

Alliant Engineering, Inc.

233 Park Ave Suite 300
Minneapolis, MN 55415
--TRAFFIC DATA--

TH 55 and Niagra Lane
Ref.Pt.: 179.737
data by : Alliant Inc.
TURN MOVEMENT COUNT

File Name : 410_TH 55 & Niagra Ln
Site Code : 410
Start Date : 2/1/2018
Page No : 1

Groups Printed- Class 1 - Class 2

| Start Time | Niagra Ln From North | | | | | TH 55 From East | | | | | Niagra Ln From South | | | | | TH 55 From West | | | | | Int. Total |
|---------------|----------------------|------|------|------|------------|-----------------|------|------|------|------------|----------------------|------|------|------|------------|-----------------|------|------|------|------------|------------|
| | Other | Rght | Thru | Left | App. Total | Other | Rght | Thru | Left | App. Total | Other | Rght | Thru | Left | App. Total | Other | Rght | Thru | Left | App. Total | |
| 06:00 AM | 0 | 2 | 13 | 10 | 25 | 0 | 16 | 61 | 16 | 93 | 0 | 5 | 5 | 11 | 21 | 0 | 19 | 236 | 2 | 257 | 396 |
| 06:15 AM | 0 | 16 | 10 | 15 | 41 | 0 | 16 | 72 | 37 | 125 | 0 | 3 | 1 | 4 | 8 | 0 | 15 | 305 | 5 | 325 | 499 |
| 06:30 AM | 0 | 9 | 19 | 26 | 54 | 0 | 27 | 130 | 34 | 191 | 0 | 3 | 6 | 3 | 12 | 0 | 20 | 402 | 1 | 423 | 680 |
| 06:45 AM | 0 | 10 | 14 | 29 | 53 | 0 | 20 | 181 | 54 | 255 | 0 | 2 | 7 | 2 | 11 | 0 | 36 | 423 | 3 | 462 | 781 |
| Total | 0 | 37 | 56 | 80 | 173 | 0 | 79 | 444 | 141 | 664 | 0 | 13 | 19 | 20 | 52 | 0 | 90 | 1366 | 11 | 1467 | 2356 |
| 07:00 AM | 0 | 28 | 15 | 31 | 74 | 0 | 24 | 196 | 32 | 252 | 0 | 4 | 6 | 1 | 11 | 0 | 29 | 509 | 2 | 540 | 877 |
| 07:15 AM | 0 | 5 | 20 | 24 | 49 | 0 | 34 | 194 | 52 | 280 | 0 | 3 | 4 | 7 | 14 | 0 | 21 | 552 | 1 | 574 | 917 |
| 07:30 AM | 0 | 31 | 17 | 34 | 82 | 0 | 28 | 234 | 43 | 305 | 0 | 2 | 11 | 6 | 19 | 0 | 29 | 572 | 6 | 607 | 1013 |
| 07:45 AM | 0 | 63 | 25 | 39 | 127 | 0 | 40 | 230 | 41 | 311 | 1 | 1 | 10 | 11 | 23 | 0 | 30 | 502 | 6 | 538 | 999 |
| Total | 0 | 127 | 77 | 128 | 332 | 0 | 126 | 854 | 168 | 1148 | 1 | 10 | 31 | 25 | 67 | 0 | 109 | 2135 | 15 | 2259 | 3806 |
| 08:00 AM | 0 | 100 | 23 | 34 | 157 | 0 | 34 | 202 | 40 | 276 | 0 | 0 | 4 | 3 | 7 | 0 | 35 | 537 | 10 | 582 | 1022 |
