1 | 1 | 2 | 51 |
| 01:00 | 2 | 4 | 2 | 5 | 7 | 1 | 1 | 2 | 3 | 4 | 2 | 2 | 35 |
| 02:00 | 3 | 1 | 3 | 0 | 4 | 2 | 5 | 1 | 2 | 2 | 4 | 1 | 28 |
| 03:00 | 4 | 4 | 1 | 2 | 0 | 2 | 3 | 1 | 4 | 6 | 3 | 1 | 31 |
| 04:00 | 1 | 2 | 2 | 3 | 2 | 3 | 1 | 3 | 4 | 7 | 3 | 6 | 37 |
| 05:00 | 1 | 6 | 4 | 7 | 9 | 5 | 12 | 11 | 13 | 16 | 13 | 12 | 109 |
| 06:00 | 14 | 8 | 17 | 17 | 11 | 28 | 26 | 19 | 18 | 35 | 19 | 27 | 239 |
| 07:00 | 27 | 32 | 25 | 32 | 28 | 37 | 33 | 36 | 35 | 18 | 44 | 46 | 393 |
| 08:00 | 32 | 67 | 42 | 45 | 50 | 53 | 48 | 33 | 48 | 37 | 50 | 38 | 543 |
| 09:00 | 48 | 41 | 53 | 50 | 31 | 43 | 38 | 58 | 35 | 48 | 49 | 49 | 543 |
| 10:00 | 53 | 29 | 47 | 37 | 53 | 43 | 49 | 44 | 47 | 57 | 63 | 54 | 576 |
| 11:00 | 56 | 48 | 61 | 60 | 55 | 66 | 49 | 73 | 56 | 58 | 79 | 53 | 714 |
| 12:00 | 75 | 63 | 72 | 82 | 66 | 59 | 53 | 77 | 73 | 60 | 74 | 70 | 824 |
| 13:00 | 66 | 63 | 68 | 81 | 70 | 66 | 82 | 68 | 82 | 70 | 60 | 61 | 837 |
| 14:00 | 70 | 79 | 80 | 60 | 81 | 79 | 90 | 73 | 81 | 67 | 87 | 73 | 920 |
| 15:00 | 87 | 80 | 78 | 84 | 81 | 70 | 70 | 88 | 91 | 95 | 73 | 83 | 980 |
| 16:00 | 95 | 94 | 117 | 93 | 93 | 98 | 70 | 72 | 71 | 93 | 87 | 91 | 1074 |
| 17:00 | 102 | 96 | 107 | 117 | 91 | 102 | 74 | 105 | 82 | 71 | 68 | 92 | 1107 |
| 18:00 | 70 | 99 | 80 | 66 | 76 | 63 | 68 | 61 | 76 | 64 | 76 | 65 | 864 |
| 19:00 | 66 | 47 | 67 | 55 | 55 | 42 | 42 | 54 | 46 | 58 | 38 | 34 | 604 |
| 20:00 | 38 | 54 | 46 | 47 | 51 | 38 | 45 | 37 | 29 | 34 | 45 | 40 | 504 |
| 21:00 | 34 | 34 | 46 | 46 | 61 | 42 | 30 | 32 | 28 | 27 | 31 | 20 | 431 |
| 22:00 | 26 | 20 | 18 | 23 | 23 | 22 | 15 | 16 | 10 | 17 | 14 | 12 | 216 |
| 23:00 | 9 | 16 | 10 | 12 | 9 | 10 | 12 | 9 | 4 | 6 | 8 | 8 | 113 |

Daily Total: 11773

AM Peak Hour: 715 (10:55 - 11:55)

PM Peak Hour: 1147 (16:45 - 17:45)

4th Highest Hour: 920 (14:00 - 15:00)

8th Highest Hour: 714 (11:00 - 12:00)