| 08:15 AM | 0 | 37 | 18 | 48 | 103 | 0 | 44 | 242 | 48 | 334 | 0 | 0 | 13 | 3 | 16 | 0 | 36 | 486 | 9 | 531 | 984 |
| 08:30 AM | 0 | 121 | 18 | 45 | 184 | 0 | 44 | 185 | 52 | 281 | 0 | 2 | 11 | 7 | 20 | 0 | 17 | 417 | 14 | 448 | 933 |
| 08:45 AM | 0 | 44 | 15 | 35 | 94 | 0 | 60 | 184 | 23 | 267 | 0 | 0 | 9 | 3 | 12 | 0 | 21 | 414 | 8 | 443 | 816 |
| Total | 0 | 302 | 74 | 162 | 538 | 0 | 182 | 813 | 163 | 1158 | 0 | 2 | 37 | 16 | 55 | 0 | 109 | 1854 | 41 | 2004 | 3755 |
| 09:00 AM | 0 | 33 | 7 | 34 | 74 | 0 | 43 | 122 | 22 | 187 | 0 | 1 | 19 | 4 | 24 | 0 | 18 | 391 | 6 | 415 | 700 |
| 09:15 AM | 0 | 8 | 10 | 35 | 53 | 0 | 33 | 162 | 31 | 226 | 0 | 1 | 8 | 6 | 15 | 0 | 10 | 405 | 8 | 423 | 717 |
| *** BREAK *** | | | | | | | | | | | | | | | | | | | | | |
| Total | 0 | 41 | 17 | 69 | 127 | 0 | 76 | 284 | 53 | 413 | 0 | 2 | 27 | 10 | 39 | 0 | 28 | 796 | 14 | 838 | 1417 |
| *** BREAK *** | | | | | | | | | | | | | | | | | | | | | |
| 10:30 AM | 0 | 40 | 13 | 47 | 100 | 0 | 45 | 140 | 13 | 198 | 0 | 4 | 6 | 5 | 15 | 0 | 8 | 278 | 17 | 303 | 616 |
| 10:45 AM | 0 | 40 | 6 | 54 | 100 | 0 | 42 | 164 | 17 | 223 | 0 | 2 | 11 | 10 | 23 | 0 | 13 | 268 | 15 | 296 | 642 |
| Total | 0 | 80 | 19 | 101 | 200 | 0 | 87 | 304 | 30 | 421 | 0 | 6 | 17 | 15 | 38 | 0 | 21 | 546 | 32 | 599 | 1258 |
| 11:00 AM | 0 | 52 | 10 | 48 | 110 | 0 | 33 | 150 | 20 | 203 | 0 | 2 | 9 | 14 | 25 | 0 | 11 | 287 | 9 | 307 | 645 |
| 11:15 AM | 0 | 82 | 14 | 44 | 140 | 0 | 52 | 140 | 22 | 214 | 0 | 7 | 13 | 23 | 43 | 0 | 18 | 317 | 8 | 343 | 740 |
| 11:30 AM | 0 | 12 | 25 | 41 | 78 | 0 | 66 | 198 | 15 | 279 | 0 | 9 | 11 | 26 | 46 | 0 | 17 | 326 | 8 | 351 | 754 |
| 11:45 AM | 0 | 39 | 17 | 65 | 121 | 0 | 75 | 214 | 18 | 307 | 0 | 0 | 23 | 30 | 53 | 0 | 23 | 238 | 10 | 271 | 752 |
| Total | 0 | 185 | 66 | 198 | 449 | 0 | 226 | 702 | 75 | 1003 | 0 | 18 | 56 | 93 | 167 | 0 | 69 | 1168 | 35 | 1272 | 2891 |
| 12:00 PM | 0 | 62 | 13 | 68 | 143 | 0 | 62 | 174 | 21 | 257 | 0 | 0 | 19 | 40 | 59 | 0 | 12 | 278 | 14 | 304 | 763 |
| 12:15 PM | 0 | 68 | 14 | 55 | 137 | 0 | 70 | 178 | 17 | 265 | 0 | 1 | 21 | 30 | 52 | 0 | 22 | 302 | 18 | 342 | 796 |