6.07% Of Daily Total

9.74% Of Daily Total

7.81% Of Daily Total

6.06% Of Daily Total

TRAFFIC SMITHY, INC

1225 NW MURRAY BLVD

PORTLAND, OR 97209

Phone: 503-641-6333 Fax: 503-643-8866

Roadway: NE ANDRESEN

Location: SOUTH OF 63RD STREET

Date: 03/17/04

Day of Week: Wednesday

SB Traffic

| TIME | :00 | :05 | :10 | :15 | :20 | :25 | :30 | :35 | :40 | :45 | :50 | :55 | Total |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| 00:00 | 6 | 3 | 2 | 2 | 1 | 2 | 4 | 5 | 3 | 7 | 3 | 2 | 40 |
| 01:00 | 3 | 4 | 2 | 3 | 3 | 2 | 2 | 1 | 4 | 2 | 6 | 3 | 35 |
| 02:00 | 7 | 3 | 3 | 3 | 1 | 2 | 2 | 2 | 5 | 0 | 2 | 2 | 32 |
| 03:00 | 2 | 3 | 3 | 5 | 1 | 0 | 2 | 7 | 2 | 1 | 4 | 2 | 32 |
| 04:00 | 0 | 0 | 0 | 3 | 6 | 1 | 3 | 6 | 3 | 2 | 6 | 7 | 37 |
| 05:00 | 5 | 6 | 8 | 6 | 4 | 12 | 11 | 15 | 12 | 20 | 20 | 24 | 143 |
| 06:00 | 17 | 24 | 32 | 22 | 25 | 31 | 43 | 53 | 35 | 61 | 43 | 44 | 430 |
| 07:00 | 40 | 60 | 58 | 72 | 65 | 82 | 53 | 102 | 87 | 79 | 120 | 86 | 904 |
| 08:00 | 79 | 65 | 50 | 67 | 72 | 51 | 80 | 58 | 65 | 75 | 66 | 79 | 807 |
| 09:00 | 47 | 52 | 56 | 44 | 55 | 41 | 38 | 49 | 58 | 60 | 67 | 52 | 619 |
| 10:00 | 44 | 58 | 52 | 56 | 63 | 55 | 59 | 54 | 51 | 59 | 69 | 63 | 683 |
| 11:00 | 49 | 44 | 53 | 79 | 89 | 70 | 62 | 55 | 79 | 72 | 66 | 61 | 779 |
| 12:00 | 65 | 82 | 79 | 57 | 59 | 84 | 58 | 73 | 54 | 90 | 70 | 72 | 843 |
| 13:00 | 60 | 80 | 63 | 66 | 62 | 87 | 57 | 65 | 74 | 62 | 58 | 49 | 783 |
| 14:00 | 78 | 73 | 71 | 59 | 54 | 73 | 68 | 77 | 71 | 71 | 56 | 68 | 819 |
| 15:00 | 74 | 86 | 69 | 78 | 51 | 81 | 81 | 72 | 65 | 106 | 59 | 103 | 925 |
| 16:00 | 81 | 65 | 86 | 57 | 72 | 78 | 76 | 75 | 67 | 75 | 85 | 89 | 906 |
| 17:00 | 72 | 74 | 76 | 80 | 80 | 81 | 68 | 58 | 67 | 80 | 71 | 58 | 865 |
| 18:00 | 40 | 79 | 66 | 65 | 68 | 75 | 76 | 62 | 67 | 36 | 59 | 69 | 762 |
| 19:00 | 58 | 53 | 46 | 48 | 33 | 31 | 38 | 32 | 32 | 53 | 32 | 36 | 492 |
| 20:00 | 35 | 40 | 30 | 29 | 24 | 45 | 44 | 34 | 35 | 29 | 29 | 29 | 403 |
| 21:00 | 31 | 31 | 33 | 27 | 26 | 31 | 22 | 20 | 27 | 22 | 10 | 21 | 301 |
| 22:00 | 20 | 23 | 26 | 10 | 9 | 16 | 11 | 21 | 14 | 9 | 10 | 11 | 180 |
| 23:00 | 8 | 9 | 5 | 11 | 10 | 7 | 3 | 12 | 2 | 13 | 6 | 5 | 91 |

Daily Total: 11911

AM Peak Hour: 948 (07:10 - 08:10)

PM Peak Hour: 932 (15:05 - 16:05)

4th Highest Hour: 865 (17:00 - 18:00)

8th Highest Hour: 783 (13:00 - 14:00)

7.95% Of Daily Total

7.82% Of Daily Total

7.26% Of Daily Total

6.57% Of Daily Total

TRAFFIC SMITHY, INC
 1225 NW MURRAY BLVD
 PORTLAND, OR 97209
 Phone: 503-641-6333 Fax: 503-643-8866

Roadway: 63RD STREET
 Location: EAST OF ANDRESEN

Date: 03/17/04
 Day of Week: Wednesday

WB Traffic

| TIME | :00 | :05 | :10 | :15 | :20 | :25 | :30 | :35 | :40 | :45 | :50 | :55 | Total |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| 00:00 | 1 | 1 | 2 | 3 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 12 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 1 | 0 | 0 | 0 | 1 | 6 |
| 02:00 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 5 |
| 03:00 | 0 | 1 | 0 | 1 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 1 | 7 |
| 04:00 | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 2 | 0 | 4 | 1 | 2 | 13 |
| 05:00 | 2 | 5 | 2 | 2 | 3 | 5 | 7 | 6 | 7 | 10 | 15 | 11 | 75 |
| 06:00 | 7 | 11 | 11 | 18 | 18 | 17 | 18 | 13 | 16 | 20 | 16 | 22 | 187 |
| 07:00 | 18 | 29 | 18 | 15 | 26 | 20 | 24 | 25 | 16 | 20 | 26 | 27 | 264 |
| 08:00 | 30 | 42 | 18 | 29 | 21 | 25 | 23 | 16 | 32 | 18 | 21 | 7 | 282 |
| 09:00 | 20 | 6 | 13 | 20 | 13 | 8 | 18 | 16 | 17 | 13 | 16 | 15 | 175 |
| 10:00 | 13 | 9 | 12 | 7 | 13 | 9 | 14 | 11 | 16 | 18 | 17 | 16 | 155 |
| 11:00 | 17 | 21 | 17 | 16 | 10 | 13 | 14 | 13 | 16 | 16 | 7 | 10 | 170 |
| 12:00 | 25 | 23 | 17 | 11 | 13 | 21 | 13 | 25 | 15 | 15 | 10 | 8 | 196 |
| 13:00 | 22 | 16 | 17 | 20 | 13 | 9 | 10 | 15 | 16 | 10 | 22 | 15 | 185 |
| 14:00 | 23 | 18 | 19 | 14 | 25 | 23 | 20 | 17 | 18 | 22 | 26 | 21 | 246 |
| 15:00 | 28 | 13 | 17 | 21 | 30 | 21 | 25 | 24 | 26 | 21 | 18 | 15 | 259 |
| 16:00 | 21 | 25 | 20 | 15 | 16 | 15 | 27 | 24 | 23 | 30 | 16 | 19 | 251 |
| 17:00 | 24 | 35 | 25 | 25 | 22 | 14 | 18 | 18 | 20 | 12 | 22 | 26 | 261 |
| 18:00 | 19 | 23 | 18 | 24 | 20 | 10 | 21 | 13 | 13 | 12 | 15 | 23 | 211 |
| 19:00 | 12 | 15 | 20 | 6 | 11 | 12 | 5 | 11 | 13 | 10 | 14 | 11 | 140 |
| 20:00 | 9 | 6 | 6 | 12 | 5 | 8 | 14 | 8 | 4 | 7 | 6 | 4 | 89 |
| 21:00 | 12 | 11 | 7 | 7 | 7 | 7 | 8 | 7 | 3 | 9 | 5 | 9 | 92 |
| 22:00 | 7 | 4 | 3 | 2 | 3 | 5 | 3 | 1 | 4 | 5 | 0 | 1 | 38 |
| 23:00 | 2 | 2 | 4 | 5 | 1 | 4 | 4 | 3 | 2 | 1 | 0 | 1 | 29 |

Daily Total: 3348

AM Peak Hour: 309 (07:45 - 08:45)

9.22% Of Daily Total

PM Peak Hour: 285 (16:25 - 17:25)

8.51% Of Daily Total

4th Highest Hour: 259 (15:00 - 16:00)

7.73% Of Daily Total

8th Highest Hour: 196 (12:00 - 13:00)

5.85% Of Daily Total

TRAFFIC SMITHY, INC

1225 NW MURRAY BLVD

PORTLAND, OR 97209

Phone: 503-641-6333 Fax: 503-643-8866

Roadway: 63RD STREET
Location: EAST OF ANDRESEN

Date: 03/17/04
Day of Week: Wednesday

EB Traffic

| TIME | :00 | :05 | :10 | :15 | :20 | :25 | :30 | :35 | :40 | :45 | :50 | :55 | Total |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| 00:00 | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 15 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 3 |
| 02:00 | 0 | 1 | 0 | 0 | 2 | 1 | 2 | 0 | 0 | 1 | 0 | 1 | 8 |
| 03:00 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 3 |
| 04:00 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 2 | 9 |
| 05:00 | 1 | 1 | 0 | 1 | 1 | 2 | 0 | 5 | 6 | 4 | 1 | 2 | 24 |
| 06:00 | 6 | 3 | 1 | 3 | 4 | 6 | 8 | 8 | 6 | 8 | 8 | 7 | 68 |
| 07:00 | 5 | 6 | 12 | 5 | 13 | 13 | 12 | 10 | 10 | 13 | 16 | 14 | 129 |
| 08:00 | 14 | 14 | 15 | 17 | 10 | 11 | 15 | 7 | 19 | 16 | 9 | 8 | 155 |
| 09:00 | 18 | 12 | 14 | 8 | 13 | 10 | 9 | 8 | 16 | 13 | 10 | 12 | 143 |
| 10:00 | 6 | 12 | 10 | 9 | 18 | 10 | 21 | 11 | 12 | 13 | 13 | 21 | 156 |
| 11:00 | 6 | 15 | 15 | 12 | 11 | 14 | 9 | 10 | 17 | 10 | 16 | 18 | 153 |
| 12:00 | 14 | 17 | 18 | 20 | 12 | 12 | 21 | 10 | 15 | 19 | 13 | 17 | 188 |
| 13:00 | 13 | 10 | 12 | 12 | 15 | 15 | 22 | 17 | 21 | 12 | 18 | 16 | 183 |
| 14:00 | 21 | 14 | 17 | 17 | 24 | 18 | 12 | 6 | 19 | 20 | 14 | 19 | 201 |
| 15:00 | 20 | 44 | 21 | 21 | 30 | 16 | 18 | 33 | 30 | 29 | 31 | 28 | 321 |
| 16:00 | 16 | 17 | 16 | 30 | 19 | 23 | 33 | 21 | 26 | 23 | 26 | 33 | 283 |
| 17:00 | 41 | 21 | 26 | 41 | 20 | 37 | 23 | 23 | 25 | 30 | 29 | 22 | 338 |
| 18:00 | 25 | 22 | 27 | 29 | 20 | 14 | 22 | 30 | 21 | 23 | 14 | 28 | 275 |
| 19:00 | 16 | 12 | 13 | 16 | 17 | 11 | 13 | 11 | 11 | 7 | 10 | 12 | 149 |
| 20:00 | 5 | 14 | 14 | 10 | 10 | 6 | 12 | 14 | 10 | 8 | 5 | 13 | 121 |
| 21:00 | 7 | 12 | 8 | 14 | 5 | 6 | 7 | 4 | 9 | 8 | 5 | 8 | 93 |
| 22:00 | 5 | 7 | 3 | 9 | 2 | 3 | 1 | 5 | 5 | 2 | 5 | 5 | 52 |
| 23:00 | 3 | 4 | 4 | 7 | 8 | 2 | 0 | 2 | 4 | 1 | 1 | 1 | 37 |