| 12:30 PM | 0 | 77 | 27 | 47 | 151 | 0 | 67 | 176 | 22 | 265 | 0 | 0 | 16 | 29 | 45 | 0 | 19 | 314 | 10 | 343 | 804 |
| 12:45 PM | 0 | 168 | 24 | 54 | 246 | 0 | 75 | 139 | 22 | 236 | 0 | 4 | 19 | 24 | 47 | 0 | 22 | 305 | 23 | 350 | 879 |
| Total | 0 | 375 | 78 | 224 | 677 | 0 | 274 | 667 | 82 | 1023 | 0 | 5 | 75 | 123 | 203 | 0 | 75 | 1199 | 65 | 1339 | 3242 |
| 01:00 PM | 0 | 176 | 32 | 57 | 265 | 0 | 66 | 130 | 20 | 216 | 0 | 12 | 16 | 18 | 46 | 0 | 13 | 293 | 8 | 314 | 841 |
| 01:15 PM | 0 | 120 | 26 | 50 | 196 | 0 | 51 | 163 | 19 | 233 | 0 | 10 | 19 | 23 | 52 | 0 | 11 | 307 | 15 | 333 | 814 |
| *** BREAK *** | | | | | | | | | | | | | | | | | | | | | |
| Total | 0 | 296 | 58 | 107 | 461 | 0 | 117 | 293 | 39 | 449 | 0 | 22 | 35 | 41 | 98 | 0 | 24 | 600 | 23 | 647 | 1655 |
| *** BREAK *** | | | | | | | | | | | | | | | | | | | | | |
| 02:30 PM | 0 | 42 | 11 | 35 | 88 | 0 | 55 | 203 | 16 | 274 | 0 | 42 | 23 | 17 | 82 | 0 | 5 | 327 | 13 | 345 | 789 |
| 02:45 PM | 0 | 14 | 23 | 40 | 77 | 0 | 41 | 221 | 17 | 279 | 0 | 22 | 19 | 26 | 67 | 0 | 2 | 291 | 13 | 306 | 729 |
| Total | 0 | 56 | 34 | 75 | 165 | 0 | 96 | 424 | 33 | 553 | 0 | 64 | 42 | 43 | 149 | 0 | 7 | 618 | 26 | 651 | 1518 |
| 03:00 PM | 0 | 20 | 14 | 52 | 86 | 0 | 62 | 268 | 20 | 350 | 0 | 61 | 24 | 29 | 114 | 0 | 4 | 236 | 5 | 245 | 795 |
| 03:15 PM | 0 | 36 | 21 | 41 | 98 | 0 | 71 | 278 | 27 | 376 | 0 | 27 | 27 | 28 | 82 | 0 | 6 | 279 | 14 | 299 | 855 |
| 03:30 PM | 0 | 35 | 19 | 40 | 94 | 0 | 73 | 300 | 13 | 386 | 0 | 73 | 20 | 54 | 147 | 0 | 1 | 345 | 15 | 361 | 988 |
| 03:45 PM | 0 | 41 | 16 | 39 | 96 | 0 | 109 | 283 | 22 | 414 | 1 | 32 | 31 | 26 | 90 | 0 | 2 | 349 | 18 | 369 | 969 |
| Total | 0 | 132 | 70 | 172 | 374 | 0 | 315 | 1129 | 82 | 1526 | 1 | 193 | 102 | 137 | 433 | 0 | 13 | 1209 | 52 | 1274 | 3607 |
| 04:00 PM | 0 | 30 | 24 | 60 | 114 | 0 | 96 | 471 | 29 | 596 | 0 | 63 | 27 | 58 | 148 | 0 | 1 | 248 | 16 | 265 | 1123 |
| 04:15 PM | 0 | 20 | 8 | 49 | 77 | 0 | 99 | 369 | 19 | 487 | 0 | 36 | 29 | 41 | 106 | 0 | 3 | 271 | 19 | 293 | 963 |
| 04:30 PM | 0 | 91 | 14 | 66 | 171 | 0 | 155 | 345 | 19 | 519 | 0 | 85 | 41 | 62 | 188 | 0 | 3 | 398 | 12 | 413 | 1291 |