Daily Total: 3107

AM Peak Hour: 168 (07:50 - 08:50)

5.40% Of Daily Total

PM Peak Hour: 349 (16:55 - 17:55)

11.2% Of Daily Total

4th Highest Hour: 275 (18:00 - 19:00)

8.85% Of Daily Total

8th Highest Hour: 156 (10:00 - 11:00)

5.02% Of Daily Total

TRAFFIC SMITHY, INC

1225 NW MURRAY BLVD

PORTLAND, OR 97209

Phone: 503-641-6333 Fax: 503-643-8866

Roadway: 63RD STREET

Location: WEST OF ANDRESEN

Date: 03/17/04

Day of Week: Wednesday

WB Traffic

| TIME | :00 | :05 | :10 | :15 | :20 | :25 | :30 | :35 | :40 | :45 | :50 | :55 | Total |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| 00:00 | 3 | 5 | 5 | 5 | 5 | 2 | 2 | 2 | 1 | 0 | 1 | 2 | 33 |
| 01:00 | 0 | 2 | 1 | 1 | 1 | 7 | 2 | 1 | 0 | 1 | 1 | 1 | 18 |
| 02:00 | 0 | 1 | 0 | 4 | 4 | 1 | 0 | 3 | 2 | 2 | 2 | 2 | 21 |
| 03:00 | 1 | 1 | 0 | 0 | 1 | 0 | 5 | 3 | 0 | 3 | 2 | 1 | 17 |
| 04:00 | 3 | 1 | 0 | 0 | 1 | 1 | 2 | 0 | 3 | 1 | 7 | 0 | 19 |
| 05:00 | 1 | 3 | 4 | 4 | 8 | 3 | 5 | 11 | 7 | 15 | 12 | 19 | 92 |
| 06:00 | 13 | 9 | 13 | 16 | 25 | 22 | 31 | 28 | 18 | 29 | 23 | 25 | 252 |
| 07:00 | 29 | 21 | 27 | 22 | 21 | 31 | 22 | 33 | 32 | 31 | 32 | 38 | 339 |
| 08:00 | 34 | 34 | 52 | 34 | 41 | 39 | 43 | 43 | 20 | 40 | 25 | 38 | 443 |
| 09:00 | 23 | 28 | 25 | 26 | 22 | 21 | 27 | 27 | 33 | 23 | 31 | 20 | 306 |
| 10:00 | 33 | 22 | 20 | 24 | 24 | 23 | 24 | 26 | 26 | 27 | 22 | 38 | 309 |
| 11:00 | 35 | 30 | 34 | 30 | 39 | 28 | 35 | 34 | 35 | 35 | 28 | 24 | 387 |
| 12:00 | 30 | 43 | 38 | 49 | 39 | 33 | 46 | 45 | 43 | 26 | 25 | 34 | 451 |
| 13:00 | 39 | 27 | 38 | 33 | 43 | 41 | 20 | 27 | 38 | 40 | 26 | 38 | 410 |
| 14:00 | 41 | 36 | 38 | 38 | 42 | 43 | 42 | 58 | 28 | 45 | 39 | 55 | 505 |
| 15:00 | 33 | 50 | 44 | 37 | 45 | 48 | 42 | 41 | 45 | 52 | 52 | 35 | 524 |
| 16:00 | 37 | 52 | 47 | 51 | 44 | 35 | 35 | 40 | 39 | 44 | 47 | 44 | 515 |
| 17:00 | 54 | 48 | 59 | 47 | 72 | 36 | 37 | 49 | 37 | 40 | 39 | 34 | 552 |
| 18:00 | 51 | 46 | 43 | 42 | 39 | 34 | 29 | 44 | 31 | 40 | 34 | 35 | 468 |
| 19:00 | 38 | 23 | 26 | 33 | 27 | 23 | 29 | 21 | 24 | 22 | 23 | 24 | 313 |
| 20:00 | 18 | 26 | 17 | 16 | 30 | 17 | 17 | 25 | 19 | 9 | 12 | 24 | 230 |
| 21:00 | 8 | 22 | 21 | 25 | 23 | 16 | 13 | 17 | 17 | 15 | 20 | 8 | 205 |
| 22:00 | 14 | 9 | 12 | 11 | 6 | 7 | 8 | 7 | 2 | 3 | 7 | 1 | 87 |
| 23:00 | 2 | 4 | 6 | 3 | 9 | 1 | 5 | 9 | 4 | 2 | 5 | 4 | 54 |

Daily Total: 6550

AM Peak Hour: 453 (07:40 - 08:40)

PM Peak Hour: 576 (16:40 - 17:40)

4th Highest Hour: 505 (14:00 - 15:00)

8th Highest Hour: 410 (13:00 - 14:00)

6.91% Of Daily Total

8.79% Of Daily Total

7.70% Of Daily Total

6.25% Of Daily Total

TRAFFIC SMITHY, INC
 1225 NW MURRAY BLVD
 PORTLAND, OR 97209
 Phone: 503-641-6333 Fax: 503-643-8866

Roadway: NE 63RD STREET
 Location: WEST OF ANDRESEN

Date: 03/17/04
 Day of Week: Wednesday

EB Traffic

| TIME | :00 | :05 | :10 | :15 | :20 | :25 | :30 | :35 | :40 | :45 | :50 | :55 | Total |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| 00:00 | 2 | 2 | 3 | 1 | 2 | 3 | 3 | 1 | 3 | 4 | 1 | 0 | 25 |
| 01:00 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 0 | 2 | 2 | 3 | 3 | 20 |
| 02:00 | 8 | 3 | 1 | 2 | 1 | 0 | 1 | 1 | 2 | 2 | 1 | 1 | 23 |
| 03:00 | 2 | 2 | 0 | 2 | 0 | 1 | 1 | 0 | 1 | 4 | 0 | 1 | 14 |
| 04:00 | 1 | 1 | 3 | 4 | 3 | 1 | 0 | 2 | 1 | 0 | 0 | 3 | 19 |
| 05:00 | 1 | 0 | 3 | 5 | 3 | 2 | 3 | 1 | 11 | 10 | 9 | 4 | 52 |
| 06:00 | 6 | 5 | 12 | 9 | 8 | 15 | 23 | 27 | 16 | 18 | 19 | 25 | 183 |
| 07:00 | 20 | 28 | 14 | 31 | 32 | 30 | 32 | 38 | 35 | 41 | 36 | 33 | 370 |
| 08:00 | 36 | 30 | 23 | 40 | 24 | 21 | 30 | 22 | 46 | 35 | 38 | 23 | 368 |
| 09:00 | 21 | 30 | 32 | 23 | 18 | 18 | 23 | 17 | 28 | 23 | 32 | 20 | 285 |
| 10:00 | 21 | 17 | 27 | 21 | 25 | 35 | 38 | 29 | 17 | 29 | 26 | 20 | 305 |
| 11:00 | 35 | 16 | 39 | 40 | 33 | 36 | 25 | 26 | 30 | 20 | 26 | 39 | 365 |
| 12:00 | 27 | 41 | 30 | 33 | 37 | 39 | 32 | 24 | 25 | 39 | 34 | 40 | 401 |
| 13:00 | 32 | 31 | 26 | 33 | 26 | 34 | 26 | 29 | 33 | 39 | 31 | 34 | 374 |
| 14:00 | 33 | 36 | 27 | 28 | 35 | 31 | 23 | 35 | 33 | 33 | 38 | 31 | 383 |
| 15:00 | 54 | 48 | 36 | 36 | 34 | 44 | 38 | 41 | 65 | 40 | 40 | 44 | 520 |
| 16:00 | 40 | 40 | 41 | 38 | 47 | 35 | 45 | 57 | 37 | 42 | 42 | 46 | 510 |
| 17:00 | 65 | 55 | 37 | 56 | 39 | 46 | 58 | 39 | 33 | 34 | 32 | 32 | 526 |
| 18:00 | 43 | 40 | 36 | 36 | 46 | 30 | 35 | 34 | 29 | 29 | 28 | 33 | 419 |
| 19:00 | 28 | 28 | 20 | 21 | 22 | 18 | 17 | 24 | 11 | 12 | 16 | 14 | 231 |
| 20:00 | 22 | 21 | 20 | 23 | 29 | 9 | 16 | 20 | 12 | 11 | 16 | 7 | 206 |
| 21:00 | 16 | 18 | 9 | 11 | 19 | 9 | 7 | 5 | 12 | 9 | 4 | 13 | 132 |
| 22:00 | 11 | 15 | 8 | 3 | 8 | 4 | 6 | 6 | 6 | 5 | 7 | 4 | 83 |
| 23:00 | 6 | 7 | 5 | 4 | 6 | 4 | 3 | 2 | 4 | 3 | 1 | 1 | 46 |