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File Name : 410_TH 55 & Niagra Ln

Site Code : 410_____

Start Date : 2/1/2018

Page No : 2

Groups Printed- Class 1 - Class 2

| Start Time | Niagra Ln From North | | | | | TH 55 From East | | | | | Niagra Ln From South | | | | | TH 55 From West | | | | | Int. Total |
|-------------|-------------------------|------|------|------|------------|--------------------|------|------|------|------------|-------------------------|------|------|------|------------|--------------------|------|-------|------|------------|------------|
| | Other | Rght | Thru | Left | App. Total | Other | Rght | Thru | Left | App. Total | Other | Rght | Thru | Left | App. Total | Other | Rght | Thru | Left | App. Total | |
| 04:45 PM | 0 | 80 | 4 | 81 | 165 | 0 | 141 | 422 | 11 | 574 | 0 | 60 | 35 | 53 | 148 | 0 | 8 | 385 | 13 | 406 | 1293 |
| Total | 0 | 221 | 50 | 256 | 527 | 0 | 491 | 1607 | 78 | 2176 | 0 | 244 | 132 | 214 | 590 | 0 | 15 | 1302 | 60 | 1377 | 4670 |
| 05:00 PM | 0 | 85 | 22 | 71 | 178 | 0 | 119 | 475 | 16 | 610 | 0 | 73 | 52 | 48 | 173 | 0 | 5 | 378 | 8 | 391 | 1352 |
| 05:15 PM | 0 | 80 | 13 | 52 | 145 | 0 | 125 | 425 | 17 | 567 | 0 | 41 | 23 | 44 | 108 | 0 | 6 | 393 | 14 | 413 | 1233 |
| 05:30 PM | 0 | 70 | 9 | 32 | 111 | 0 | 131 | 397 | 13 | 541 | 0 | 39 | 27 | 34 | 100 | 0 | 5 | 414 | 26 | 445 | 1197 |
| 05:45 PM | 0 | 62 | 10 | 62 | 134 | 0 | 130 | 334 | 30 | 494 | 0 | 20 | 25 | 14 | 59 | 0 | 4 | 350 | 27 | 381 | 1068 |
| Total | 0 | 297 | 54 | 217 | 568 | 0 | 505 | 1631 | 76 | 2212 | 0 | 173 | 127 | 140 | 440 | 0 | 20 | 1535 | 75 | 1630 | 4850 |
| Grand Total | 0 | 2149 | 653 | 1789 | 4591 | 0 | 2574 | 9152 | 1020 | 12746 | 2 | 752 | 700 | 877 | 2331 | 0 | 580 | 14328 | 449 | 15357 | 35025 |
| Apprch % | 0 | 46.8 | 14.2 | 39 | | 0 | 20.2 | 71.8 | 8 | | 0.1 | 32.3 | 30 | 37.6 | | 0 | 3.8 | 93.3 | 2.9 | | |
| Total % | 0 | 6.1 | 1.9 | 5.1 | 13.1 | 0 | 7.3 | 26.1 | 2.9 | 36.4 | 0 | 2.1 | 2 | 2.5 | 6.7 | 0 | 1.7 | 40.9 | 1.3 | 43.8 | |
| Class 1 | 0 | 2149 | 637 | 1755 | 4541 | 0 | 2532 | 8758 | 917 | 12207 | 2 | 702 | 678 | 830 | 2212 | 0 | 547 | 13901 | 443 | 14891 | 33851 |
| % Class 1 | 0 | 100 | 97.5 | 98.1 | 98.9 | 0 | 98.4 | 95.7 | 89.9 | 95.8 | 100 | 93.4 | 96.9 | 94.6 | 94.9 | 0 | 94.3 | 97 | 98.7 | 97 | 96.6 |
| Class 2 | 0 | 0 | 16 | 34 | 50 | 0 | 42 | 394 | 103 | 539 | 0 | 50 | 22 | 47 | 119 | 0 | 33 | 427 | 6 | 466 | 1174 |
| % Class 2 | 0 | 0 | 2.5 | 1.9 | 1.1 | 0 | 1.6 | 4.3 | 10.1 | 4.2 | 0 | 6.6 | 3.1 | 5.4 | 5.1 | 0 | 5.7 | 3 | 1.3 | 3 | 3.4 |