Daily Total: 5860

AM Peak Hour: 406 (07:20 - 08:20)

PM Peak Hour: 580 (16:35 - 17:35)

4th Highest Hour: 419 (18:00 - 19:00)

8th Highest Hour: 370 (07:00 - 08:00)

6.92% Of Daily Total

9.89% Of Daily Total

7.15% Of Daily Total

6.31% Of Daily Total

Roadway Survey Field Sheet

TS Project # _____ Map _____ Grid _____ Start Time **09:10** # Of Days **3**

Location: **ANDRESEN @ NE 63RD ST**
NORTH LEG ROAD: VANCOUVER
 Location ID: **#18**

Type Of Survey
 Volume
 Speed
 Classification

Start Date: **3/24/04** Counters **2**
 S M T **W** T F S
 End Date: **3/26/04** Tubes **2**
 S M T **W** T F S

| SITE EVALUATION | | | POSTED SPEED | | DWELL TIME | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------|---|-----------------------------|--------------------------|---------------------------------------|--|---|--|--|--|--|--------------|---------------|--|--|--|--|-----|-------|-------|-------|-------|------|----------------|-----|-----|-----|----|----|------------|-----|----|----|----|----|----------|-----|----|----|----|----|
| Vehicles Crossing Tube Perpendicular | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> | ??? | <input type="checkbox"/> None | <input checked="" type="checkbox"/> 40 Mph | <table border="1"> <thead> <tr> <th>LOWEST SPEED</th> <th colspan="5">HIGHEST SPEED</th> </tr> <tr> <th>MPH</th> <th>10-20</th> <th>15-30</th> <th>25-40</th> <th>35-45</th> <th>> 45</th> </tr> </thead> <tbody> <tr> <td>Standing Queue</td> <td>200</td> <td>130</td> <td>100</td> <td>80</td> <td>40</td> </tr> <tr> <td>5 - 10 MPH</td> <td>130</td> <td>90</td> <td>70</td> <td>60</td> <td>40</td> </tr> <tr> <td>> 10 MPH</td> <td>100</td> <td>80</td> <td>60</td> <td>40</td> <td>40</td> </tr> </tbody> </table> | | | | | LOWEST SPEED | HIGHEST SPEED | | | | | MPH | 10-20 | 15-30 | 25-40 | 35-45 | > 45 | Standing Queue | 200 | 130 | 100 | 80 | 40 | 5 - 10 MPH | 130 | 90 | 70 | 60 | 40 | > 10 MPH | 100 | 80 | 60 | 40 | 40 |
| LOWEST SPEED | HIGHEST SPEED | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MPH | 10-20 | 15-30 | 25-40 | 35-45 | > 45 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Standing Queue | 200 | 130 | 100 | 80 | 40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 - 10 MPH | 130 | 90 | 70 | 60 | 40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| > 10 MPH | 100 | 80 | 60 | 40 | 40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Do You Anticipate Queuing Across Tube | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> 25 Mph | <input type="checkbox"/> 45 Mph | (TAD, TBD) Use 2 Counters if Traffic Conditions are different in each direction. DWELL (TAD, TBD) 40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Speed Greater Than 20 Miles / Hour | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> 30 Mph | <input type="checkbox"/> 50 Mph | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tube Crosses More Than 2 Lanes | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> 35 Mph | <input type="checkbox"/> 55 Mph | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SPEED: High _____ Mph Low _____ Mph | | | | <input type="checkbox"/> Other: _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| AXLE STRIKE COUNT | SYSTEM DELAY LOGIC | SPEED LOW VOL | VEHICLE SPEED / CLASSIFICATION | | | |
|---|----------------------------|--|---|----------------------------|----------------------------|--|
| <input type="checkbox"/> G <input type="checkbox"/> M <input checked="" type="checkbox"/> D <input type="checkbox"/> A <input type="checkbox"/> B | <input type="checkbox"/> D | <input type="checkbox"/> G <input type="checkbox"/> M <input type="checkbox"/> B | <input type="checkbox"/> M <input type="checkbox"/> B | <input type="checkbox"/> G | <input type="checkbox"/> L | |
| | | | | | | |
| <input type="checkbox"/> Tube equal length <input type="checkbox"/> Use proper spacing <input type="checkbox"/> One Lane only except Low Volume Speed Surveys ADT 2,000 | | | | | | |

COUNTER / SET DOWN

Type: **ANNAK**
 No: **ALC 13**
 Box: _____
 Tube Length: **40**
 Hammer Test

| CHECK | DATE | TIME |
|-------|------|------|
| P F | | |
| P F | | |
| P F | | |
| P F | | |
| P F | | |

PICK-UP

Hammer Test
 Date: _____ Time: _____

FILE NAMES

26 VANC 13
26 VANA 66

DIRECTION: East Bound West Bound North Bound South Bound Approach

COMBINED: East / West North / South DRWY: Combined In-Bound Out-Bound

ROAD: Dry Wet Asphalt Concrete Broken Rutted Curved

REDUNDANT SET-UP

Remarks: _____ WEATHER: Sunny Overcast Rain Snow

Surveyed By: *me*



TRAFFIC SMITHY
 1225 NW Murray Blvd. Suite 111
 Portland, OR 97229
 Phone: 503/641-6333 - Fax: 503/643-8866

TRAFFIC SMITHY, INC
 626- 120TH AVENUE NE SUITE B102
 BELLEVUE, WA 98005
 PHONE- 425-688-7888 FAX- 425-688-7784

roadway: ANDRESEN ROAD
 Location: NORTH OF NE 63RD STREET

Date: 03/25/04
 Day of Week: Thursday

SB Traffic

| TIME | :00 | :05 | :10 | :15 | :20 | :25 | :30 | :35 | :40 | :45 | :50 | :55 | Total |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| 00:00 | 5 | 4 | 0 | 2 | 6 | 1 | 1 | 1 | 4 | 2 | 2 | 2 | 30 |
| 01:00 | 2 | 2 | 3 | 4 | 0 | 3 | 1 | 3 | 4 | 1 | 3 | 1 | 27 |
| 02:00 | 3 | 3 | 3 | 1 | 0 | 1 | 4 | 1 | 1 | 0 | 4 | 3 | 24 |
| 03:00 | 1 | 0 | 1 | 0 | 3 | 3 | 1 | 1 | 0 | 5 | 2 | 2 | 19 |
| 04:00 | 4 | 4 | 1 | 5 | 1 | 4 | 4 | 1 | 2 | 2 | 3 | 7 | 38 |
| 05:00 | 6 | 6 | 3 | 7 | 6 | 5 | 9 | 9 | 11 | 10 | 13 | 17 | 102 |
| 06:00 | 16 | 18 | 17 | 20 | 20 | 25 | 29 | 36 | 39 | 33 | 42 | 33 | 328 |
| 07:00 | 40 | 48 | 47 | 42 | 44 | 61 | 48 | 55 | 61 | 75 | 68 | 67 | 656 |
| 08:00 | 60 | 52 | 63 | 58 | 45 | 46 | 66 | 49 | 44 | 51 | 46 | 41 | 621 |
| 09:00 | 36 | 39 | 38 | 34 | 43 | 47 | 35 | 36 | 45 | 60 | 53 | 35 | 501 |
| 10:00 | 48 | 42 | 38 | 43 | 48 | 32 | 39 | 50 | 45 | 48 | 39 | 46 | 518 |
| 11:00 | 46 | 55 | 40 | 56 | 60 | 56 | 46 | 50 | 52 | 59 | 61 | 56 | 637 |
| 12:00 | 56 | 47 | 54 | 63 | 66 | 42 | 55 | 63 | 53 | 52 | 39 | 43 | 633 |
| 13:00 | 49 | 52 | 48 | 40 | 54 | 55 | 35 | 60 | 52 | 61 | 57 | 49 | 612 |
| 14:00 | 59 | 55 | 35 | 50 | 50 | 63 | 52 | 50 | 57 | 52 | 44 | 32 | 599 |
| 15:00 | 63 | 49 | 60 | 61 | 61 | 55 | 46 | 65 | 50 | 61 | 61 | 46 | 678 |
| 16:00 | 57 | 53 | 63 | 60 | 45 | 50 | 41 | 51 | 62 | 47 | 66 | 54 | 649 |
| 17:00 | 54 | 50 | 66 | 58 | 33 | 43 | 54 | 40 | 66 | 63 | 56 | 45 | 628 |
| 18:00 | 43 | 39 | 45 | 56 | 48 | 40 | 53 | 45 | 49 | 46 | 46 | 34 | 544 |
| 19:00 | 43 | 27 | 37 | 32 | 34 | 33 | 33 | 23 | 23 | 32 | 27 | 32 | 376 |
| 20:00 | 13 | 25 | 25 | 33 | 22 | 16 | 19 | 23 | 27 | 29 | 17 | 20 | 269 |
| 21:00 | 21 | 26 | 20 | 28 | 21 | 20 | 22 | 6 | 19 | 20 | 9 | 14 | 226 |
| 22:00 | 12 | 9 | 18 | 15 | 9 | 9 | 7 | 8 | 11 | 2 | 11 | 6 | 117 |
| 23:00 | 10 | 8 | 5 | 6 | 5 | 6 | 2 | 4 | 4 | 4 | 2 | 2 | 58 |