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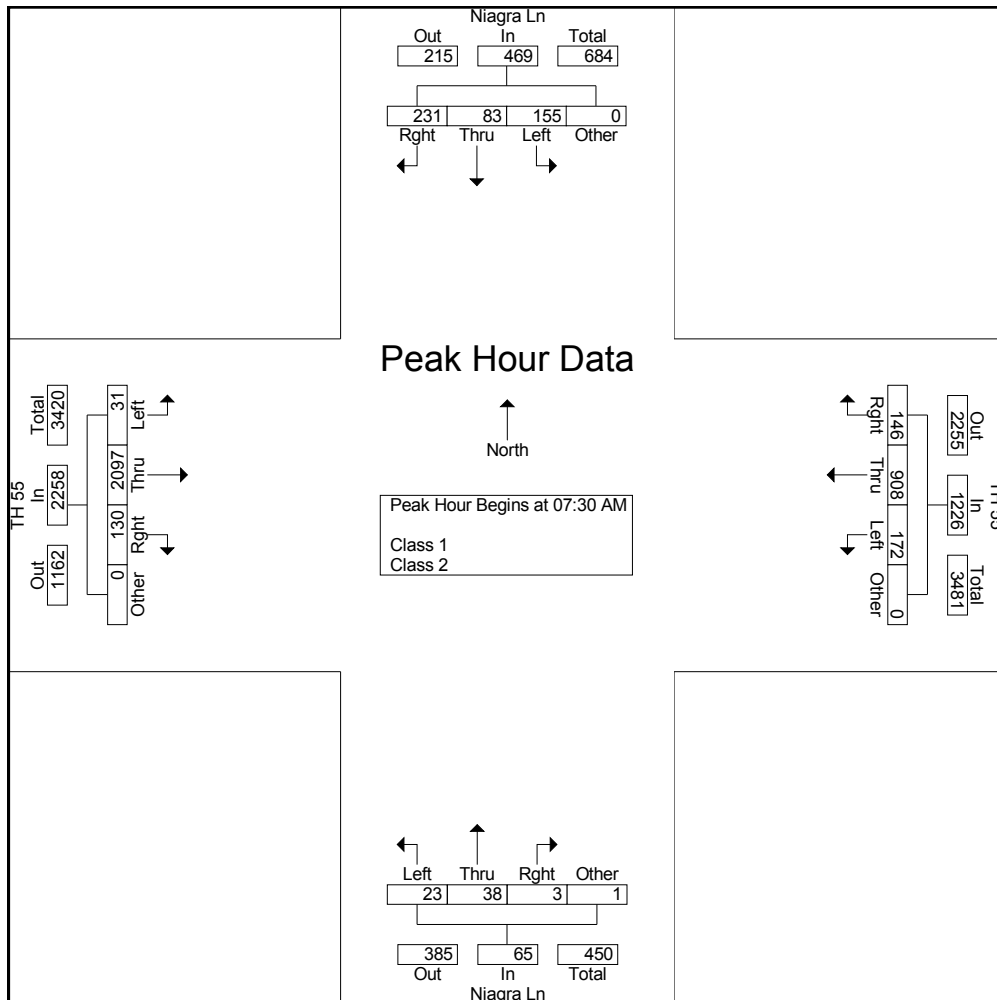
File Name : 410_TH 55 & Niagra Ln

Site Code : 410_____

Start Date : 2/1/2018

Page No : 3

| Start Time | Niagra Ln From North | | | | | TH 55 From East | | | | | Niagra Ln From South | | | | | TH 55 From West | | | | | Int. Total |
|--|----------------------|-------|------|------|------------|-----------------|-------|------|------|------------|----------------------|-------|------|------|------------|-----------------|-------|------|------|------------|------------|
| | Other | Right | Thru | Left | App. Total | Other | Right | Thru | Left | App. Total | Other | Right | Thru | Left | App. Total | Other | Right | Thru | Left | App. Total | |
| Peak Hour Analysis From 06:00 AM to 11:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:30 AM | | | | | | | | | | | | | | | | | | | | | |
| 07:30 AM | 0 | 31 | 17 | 34 | 82 | 0 | 28 | 234 | 43 | 305 | 0 | 2 | 11 | 6 | 19 | 0 | 29 | 572 | 6 | 607 | 1013 |
| 07:45 AM | 0 | 63 | 25 | 39 | 127 | 0 | 40 | 230 | 41 | 311 | 1 | 1 | 10 | 11 | 23 | 0 | 30 | 502 | 6 | 538 | 999 |
| 08:00 AM | 0 | 100 | 23 | 34 | 157 | 0 | 34 | 202 | 40 | 276 | 0 | 0 | 4 | 3 | 7 | 0 | 35 | 537 | 10 | 582 | 1022 |
| 08:15 AM | 0 | 37 | 18 | 48 | 103 | 0 | 44 | 242 | 48 | 334 | 0 | 0 | 13 | 3 | 16 | 0 | 36 | 486 | 9 | 531 | 984 |
| Total Volume | 0 | 231 | 83 | 155 | 469 | 0 | 146 | 908 | 172 | 1226 | 1 | 3 | 38 | 23 | 65 | 0 | 130 | 2097 | 31 | 2258 | 4018 |
| % App. Total | 0 | 49.3 | 17.7 | 33 | | 0 | 11.9 | 74.1 | 14 | | 1.5 | 4.6 | 58.5 | 35.4 | | 0 | 5.8 | 92.9 | 1.4 | | |
| PHF | .000 | .578 | .830 | .807 | .747 | .000 | .830 | .938 | .896 | .918 | .250 | .375 | .731 | .523 | .707 | .000 | .903 | .917 | .775 | .930 | .983 |



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File Name : 410_TH 55 & Niagra Ln

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| Start Time | Niagra Ln From North | | | | | TH 55 From East | | | | | Niagra Ln From South | | | | | TH 55 From West | | | | | Int. Total |
|--|----------------------|-------|------|------|------------|-----------------|-------|------|------|------------|----------------------|-------|------|------|------------|-----------------|-------|------|------|------------|------------|
| | Other | Rgh t | Thru | Left | App. Total | Other | Rgh t | Thru | Left | App. Total | Other | Rgh t | Thru | Left | App. Total | Other | Rgh t | Thru | Left | App. Total | |
| Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1 | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:30 PM | | | | | | | | | | | | | | | | | | | | | |
| 04:30 PM | 0 | 91 | 14 | 66 | 171 | 0 | 155 | 345 | 19 | 519 | 0 | 85 | 41 | 62 | 188 | 0 | 3 | 398 | 12 | 413 | 1291 |
| 04:45 PM | 0 | 80 | 4 | 81 | 165 | 0 | 141 | 422 | 11 | 574 | 0 | 60 | 35 | 53 | 148 | 0 | 8 | 385 | 13 | 406 | 1293 |
| 05:00 PM | 0 | 85 | 22 | 71 | 178 | 0 | 119 | 475 | 16 | 610 | 0 | 73 | 52 | 48 | 173 | 0 | 5 | 378 | 8 | 391 | 1352 |
| 05:15 PM | 0 | 80 | 13 | 52 | 145 | 0 | 125 | 425 | 17 | 567 | 0 | 41 | 23 | 44 | 108 | 0 | 6 | 393 | 14 | 413 | 1233 |
| Total Volume | 0 | 336 | 53 | 270 | 659 | 0 | 540 | 1667 | 63 | 2270 | 0 | 259 | 151 | 207 | 617 | 0 | 22 | 1554 | 47 | 1623 | 5169 |
| % App. Total | 0 | 51 | 8 | 41 | | 0 | 23.8 | 73.4 | 2.8 | | 0 | 42 | 24.5 | 33.5 | | 0 | 1.4 | 95.7 | 2.9 | | |
| PHF | .000 | .923 | .602 | .833 | .926 | .000 | .871 | .877 | .829 | .930 | .000 | .762 | .726 | .835 | .820 | .000 | .688 | .976 | .839 | .982 | .956 |