Daily Total: 8890

AM Peak Hour: 716 (07:35 - 08:35)

PM Peak Hour: 679 (15:15 - 16:15)

4th Highest Hour: 637 (11:00 - 12:00)

8th Highest Hour: 612 (13:00 - 14:00)

8.05% Of Daily Total

7.63% Of Daily Total

7.16% Of Daily Total

6.88% Of Daily Total

TRAFFIC SMITHY, INC
 626- 120TH AVENUE NE SUITE B102
 BELLEVUE, WA 98005
 PHONE- 425-688-7888 FAX- 425-688-7784

roadway: ANDRESEN ROAD
 Location: NORTH OF NE 63RD STREET

Date: 03/25/04
 Day of Week: Thursday

NB Traffic

| TIME | :00 | :05 | :10 | :15 | :20 | :25 | :30 | :35 | :40 | :45 | :50 | :55 | Total |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| 00:00 | 9 | 3 | 4 | 4 | 5 | 4 | 1 | 0 | 1 | 3 | 3 | 4 | 41 |
| 01:00 | 2 | 1 | 4 | 3 | 3 | 0 | 2 | 1 | 3 | 1 | 1 | 2 | 23 |
| 02:00 | 1 | 1 | 1 | 4 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 19 |
| 03:00 | 2 | 1 | 2 | 3 | 2 | 1 | 3 | 1 | 1 | 0 | 5 | 1 | 22 |
| 04:00 | 1 | 3 | 2 | 0 | 1 | 1 | 2 | 5 | 3 | 2 | 6 | 3 | 29 |
| 05:00 | 0 | 5 | 5 | 8 | 6 | 4 | 6 | 8 | 6 | 13 | 6 | 8 | 75 |
| 06:00 | 13 | 9 | 6 | 15 | 10 | 15 | 17 | 20 | 14 | 17 | 23 | 19 | 178 |
| 07:00 | 23 | 25 | 25 | 28 | 20 | 27 | 32 | 23 | 29 | 21 | 31 | 26 | 310 |
| 08:00 | 34 | 25 | 45 | 33 | 40 | 52 | 30 | 33 | 26 | 32 | 41 | 30 | 421 |
| 09:00 | 30 | 25 | 35 | 33 | 30 | 31 | 43 | 27 | 36 | 25 | 37 | 37 | 389 |
| 10:00 | 35 | 28 | 29 | 29 | 31 | 43 | 38 | 37 | 26 | 37 | 29 | 45 | 407 |
| 11:00 | 48 | 32 | 51 | 47 | 55 | 51 | 32 | 52 | 44 | 40 | 54 | 37 | 543 |
| 12:00 | 56 | 30 | 35 | 50 | 41 | 44 | 41 | 39 | 50 | 51 | 56 | 51 | 544 |
| 13:00 | 47 | 43 | 63 | 46 | 63 | 63 | 51 | 40 | 37 | 58 | 48 | 53 | 612 |
| 14:00 | 43 | 53 | 57 | 29 | 47 | 54 | 57 | 70 | 56 | 70 | 83 | 71 | 690 |
| 15:00 | 75 | 45 | 76 | 71 | 57 | 67 | 71 | 70 | 64 | 51 | 64 | 70 | 781 |
| 16:00 | 72 | 67 | 69 | 84 | 53 | 89 | 79 | 79 | 74 | 63 | 51 | 80 | 860 |
| 17:00 | 97 | 80 | 79 | 72 | 61 | 79 | 77 | 89 | 56 | 63 | 69 | 76 | 898 |
| 18:00 | 57 | 59 | 69 | 59 | 53 | 61 | 65 | 51 | 57 | 49 | 47 | 44 | 671 |
| 19:00 | 51 | 39 | 41 | 43 | 52 | 38 | 22 | 42 | 28 | 34 | 29 | 34 | 453 |
| 20:00 | 38 | 44 | 27 | 34 | 20 | 39 | 37 | 25 | 25 | 27 | 28 | 30 | 374 |
| 21:00 | 39 | 18 | 24 | 22 | 24 | 16 | 16 | 15 | 15 | 7 | 15 | 21 | 232 |
| 22:00 | 26 | 16 | 19 | 20 | 14 | 15 | 13 | 10 | 8 | 4 | 9 | 19 | 173 |
| 23:00 | 10 | 1 | 4 | 5 | 5 | 9 | 7 | 4 | 2 | 3 | 4 | 6 | 60 |

Daily Total: 8805

AM Peak Hour: 551 (10:55 - 11:55)

PM Peak Hour: 908 (16:15 - 17:15)

4th Highest Hour: 690 (14:00 - 15:00)

8th Highest Hour: 543 (11:00 - 12:00)

6.25% Of Daily Total

10.3% Of Daily Total

7.83% Of Daily Total

6.16% Of Daily Total